

## APPENDIX

### BULLER PLATEAU MINING PRECINCT

*The Buller Plateau is an area on the West Coast of New Zealand which has both high conservation values and valuable deposits of minerals, in particular coal. Mining has contributed and will contribute significantly to the economic and social wellbeing of the West Coast region. Applications by mining companies for consents to extract the mineral deposits on the Buller Plateau have been highly contested processes over a number of decades. However, uncertainty remains for all stakeholders as to which areas of the Buller Plateau might be mined and which might not. The current processes under the Resource Management Act, Conservation Act and associated legislation have proved time consuming, costly in dollar terms and emotionally, for all participants and have failed to view the Buller Plateau in a holistic way.*

*There is a high degree of knowledge around the conservation values of the Buller Plateau and the deposition of minerals. Resource Management Act processes over the last decade on the Buller Plateau have demonstrated that mining and rehabilitation of mining areas can be undertaken according to world's best practice. The purpose of this precinct is to identify those areas of the Buller Plateau that should have permanent biodiversity protection by prohibiting mining from taking place in those areas while also identifying those areas that should remain open to mining proposals, subject to the extensive and detailed controls set out in this section. Those controls adopt the resource consent conditions approved by the Environment and High Courts as minimum conditions for new activities.*

#### *Areas Open to Mining*

*Applications for mining (as defined by the Crown Minerals Act 1991) may only be made in respect of those parts of the Buller Plateau shown as "Buller Plateau Mining Precinct" on Plan XX. No applications for resource consents for mining may be made for any other area within the Buller Plateau. The extent of the Buller Plateau is shown on Plan XX. For the avoidance of doubt applications for consent for mining operations (as defined by the Crown Minerals Act 1991) may be made in respect of any area of the Buller Plateau but applicants are strongly urged to limit mining operations to within the Buller Plateau Mining Precinct and will need to show a compelling reason why mining operations must be located outside this area.*

#### *Rules*

##### **Permitted Activities**

- **Minimum Impact<sup>1</sup> Prospecting and Exploration**

*Minimum impact prospecting and exploration are permitted*

*Notwithstanding the above any person proposing to carry out minimum impact activities shall first notify the Council in writing not less than 10 working days prior to the commencement of the proposed activities.*

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<sup>1</sup> Cross reference to definitions in Crown Minerals Act for minimum impact; prospecting and exploration

## **Controlled Activities**

### **Exploration**

*Exploration (other than minimum impact activities) in respect of a mineral in the Buller Plateau Mining Precinct.*

*The Council must grant a consent for other than minimum impact exploration to the applicant on the terms and conditions set out in Section A and conditions 1.1 and 1.3 of Section B of Schedule 1 and for a term at the discretion of the Council having regard to the proposed work programme but not exceeding ten years in duration.*

### **Mining and Mining Operations**

*The Council must grant a consent for mining and mining operations to the applicant on the terms and conditions which as a minimum shall be those conditions set out in Sections B and C of Schedule 1 and for a term at the discretion of the Council having regard to the proposed work programme but not exceeding thirty five years in duration. The Council shall also set a bond for rehabilitation of the land affected by the activities. Such bond shall be for an initial set quantum with a mechanism for it to be adjusted annually to reflect the progress of the permitted activities.*

## **SCHEDULE– Consent Conditions<sup>2</sup>**

### **DEFINITIONS**

“AMD” means acid and metalliferous drainage.

“Mine Closure” means rehabilitation of the mine site such that (a) to (e) of Condition 14.2 have all been demonstrated by the Consent Holder, to the satisfaction of the Council, to have been met.

“Construction” for the purposes of Condition 11 means earthworks that occur prior to the commencement of mining.

“Construction phase” for the purposes of Condition 11 includes all construction activities up until the time that coal is extracted from the pits on a continuous basis.

“Certification” means that the management plan contains the necessary information specified in the management plan condition and meets all the requirements set out in more specific conditions of this Consent.

“DT” means vegetation direct transfer.

“ELF” means an engineered landform.

“Mining operations” has the same meaning as in the Crown Minerals Act 1991.

“Mining” commences when the water treatment facilities have been constructed and commissioned and access to the initial mining face has been completed such that enough coal is exposed to win coal at the target production rates.

“Council” means the Buller District Council acting within the scope of its functions under the Resource Management Act 1991.

“NAF” means non-acid forming.

“PAF” means potentially acid forming.

“Mine site” means all areas of disturbance, including any access road, mine pits, and all ex-pit infrastructure.

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<sup>2</sup> Note these proposed conditions cover functions of both the district and regional councils, with those relating to regional council put in italics. The purpose of including the full suite of conditions is to show how an integrated approach would function.

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## Schedule 1

### A GENERAL CONDITIONS FOR EXPLORATION

One month prior to entry onto the land to undertake other than non minimum impact exploration activities the Consent Holder shall submit to the Council an Exploration Work Plan that outlines the following:

- a. a description of the exploration activities to be carried out, including access and hours of operation;
- b. the location of the activities;
- c. measures established to manage the adverse effects from all aspects of the exploration activities, including:
  - i. *Water take and discharge to avoid any effects on the quality of water catchments*
  - ii. Establishment of access to the site
  - iii. Minimising the chance of spread of introduced weeds
  - iv. Waste management
  - v. Noise management
  - vi. Any interaction with members of the public or other persons or agencies that may have an authority to use the area
  - vii. Effects on any threatened fauna in the general vicinity of the activities;
- d. a list of all hazardous chemicals to be used on site and the measures taken to ensure that they are stored and handled in compliance with any HSNO regulations, including spill procedures; and
- e. rehabilitation of the site once the exploration activities are completed unless mining or mining related activities at the site will occur within the next 12 months that will have a detrimental impact on the rehabilitation of the site.

### B. GENERAL CONDITIONS – MINING AND MINING OPERATIONS

#### 1. Method of Operations

- 1.1 All activities authorised by this Consent shall be undertaken generally in accordance with the information contained in the Application dated (DATE) and all supporting technical documents and plans, as provided to the Council, except where inconsistent with these conditions and any additional conditions imposed by the Council, in which case these and any other conditions shall prevail.
- 1.2 The Consent Holder shall ensure that the development of the mine site, including all disturbed areas such as ELFs, overburden disposal areas, ELF underdrainage systems, ex-pit sumps, the construction of all earth bunds, diversion channels, roads, tracks, stream crossings is supervised by appropriately qualified engineers. A Chartered Professional Engineer shall be retained to review the design and engineering of all such areas and any associated structures to ensure that they are constructed in accordance with current accepted engineering practices. Evidence of the compliance with this condition shall, if requested by the Council, be submitted to the Council in the form of a certificate from a Chartered Professional Engineer.
- 1.3 The Consent Holder shall ensure all key staff and contractors are made aware of the conditions of this Consent to ensure compliance with those conditions.
- 1.4 Prior to undertaking any of the activities authorised by this Consent, the Consent Holder shall appoint an Environmental Manager, or equivalent position. The Consent Holder shall ensure an Environmental Manager is employed at all times during all mining operations (including all rehabilitation activities).
- 1.5 The Environmental Manager shall:
  - a) Be a full-time employee of the Consent Holder;
  - b) Report directly to the Mine Manager, making recommendations for improving environmental management and outcomes where necessary; and

c) Operate in an objective manner with a view to ensuring the Consent Holder meets the conditions of any Consent, including monitoring, reporting, rehabilitation and biodiversity management.

1.6 The Consent Holder shall ensure that the recommendations of the Environmental Manager under Condition 1.5 shall be taken into account and given effect to in mine planning and mining operations) except where, and only to the extent that, the recommendations might be contrary to the Consent Holder's obligations under the Health and Safety at Work Act 2015 (and all associated legislation).

