**Bathurst Coal Limited**

**Proposed Regional Council Consent Conditions – Supplementary Reply Evidence**

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**General Conditions - Applying to all consents issued by the Canterbury Regional Council.**

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| **Definitions:** |
| *Operational phase:*The operational phase includes the final scheduled coal mining until mining of N02 and N03 have been completed, and all earthworks operations required to construct the final landform are completed. This includes bulk earthworks, placement of topsoil, revegetation and removal of infrastructure There may be minor volumes of incidental coal encountered and recovered during the construction of the final landform and this coal will be stockpiled and trucked from site as it is encountered. Active water management and treatment infrastructure remains onsite and the construction, commissioning and testing of the Mussel Shell Reactor (MSR) is completed. |
| *Active closure phase:* Site rehabilitation works once the final landform have been completed. Active water management continues. This phase continues until vegetive cover reaches greater than 80% (excluding road and areas of land to be used for water infrastructure) and is self-sustaining and effective at minimising sediment run-off~~.~~, and concentrated flow paths are adequately lined and water treatment system pumps are removed from the site.  |
| *Post-closure phase:* The post closure phase begins once infrastructure is in place to allow all water treatment system pumps to be removed from the site. Intervention and management occurs as part of the adaptive management framework controlled by the Trigger Action Response Plan (TARP)s and comply with consent conditions.  |
| *MOA*: Mine Operations Area as shown on Plan CRC [insert ref].  |
| *Mine influenced water:*Surface or groundwater that contains contaminants related to mining and earthworks activities. This encompasses contaminant types such as treated mine water, Acid Mine Drainage, Acid and Metalliferous Drainage, and Neutral Metalliferous Drainage but excludes suspended sediment. |
| *Surface Water Drainage:*Distinct areas of the site that have been segregated based on surface water flows defined by the shape of the final landform as defined the *MCMP, appendix 4: Water Management Report*, these drainage areas can include both sheet flow and concentrated flow paths. These small drainages form part of the defined sub-catchments being Tara Gully, Oyster Gully, Bush Gully, and Surveyors Gully. |

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| **#** | **Condition**  |
| **Environmental Management Plan and Mine Closure Management Plan**  |
| 1 | All activities and works associated with ~~retrospective mining activities and~~ the final operational phase of the site, active closure and post closure rehabilitation phases of mining, shall be carried out in accordance with the relevant provisions of the Environmental Management Plan (EMP). The active closure and post closure rehabilitation phases of mining shall also be undertaken in accordance with the requirements and obligations set out in the Mine Closure Management Plan (MCMP).  |
| 2 | The EMP shall guide the management of operations to ensure compliance with resource consent obligations and the utilisation of recognised and accepted practices to avoid remedy and mitigate adverse effects that may be caused by the mining and rehabilitation activities. As a minimum, the EMP shall cover the following matters:* 1. Site Water Management (including erosion and sediment control measures);
	2. Acid Mine Drainage Management;
	3. Chemical Treatment;
	4. Construction Management;
	5. Coal Combustion Residual Management;
	6. Spill Management;
	7. Dust Management;
	8. Lizard Management;
	9. Wetland Management;
	10. Site rehabilitation;
	11. Lighting;
	12. Fire;
	13. Noise; and
	14. Archaeology, Cultural including an accidental discovery protocol.
 |
| 3 | At the completion of site rehabilitation, the following objectives shall be achieved:* 1. Landform design and rehabilitation activities create a landform that is stable with similar land use capabilities and hydrological sub-catchments that existed prior to the disturbance;
	2. Disturbed land will be rehabilitated and stabilised to a condition where the risk of adverse effects on water quality are low;
	3. Soil will be applied to enable future grazing and production forestry activities;
	4. Vegetation cover will be established to reduce potential for erosion and sediment loss so that the quality of surface runoff is comparable to surrounding undisturbed landscapes;
1. Prevent, minimise, and where necessary control and treat mine influenced waters to ensure rehabilitation and consented water quality limits are achieved in order to maintain water quality and potentially enhance aquatic ecology values in Tara Stream and Bush Gully Stream; and
2. To enhance the North Property wetland and ecological enhancement area with ecologically appropriate species and restore indigenous vegetation to compensate for the retrospective removal of seepage wetlands.
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| 4 | The MCMP shall detail the methodology and anticipated outcomes to achieve the closure objectives in Condition 3. The MCMP shall include, but not be limited to:1. Identification of key personnel and their responsibilities;
2. A plan(s) showing the final design and intended contours of all permanent structures and works, including but not limited to final landforms, ponds, roads, access tracks or other works which are proposed to remain after closure of the site;
3. Details on the staging of the active closure and post-closure phases until closure objectives are achieved;
4. Details of the rehabilitation required to fulfil the conditions of this consent, including closure criteria and any related consents;
5. Details on infrastructure to be decommissioned, such infrastructure may include buildings, plant, and equipment.
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| 5 | The draft EMP lodged with the Closure and Rehabilitation Plan AEE dated 6 April 2021 shall be updated and finalised by the consent holder and provided to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, for certification within 30 working days of the commencement of this consent. The certification process must be confined to confirming that the final EMP adequately gives effect to the relevant condition(s). If the Canterbury Regional Council does not provide a response with a certification decision or request for changes within 30 working days of receipt of the final EMP, that Plan will be deemed to be certified. |
| 6 | The draft MCMP lodged with the Closure and Rehabilitation Plan AEE dated 6 April 2021 shall be updated and finalised by the consent holder and provided to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, for certification within 30 working days of the commencement of this consent. The certification process must be confined to confirming that the final MCMP adequately gives effect to the relevant condition(s). If the Canterbury Regional Council does not provide a response with a certification decision or a request for changes within 30 working days of receipt of the final MCMP, that Plan will be deemed to be certified.  |
| 6a | In the event of any dispute or disagreement arising as to any certification of any plan required by the conditions, or as to the implementation of, or monitoring required by the conditions, matters shall be referred in the first instance to the Canterbury Regional Council, Manager Consents and Compliance (or equivalent position) to determine a process for resolution of the dispute or disagreement. If a resolution cannot be agreed within 10 working days of any dispute or disagreement arising, the Consent Holder is able to give notice that the matter is to be referred to an independent and appropriately qualified expert setting out the details of the matter to be referred for determination and the reasons the parties do not agree. The qualified expert shall be appointed within five working days of the Consent Holder giving notice of its intention to seek expert determination and there shall be a mutual agreement between the parties as to who this expert should be. The expert shall issue a decision on the matter within 15 working days. The decision of the qualified expert is binding on the Consent Holder and shall be implemented. The dispute resolution process shall be applied before any formal enforcement action is taken by the Consent Authority.  |
| 7 | The consent holder shall review the EMP and MCMP, on at least annual basis during the active and post closure phases (and for no less than 5 years), and if necessary, update it. The consent authority shall be provided with any updates of the plan(s) within 30 working days of any update occurring. Any amendments shall be:1. Only for the purpose of improving the efficacy of the measures to avoid, remedy or mitigate adverse effects;
2. Consistent with the conditions of this resource consent; and
3. Submitted in writing to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, prior to any amendment being implemented.
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| **Complaints** |
| 8 | The consent holder shall maintain a Complaints Register for the purpose of recording and dealing with any complaints that are received by the consent holder in relation to the exercise of this resource consent. The Complaints Register shall record, where this information is available: 1. The issue raised;
2. Any possible cause of the nuisance or effect;
3. The date and time of the
4. Any corrective action taken to address the cause of the complaint, including the timing of that corrective action; and
5. Name of complainant, if offered.
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| **Accidental Discovery Protocol**  |
| 9 | In the event of any discovery of an archaeological site:   1. the Consent Holder shall immediately:
	* 1. Cease earthmoving operations in the affected area and mark off the affected area; and
		2. Advise the Canterbury Regional Council of the disturbance; and
		3. Advise Heritage New Zealand Pouhere Taonga of the disturbance.
	1. If the archaeological site is determined to be Koiwi Tangata (human bones) or taonga (treasured artefacts) by Heritage New Zealand Pouhere Taonga, the Consent Holder shall immediately advise the office of the appropriate runanga (office contact information can be obtained from the Canterbury Regional Council) of the discovery.
	2. If the archaeological site is determined to be Koiwi Tangata (human bones) by Heritage New Zealand Pouhere Taonga, the Consent Holder shall immediately advise the New Zealand Police of the disturbance.
	3. Work may recommence if Heritage New Zealand Pouhere Taonga (following consultation with runanga if the site is of Maori origin) provides a statement in writing to the Canterbury Regional Council, Attention: Regional Manager RMA Compliance and Monitoring that appropriate action has been undertaken in relation to the archaeological site discovered. The Canterbury Regional Council shall advise the Consent Holder on written receipt from Heritage New Zealand Pouhere Taonga that work can recommence.

