Before the Hearing Panel appointed by Canterbury Regional Council and Waimakariri District Council

IN THE MATTER OF	The Resource Management Act 1991
AND	
IN THE MATTER OF	Applications CRC184166, CRC200500, CRC201366, CRC201367, CRC201368, CRC203016, CRC214320 and CRC214321 by Bathurst Coal Limited for a suite of resource consents to operate, rehabilitate and close the Canterbury Coal Mine.

SUMMARY STATEMENT

SECTION 42A REPORTING OFFICER CANTERBURY REGIONAL COUNCIL PLANNING – ADELE DAWSON

DATED: 29 OCTOBER 2021

INTRODUCTION

1. My full name is Adele Maree Dawson and I have been contracted by the Canterbury Regional Council (CRC) to prepare a Section 42A report for these resource consent applications. I am an Associate Resource Management Consultant from Incite. I hold a Bachelor of Arts in Geography and Sociology from Canterbury University and a Master of Resource and Environmental Planning from Massey University. I am a full member of the New Zealand Planning Institute.

2. While this is a Council Hearing, I acknowledge that I have read the Environment Court's Code of Conduct for Expert Witnesses as contained in section 7 of the Environment Court Practice Note 2014, and have complied with it in the preparation of this summary.

SCOPE OF REPORT

3. This report is an addendum to my primary Section 42A Officer's Report circulated on 24 September 2021. The purpose of this addendum is to provide a summary of my report and respond to matters raised in the applicant's evidence and during the hearing.

4. In preparing this addendum report, I have reviewed the following information:

    a. Applicant's evidence circulated 4 October 2021;

    b. Ecology and wetlands joint witness statement dated 18 October 2021;

    c. Planning joint witness statement dated 21 October 2021; and

    d. The applicant's revised proposed consent conditions provided on 26 October 2021.

5. The other Section 42A officers have also prepared addendum reports and my comments below refer to those reports.

SECTION 42A REPORT SUMMARY

6. The Section 42A report covered in detail my understanding of the proposed activity as described in the Assessment of Environment Effects (AEE's), further information responses and closure addendum AEE, an assessment of the relevant regional plan rules, objectives and policies, a description of the receiving environment and an assessment of the actual and potential effects of the proposal.

7. Broadly, I considered that (based on the information at the time) there was insufficient information to demonstrate that the proposal could meet the Section 104D gateway tests and as such resource consent could not be granted. My opinion was largely based on:

    a. The adverse effects on wetland ecology as a result of wetland removal and potential further degradation of wetlands on the north-west slopes of the site;

    b. Surface water quality effects arising from long-term discharges not meeting appropriate water quality limits; and

    c. The consumptive use of water in an over-allocated catchment.

8. I also expressed concern regarding:

    a. Future land uses on the site exposing PAF and CCR and consequently resulting in surface water quality impacts;

    b. The effects on natural character, particularly associated with changes to drainage patterns and wetland removal; and

    c. Potential effects on cultural values being unacceptable due to inadequate wetland compensation and uncertainty regarding long-term discharge quality.

9. In relation to the objectives and policies of the relevant statutory documents, my assessment commented on how the proposal compared to the relevant provisions and concluded that:

    a. The proposal did not achieve the objective of the NPS-FM due to water quality limits unlikely being achieved 100% of the time, the wetland compensation package being inadequate to address wetland losses to date and potential future losses and the consumptive abstraction of water in an over-allocated catchment.

    b. In relation to the CRPS, the proposal may be contrary to the freshwater provisions due to discharge quality potentially not providing for the life-supporting capacity of ecosystems or meeting set water quality limits and the further over-allocation of water. With regards to indigenous ecosystems, the proposal is considered contrary to the CRPS provisions as the wetland compensation package was insufficient to address the wetland loss that has occurred, further degradation to seepage wetlands is anticipated and effects may also occur on the raised spring.

    c. The proposal was either inconsistent or contrary with a number of the CLWRP objectives and policies due to the insufficient compensation proposed for the wetland removal and further wetland losses, impacts on the hydrology of Tara Stream, the consumptive take of water in an over-allocated catchment and the ability of the applicant to continuously achieve appropriate water quality limits.

    d. Under the CARP, I consider the proposal is consistent with the objectives and policies primarily due to the separation to sensitive receptors.

10. Based on the Section 42A reports of CRC and external experts, I listed a number of outstanding questions and concerns for the applicant to address in order for a complete and thorough assessment of the proposal.

MATTERS RAISED IN EVIDENCE AND DURING THE HEARING

11. In the following sections I have commented on some key matters raised in evidence, joint witness statements and during discussion through the hearing process. Due to the time constraints, I have not yet provided a full revised set of conditions but I have noted some amendments I consider necessary. However, as suggested by the applicant and the Panel, the CRC team will continue to work with BCL to reach as much agreement as possible on appropriate conditions.

Existing environment

12. Paragraph 23 of Ms Hunter's evidence describes the existing environment as it relates to the land use consent for earthworks. Figure 7 of the "plans bundle" demonstrates the existing environment relevant to earthworks activities pre 2012. For clarification, I agree with the extent of the area shown on Figure 7, but I consider that consent for earthworks is required across the full extent of the MOA in the Tara catchment. This is because any earthworks after notification of the CLWRP in 2012 required consent. Therefore, only the level of disturbance until 2012 in relation to extent and depth of earthworks can form part of the existing environment.

13. Paragraphs 34 – 39 of Ms Hunter's evidence sets out her understanding of the CRC existing environment for AMD management. Figure 9 of the "plans bundle" depicts the areas of the MOA where discharges are authorised by consent or subject to the current applications.