## **2. Lapsing of Permission**

2.1 The Consent shall lapse at the end of 8 years (or such time that may otherwise be allowed by the Council) unless given substantial progress or effort has been made towards giving effect to the Consent.

## **3. Review of Consent**

3.1 The Council may on its own initiative, or on request from the Consent Holder, review any of the conditions of this Consent and the Council may do so by serving notice on the Consent Holder either:

- i. within a period of one month, commencing six months after the Consent Holder gives notice given under Condition 5 that activities have commenced under this Consent; or
- ii. within a period of three months, commencing on each anniversary of the date of grant of this Consent;

for any of the following purposes:

- a. to deal with any adverse effect on the environment which may arise from the exercise of the Consent and which it is appropriate to deal with at a later stage;
- b. to require the adoption of the best practicable option to remove or reduce any adverse effect, that is more than minor, on the environment;
- c. to assess the appropriateness of imposed compliance standards, monitoring parameters, monitoring regimes and monitoring frequencies and to amend, delete or add these accordingly;
- d. To ensure that any management plan required by these conditions is implemented and gives effect to conditions of this Consent; or
- e. to take account of any written recommendations of any technical reviews made in accordance with Condition 7.

## **4. Complaints and Non-compliance**

4.1 The Consent Holder upon receipt of any complaint reported to it by the Council, shall promptly investigate the complaint, take action to remedy or mitigate the complaint, and inform the Council as soon as practicable of the details of the cause of the complaint and the action taken.

4.2 The Consent Holder shall maintain and keep a complaint register for all activities authorised by this Consent. The register shall detail the date, time and type of complaint, cause of the complaint, and the action taken by the Consent Holder in response to the complaint. The register shall be available to the Council at all reasonable times.

4.3 Unless otherwise stated within this Consent, in the event of any breach of compliance with Sections B and C of the conditions of this Consent the Consent Holder shall notify the Council within 48 hours of the breach being detected. Within 7 days of any breach, the Consent Holder shall provide written notification to the Council, which explains the cause of the breach, and if the cause was within the control of the Consent Holder, steps, which were taken to remedy the breach and steps which will be taken to prevent any further occurrence of the breach.

## **5. Notification of Exercise of Consent**

5.1 The Consent Holder shall notify the Council in writing of:

- a. The intention to exercise the Consent at least three months prior to, but not more than 12 months prior to, the commencement of any activities authorised by the Consent; and
- b. The date that activities authorised by the Consent first commence; and

- c. The intention to complete mining activities three months prior to the cessation of mining activities; and
  - d. The date mining activities cease or are suspended for a planned period of more than one year.
- 5.2 The Consent Holder shall notify the Council in writing of the expected date of Completion of and Closure of the Site (in terms of Condition 14) at least two years prior to that date.

## **6. Requirements Prior to Commencing Activities**

- 6.1 Prior to undertaking any activities authorised by this Consent, the Consent Holder shall submit:
- a. an Annual Work Plan, as required by Condition 8, to the Council and thereafter submit an Annual Work Plan one month prior to each anniversary of the date of commencement of the Consent;
  - b. an Environmental Monitoring Plan to the Council that sets out a schedule of monitoring to be undertaken, and requirements for reporting of the results in accordance with the conditions of this Consent;
  - c. a set of Management Plans to the Council that describes the management objectives and methods required to manage the activities and effects described in Part C of these Conditions;
  - d. a set of vegetation closure criteria as required by Condition 14.1.
- 6.2 Prior to undertaking any activities authorised by this Consent, the Consent Holder shall submit:
- a. evidence of bonds being lodged with an approved surety, the purpose of which is to:
    - i. secure the compliance by the Consent Holder with the conditions of this Consent, including any offsite biodiversity management measures;
    - ii. secure the completion of rehabilitation and Mine Closure in accordance with the Rehabilitation Management, Water Management and Mine Closure Plans; and
    - iii. Enable the Council to monitor any adverse effect on the environment that may arise from the exercise of the Consent including monitoring anything which is to be done to avoid, remedy, mitigate or compensate an adverse effect.
  - b. evidence of Insurances being in place with an approved insurance provider.
- 6.3 Prior to undertaking any activities authorised by this Consent, the Consent Holder shall agree with the Council the means by which any technical reviews of the Management Plans required under Condition 9 will be carried out.

## **7. Technical Review**

- 7.1 The Consent Holder shall pay the actual and reasonable costs of independent technical reviewers if they are appointed by the Council for the purposes specified in Condition 7.2 and in accordance with the conditions of this Consent.
- 7.2 The primary functions of the technical reviewers (individually or jointly) in relation to this Consent are to:
- a. Provide input into the development and review of the management plans and Annual Work Plans, and any changes to those plans;
  - b. Assess whether the biodiversity management and habitat enhancement measures are achieving the objectives and outcomes sought;
  - c. Assess whether rehabilitation is achieving the objectives of the Rehabilitation Management Plan;
  - d. Ensure that civil and geotechnical engineering is designed and constructed appropriately; and
  - e. Based on any reviews and assessments carried out under Conditions 7.2(a) to (d), if considered necessary, to make recommendations for improving environmental management and outcomes.
- 7.3 The Consent Holder shall provide the technical reviewers, if appointed, with information in relation to rehabilitation, habitat enhancement and biodiversity management, pest control, water quality, overburden

management, mine closure and Annual Work Plans that the Council requests and shall afford the technical reviewers full access to the mine site at all reasonable times.

7.4 The technical reviewers, if appointed, shall report directly to the Council in writing and make such recommendations as they (individually or jointly) see fit on all matters which arise during their reviews.

## **8. Annual Work Plan**

8.1 Before exercising this Consent, and annually at least one month prior to each anniversary of the commencement of the exercise of the Consent, the Consent Holder shall submit an Annual Work Plan to the Council.

8.2 The Annual Work Plan shall include:

- a. A description of all the mining operations, mitigation measures, rehabilitation (including the amount of soil stockpiled and the amount of direct transfer(DT) completed), placement of overburden, monitoring and reporting carried out in the preceding 12 months.
- b. A description of all the mining operations, mitigation measures and rehabilitation (including an estimate of soil volumes potentially available for use in rehabilitation and the amount of DT planned), placement of overburden, monitoring and reporting intended to be carried out in the forthcoming 12 months, with an approximate timetable of events.
- c. Long-term projections and intentions for mining operations in relation to the future exercise of the Consent.
- d. An explanation of any departure from any previous Annual Work Plan in the next 12 months.
- e. A description and analysis of any unexpected adverse effect on the environment that has arisen as a result of the exercise of the Consent in the last 12 months and the steps taken to rectify it, and the results of those steps.
- f. Identification of any issues that have arisen or are expected to arise as a result of operations, geological conditions or monitoring results.
- g. A summary of any complaints received, responses and the mitigation measures adopted.
- h. Plans or aerial photographs showing the current footprint of all works and structures.
- i. Report on compliance with the management plans prepared under Condition 9.1.

8.3 The Consent Holder shall provide the Council and the Council with any further information, or report, which either party may reasonably request after considering any Annual Work Plan. This information or report shall be provided in the time and manner required by the Council and/or the Council on a reasonable request basis.

8.4 The Annual Work Plan shall comply with all conditions of the Consent and the Consent Holder shall exercise the Consent in accordance with the Annual Work Plan.

8.5 The Consent Holder may, at any time, amend and resubmit an Annual Work Plan to the Council and the Council provided it complies with all conditions of the Consent.