***Advice Note:*** *This may be in addition to any agreements that are in place between the consent Holder and the Papatipu Runanga.  (Cultural Site Accidental Discovery Protocol).****Advice Note:*** *Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Maori origin, this evidence may be in the form of accumulations of shell, bone, charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc, may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains/koiwi may date to any historic period.  It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides for substantial penalties for unauthorised damage or destruction.* |
| **Annual Report** |
| 10 | The consent holder shall provide an annual report by 1 November each year to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga. The annual report shall include, but not be limited to the following:1. A summary of all activities that occurred in the previous 12 months;
2. A summary of all slope, wetland and water quality (performance and compliance) monitoring results obtained in accordance with the conditions of this consent;
3. Any complaints received and actions taken to address the complaint.
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| **Bond**  |
| 11 | Unless condition 11 (f) is triggered, within three months of the EMP and MCMP being certified the consent holder shall enter into an enforceable agreement acceptable to the Canterbury Regional Council and the Selwyn District Council that provides a single joint bond, pursuant to sections 108(2)(b) and 108A of the Resource Management Act 1991. |
| 11aa | These bond conditions will apply to all resource consents relating to the closure and rehabilitation of the Bathurst Coal Mine, consent, namely:1. RC185640
2. CRC184166
3. CRC200500,
4. CRC201366
5. CRC201367
6. CRC201368
7. CRC203016
8. CRC214320
9. CRC214321
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| 11a | The purpose of the bond is to secure, in the event of any default by the consent holder:1. Compliance with all the conditions of the consents listed in condition 11(aa) above that address closure of the mine and the wetland compensation package;
2. The completion of rehabilitation and closure in accordance with the certified MCMP; and
3. Any future monitoring and maintenance obligations of the consent holder under the consents listed in condition 11(aa) including:
	* + - Site inspections and remediation following a natural hazard event (conditions 11 – 15 of CRC184166);
			- Final landform and cover requirements (condition 6 -10 of CRC184166)
 |
| 11b | The bond agreement shall provide that the consent holder remains liable under the Resource Management Act 1991 for any breach of the conditions of any consent issued which occurs prior to the completion of closure. |
| 11c | The bond can be either in the form of a cash bond or a bank bond at the consent holder’s choice.  |
| 11d | The consent holder must engage a suitably qualified and experienced person(s) to assess the anticipated costs and risks of the activities listed in Condition 11a (a) – (c) and all relevant conditions of all of the issued consents.  |
| 11e | The consent holder shall provide a report to the Canterbury Regional Council and Selwyn District Council which specifies all matters covered by condition 11a (a) – (c) of this consent and the relevant conditions of the consents listed in condition 11aa and identifies the matters to be bonded for, all assumptions, costs, and risk elements that inform the recommended bond amount. |
| 11f | If the Canterbury Regional Council and the Selwyn District Council do not within 5 working days give notice to accept the bond amount derived in accordance with condition 11(e), they will jointly at the consent holder’s cost engage a suitably qualified and experienced person to peer review the report prepared in accordance with condition 11(e) or condition 11(h) and within 30 days of that notice report, confirm the alternative amount of the bond.  |
| 11g | If the consent holder and the Councils cannot agree on the terms of the bond, including the bond amount and any review of the bond, the dispute must be resolved through the dispute resolution process set out in condition 11(f) or referred to arbitration at the election of the consent holder. This condition relates to the setting of the bond amount in accordance with conditions 11 – 11(f) and the review of the bond amount in accordance with condition 11h.  |
| 11h | The bond amount may be reviewed annually, within 30 days of each annual anniversary of the commencement of this consent. If the consent holder wishes to review the bond, the consent holder shall provide a report to the Canterbury Regional Council and the Selwyn District Council which deals with all matters covered by condition 11(a) and identifies the matters yet to be completed and to therefore be bonded for, revised estimate of costs and recommends the revised bond amount. The Canterbury Regional Council and the Selwyn District Council shall jointly engage a suitably qualified and experienced person to peer review the report and give notice, within 60 days of receipt of the report, the revised bond amount. In setting any new bond sum, the Councils shall have particular regard to the updated estimates of the costs of rehabilitation, monitoring and compliance with the conditions of consent. The two Councils shall also take into account the quantum and purpose of any bond provided by the consent holder in favour of any other party or other commitments (e.g. protection covenants for ecological enhancement). The revised bond amount shall not apply until the consent holder receives confirmation from the Canterbury Regional Council and the Selwyn District Council that the new bond amount is agreed. The consent holder shall meet the reasonable costs of bond reviews. If the revised amount less than the existing bond, the Canterbury Regional Council and the Selwyn District Council shall release any excess. |
| 11i | The Canterbury Regional Council and the Selwyn District Council shall release any remaining bond upon the completion of closure of the site. This means when all objectives of the MCMP have been achieved and compliance with consent conditions has been demonstrated by the Consent Holder to the satisfaction of the Canterbury Regional Council and the Selwyn District Council.  |
| 11j | If the consent is transferred in part or whole to another party or person, the bond lodged by the transferor shall be retained until any outstanding work at the date of transfer is completed or a replacement bond is entered into by the transferee, to ensure compliance with conditions of the consent unless the Canterbury Regional Council and the Selwyn District Council is satisfied adequate provisions have been made to transfer the liability to the new consent holder.  |
| 11k | The consent holder shall meet the reasonable costs of providing any bond, including the costs of preparation of the bond and any substitute bond.  |
| **Administration**  |
| 12 | The Canterbury Regional Council may annually on the last five working days of May or November each year, serve notice of its intention to review the conditions of this resource consent for the purposes of: 1. Dealing with any adverse effect on the environment which may arise from the exercise of this onset and which it is appropriate to deal with at a later stage; or
2. Requiring the consent holder to carry out monitoring and reporting instead of, or in addition to, that required by the consent.
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**CRC184166 s9 Land use consent to undertake earthworks in the high soil erosion risk area and earthworks and vegetation clearance in riparian margins, including removal of wetlands**

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| **General**  |
| 1 | The use of the land shall be limited to:1. The excavation and stripping of topsoil and overburden;
2. Extraction and blending of coal;
3. Overburden stockpiling;
4. Rehabilitation of land areas, including the deposition of Coal Combustion Residuals (CCR);
5. Creation and on-going development of haul roads and access tracks;
6. Installation, maintenance and removal of erosion and sediment control structures;
7. Exploration drilling and trenching; and
8. Earthworks, disturbance works and vegetation removal in the riparian margins of wetlands.

***Advice Note:*** *This consent authorises retrospective activities listed in Condition 1 that have occurred onsite within the MOA.*  |
| 2 | The works described in Condition 1 shall only occur at the Canterbury Coal Mine on the land parcels legally described as:1. RS 32347 (CB41A/436, CB8B/920);
2. Part Lot 2 DP 6591 (CB24B/403, CB576/48, CB7D/967);
3. Part Lot 1 DP 18018 (CB2D/1450, CB7D/965);
4. Part Lots 2 and 3 DP 6591 (CB651/33, CB7D/967, CB7D/1140, CB24B/403, CB7D/969);
5. Lot 3 DP 8898 (CB5A/1042);

and within the Mine Operations Area as shown on Plan CRC184166A, which is attached to, and forms part of this consent. |
| 3 | From the commencement of this consent coal extracted from the Canterbury Coal Mine shall be limited to incidental volumes won during site rehabilitation works.  |
| 4 | The total area of disturbed land shall not exceed 58 ha. |
| 5 | This consent authorises the retrospective removal of up to 0.45 ha of wetland vegetation. No further wetland vegetation shall be removed |

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| **Slope Stability**  |
| 6 | Unless specifically excluded, the construction of the engineered landform(s) shall be completed with a cover system to minimise surface water and oxygen ingress and promote re-vegetation.  |
| 7 | Following the completion of construction of the engineered landform(s), surface water diversions shall be constructed to prevent concentrated flows of up-catchment run-off over the engineered landforms. |
| 8 | Following the completion of engineered landform(s) and land contouring the final cover material (soil) shall be re-vegetated in accordance with the MCMP. |
| 9 | Temporary and permanent slopes shall not exceed the following parameters:Table  Description automatically generated |
| 10 | Upon completion of the active closure phase, the following criteria related to slope stability shall be met:1. There is no ponding of water on any remaining slope benches;
2. Water flows without intervention to pre-identified off site drainages;
3. Final slopes do not exceed the maximum slope angles in Condition 9 and geotechnical sign-off has been obtained in accordance with Condition 11.
 |
| **Slope Monitoring and Reporting**  |
| 11 | Upon the completion of the final landform at the end of the active closure phase, the consent holder shall provide a report from a suitably qualified geotechnical engineer to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, that confirms the as-built landform are stable and meets the criteria set out in Condition 10.  |
| 11a | During the operational phase, the MOA shall be inspected at least monthly by a suitably qualified person to:1. Check for foundation preparation prior to fill placement and advise of the installation of underdrainage if and when required.
2. Oversee the fill placement methodology;
3. Identify any areas of slumping, cracking, settlement, subsidence or slope failures, erosion, seepages and areas of water ponding including the remaining sediment ponds and drains onsite. If any such areas are identified, remedial actions to address slope instability shall commence within 10 working days.
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| 12 | Following the completion of the operational phase, the consent holder shall undertake regular monitoring of landform stability for the active and post-closure phases. This monitoring shall be undertaken by a suitably qualified person every three months for 1 year during the active closure phase. The monitoring shall include, but not be limited to:1. Inspecting the landform for any signs of slumping, cracking, settlement, erosion, subsidence or slope failures, seepages and areas of water ponding including the remaining sediment ponds and drains onsite.
2. If any such areas are identified, remedial actions to address slope instability shall commence within 10 working days.
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| 13 | Following the quarterly monitoring undertaken for 1 year in accordance with Condition 12, the consent holder shall provide a report from a suitably qualified geotechnical engineer to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance that:1. Summarises the results of monitoring undertaken during the 12 month period;
2. Describes the causes (if known) for any slope instability issues that have arisen and the remedial actions undertaken;
3. Confirms that the long-term slope stability risks associated with the site are acceptable.
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| 13a | Vegetative cover on rehabilitated areas shall also be recorded as part of the quarterly inspections undertaken in accordance with condition 12.  |
| 14 | For a period of up to four years post the annual monitoring undertaken in accordance with Condition 13, the consent holder shall have a suitably qualified geotechnical engineer undertake a site inspection after an event of an earthquake that generates ground shaking as measured on the Modified Mercalli scale greater that level 6 (MMVI), or a rainfall event that generates more than 96mm of rainfall in 24 hours or more than 21mm of rainfall in 1 hour (at the Whitecliffs Rain Gauge monitored by Canterbury Regional Council). The site inspection shall be undertaken in accordance with Conditions 11a and 15 within 10 working days of the event occurring.  |
| 15 | In the event of any slope failures or significant erosion that results in the disturbance of land or failure outside of the MOA identified in accordance with Conditions 11, 11a 12 and 14, the consent holder shall notify Canterbury Regional Council, Attention: Regional Leader – Monitoring and Compliance, within 5 working days. The notification shall include, but not be limited to the following:1. The location of the failure;
2. Identification of the probable cause of failure;
3. Measures taken to address the failure, prevent recurrence and re-stabilise the slope;
4. Assessment of any environmental effects of the slope failure; and
5. Any actions taken to address any environmental effects.
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| **Records** |
| 16 | For all site inspections in accordance with Condition 11a, 13a and 14, the consent holder shall record the following:1. The date and time of the inspection;
2. The weather conditions during the inspection;
3. Photographs of any areas on instability;
4. A description of any remedial actions undertaken.

A copy of these records shall be provided to Canterbury Regional Council upon request. |
| **Erosion and Sediment Control** |
| 17 | The EMP section on Site Water Management shall describe the erosion and sediment control measures necessary to comply with the conditions of this consent. This shall include, but not be limited to:1. Procedures to minimise erosion;
2. Detailed plans showing the location and design of sediment control measures, on-site catchment boundaries and sources of run-off;
3. Specifications of sediment control measures, for example sediment treatment and storage ponds;
4. Inspection and maintenance procedures for sediment control measures; and
5. The methodology for decommissioning erosion and sediment control measures following rehabilitation.
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| 18 | All erosion and sediment control measures shall be designed, installed, inspected, maintained and decommissioned in accordance with the EMP and MCMP.  |
| 19 | During the active closure phase the consent holder shall provide to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, a monthly update by the 30th of each month, which describes:1. The erosion and sediment control devices in place, including part of the Tara Gully Water Treatment system, to manage discharges from the site: and
2. A description of any devices to be decommissioned in the upcoming month; and
3. Notification of when the site moves from operational to active closure phase, and from active closure phase to post closure phase.
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| 20 | The Consent Holder shall adopt the best practicable option to:1. Minimise soil disturbance and prevent soil erosion;
2. Prevent sediment from leaving the site; and
3. Avoid placing cut or cleared vegetation, debris or excavated materials in a position such that it may enter stormwater runoff or surface water.
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| 21 | Upon completion of the active closure phase vegetation coverage across the site shall be at least 80% (this does not include roads and areas that are to be utilised for water infrastructure purposes). The vegetation cover shall be maintained so that it is in a healthy and uniform state with the exception of seasonal browning off and shall be replanted where erosion or die-off has resulted in bare or patchy soil cover. |
| **Wetland Compensation**  |
| 22 | The Consent Holder shall prepare and implement a Wetland Management and Planting Plan. The Wetland Management and Planting Plan shall be prepared in accordance with the ~~“~~Draft Wetland Management and Planting Plan submitted as part of the Consent Holder’s reply evidence dated 25 February 2022. The Wetland Management and Planting Plan shall address the following:1. A description and summary of the ecological values of the North Property Wetland and Enhancement Area;

b. A description of the other enhancement sites within and adjoining the former mine footprint;c. A description of the planting proposed and/or fencing at each site;d. The monitoring and maintenance requirements for the North Property Wetland and Enhancement Area;e. Discussion around the legal protection requirements for the North Property Wetland and Enhancement Area.A copy of the Wetland Management and Planting Plant shall be provided to Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga. |
| 23 | The consent holder shall engage an appropriately qualified and experienced ecologist to prepare the Wetland Management and Planting Plan referred to above. The objectives of this plan shall be to achieve the following outcomes:*North Property Wetland and Enhancement Area* 1. To revegetate the North Property Wetland and Enhancement Area as shown on Plan CRC [x] with ecologically appropriate species and restore indigenous vegetation to at least 70% canopy cover as demonstrated in plots across both wetland and dryland sites;
2. Woody weed species (including gorse, broom, pine, Himalayan honeysuckle) are at a level of less than 5% cover as demonstrated in plots across the North Property Wetland and Enhancement Area. This will be achieved via weed control.
3. Improve terrestrial and wetland habitat quality and create corridors for wildlife movement at the North Property Wetland and Enhancement Area. This will be achieved via planting and weed control and demonstrated via an increase in commonly accepted wetland condition index and reporting about the site as required by monitoring.
4. Encourage natural ecosystem processes including the regeneration and dispersal of indigenous fauna and flora. This will be achieved by including a selection of appropriate (bird pollinated and dispersed) eco-sourced species in the plantings.
5. Improve habitat for any native lizards (particularly grass skinks) which might be resident at the North Property Wetland and Enhancement Area.