## **9. Management Plans**

9.1 At least two months prior to undertaking any activities authorised by this Consent, the Consent Holder shall provide to the Council for approval, the following management plans:

- Contingency and Response and Hazardous Substances Management Plan
- Construction Management Plan
- Rehabilitation Management Plan
- Geotechnical Management Plan
- *Water Management Plan*
- Overburden Management Plan



- Dust Management Plan
- Biodiversity Management and Habitat Enhancement Plan
- Waste Management Plan
- Environmental Monitoring Plan

- 9.2 Construction activity shall not commence until the management plans required in Condition 9.1 have been certified by the Council. If the Council has not advised the Consent Holder in writing whether it has certified a management plan required under Condition 9.1 within two months of receipt of the management plan, then the Consent Holder may commence activities in accordance with the management plan unless the Council advises the Consent Holder that it refuses to certify the management plan on the grounds that it fails to meet one or more conditions of this Consent.
- 9.3 Subject to any other conditions of this Consent, all activities shall be undertaken in accordance with the latest version of the management plans.
- 9.4 The management plans may be reviewed at any time by the Consent Holder and may be amended accordingly to consider:
- a. Any required actions identified because of monitoring under this Consent; and/or
  - b. Any changes required because of actions identified in the Annual Work Plans.
- 9.5 The management plans shall be reviewed within one month by the Consent Holder upon written request by the Council for either of the purposes set out in Condition 9.4 above.
- 9.6 The Consent Holder shall consult with the Department of Conservation regarding any proposed changes to the Rehabilitation Management Plan and Mine Closure Plan.
- 9.7 The management plans shall not be amended in a way that contravenes the objectives set out for the respective management plans.
- 9.8 A copy of the latest version of the management plans shall be kept on site at all times and all key personnel shall be made aware of each management plans' contents, including all amendments and updates to the plans.

## **C MANAGEMENT CONDITIONS BY TOPIC**

*Note: The Consent Holder may, in consultation with the Council, cover the obligations set out in this Section C in its preferred configuration of Management Plans including Hazard Control Plans or Principal Hazard Control Plans provided that all requirements of this section relevant to its activities are appropriately addressed.*

### **10. Contingency and Response and Hazardous Substances**

- 10.1 A Management Plan shall be prepared that details the procedures to be followed by the Consent Holder for the management of hazardous substances on the site and the procedures to be followed by the Consent Holder and parties under its control in the event of accidents or other events that may result in adverse environmental effects.
- 10.2 The Management Plan shall, as a minimum, include the following:
- a. a list of all hazardous substances and potentially contaminating materials, including explosives which are used in the mining operation (but excluding potentially acid generating waste rock) held on-site and the procedures to be adopted for storage, transportation, use and in the event of spillage of any of these substances or materials;
  - b. Preventative measures and actions to be taken with regard to rupture or spillage from any pipeline, container, tanker or store tank used at the mine site.
  - c. Preventative measures and actions to be taken with regard to spillages during transportation of hazardous substances within the mine site.
  - d. Emergency response procedures and emergency contacts during the event of power failure, fire, disaster or natural event.

- e. the personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times;
  - f. a training schedule for staff and contractors, which shall include identification of contractors' responsibility and liability for non-compliance with Consent conditions;
  - g. Provide details on the inspection and maintenance regime for mine plant, vehicles and equipment, sumps and washdown pads.
- 10.3 The Consent Holder shall deal with accidents or events requiring an emergency response in accordance with the Contingency and Response and Hazardous Substances Management Plan.

## **11. Construction Management Plan**

11.1 A Management Plan shall be prepared that details the practices and procedures to be adopted to ensure that all conditions relating to earthworks during the construction phase are complied with

11.2 The Construction Management Plan shall provide for the following objectives:

- a. To minimise the overall area of disturbance, so as to reduce the potential impact on vegetation, native fauna, and waterways.
- b. To ensure the conservation of overburden, suitable soils/root zone materials and vegetation for subsequent use for backfilling and rehabilitation.
- c. To avoid use of materials that introduce weeds/non-native plants to the mine site.
- d. To ensure that appropriate monitoring and reporting of all construction activities is undertaken in accordance with the Consent conditions.
- e. To minimise sediment generation and sediment laden runoff.

11.3 The Construction Management Plan shall, as a minimum, include the following:

- a. a description of the sequence for construction of access and haul roads, any infrastructure such as site office buildings and coal handling facilities and all activities authorised by this Consent;
- b. a description of the sequence of construction of sediment control facilities and water management systems including diversion drains;
- c. A description of the means by which the site boundary shall be marked and maintained so as to prevent any disturbance outside the mine footprint;
- d. a description of the earthwork procedures to be used to ensure the stability of roads and landforms, and measures to be used to avoid erosion and minimise runoff and sediment generation;
- e. a description of the degree to which, and the means by which rehabilitation of any highwall will be facilitated sequentially as the high wall benches are constructed;
- f. a description of the means by which any highwall benches will be integrated with adjacent land for habitat enhancement;
- g. a description of the specific sediment control measures available to be used;
- h. A description of the procedures that will minimise the risk of introducing unwanted weeds to the mine site and/or spreading weeds throughout worked areas of the mine site.
- i. a description of the documentation and information management and approvals processes to be used in implementing the Management Plan, and a description of the process for monitoring performance and changes to the Management Plan based on monitoring activity;
- j. a description of the water monitoring locations, parameters and any site-specific limits established to control the effects of sediment run-off during construction;
- k. the personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times;

- l. The training of staff and contractors on the methods to be used and procedures to be followed to ensure compliance with these conditions.

### **Construction Phase Damming, Diversion and Discharge of Water**

11.4 *The activities authorised by this Consent include temporary damming, diversion, stream crossing, culvert construction works in streams and erosion control required for the initial development of the site infrastructure or its on-going development and which are:*

- a. *required to enable the construction phase to commence; or*
- b. *required to manage water and stormwater and control sediment generation during the construction phase; or*
- c. *required during the construction phase of and prior to the completion of the site water management system; or*
- d. *required during the operation of the site water management system to extend, upgrade or modify the system and other infrastructure.*
- e. *included in the latest Annual Work Plan.*

11.5 The Consent Holder must notify the Council two weeks prior to any activities being undertaken in reliance on this Consent if the activities meet the requirements of Condition 11.2(a) or 11.2(b) but are not included in the latest Annual Work Plan.

11.6 *All stormwater runoff from construction areas shall be directed through sediment control facilities prior to discharge to natural watercourses.*

11.7 Activities authorised by this Consent shall be carried out in general accordance and as relevant with the principles outlined in the document prepared by the Auckland Regional Council, Guideline Document 2016/005 (GD05) "Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region".

11.8 Specific works and design controls for the activities authorised by this Consent shall be included in the relevant Management Plan prepared to meet the requirements of Condition 11.1-11.7, 11.9 – 11.12.

11.9 Any discharge of sewage shall be consistent with the information included in the Application for Consent and accompanying information and will be described in the relevant Management Plan. The relevant Management Plan shall include a description of the anticipated volumes, dispersal fields and management of any known effects that may arise.

11.10 The Consent Holder shall minimise the construction phase as far as practicable.

11.11 *The final design of all diversion drains, underdrains and water management treatment facilities and structures shall take into account any changes to rainfall predicted for the duration of the Consent as a result of climate change.*

11.12 The Consent Holder shall rehabilitate and re-vegetate, where practicable, all disturbed areas of land associated with the exercise of the Consent as soon as practicable after completion of the works.

### **12. Overburden Management Plan**

12.1 The Consent Holder shall ensure that the diversion and drainage systems associated with the overburden placement areas are installed and operational prior to the deposition of any overburden and waste rock to the overburden placement areas. An Overburden Management Plan shall be prepared that sets out the practices and procedures to ensure the correct classification of stripped overburden of varying geology or geochemistry and the correct fill scheduling and destination with appropriate rock/chemistry type.

12.2 The Overburden Management Plan shall, as a minimum, address the following:

- a. Details of the proposed overburden geochemical classification scheme, testing procedures, and visual identification techniques to be used in order to classify the material for appropriate placement either within overburden engineered landforms (ELFs) or for use elsewhere within the mine footprint.
- b. An outline of ELF construction methods, underdrainage, scheduling and overburden placement, and clean water diversion to minimise oxygen ingress.

- c. A description of the monitoring programme to confirm the methods in (b) above are similarly effective to other sites where this approach has been adopted.
  - d. Monitoring, documentation and data management procedures required to implement the plan.
  - e. The relevant personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times.
  - f. The training of staff and contractors.
  - g. Methods to minimise the overall area of disturbance, so as to reduce the potential impact on vegetation, native fauna, and waterways.
  - h. Methods to ensure the conservation of overburden, suitable soils/root zone materials and vegetation for subsequent use for backfilling and rehabilitation.
  - i. The avoidance of use of materials that introduce weeds/non-native plants to the mine site.
  - j. A description of the means by which the site boundary shall be marked and maintained so as to prevent any disturbance outside the mine site footprint.
- 12.3 No overburden shall be removed or disposed of unless it has been classified and provision made for its acceptance at overburden placement areas in accordance with the conditions of this Consent and the protocols outlined in the Overburden Management Plan, prepared in accordance with Condition 12.2.
- 12.4 The backfill of the pits shall be designed such that its performance under a Probable Maximum Flood or Maximum Credible Earthquake does not result in loss of containment of the PAF and Low PAF material.
- 12.5 Before commencing construction activities, the Consent Holder shall commission a suitably qualified and experienced professional engineer to undertake a detailed site investigation and prepare a design for the overburden placement areas. The investigation and design shall include the following:
- a. Foundation permeability beneath the proposed overburden placement areas with particular emphasis on local groundwater profiles, potential seepage and mitigation measures;
  - b. Overburden placement area proportions and dimensions including side and top slopes;
  - c. Deposition procedures to enhance drainage and the construction of seal layers with associated drainage;
  - d. The seepage interception and drainage system; and
  - e. Recommendations for monitoring and construction of the overburden placement areas.
- 12.6 The overburden placement landform shall be designed to best practice standards and shall be peer reviewed by an appropriately qualified and experienced engineer such that the drainage systems will ensure the passage of a 1% AEP flood flow.
- 12.7 On completion of the investigation and design required by Condition 12.6, the Consent Holder shall provide to the Council a report containing the results of the investigation and the proposed design for the overburden placement areas.
- 12.8 An appropriately qualified professional engineer experienced in the construction of overburden and waste rock filled structures shall supervise the construction of the overburden placement areas.
- 12.9 Evidence of the compliance with the designs and recommendations in the report required by Condition 12.7 of this Consent during construction, operations and decommissioning shall be submitted to the Council in the form of a certificate from a professional engineer, with confirmation that the design has been peer reviewed by a technical expert approved by the Council or a Chartered Professional Engineer.

### **13. Rehabilitation and Rehabilitation Management Plan**

- 13.1 A Rehabilitation Management Plan shall be prepared, in consultation with the Department of Conservation, to achieve an outcome generally in accordance with a Rehabilitation Concept Plan which is to be appended to the conditions, and in accordance with the following objectives:
- a. Reinstatement of any ridgeline profile (where relevant);
  - b. Establishment of terrestrial habitat linkages to adjacent areas to enable flora and fauna movement into rehabilitated areas, and establishment of aquatic habitat linkages to enable in-stream flora and fauna to re-establish in new stream channels;
  - c. Varied topography, across the ELF and back fill areas to create a topographic pattern that abuts natural ground levels and that integrates with surrounding existing topography, creates habitat diversity, and avoids an engineered appearance;

- d. Creation of stable and hydrologically variable surfaces that minimise ongoing erosion and prevent loss of growth media (soil) from rehabilitated areas to surface waters;
- e. Management of wood, plant, NAF rock, boulders, soil and root-zone resources to maximise their use in rehabilitation, including provision of logs and stumps for kiwi habitat, and boulders in all ecosystems;
- f. Incorporation of rock landscape features in the finished landform as far as practicable;
- g. Minimisation of the area affected by mining and associated activities by confining overburden and buffering adjacent undisturbed areas from any vegetation clearance, therefore maximising their condition, contributions to rehabilitation and ecological resilience;
- h. Establishment of root zones and topography that support targeted native ecosystems and ecosystem mosaics and support a high degree of naturalness in the short and longer term. Naturalness means landforms will not include permanent highwalls, pit lakes or extensive linear features;
- i. Establishment of self-sustaining, locally-characteristic native vegetation that can naturally develop into a mosaic of native vegetation associations resistant to fire, weeds and pests;
- j. Conservation of the genetic resources of plant species (including bryophytes), particularly those considered at-risk or threatened, both within and outside the footprint;
- k. Prevention of plant pests establishing at the site so far as is reasonably possible, and otherwise to identify and control weeds and pests on the site so that that site closure criteria can be achieved; and
- l. Provision of habitat and connectivity of habitat that will develop in the longer term to be suitable for identified native fauna.

13.2 The Rehabilitation Management Plan shall, as a minimum, include the following:

- a. A requirement that the Consent Holder maximise the amount of vegetation direct transfer as much as reasonably practicable
- b. How the baseline state of plant species diversity for possible DT removal will be characterised including sampling methods and techniques, in order to provide an accurate basis against which closure criteria established in accordance with Condition 13.1 can be assessed.
- c. How the rehabilitation objectives set out in Condition 13.1 are to be achieved; and rehabilitation methods considering the constraints placed on rehabilitation planning at the mine, including constraints on vegetation growth, soil availability, climatic constraints, slopes, aspects and local soil and overburden characteristics
- d. The construction methods and/or rehabilitation methods to be used to minimise the potential adverse effects of vegetation removed for access routes, including treatment of cut faces and batters, and methods to minimise adverse effects on adjoining plant communities (particularly bryophytes and lichens) and fauna.
- e. Whether rehabilitation trials should be undertaken, and the type and protocols for any such trials, including success criteria and monitoring.
- f. Revegetation techniques, which shall include the following methods:
  - i. The management practices associated with the identification, prioritisation, salvage, stripping and stockpiling of all rehabilitation resources identified above.
  - ii. Identification of the key pest plant and pest animal species (including non-native bryophytes), their distribution, and the management principles adopted in the mine planning, stripping, rehabilitation and closure stages with respect to weed and pest control.
  - iii. The range of erosion control techniques that shall be applied and the order of priority.
  - iv. Preferred species and methods for rehabilitation, vascular and non-vascular plant salvage and nursery propagation.
  - v. Placement of weathered boulders within direct transfer to enhance the density of sheltered, high-humidity zones for bryophytes.
  - vi. Any indigenous species that should not be used for rehabilitation and propagation and the reason for this.
  - vii. Methods of complementing surrounding land surface covers, e.g. through plant species selection and strategic placement of rock mulches and weathered sandstone boulders.