*Other Enhancement Sites*1. Create approximately 0.7ha of wīwī rushland surrounding the constructed drains in the Oyster Gully catchment;
2. Create approximately 0.2ha of shrubland habitat surrounding the ponds at the North ELF;
3. Undertake approximately 0.2ha of planting at the N02 pond, North Elf Ponds and Tara Pond to create pond edge habitats.

Fence around the raised seepage north of the mining area. |
| 24 | In order to achieve the objectives, set out in condition 23 (a) to (e) of the Wetland Management and Planting Plan, the consent holder shall within the North Property Wetland and Enhancement area shown on Plan CRC [ref – North Property Wetland and Enhancement Area – refer to Figure 2 in the Wetland Management Plan] undertake the following actions:1. Set aside an area of land known as the “North Property Wetland and Enhancement Area” as shown on Plan CRC[ref – North Property Wetland and Enhancement Area – refer to Figure 2 in the Wetland Management Plan] attached to this consent for the purpose of providing an ecological enhancement of this area.
2. Remove pest plant species identified in the Wetland Management and Planting Plan from within the areas identified on Plan CRC [ref] for restoration.
3. Revegetate the area shown on Plan CRC [ref] intended for restoration with eco-sourced, pioneer plants to establish a nurse crop into which light and moisture sensitive species will spread and establish via natural means of dispersal.
4. Promote ecological succession by including in the revegetation areas a selection of eco-sourced “diversity” or terminal plant species to initiate and promote successional processes in conjunction with natural dispersal.
5. Require the exclusion of stock from the area shown on Plan CRC [ref] – North Property Wetland and Enhancement Area.]
6. Monitor and control of plant pests and the impacts from animal pests within the areas intended for restoration in accordance with the Wetland Management and Planting Plan requirements.
7. Establishing a covenant to protect the wetland values of the North Property Wetland and Enhancement Area.
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| 25 | In order to achieve the objectives, set out in condition 23 (f) to (i), of the Wetland Management and Planting Plan, the consent holder shall implement the native vegetation planting or fencing where this is specified in general accordance with the following plans, as attached to this consent:a. Refer figures 4 – 7 of the Wetland Management and Planting Plan.For the avoidance of doubt, conditions 26 - 33 do not apply to the works to be done on the other enhancement sites in accordance with this condition |
|  | **Wetland Monitoring – North Property Wetland Enhancement Area** |
| 27 | The Consent Holder shall undertake baseline monitoring in accordance with the Wetland Management and Planting Plan of the North Property Wetland and Enhancement Area. This baseline monitoring shall include both terrestrial and wetland habitats. Vegetation/habitat mapping should distinguish between the these, and for wetland habitats identify the wetland type. As part of this baseline monitoring six permanent photo points are to be established, as generally shown in Figure [inset reference to plan] and listed below:1. Photo point 1: E1515714, N5189141. Upslope of the open water.
2. Photo point 2: E1515689, N5189135.
3. Photo point 3: E1515709, N5189166. 2 photos, one looking at the raised mire and one looking down the channel.
4. Photo point 4: E1515667, N5189221. Three photos facing 145º, 70º and 300º
5. Photo point 5: E1515741, N5189225.
6. Photo point 6 E1515127 N5189305.

These photo points are intended to visually demonstrate restoration over time. |
| 28 | Within six months of the planting at the North Property Wetland and Enhancement Area commencing a Wetland Condition Assessment, including photographs from each photo point at the North Property Wetland and Enhancement Area referred in condition 27 shall be undertaken by the Consent Holder. The results of this assessment shall be in the form of a report which shall describe the observations and conclusions and provide recommendations for ongoing management. This report shall be provided to Canterbury Regional Council, Attention; Regional Leader Monitoring and Compliance and Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga. |
| 29 | Following the initial assessment undertaken in accordance with condition 28, annual monitoring of the wetland condition and photographs at photo points shall be undertaken until 2026. The obligation to continue to undertake this monitoring shall be reviewed in accordance with Condition 33a. If the review determines that monitoring is no longer required, this obligation can cease after 2026. |
| 30 | On a bi annual basis, during the spring and autumn, the Consent Holder shall monitor the North Property Wetland and Enhancement Area for woody weed species. All woody weed species found shall be recorded, along with the approximate size of the population (either number of plants or area covered) and the management treatment applied. Where herbicide is applied a follow-up visit will be planned to confirm that it has been effective and to note whether additional applications might be required (e.g., due to regrowth). The obligation to continue to undertake this monitoring shall be reviewed in accordance with Condition 33a. If the review determines that monitoring is no longer required, this obligation can cease after 2026.  |
| 31 | During the bi annual woody weed monitoring undertaken in accordance with condition 30 the consent holder shall also monitor the North Property Wetland and Enhancement Area for plant health and signs of animal pests. Following monitoring, plants which fail to establish may be replaced as necessary to the ultimate achieving of the Objectives of the Wetland Management and Planting Plan, although they are not required to be replaced at exactly the same microsite or with the same species.  Replacement plants will be planted according to the guidelines set out in the Wetland Management and Planting Plan following the discovery of dead plants. If plant losses to herbivore predation or other animal damage exceed 1% (in the case of rabbits and hares) or 5% (for all other species) then appropriate animal control or other methods of pest exclusion will be implemented by the Consent Holder within the site. The obligation to continue to undertake this monitoring shall be reviewed in accordance with Condition 33a. If the review determines that monitoring is no longer required, this obligation can cease after 2026. |
| 32 | The results of annual monitoring and reporting of management actions (e.g. weed control, planting) undertaken at the North Property Wetland and Enhancement Area shall provided to Canterbury Regional Council/Selwyn District Council, Attention; Regional Leader Monitoring and Compliance and Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga as part of the annual report prepared in accordance with condition [refer general conditions which require an annual report]. |
| 33 | Within five years of commencement of this consent, the consent holder shall provide to the Canterbury Regional Council/Selwyn District Council evidence to confirm that an appropriate legal instrument has been registered on the titles of land known as the North Property ensuring a condition to recognise the values that exist at the North Property wetland. Costs associated with creating and registering the legal instrument shall be borne by the consent holder. |
| 33a | The Wetland Management and Planting Plan shall be reviewed by the Consent Holder in 2026. The purpose of this review shall be to confirm that the Wetland Management and Planting Plan has achieved the objectives set out in Condition 23, and to identify if monitoring can cease or whether this needs to be continued for a further duration in order to better achieve the objectives of the Plan. A written report detailing the results of the review shall be submitted to the Canterbury Regional Council/Selwyn District Council within 30 working days of the review being undertaken. If the review results in amendments to the monitoring regime these are to be implemented by the Consent Holder for the duration specified in the review report. |
| **Spills and Refuelling**  |
| 34 | During works the Consent Holder shall take all practicable measures to prevent spills of hazardous substances being discharged into surface water. Such measures shall include, but not be limited to: 1. All practicable measures shall be undertaken to prevent oil and fuel leaks from vehicles and machinery;
2. Refuelling of machinery and vehicles shall not occur within 20 metres of any waterway, drain or pond and shall be supervised throughout the whole activity;
3. All refuelling equipment shall have a shut-off valves;
4. The storage of fuel and other hazardous substances shall not occur within 20 metres of any water body, drain or pond, and shall be stored securely, unless required for operational purposes during the active ~~or post~~ closure phase (e.g. generator to operate pond pumps);
5. All vehicles and works areas shall have a spill kit capable of absorbing the quantity of fuel and other hazardous substances that may leak or be spilt; and
6. Spill containment equipment shall be immediately available and kept on site at all times.
 |
| 35 | The Consent Holder shall immediately inform the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, of a leak or spill that is greater than 10 litres, or if any fuel enters waterways. Within 24 hours of the spill the Consent Holder shall provide the Canterbury Regional Council with the following information: 1. The date, time, location and estimated volume of the spill;
2. The cause of the spill;
3. The type of contaminant(s) spilled;
4. Observations and photos of any spilt material once it enters the aquatic environment;
5. Clean up procedures undertaken;
6. Details of the steps taken to control and remediate the effects of the spill on the receiving environment;
7. An assessment of the potential ecological effects of the spill; and
8. Measures to be undertaken to prevent a recurrence.
 |

**CRC200500 – Discharge permit, to discharge contaminants into air (fugitive dust) from within the Mine Operations Area**

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| **#** | **Condition**  |
| **General**  |
| 1 | The discharge shall be only fugitive dust generated from mining, earthworks, vehicle movements and rehabilitation and closure works associated with coal mining operations and mine closure within the Mine Operations Area as shown on Plan CRC200500A, which is attached to, and forms part of the resource consent. ***Advice Note:*** *This discharge permit does not authorise the discharge of stormwater, or mine influenced water. This permit also does not authorise the abstraction of water for dust suppression or the excavation or disturbance of land. The consent holder should ensure all necessary authorisations are obtained before commencing works.* |
| 2 | The discharges shall occur at the site legally described as:1. RS 32347 (CB41A/436, CB8B/920);
2. Part Lot 2 DP 6591 (CB24B/403, CB576/48, CB7D/967);
3. Part Lot 1 DP 18018 (CB2D/1450, CB7D/965);
4. Part Lots 2 and 3 DP 6591 (CB651/33, CB7D/967, CB7D/1140, CB24B/403, CB7D/969);
5. Lot 3 DP 8898 (CB5A/1042);

and within the Mine Operations Area as shown on Plan CRC200500A and Plan CRC200500B, which are attached to, and form part of this resource consent. |
| 3 | The discharge of particulate matter shall not give rise to effects that are noxious, dangerous, offensive or objectionable beyond the boundary of the Mine Operations Area as shown on Plan CRC200500A.  |
| **Dust Management Plan**  |
| 4 | The Dust Management section of the EMP shall include but not be limited to:1. A description of the activities that will result in the discharge of contaminants into air; and
2. A description of how often the contaminants will be discharged; and
3. A description of the location of the discharge, including a description of the activities that occur on neighbouring properties and location of any sensitive activities that may be affected; and
4. An explanation as to how any adverse effects on sites that are sensitive to Ngāi Tahu, such as statutory acknowledgement areas, silent file areas or wāhi tapu or wāhi taonga are to be managed; and
5. A description of the management practices being implemented to minimise the discharge or the effects of the discharge of contaminants to ensure compliance with this consent; and
6. Identification and contact details of the persons responsible for carrying out all actions in relation to meeting the requirements of this consent;
7. A system of training for employees and contractors to make them aware of the requirements of the DMP;
8. A method for recording and responding to complaints from the public; and
9. Procedures for managing dust when staff are not on site.
 |
| 5 | The DMP shall be provided to Canterbury Regional Council on request. The DMP may be amended at any time. Any amendments shall be: 1. Only for the purpose of improving the efficacy of the dust control measures and shall not result in reduced discharge quality; and
2. Consistent with the conditions of this resource consent.
 |
| **Dust Control Measures**  |
| 6 | The consent holder shall use the best practicable option at all times to ensure compliance with Condition 3. These measures shall include but not be limited to:1. A water truck (or other alternative mechanism) which shall be available and used as necessary to wet down haul roads and other areas of operation as required.
2. A speed limit of 40 kilometres per hour, which shall be maintained for all vehicles on all unsealed roads on the properties on which the consent is exercised.
3. Following the completion of overburden placement and land contouring the final cover material shall be re-vegetated with pasture species.
4. In the event that wind speeds over a ten-minute rolling average exceed 90 kilometres per hour, site activities are to cease other than for essential works such as dust suppression until the wind speed has reduced below that threshold.
5. In the event that suspended particulate matter reduces visibility to less than 50 metres at the site, site activities are to cease other than for essential works such as dust suppression until the visibility increases above that threshold.
 |
| **Monitoring** |
| 7 | A meteorological monitoring station is to be operated at the site until the completion of the active close phase at the site. The meteorological equipment shall:1. Include provision for both wind speed and rainfall;
2. Be installed and maintained in accordance with the manufacturer’s instructions;
3. The wind monitor shall be installed on a mast at a location where wind direction and speeds are representative of the site, and such that their height is at least four metres above local ground level;
4. The wind monitor shall be fitted with an alarm to site staff that operates if the wind speed trigger level in Condition 6(e) is exceeded;
5. The wind monitor shall record as a minimum wind speed and direction as 1-minute vector averages with the following resolutions and accuracies:
6. Wind speed resolution of 0.1 metres per second (m/s), accuracy of at least within +/-0.2 m/s, and a stall speed no greater than 0.5 m/s; and
7. Wind direction resolution of 1.0 degree and accuracy of at least within +/- 1.0 degree.
8. Record all of the data in electronic form.

The meteorological data recorded in accordance with Condition 7 shall be retained and provided to the Canterbury Regional Council on request. |
| **Administration**  |
| 8 | This consent may be surrendered in accordance with section 138 of the RMA upon the site achieving closure criteria for vegetation cover in accordance with CRC184166 and entering the post closure phase.  |

**CRC201366 s14 Water Permit to take, divert and dam water**

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| **#** | **Condition**  |
| **General** |
| 1 | This consent authorises the following activities:1. The diversion of surface run-off water and drainage water, including between sub-catchments, into the Tara Gully Mine Water Treatment System;
2. The damming of water in artificial storage ponds; and
3. The taking and using of water from storage ponds;

associated with the operation, rehabilitation and closure of the Canterbury Coal Mine. ***Advice Note:*** *This consent authorises retrospective activities listed in Condition 1 that have occurred onsite within the MOA.* |
| 2 | The activities described in Condition 1 shall only occur at the Canterbury Coal Mine on the land parcels legally described as:1. RS 32347 (CB41A/436, CB8B/920);
2. Part Lot 2 DP 6591 (CB24B/403, CB576/48, CB7D/967);
3. Part Lot 1 DP 18018 (CB2D/1450, CB7D/965);
4. Part Lots 2 and 3 DP 6591 (CB651/33, CB7D/967, CB7D/1140, CB24B/403, CB7D/969);
5. Lot 3 DP 8898 (CB5A/1042);

and within the Mine Operations Area as shown on Plan CRC201366A, which is attached to, and forms part of this consent. |
| 3 | Upon the completion of the final landform and prior to entering the post closure phase, the consent holder shall provide a report from a suitably qualified person to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, that confirms the as-built landform and catchments are generally consistent with the sub-catchment boundary areas shown on Plan CRC[insert ref – catchment boundary plan].  |
| 3b | Included in the report from condition 3, the consent holder shall submit final as-built plans that identify the location of the surface drains which are to be retained on the site and the flow paths for surface water dispersing from the final landform  |
| 4 | All permanent surface drains shall be maintained as per design intentions on the site at all times.  |
| **Ponds** |
| 5 | Water may be contained in the following water storage ponds with volumes not exceeding:* 1. Surge Pond – 8,500m (Operational phase);
	2. Dust Pond – 10,000m (Operational phase);
	3. N02 Pit Pond – 19,000m3 (active closure and post-closure phases); and
	4. Tara Pond – 350m3 (all phases).