- viii. Provisions for reducing fire risk.
  - ix. Methods for monitoring the success of rehabilitation of vegetation on major landforms and the success of particular vegetation types, following vegetation establishment. Such monitoring shall be undertaken at least three-yearly intervals until rehabilitation closure is achieved. Trigger point methods for active intervention following each monitoring exercise shall be included.
  - g. The relevant personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times.
  - h. The training and induction of staff and contractors.
- 13.3 In designing the final landform, the Consent Holder shall engage a suitably qualified and experienced landscape architect to advise on the design.
- 13.4 The Consent Holder shall, as far as practicable, ensure that rehabilitation is carried out so that the performance of any modified landform, watercourse, or any permanent structures and facilities under a Probable Maximum Flood or Maximum Credible Earthquake do not result in damage to landforms or structures greater than those that would have occurred under natural slope and landform conditions.
- 13.5 The Consent Holder shall undertake progressive rehabilitation of all disturbed areas as areas of practical working size become available, in accordance with the Rehabilitation Management Plan.
- 13.6 Hydro-seeding of exotic grasses shall only be applied where there is a significant risk of soil loss and/or sediment generation and where there is no other effective erosion control method available.
- 13.7 Seed and plant resources shall be genetically sourced from the locality or Ngakawau Ecological District.
- 13.8 Any material used to surface roads, or for erosion control shall be assessed for potential to introduce non-native plant species.
- 13.9 The Rehabilitation Management Plan shall be drafted and/or audited by a suitably experienced and qualified ecologist and a suitably experienced and qualified landscape architect.
- 14. Mine Closure**
- 14.1 Prior to undertaking any activities authorised by this Consent, the Consent Holder shall submit to the Council for certification a set of vegetation closure criteria based on the vegetation assemblages present within the mine site and the general area. The closure criteria shall be developed so that the Consent Holder can demonstrate that these communities will become self-sustaining and will form an ecosystem that as far as practicable resembles the ecosystems that will be affected.
- 14.2 The site shall be deemed to be closed when:
- a. the closure criteria established in accordance with Condition 13.1. have been met and maintained for a minimum period of five years. The rehabilitation assessment for completion of closure of the site shall be undertaken and/or audited by a suitably experienced and qualified ecologist;
  - b. all mine infrastructure has been removed from the site and these areas rehabilitated. Only infrastructure determined by the Council to be necessary for post closure use shall remain.
  - c. *water compliance limits at the locations specified in Condition 16 have not be exceeded in the preceding 36 month period without active water treatment or with passive water treatment technologies.;*
  - d. the landform is stable and any finished landform requirements set out in Condition 13.1 have been met;
  - e. compliance with all other conditions of this Consent, except Condition 30 requiring ongoing habitat enhancement measures, can be demonstrated at the time of completion of closure of the site.
- 14.3 Immediately following the cessation of activities under this Consent, the Consent Holder shall initiate and maintain a programme of mine closure in accordance with the Mine Closure Plan prepared in accordance with Condition 14.4.
- 14.4 Within 12 months of undertaking any mining activities authorised by the Consent, a Mine Closure Plan shall be prepared, in consultation with the Department of Conservation, that sets out the practices and procedures to be adopted to ensure that closure of the site can be achieved in accordance with the conditions of this Consent, including the closure targets established pursuant to Condition 13.1.



14.5 The Mine Closure Plan shall address:

- a. the design and development of a new drainage system for backfilled pit areas and overburden areas directing clean runoff to the relevant streams and other smaller watercourses;
- b. the activities required to dis-establish those diversion drains, culverts and structures that will not remain as permanent watercourses after mine closure;
- c. *the water management steps required at mine closure, including treatment of water if required, and the disposal of any AMD treatment sludge;*
- d. the structures (including engineered landforms, roads and infrastructure) that will remain after mine closure.
- e. details of the dis-establishment of any dam that is to be dis-established and any other infrastructure;
- f. Any continued rehabilitation, monitoring and weed, animal pest and fire control required post mine closure.;
- g. *Long term performance monitoring of the ELFs and any water treatment systems.*
- h. Any infrastructure that will remain after closure, i.e. access roads.
- i. The relevant personnel who will be responsible for plan implementation, such that the provisions of the plan can be implemented at all times.
- j. The training of staff.

## **15. Environmental Monitoring Plan and Report**

15.1 The Consent Holder shall, prior to the exercise of any of this Consent, prepare an Environmental Monitoring Plan. This Plan shall be submitted to the Council for certification and shall set out a schedule of monitoring to be undertaken, and requirements for reporting of the results in accordance with these conditions.

15.2 The Consent Holder shall prepare and submit to the Council an Annual Environmental Monitoring Report one month prior to each anniversary of the commencement of this Consent.

15.3 As a minimum, the Annual Environmental Monitoring Report shall:

- a. Detail all environmental monitoring undertaken to ensure compliance with the conditions of this Consent, including environmental monitoring within the mine site, and monitoring relating to progress, results and outcomes of biodiversity management, rehabilitation and habitat enhancement programmes;
- b. Summarise all the data collected, as required under the Environmental Monitoring Plan and any other condition of this Consent. This should include graphical presentation, statistical summations of monitoring data and critically analyse the information in terms of compliance and environmental effects;
- c. Highlight and discuss any important environmental trends, including in relation to rehabilitation trials if undertaken;
- d. Compare results obtained over the reporting period with the results that were predicted to occur during the pre-mining investigations and the results obtained from previous reporting periods;
- e. Report and discuss any operational difficulties, changes or improvements in relation to the water treatment system;
- f. Report and discuss any difficulties in compliance with, and breaches of, the conditions of this Consent and the measures adopted to rectify problems;
- g. List any maintenance works needed, proposed or undertaken to ensure compliance with these conditions of this Consent or to facilitate operations and
- h. Progress towards achieving the closure criteria established in accordance with Condition 13.1.

## **16. Water Management**

16.1 A Water Management Plan shall be prepared that details the practices and procedures to be adopted to ensure compliance with the conditions of this Consent for the purposes of:

- a. *establishing water management structures and processes to ensure that all water leaving the site shall be life-supporting and at a distance 200m from the mine site boundary shall be similar in quality to prior to the construction phase commencing in that catchment;*
- b. *setting out the methods and activities by which the water quality criteria and standards required under any condition of this Consent will be met;*
- c. *addressing the design, development and management of the water management and treatment system, including the operation of any dams, settlement and water treatment areas, in-pit sumps, drains and diversions;*
- d. *describing how the conditions will be monitored and reported to the Council;*
- e. *setting out the methods and activities by which surface water, groundwater levels and quality will be monitored.*

16.2 *The Management Plan shall, as a minimum, address the following matters:*

- a. *details of the operation of the proposed water management system;*
- b. *the location and design criteria of the key features of the water treatment system and their operation, including any dams, in-pit and ex-pit sumps and drains, diversions and culverts;*
- c. *the management of water inventories, water levels and pumping rates and the management of retained sediment levels;*
- d. *the water management methods used to ensure the separation of clean and operational water and to treat the discharges to the appropriate quality specified by the Consent conditions and water quality performance standards;*
- e. *the inspection and maintenance schedules of the water diversion and treatment system which will be carried out to ensure that the diversion and water treatment system and water management practices are working effectively and to identify any further management, maintenance, or treatment requirements;*
- f. *an outline reporting of the results obtained from the water quality monitoring;*
- g. *the location of groundwater monitoring sites, monitoring frequency and compliance limits to assess the effects of discharges from the mine site on groundwater;*
- h. *the methods and frequency proposed for long term monitoring;*
- i. *contingency measures dealing with water-related issues, power failure, spills, natural events, non-compliance and any unforeseen events;*
- j. *the location, anticipated chemical nature and volumes of water to be taken for dust suppression purposes;*
- k. *site specific compliance limits for dissolved metals, pH, Acidity, Turbidity, Suspended Solids based on a percentile compliance;*
- l. *process for determining site-specific water compliance limits. This will be based on an analysis of baseline water quality data, and laboratory based toxicological studies using local organisms occurring in the receiving environments, including macroinvertebrates;*
- m. *the personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times*