as shown on Plan CRC201366X, which is attached to, and forms part of this consent. |
| 6 | The Surge Pond and Dust Pond shall be removed during the operational phase of the rehabilitation process. |
| 7 | During the active closure and post-closure phases of site rehabilitation, the consent holder shall undertake inspections of pond stability in accordance with CRC184166. |
| **Water Take** |
| 8 | During the active closure phase water may be taken at a maximum rate of 300m3/day from any of the ponds remaining onsite for the purposes of providing dust suppression and irrigation to support vegetation establishment on rehabilitated areas.  |
| 9 | During the post closure phase water may only be taken from the N02 pit pond via a decant structure and Tara Pond for the purposes of diluting the discharge of contaminants and water in accordance with CRC201368 and CRC170541 [Tara Stream discharge consents] and as shown on Plan CRC201366X. |

**CRC201367: Water permit to take and use groundwater (via drainage systems)**

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| **#** | **Condition**  |
| **General**  |
| 1 | This permit authorises the taking and diversion of groundwater via sub-soil drainage systems. |
| 2 | The activities described in Condition 1 shall only occur at the Canterbury Coal Mine on the land parcels legally described as:* 1. RS 32347 (CB41A/436, CB8B/920);
	2. Part Lot 2 DP 6591 (CB24B/403, CB576/48, CB7D/967);
	3. Part Lot 1 DP 18018 (CB2D/1450, CB7D/965);
	4. Part Lots 2 and 3 DP 6591 (CB651/33, CB7D/967, CB7D/1140, CB24B/403, CB7D/969);
	5. Lot 3 DP 8898 (CB5A/1042);

and within the Mine Operations Area as shown on Plan CRC201366A, which is attached to, and forms part of this consent. |
| **During Active Closure** |
| 3 | Within three months of the completion of rehabilitation activities to create the final landform, and entering the active closure phase, the consent holder shall submit to Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, final as-built plans that identify the location of all sub-soil drains, including their discharge location. |

**CRC[discharges to Tara Stream]: Discharge permit to discharge sediment, mine influenced water, drainage water and residual contaminants from the treatment of water**

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| **#** | **Condition** |
| **General**  |
| 1 | The discharge of contaminants to water shall be limited to the following:1. Sediment-laden stormwater run-off during rainfall events;
2. Mine influenced water;

c. Surface drainage); d. Water from engineered landforms;associated with the operation and rehabilitation of the Canterbury Coal Mine.***Advice Note:*** *This consent authorises retrospective activities listed in Condition 1 that have occurred onsite within the MOA.* |
| 2 | The activities described in Condition 1 shall only occur at the Canterbury Coal Mine on the land parcels legally described as:land parcels legally described as:1. RS 32347 (CB41A/436, CB8B/920);
2. Part Lot 2 DP 6591 (CB24B/403, CB576/48, CB7D/967);
3. Part Lot 1 DP 18018 (CB2D/1450, CB7D/965);
4. Part Lots 2 and 3 DP 6591 (CB651/33, CB7D/967, CB7D/1140, CB24B/403, CB7D/969);
5. Lot 3 DP 8898 (CB5A/1042);

and within the Mine Operations Area as shown on Plan CRC201368X, which is attached to, and forms part of this consent. |
| 3 | All point source discharges shall occur into the Tara Stream. For the purposes of this consent, the compliance point during the operational and active closure phases shall be CC02 tele as shown on Plan CRC201368X (1513950, 5188030) during times of pumped discharge or when Tara Pond is overflowing via the spillway. At other times the compliance point shall be the bottom of the Tara spillway mixing structure referred to as CC02\_TSMS as shown on Plan CRC[insert ref] (NZTM2000 1513881, 5188046).During the post closure phase the compliance point shall be the bottom of the Tara Pond spillway mixing structure referred to as CC02\_TSMS shown on Plan CRC [insert ref] (NZTM2000 1513881, 5188046).  |
| 4 | The discharge shall not result in: 1. The production of oil or grease films, scums, foams, floatable or suspended materials, nor any conspicuous change in colour or clarity in the Tara Stream at the edge of the compliance point; or
2. The emission of objectionable odour from the discharge to Tara Stream.
 |
| 5 | The discharge shall not cause the erosion or scour of the bed or banks of Tara Stream. |
| 6 | All monitoring required by this consent shall be undertaken by a suitably qualified and experienced person. Sampling shall be undertaken in accordance with industry standard practices with reference being made to the most recent version and issue of the National Environmental Monitoring Standards (NEMS) Water Quality: Sampling, Measuring, Processing and Archiving of Discrete River Water Quality Data.  |
| 7 | All water quality samples required by this consent shall be analysed using the most appropriate scientifically recognized and current method by a laboratory that is accredited for that method of analysis by International Accreditation New Zealand (IANZ) or an equivalent accreditation organisation that has a mutual recognition arrangement with IANZ. |
| **Erosion and Sediment Control**  |
| 8 | During the operational phase and active closure phase of the site rehabilitation:1. Best practicable option erosion and sediment control measures shall be actioned to minimise the discharge of sediment from the site.
2. Staging rehabilitation works and progressively stabilising rehabilitated areas to minimise the area of disturbed land.
3. Progressively reducing concentrated surface water flows into the N02 Pit Pond by returning the landform to reflect its original shape and allow the dispersal of flows down slopes following the stabilisation of the landform.
4. Directing sediment laden water to sediment retention ponds for treatment prior to discharge.
 |
| 9 | All erosion and sediment control measures shall be designed, installed, maintained and decommissioned (if they are not designed to be permanent features) in accordance with the EMP and MCMP. |
| **Operational and Active Closure Phase – Water Management System** |
| 10 | During the operational and active closure phases active management of surface run-off water shall occur using pumps to transfer flows in the onsite ponds to meet water quality limits until the drainages have met the closure criteria for vegetative cover in accordance with Condition 11 and drains are adequately lined to prevent erosion. |
| 11 | Surface water run-off diverted to the water quality treatment system shall only be returned to their natural flow paths when the landform within the contributing drainage area is stabilised to prevent erosion and vegetation coverage is at least 80% coverage~~.~~ on rehabilitated sites (excluding roads and other areas used for water infrastructure). |
| 12 | All water treatment devices used during the operational and active closure phase shall remain operational until such time that no flows are directed to them, or there remains sufficient water treatment capacity in the water treatment system to achieve compliance with the water quality limits.  |
| 13 | The consent holder shall ensure at least 0.5 metre of non-acid forming rock and/or topsoil is placed against all final backfill areas and reshaped surface in the N02 pit pond high wall catchment areas to prevent insitu exposed coal seams and potentially acid forming rock deposits continuing to be exposed to the atmosphere. |
| **Post Closure – Water Management System** |
| 13a | Prior to permanently using N02 Pit Pond water for dilution of MSR effluent the consent holder shall develop a water balance model, CC02 underdrain contaminant load model and N02 Pit Pond water quality model using empirical data to validate and calibrate the suitability of the N02 pit pond water for the long term water quantity and quality dilution and discharge requirements at the site. A description of these models and results of these models shall be submitted to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, upon completion.  |
| 14 | The post-closure water management infrastructure shall comprise of:1. The N02 Pit Pond;
2. Boxcut Drain from the N02 Pit Pond;
3. MSR adjacent to Tara Pond;
4. Tara Pond;
5. N02 pond decant system and pipeline from decant to MSR diluent mixing structure.
6. Dilution mixing system;
7. Lined drainage channels; and
8. Any other infrastructure required, or modifications to such infrastructure through adaptive management.

as shown on Plan CRC [ref], which is attached to, and forms part of this consent. |
| 15 | The post-closure concentrated flow paths shall be designed and constructed to manage all run-off in events up to, and including the 1% Annual Exceedance Probability, time of concentration event, without compromise to the ability to perform to its design. |
| 16 | At the commencement of the post-closure phase, the Tara Pond shall:1. Include a spillway that provides for the discharge of 1.21m³/s of water and energy dissipation structures to reduce water velocities; and
2. Include a weir and flow monitoring infrastructure to monitor discharges from the pond.
3. Include a mixing structure at base of the spillway infrastructure, which should be designed to mix the combined discharges from the MSR effluent and the diluent pipeline discharge.
 |
| 17 | The N02 Pit Pond shall:1. Include a spillway that provides for the discharge of 0.89m3/s of water;
2. Prior to using N02 Pit Pond water for dilution of MSR effluent, the N02 Pit Pond shall:
	* 1. Include a decant structure to provide for the continuous discharge from the pond; and
		2. Include a piped system to take the water from the decant to the MSR effluent mixing structure; and
		3. Provide an operating live water storage volume of at least 3,700m³.
 |
| 18 | At the commencement of the post-closure phase, the CC02 underdrain shall be piped and treated in a Mussel Shell Reactor (MSR). The MSR shall be designed to generally accord with the following: 1. The MSR shall be at least 24m in length and 5m in width at the top, with internal walls battered to ensure stability;
2. The depth of the MSR shall be at least 1.5m comprising of a 1m layer of mussel shells and 0.5m of freeboard and hold at least 58m³ of untreated water;
3. An underdrain network shall be installed at the base of the shell layer approximately 200mm above the base of the MSR to collect treated water; and
4. The MSR shall discharge treated water to the mixing structure at the base of the Tara Pond spillway.

In order to confirm that the MSR has been constructed to generally accord with the requirements of this condition and is effective in treating contaminants, a commissioning report shall be prepared and submitted to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance, upon completion of its construction.  |
| 18a | The MSR shall be maintained by the consent holder to ensure its effectiveness at treating water from the CC02 and maintain compliance of water discharges. Maintenance may include the periodic removal of sludge build up within the MSR or other maintenance to ensure the system is working. During de-sludging events no untreated CC02 underdrain flows shall be discharged to Tara Stream.  |
| 18b | Any sludge and shell material removed from the MSR during any maintenance activities undertaken in accordance with condition 18a shall be prevented from entering Tara Stream directly and shall be removed from the site and disposed of at a suitably licenced disposal facility.  |
| 19 | All concentrated flow paths from contributing drainages greater than 0.5ha as shown on Plan CRC [ref] remaining a on the final landform and prior to the end of the active closure phase shall be engineered and lined to minimise erosion in accordance with the MCMP.  |
| **Water Quality Monitoring and Limits** |
| 20 | During the operational, active closure and closure phases water quality monitoring shall be undertaken at the locations specified in condition 3 for each phase, when a discharge is occurring from the site for the following contaminants and at the stated frequencies:

|  |  |
| --- | --- |
| **Contaminant** | **Frequency** |
| pH# | Continuous (Every 15 minutes) with monthly manual testing (grab samples) |
| Temperature  | Continuous (Every 15 minutes) |
| Turbidity (NTU)\*\* | Continuous (Every 15 minutes) with monthly manual testing (grab samples) |
| Electrical conductivity#  | Continuous (Every 15 minutes) with monthly manual testing (grab samples) |
| Boron (mg/L) | Monthly (grab samples) |
| Manganese (mg/L)\*\*\* | Monthly (grab samples) |
| Nickel (mg/L)\* | Monthly (grab samples) |
| Zinc (mg/L)\* | Monthly (grab samples) |
| Iron (mg/L)\*\*\* | Monthly (grab samples) |
| Aluminium (mg/L)\*\*\* | Monthly (grab samples) |
| Calcium (mg/L) | Monthly (grab samples) |
| Magnesium(mg/L) | Monthly (grab samples) |
| Sulfate | Monthly (grab samples) |
| Dissolved oxygen%# + | Monthly (grab samples) |
| Dissolved organic carbon (mg/L)+  | Monthly (grab samples)  |
| Polycyclic aromatic hydrocarbons+ | Annually (grab sample) |
| Arsenic (mg/L) | Annually (grab sample) |
| Cadium\* (mg/L) | Annually (grab sample) |
| Chromium\* (mg/L) | Annually (grab sample) |
| Copper\* (mg/L) | Annually (grab sample) |
| Lead\* (mg/L) | Annually (grab sample)  |
| Mercury (mg/L) | Annually (grab sample) |

*This is a field measure of DO. Field pH and field EC should also be undertaken to support laboratory data and interpretations.* *\*Hardness modified* *\*\*Only for operational and active closure phases.* *\*\*\*Manganese, Iron, and Aluminium will also be analysed for total metals at CC02-tsms.* *+ Taken only at CC02\_TSMS* |
| 22 | The water quality sampling results shall be compared to the following limits:

|  |  |
| --- | --- |
| **Contaminant** | **Limits** |
| pH | Between 6-9 |
| Turbidity\*\* | 50 NTU |
| Boron#  | 1.5 mg/L  |
| Manganese\*  | 1.9 mg/L |
| Nickel\*\*\*  | 0.011 mg/L |
| Zinc\*\*\*  | 0.008 mg/L |
| Iron\*  | 1 mg/L |
| Aluminium\*  | 0.055 mg/L |
| Arsenic  | 0.013mg/L |
| Cadium  | 0.0002 mg/L |
| Chromium\*\*\* | 0.0033 mg/L |
| Copper\*\*\* | 0.0014 mg/L |
| Lead\*\*\* | 0.0034 mg/L |
| Mercury  | 0.0006 mg/L |
| *\* Manganese, Iron, and Aluminium will also be analysed for total metals but for compliance purposes these limits are based on the dissolved fractions.* *\*\*Only for operational and active closure phases.* *\*\*\*Hardness modification is required for these metals by a hardness algorithm.* |

 |
| 23 | The consent holder shall confirm compliance with the limits set out in Condition 22 by undertaking the monitoring in accordance with Condition 20. 1. In the event that one or more of the monthly grab samples shows non-compliance with the limits set out in Condition 22, the Consent Holder shall be required to resample onsite or retest a duplicate sample if that is available for that parameter as soon as practicable and no later than two working days following receipt of the non compliance. Following the first exceedance the consent holder shall also be required to investigate onsite as soon as practicable, the possible cause of the exceedance and if this can be clearly attributable to a direct fault (e.g. equipment malfunction) that can be remedied then such actions should be undertaken to prevent further non compliance.
2. In the event that the boron samples show non compliance with the limits set out in Condition 22, the Consent Holder shall be required to immediately seek to repeat the analysis using a duplicate sample.
3. In circumstances when dissolved iron or dissolved aluminium show non compliance with the limits set out in Condition 22, this may be due to colloidal iron and colloidal aluminium being present within the receiving environment. If an exceedance of these parameters is detected, then this will require additional investigations such as such as 0.2 µm filters, assessment of dissolved oxygen concentrations, and other chemical parameter before this is a confirmed exceedance for the purposes of Condition 24.
4. In circumstances where one or more of the limits set out in Condition 22 is exceeded on two consecutive sampling occasions as set out in (a) or following the duplicate resampling in (b) and these results are confirmed exceedances arising from discharges or activities at the site, the Consent Holder shall report to the Consent Authority in accordance with Condition 24;
5. In the event that continuous monitoring shows at least four readings in a row (one hour) above the limits set out in Condition 22 with greater than 1L/s ~~is~~ being discharged into Tara Stream, or a fault causes the loss of data or recording function, the Consent Holder shall report to the Consent Authority in accordance with Condition 24.