## **17. Soil Conservation and Erosion Control**

17.1 Conditions for soil conservation and erosion control shall apply to the following activities:

- a. *vegetation removal and earthworks;*
- b. *activities in and over the beds of stream in relation to diversions and the placement of culverts and water management structures.*



- 17.2 The Consent Holder shall ensure that all vegetation clearance and earthworks under this Consent are progressive and that the smallest area possible is cleared using methods that cause least disturbance to surrounding vegetation.
- 17.3 The Consent Holder shall, prior to the exercise of this Consent, and thereafter annually, include in the Annual Work Plan details of the areas to be cleared, and the procedures to be used, in disposing of the cleared material so as to conserve soil and minimise erosion.
- 17.4 The Consent Holder shall avoid, to the greatest extent practicable, sidecasting of material alongside the roads.
- 17.5 *All roads shall be adequately serviced with water tables, cut-offs and culverts to control surface water runoff and minimise the scouring of road surfaces, water tables, cut-offs and culvert outfalls.*
- 17.6 The geotechnical design of the highwalls and overburden placement areas shall be designed by an appropriately qualified civil engineer. The design specifications shall be supplied to the Council with the first Annual Work Plan.
- 17.7 There shall be no removal of overburden for the purpose of exposing coal until such time as the water management system can be demonstrated to manage sediment from the construction area.
- 17.8 The Consent Holder shall ensure that no area is cleared of vegetation without being excavated or re-vegetated in accordance with the Rehabilitation Management Plan for a period of more than 24 months, unless that area is required to be maintained in a non-vegetated state for the purposes of infrastructure, site access, water management, geochemical, or geotechnical requirements.
- 17.9 The Consent Holder shall ensure that all activities authorised by this Consent are carried out so that machinery activity in the bed of any waterway is kept to a minimum.
- 17.10 The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the mining activities and for any erosion control and energy dissipation works which become necessary as a consequence of the activities.
- 17.11 *The Consent Holder shall ensure that, to the greatest extent practicable, structures built under this Consent do not cause erosion or scour of stream beds or banks or impede fish passage.*
- 17.12 *Stream crossings shall be designed by an appropriately qualified civil engineer to and the specifications for the crossings shall be supplied to the Council with the first Annual Work Plan.*
- 17.13 Unless otherwise stated in this Consent, all sediment control practices during construction of the diversion drains shall be undertaken in accordance with the principles outlined in the document prepared by the Auckland Regional Council, Guidance Document 2016/005 (GD05), June 2016 "Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region".
- 17.14 There shall be no refuelling or maintenance (barring breakdown) of equipment or machinery within five metres of any surface waterway.
- 17.15 To avoid the spread of Didymo, no equipment shall be used in the exercise of this Consent that has been used previously to undertake activities in any water body known to contain Didymo, unless that equipment has been thoroughly cleaned in accordance with the attached Biosecurity New Zealand document titled "Don't Spread Didymo".
- 17.16 All equipment refuelling, lubrication and mechanical repairs shall be undertaken in an area that provides sufficient mitigation measures to ensure that no spillages onto the land surface or into water occur. No refuelling or lubrication shall be undertaken on the bed of any stream or creek.

## **18. Geotechnical Management Plan**

- 18.1 A Geotechnical Management Plan shall be prepared that sets out the practices and procedures to ensure that any potential slope instability is appropriately managed to enable Mine Closure to occur in accordance with Condition 13.2.
- 18.2 The Geotechnical Management Plan shall, as a minimum, address the following:
- a. A description of the sequence for ridgeline mining activity, including any measures that will be necessary to mitigate any potential slope instability;

- b. An exit plan in the event that a large slip closes the project;
- c. An operational recovery mine plan to manage a large slip which would allow mine operations to continue;
- d. The management methods used to minimise any fly rock deposition outside of the mine site resulting from blasting activity near the mine boundary;
- e. Details of the monitoring strategy for local slope instability and larger scale deformation throughout the mine site, where required;
- f. The relevant personnel who will be on-site and their responsibilities, such that the provisions of the plan can be implemented at all times;
- g. The training of staff and contractors.

**19. Diversion of Water**

19.1 *All activities authorised by this Consent shall be implemented under the supervision of persons with appropriate experience in the supervision of civil engineering construction works.*

**Stormwater Diversion Drain Specifications**

19.2 *Diversion channels and associated works shall be subject to a design and construction analysis and detailed engineering design in accordance with the Management Plan that addresses Construction and Earthworks and Water Management. The principles of stormwater design shall be included in the relevant Management Plan and provided for technical review.*

**Stormwater Discharge Monitoring**

19.3 The Consent Holder shall monitor the water quality in any natural receiving water (stream) to which stormwater is diverted off-site, for total suspended solids, at weekly intervals, at a location detailed in the relevant Management Plan.

**Stormwater Discharges from and to Rehabilitated Areas**

19.4 *Any clean stormwater and run-off from rehabilitated areas of the mine shall not be diverted back to natural watercourses until the Consent Holder has demonstrated that total suspended solids and pH of the water is not statistically higher/more acidic than the immediate receiving waters, with 90% confidence, based on a minimum of 12 consecutive months of data.*

19.5 *The Consent Holder shall ensure that stormwater intercepted by rehabilitated and undisturbed land is not affected by mining operations prior to being discharged.*

**Minewater Diversions**

19.6 *Conditions for minewater diversion apply to the following:*

- a. *the taking of groundwater seepage and stormwater runoff from within the opencast pits for dewatering purposes;*
- b. *the diversion of minewater (stormwater runoff and groundwater seepage) from within opencast workings, haul road, overburden placement areas, ELFs, soil stockpiles, and other ancillary mining areas to settlement and/or treatment facilities via drainage channels.*

19.7 *No water from mining and overburden disposal areas shall be discharged to natural water without being first diverted to the water management and treatment system.*

19.8 *The rate of water abstraction from opencast pits for dewatering purposes, shall be managed such that the rate of discharge does not exceed the functional capacity of the ex-pit water settlement and/or treatment facilities.*

**Minewater Diversion Drain Specifications**

19.9 *Diversion channels and associated works shall be designed and constructed to ensure that any accidental discharge from the diversion drains shall be to disturbed areas within the water management system rather than to undisturbed natural ground, as far as is practicable.*

## **20. Water Treatment and Discharge**

20.1 *The Consent Holder shall undertake water treatment and discharge activities in accordance with the provisions of the Management Plan that addresses Water Management.*

20.2 *No water from the following areas shall be discharged to natural waters without first passing through the water management and treatment system and can be demonstrated as meeting the receiving water compliance limits:*

- a. *mine operational areas;*
- b. *haul roads;*
- c. *overburden placement site;*
- d. *infrastructure areas;*
- e. *soil stockpiles.*

*The water management and treatment system will consist of the system of drains, diversions, sumps, pumps, dams, flocculant use and a treatment plant or plants within the catchments [described in the Application for Consent and the Management Plans].*

20.3 *The discharge point(s) of treated water from the mining area to the receiving water shall be [as specified in the Application for Consent or subsequent technical reports].*

20.4 *The collection, analysis and preservation of all samples collected in accordance with these conditions (excluding aquatic ecology monitoring) shall be undertaken using the Standard Methods for the Examination of Water and Wastewater (23rd Edition) from the American Public Health Association (APHA), the American Water Works Association (AWWA), and the Water Environment Federation (WEF), or equivalent or superseding methods.*