**Advice note:***For the avoidance of doubt the turbidity limit in Condition 22 do not apply during the post closure phase.*  |
| 24 | If the monthly monitoring results in a confirmed exceedance in accordance with Condition 23 (a), or the continuous monitoring exceeds the triggers set out in Condition 23 (b) then the Consent Holder shall:1. Notify the Canterbury Regional Council, Attention; Regional Leader Monitoring and Compliance within 24 hours of receiving the confirmed sampling results;
2. Investigate the possible cause of the exceedance;
3. Identify the risk to the environment from the exceedance;
4. Undertake steps to minimise the risk of future exceedances within ten working days of receiving sampling results; and
5. Provide a report to the Canterbury Regional Council, Attention: Regional Leader Monitoring and Compliance that:
	* 1. Outlines the findings of the investigation;
		2. Any mitigations acted upon, or proposed mitigation measures or amendments to the TARPs in order to address potential effects; and
		3. The timeframe for implementing any proposed mitigation measures.
 |
| **Water Quality Recording and Reporting** |
| 30 | When monthly sampling is undertaken, the Consent Holder shall also record:1. The name of the person collecting samples;
2. The date and time the samples were collected;
3. The methodology used to collect the sample;
4. The weather and flow conditions at the time of sampling; and
5. The rainfall data associated with the sampling events, including the:
	* 1. Date;
		2. Time;
		3. Duration; and
		4. Rainfall depth.
 |
| 31 | The water quality monitoring results from the monthly sampling must be supplied to the Canterbury Regional Council, Attention: Regional Leader – Monitoring and Compliance within one month of them being received in an electronic format, suitable for automatic upload to a water quality database (preferably directly from the analytical laboratory immediately after quality checking). |
| 32 | As part of the Annual Report submitted to the Canterbury Regional Council in accordance with condition 10 [general conditions] the Consent Holder shall provide a summary of the water quality monitoring including:1. The name of persons who collected samples, the date and the time the samples were collected;
2. The weather and flow conditions at the time of sampling;
3. The rainfall data associated with sampling events;
4. The laboratory analysis results;
5. An interpretation of water quality limit trends including comparisons to previous years' monitoring;
6. A discussion of performance monitoring data collected in accordance with condition 35 and any issues identified; and
7. Documentation of water quality limit compliance and the action taken to address exceedances including what actions were undertaken and when those actions were implemented.
 |
| **Trigger Action Response Plan (TARP)** |
| 33 | As part of the MCMP required in accordance with Condition 4 [general condition] the Consent Holder shall prepare a Trigger Action Response Plan (TARP). The objective of the TARP is to ensure the proposed water management system during both the active and post closure phases are effective and that discharges leaving the site continue to meet the water quality compliance limits specified in Conditions 22 and 27.  |
| 34 | The purpose of the TARP is to manage uncertainties so as to minimise risk of exceeding contaminant limits in discharge water. The TARPs shall describe the methods for monitoring the water management systems and the physical characteristics and water quality parameters of key parts of the system during the active and post closure phases, and to explain the actions that are required to be undertaken by the Consent Holder should any TARP green, yellow, orange or red level triggers be reached during these periods.  |
| 35 | The MCMP and the TARP shall include, but not be limited to, the following matters:1. Identify the water management systems that will be in place during both the active and post closure phases;
2. Provide a description of the key water management and mitigation features that will remain on site during the active and post closure phases, including the N02 Pit Pond, and Tara MSR;
3. A description of the performance water quality monitoring that will be undertaken during the active and post closure phases.
4. A description of the water quality and TARP level triggers during both the active closure phase and post closure phase that will necessitate the Consent Holder undertaking either further investigation or action to address the trigger which has occurred.
5. Provide a description of the investigations or actions that will be implemented by the Consent Holder in response to a TARP level trigger being reached or exceeded.
6. Provide a description of the steps that will be undertaken to mitigate or remediate the resultant effects of that TARP level trigger being reached or exceeded.
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| 35a | In demonstrating compliance with condition 35(c) the Consent Holder shall ensure performance monitoring includes but is not limited to:1. Monitoring of the N02 Pit Pond for potential stratification effects and mitigative actions included as part of the TARPs should any stratification effects be detected; and
2. Monitoring of CC12 in Oyster Gully during both the active closure phase and post closure.
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| 36 | If any of the TARP level triggers identified within the TARP are reached or exceeded, then the Consent Holder shall be required to implement the corresponding actions that are set out within it. The Consent Holder shall notify the Consent Authority within 5 working days of any red triggers within the TARPs being reached, and confirmation of the actions that are being or will be undertaken.  |
| 37 | Prior to moving to the post closure phase the TARP shall be reviewed to ensure it will continue to meet the objective and purpose described in conditions 33 and 34 for the remaining duration of the consent by the Consent Holder. The purpose of this review shall be to confirm that the TARP accurately reflects current on-site activities, the requirements of these conditions of consent, the water management system and to identify if changes to the triggers, investigations or actions contained within the TARP for the post closure phase are required. The review shall also consider whether there can be a reduction in the frequency of monitoring required by these conditions as discharges from the site reach steady state within the prescribed limits in Condition 27. A written report detailing the results of this review shall be provided to the Canterbury Regional Council within 20 working days of the review being undertaken and completed confirming that the reviewed TARP and monitoring regime gives effect to these conditions. If the review results in amendments to the trigger levels within the TARP, then this should be provided to the Canterbury Regional Council for certification at this time. ***Advice Note:****If the review of the TARP identifies that there should be an amendment to the water quality monitoring or discharge limits that are prescribed in these conditions, to formally amend these requirements within the conditions of consent a section 127 variation application will be required.* |
| **Aquatic Ecology Monitoring**  |
| 38 | As part of the MCMP prepared in accordance with Condition 4 [general condition] the Consent Holder shall prepare an Aquatic Ecology Management Plan. The purpose of this Plan shall be to inform achievement of the rehabilitation objectives insofar as they seek to maintain and potentially enhance instream values and aquatic ecology within Tara Stream and Bush Gully Stream post closure of the site. The Aquatic Ecology Management Plan shall set out the monitoring parameters, sites and duration, and as a minimum include:*Tara Stream* * 1. A description of the monitoring programme for water quality, habitat, macroinvertebrates and fish at three sites (downstream of CC02, CC03B, and CC03).
	2. A mechanism to review the monitoring obligations after two years of monitoring data to determine validity and merit of its continuation.
	3. A description of the record and reporting requirements.

*Bush Gully* 1. A description of the monitoring programme for water quality, habitat, macroinvertebrates and fish at sites along Bush Gully stream, upstream, within and downstream of the North Property enhancement area.
2. A mechanism to review of the monitoring obligations after two years of monitoring data to determine validity and merit of its continuation.
3. A description of the record and reporting requirements.
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**CRC[CCR discharges] – To discharge CCR, lime products and mussel shells to land and to water**

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| **#** | **Condition**  |
| **General**  |
| 1 | The discharge of contaminants to land where contaminant may enter water shall be limited to the discharge of coal combustion residuals (CCR), lime and mussel shells. |
| 2 | The discharge shall only occur at the Canterbury Coal Mine on the land parcels legally described as:1. RS 32347 (CB41A/436, CB8B/920); and
2. Lot 3 DP 8898 (CB5A/1042);

and within the Mine Operations Area as shown on Plan CRC203016A, which is attached to, and forms part of this consent. |
| 3 | This consent authorises the retrospective discharge of CCR to land on land described in Condition 2. Any future discharges from the commencement of this consent shall be limited to lime and mussel shells for the treatment of mine influenced water. |
| 4 | Lime products and mussel shells may be discharged to land and to water bodies within the MOA to treat acid mine drainage. |
| **Following Site Rehabilitation**  |
| 5 | At the completion of site rehabilitation, the consent holder shall submit to the Canterbury Regional Council, Attention Regional Leader Monitoring and Compliance a detailed plan that demonstrates:1. The mined and filled areas, including the area where CCR has been disposed; and
2. Location of permanent water quality treatment system and features to remain.
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