*The sampling and sample analysis required by these conditions shall be undertaken on contract to the Consent Holder by an appropriately qualified independent person or persons who shall not be a director or employee of the Consent Holder.*

### **Discharge Rate**

20.5 *[Where flow rates in the receiving waters are such that a control on the discharge rate is necessary to maintain receiving water quality then a discharge rate may be set as proposed in the Application for Consent or in any subsequent technical report.]*

20.6 *The discharge shall not result in the production of conspicuous oils, grease or films, scums or foams, or floatables.*

20.7 *To further protect water quality there shall be no refuelling of equipment or machinery within 5 metres of any surface water.*

### **Aquatic Ecology Monitoring**

20.8 *An Aquatic Ecology Monitoring Plan shall be prepared that details the locations and frequency for aquatic invertebrate and periphyton monitoring (including bryophytes). The plan shall include:*

- a. *the location of comparative sites unaffected by mining to be monitored at the same time as the indicator sites;*
- b. *Baseline information from the area to be affected by either mining or construction works;*
- c. *Monitoring methods and techniques;*
- d. *Frequency of monitoring;*
- e. *Methods of analysis and reporting of the information;*
- f. *Contingencies to be established if the monitoring results show a statistically significant change in abundance or species diversity.*

## **21. Discharges to Air**

- 21.1 The Consent Holder shall operate mining and associated processes and other operations in such a manner so as to ensure that emission of dust is reduced to a practicable minimum. The location of any deposit gauges shall take into consideration the prevailing wind direction, wind velocities and topography and will be shown in the appropriate Management Plan.
- 21.2 Dust deposition monitoring shall be carried out as set out in ISO/DIS 4222.2 Air Quality — Measurement of Atmospheric Dustfall or equivalent method.
- 21.3 A Dust Management Plan shall be prepared that details the practices and procedures to be adopted in order that compliance with Condition 21.1 can be achieved and the effects of air discharges are minimised to the greatest extent possible.
- 21.4 The Dust Management Plan shall, as a minimum, address the following matters:
- a. identification of all sources of dust and other discharges and their potential impacts;
  - b. any significant changes/alterations throughout the life of the project that may result in changes to the quantity and nature of dust and other discharges;
  - c. techniques and methods which will be used to avoid or eliminate all off site visible discharges to air, and the programme for rehabilitation and revegetation of areas of the site in order to minimise dust emissions;
  - d. details of the proposed air quality monitoring programme for the mining area including:
    - i. visual inspections of the dust generating activities on site in relation to weather conditions;
    - ii. details of the monitoring methodology, location and number of sampling stations and frequency of monitoring and analysis;
    - iii. siting of sampling stations to avoid erroneous results and vandalism;
    - iv. logging of monitoring results and submission of results to the Council.
  - e. training of operators and contractors to help prevent and control dust emissions;
  - f. procedures to deal with air quality complaints.

## **22. General Land Use Provisions**

- 22.1 The colours to be used for all buildings and structures shall be recessive and non-reflective and shall be certified by the Council, prior to construction.
- 22.2 Subject to meeting all other conditions of this Consent, mining and mining operations may operate 24 hours a day, seven days a week.

## **23. Lighting**

- 23.1 The Consent Holder shall ensure that any light spill during construction does not exceed 10 lux (horizontal or vertical) of light at any adjoining property occupied by non-project personnel, measured inside the boundary of the adjoining site.
- 23.2 The Consent Holder shall undertake appropriate mitigation measures, including but not limited to, utilisation of lighting at the orange end of the spectrum, screens, shields, hoods and fences to ensure glare and light spill is minimised so as not to create a nuisance to residents, traffic, or to act as a distraction to wildlife.

## **24. Blasting**

- 24.1 A programme of blasting times shall be notified publicly by way of notice erected at the road entrance to the mine area. A public advertisement to local residents, the Department of Conservation, the West Coast Regional Council, and the Council will be issued prior to blasting taking place and at regular intervals not exceeding twelve months thereafter.
- 24.2 Blasting shall be restricted to the hours between half an hour after sunrise and half an hour before sunset.
- 24.3 Details of all blasts shall be entered into a record book kept for that purpose and shall be available to the Council upon request.

- 24.4 During blasting the Consent Holder shall ensure that air blast overpressure conforms with the recommendations outlined in the Australian Standard AS2187.22006 "Explosives – Storage and Use"; whereby all noise created by the use of explosives measured at a location agreed with the Council shall not exceed a peak overall sound pressure of 120dB linear peak for 95% of the time, with a maximum peak of 125 dB. 25.5 Ground vibration levels measured at any residence not owned by the Consent Holder shall not exceed 10 millimetres per second peak particle velocity measured in the frequency range of 3 hertz to 20 hertz, thereafter NZS 4403:1976 Code of Practice for the Storage, Handling and Use of Explosives or any other Codes of Practice which may from time to time be current shall apply
- 24.5 The Consent Holder shall monitor peak particle velocity, noise and frequency of blasting activities.
- 24.6 The Consent Holder shall monitor blasting at three monthly intervals for at least 12 months following the commissioning of the open mine pit(s). In the event of the above monitoring indicating compliance with the conditions, the frequency of monitoring may be reduced from three monthly to six monthly periods upon written Consent from the Council

## **25. Historic Heritage**

- 25.1 Prior to the land disturbance and the construction phase commencing the Consent Holder shall:
- a. take all reasonable measures to identify and recover any remnants of historic mining prior to areas being disturbed;
  - b. collect all loose artefacts from the site for more detailed analysis to provide more information about the operation of the mine and the activities carried out there. A person shall be employed by the Consent Holder to undertake documentation of artefacts if and when recovered in the course of exercising this Consent. The Consent Holder shall provide records of the recovery, identification and distribution of these objects to the West Coast Filekeeper of the New Zealand Archaeological Association.
- 25.2 The Consent Holder shall prepare a final archaeological report on completion of the work identified above, and make the results publicly available. Copies of the report shall be sent to the Heritage New Zealand, the Department of Conservation and local libraries and museums within 6 months of commencement of coal extraction activities.

### **Accidental Discovery Protocol**

- 25.3 In the event of an accidental discovery of archaeological material not identified by the archaeological survey, the following steps will be followed:
- a. all work in the immediate vicinity of the material will cease immediately;
  - b. the Consent Holder will take immediate steps to secure the site (e.g. tape it off) to ensure the archaeological remains are undisturbed and the site is safe in terms of health and safety requirements. Work may continue outside of the secured site area;
  - c. if the material is confirmed as being archaeological under the terms of the Heritage New Zealand Pouhere Taonga Act 2014 Act, the Consent Holder shall ensure that an archaeological assessment is carried out by a qualified archaeologist, and if appropriate, an archaeological authority is obtained from the Trust before work resumes;
  - d. if burials, human remains/koiwi tangata are uncovered, the Area Archaeologist of the Heritage New Zealand, the New Zealand Police and the Iwi representative for the area shall be contacted immediately. The area shall be treated with discretion and respect and the koiwi tangata/human remains dealt with according to New Zealand law and tikanga;
  - e. works at the site area shall not recommence until an archaeological assessment has been made, all archaeological material has been dealt with appropriately, and statutory requirements are met. All parties shall work towards enabling work to recommence in the shortest possible timeframe while ensuring that archaeological and cultural requirements are complied with.

## 26. Cultural Heritage and Liaison

- 26.1 The Consent Holder shall prepare, in consultation with Papatipu Runanga, and provide to the Council a Cultural Heritage and Liaison Plan. The purpose of the Cultural Heritage and Liaison Plan shall be to ensure that any cultural materials found at the mining area are evaluated and if necessary, protected. The Plan may be amended during the term of this Consent, in consultation with the Papatipu Runanga and the Council provided the key outcomes are achieved.
- 26.2 The Cultural Heritage and Liaison Plan shall discuss cultural connections to the mining area and surrounding area and will identify any sites of particular cultural significance. The Plan will describe the protocols should mining uncover any artefact or material that may be of early origin.

## 27. Noise

- 27.1 Subject to the express provisions of this condition the noise level, if undertaken, shall be measured and assessed in accordance with the requirements of New Zealand Standards NZS 6801:2008 Measurement of Environmental Sound and NZS 6802:2008 Acoustics - Environmental Sound. In particular, the provisions of NZS 6802:2008, 5 dB corrections for noise with special audible characteristics shall apply to noise measurements and assessments.

- 27.2 The  $L_{10}$  level as measured at or within any residentially zoned boundary of a property not owned by the Consent Holder, or the notional boundary of any existing dwelling not owned by the Consent Holder, shall not exceed the following limits, except by mutual agreement:

Monday-Saturday 7.00am to 9.00pm	55 dBA $L_{10}$
All other times	45 dBA $L_{10}$

$L_{(max)}$  70 dBA

The notional boundary of any dwelling shall, for the purpose of this condition, shall be a point 20 metres from the most exposed façade of the dwelling.

- 27.3 All equipment and machinery shall be regularly maintained to ensure noise levels are as low as reasonably attainable but at no time shall they exceed the levels permitted by the Consent.
- 27.4 During the constructional phase of the mining operation, the noise levels shall comply with the recommended upper limits for levels of construction work noise received in residential areas listed in NZS 6803:2008 Acoustics – Construction Noise at the boundary of any property not owned by the Consent Holder, or the notional boundary of any existing dwelling not owned by the Consent Holder.
- 27.5 A Noise Management Plan shall be prepared which details the practices and procedures to be adopted to ensure compliance with the conditions of this Consent for the purpose of ensuring that the impacts of the proposed mining activities on noise in the local area are minimised. The noise management plan shall, as a minimum:
- identify mining activities that potentially generate noise within the context of background noise in the general vicinity of the site;
  - describe any noise monitoring and reporting requirements set out in the Consent conditions;
  - describe noise control measures that will be used at the mine area to minimise noise at and from the mine site;
  - outline details of relevant vehicle or plant specifications and vehicle maintenance requirements to avoid excessive noise production and details of speed restrictions placed on parts of the site to minimise noise.

## 28. Waste Management

- 28.1 A Management Plan shall be prepared, which details how waste and litter generated from the mining operations will be minimised or eliminated, how recycling and reuse opportunities will be maximised, how any pollution risk associated with the waste generated at the site will be avoided or eliminated, and how organic waste will be isolated from rodents.



- 28.2 The Management Plan shall, as a minimum:
- a. identify the waste likely to be generated at the project site, workshop and administration offices and identify the waste that can be reused, recycled, disposed of on-site and disposed of off-site;
  - b. describe the methods to minimise waste generation and to reuse or recycle materials where feasible; and
  - c. describe the transport and disposal of waste off site.

## 29. Community Liaison

- 29.1 On two occasions in the first year in which this Consent is exercised and thereafter on one occasion per year throughout the duration of the Consent, the Consent Holder shall convene a community liaison meeting to present the results of monitoring undertaken over the year, compliance with Consent conditions, a summary of mining operations proposed for the next year, and any proposed changes to the management or operation of the mine site.

*Advice Note:* The community liaison meeting required by this condition may be held in conjunction with other public meetings held by the Consent Holder relating to the Consent Holder's operations on the Buller Plateau.

## 30. Biodiversity Management and Habitat Enhancement

- 30.1. The Consent Holder shall undertake a programme of biodiversity management and habitat enhancement including species relocation and management and plant pest and predator control in accordance with these conditions in areas identified in conditions.
- 30.2 A Biodiversity Management and Habitat Enhancement Plan shall be prepared in consultation with the Department of Conservation and Papatipu Runanga, which details the practices, procedures, baseline surveys and monitoring to be adopted to ensure compliance with the conditions of this Consent and how the objectives set out in these conditions will be achieved.
- 30.3. The objectives of the Biodiversity Management and Habitat Enhancement plan shall be to:
- a. Minimise and mitigate the effects from mining activities on the habitats of birds identified as being of conservation concern;
  - b. Maintain populations of birds identified as being of conservation concern within an area identified for that purpose while mining operations are in progress, and until rehabilitated habitats at the former mine site support their return;
  - c. Prevent the establishment of new weed species and to maintain the distribution and abundance of existing weeds at the site at very low levels so that weeds do not impair natural succession of native vegetation cover in the medium to long term;
  - d. Enhance the survival rates of indigenous fauna within any area identified for that purpose, by way of pest and predator control for a period of 35 years from the date of commencement of this Consent;
  - e. Develop and employ a range of management tools for any species other than birds identified as being of conservation concern intended to mitigate any adverse effects at the population level of those species near the mining area while mining operations are in progress;
  - f. Where appropriate, provide compensation for any coal measures vegetation and other key biodiversity attributes which cannot be effectively mitigated, by enhancing the survival rates of indigenous fauna within any area identified for that purpose, by way of pest and predator control for a period of 35 years from the date of commencement of this Consent.
- 30.4 The plan shall as a minimum, address the following:
- a. identify those threatened species within or adjacent to the Consent footprint that the planned mining operations are likely to have an adverse effect on at a local population scale;
  - b. a list of any absolutely protected species under the Wildlife Act 1953 and the measures put in place to manage effects on them at a population scale;
  - c. outline the management of those species identified in Condition 30.4a;

- d. performance measures to determine the effectiveness of any management actions planned for the species identified in Condition 30.4a;
  - e. methods, monitoring, analysis and reporting processes to be undertaken to demonstrate progress towards meeting the objectives of the Plan;
  - f. integration with the rehabilitation objectives outlined in Condition 13;
  - g. predator and weed control programme to be carried out within the mine site and in any other identified areas.
- 30.5 No later than 15 years after the commencement of biodiversity management and habitat enhancement activities, the Consent Holder shall provide to the Council a report from an independent appropriately qualified expert which sets out whether any additional or different actions or management measures, including funding and duration of management measures, are necessary to continue to meet the objectives of the Biodiversity Management and Habitat Enhancement Plan.

**31. Biodiversity Management and Habitat Enhancement Levy**

- 31.1 In addition to the payment of any royalties paid under any permit or licence held by the Consent Holder, the Consent Holder will during the term of this Consent pay to the Council a biodiversity management and habitat enhancement levy calculated at the rate of \$1 per tonne of coal mined and sold to offset or compensate for any effects from its activities that are not otherwise avoided, remedied or mitigated. To the extent that the Consent Holder is required by other regulatory authorities to make other compensation payments in connection with its mining and mining operations, this sum shall be reduced proportionately to the end that the Consent Holder should not be required to pay more than \$1 per tonne of coal mined and sold in total compensation payments. The Council will use any funds received from this levy solely for the carrying out biodiversity and habitat enhancement within its district.



**NOTES:**

1. The Consent Holder should be aware that they will require building Consents for structures from the Buller District Council, including but not limited to:

Bridges

Installation of septic tank or other effluent systems

Any dams over three metres high and retaining more than 20,000 cubic metres of water or tailings

Any road construction requiring retaining walls, gabion baskets, etc, more than 1.5 metres high and supporting the road

Infrastructure and ancillary buildings

Administration building, including training and first aid

Amenities and ablution facilities

Workshops and stores

Plant control room

Fuel storage area including bunded walls

Fencing over two metres in height

WORKING DRAFT