14. I largely agree with Ms Hunter's Figure 9, other than the area shown in orange between the CRC214321 variation and the MOA boundary at the northern extent of the site. I consider this area is not subject to any consent or consent application. I note however, that I understand it does not require consent on the assumption that disturbance works in this area have not occurred as it sits outside of the pit shell.

15. Both Ms Hunter and Dr Bramley make comment regarding the existing environment in relation to wetland removal. Figure 8 of the "plans bundle" sets out the areas where BCL indicate wetlands have been removed as a result of permitted or consented activities. I agree that wetland removal on the North ELF forms part of the CRC existing environment, but I consider that any wetlands removed within the Tara catchment do not. I am not aware of any consents being issued for wetland removal (other than CRC183000 which has not been exercised) and wetland removal prior to 2012 would have required consent under the previous regional plan.

16. Some questions from the panel have also arisen in relation to the existing environment and non-compliances associated with discharges from the Tara Pond. In my view the existing environment does not include any effects associated with those non-compliances, or any effects associated with the activities that are yet to be consented. I consider this is a different question as to whether this package of consents, needs to authorise or rectify those non-compliant discharges.

Landform capping

17. The evidence of Mr Sinclair provides clarification regarding the thickness of material overlying PAF and CCR and also clarifies the PAF and CCR placement methodology. Mr Sinclair explains there is generally 10-15m of NAF cover as opposed to the minimum 0.5m cover the EMP required. In questioning, Mr Sinclair noted that the 0.5m minimum cover was likely for covering PAF on the highwalls rather than as the PAF/CCR cover used during ELF construction.

18. Mr Macfarlane and Dr Massey have reviewed this evidence. Based on their supplementary reports, I consider there is a greater level of comfort that future land use activities are less likely to disturb the encapsulated CCR/PAF. However, there remains some concern from Dr Massey that plantation forestry could result in oxygen or water intrusion into the ELF or the potential for contaminant mobilisation associated with organic matter.

19. I also note the potential for PAF to be exposed on highwalls if the 0.5m of cover is lost from these areas. I understand that the area of PAF within the highwalls is limited to a small section of the N02 pit pond catchment as identified by Dr Weber in his Appendix 2 of his evidence in chief.

20. I consider that the water quality monitoring programme could likely identify any particular issues associated with future land uses and that the TARP responses could effectively manage any changes in discharge quality arising from the site. However, this will be reliant on on-going monitoring as the future land uses change and certainty that monitoring is occurring in appropriate locations.

Slope stability monitoring

21. Dr Begbie has provided comments on the proposed slope stability monitoring conditions, agreeing with many of the requirements but suggesting that monitoring is only required every three months for a period of one year following the completion of site rehabilitation.

22. Based on Mr Macfarlane's opinion, I consider that post-construction monitoring (after the first 12 months) could be triggered by the events suggested by Mr Macfarlane in his evidence in chief, being an earthquake or rainfall event of a specified magnitude for a period of another 4 years. The applicant has adopted this recommendation and I agree with their proposed condition subject to the amendment discussed between

Commissioner McGarry and Mr Macfarlane to commence the post construction monitoring once the vegetative cover criteria is met.

Plantation forestry

23. There have been a number of questions from the panel regarding the need (or not) for resource consent to undertake afforestation within and surrounding the site. For clarity, I can confirm that forestry planting which has been undertaken by the landowner on the North ELF has been assessed by CRC.

24. My understanding is that the landowner initially applied for resource consent to undertake planting in a number of locations throughout the Upper Waianiwaniwa catchment, but that during this process it was determined planting on the North ELF and over the active mine site did not require consent.[1]

25. The landowner has since provided notice to CRC in accordance with the requirements of the NES for Planation Forestry (NES-PF) that planting has been undertaken on the North ELF. A CRC Resource Management Officer has provided confirmation to the landowner that the planting is permitted under the CLWRP and the NES-PF.

26. I note that any planting under the NES-PF is required to meet conditions regarding setbacks to waterways and wetlands and "significant natural areas".

Hydrological impacts on Tara Stream

27. Based on the evidence of Ms Dodson, I understand that effects associated with the changes in sub-catchment boundaries are minimal. I believe that the primary hydrological impact of concern relates to the storage of water in ponds on the site during the operational and active closure phases which effectively reduces flows that would otherwise occur from the site to zero.

28. Dr Meredith stated in his Section 42A report that the effects on Tara stream have been considerable due to the storage of water on site, with this potential effect being more detrimental to the waterbody than exceedances of the consented discharge criteria.

29. Restoring flows by removing the majority of the treatment system will go a significant way to reducing the hydrological impacts of the mine. However, I consider there

[1] CRC210535

remains a question as to whether there needs to be any remediation or compensation to address any effects on Tara Wetland/Stream arising from the reduction in flow. I believe this needs to be accounted for when also considering any compensation or remediation required to address some of the non-compliant and unconsented discharges to date. Further discussion between CRC and BCL experts is therefore necessary to determine the extent of any remediation or compensation and how this can occur.

N02 pit pond dilution flows

30. Dr Weber has provided further information regarding options for the applicant to manage infrequent dry periods when there may not be sufficient water to dilute the CC02 underdrain discharge. Additionally, to inform the need for low flow options, Dr Weber recommends that an empirical model is constructed to assist in determining the actual flow rates required for dilution. Dr Weber notes this model could be used as a trigger to inspect the management system.

31. I consider the creation of this model and review of the TARPs following its development should be a condition of consent as it is indicative of the likely need for low flow management options. The model results and details should be provided to CRC for review. If the model confirms there is likely to be periods of no flow, I also consider that the applicant should confirm the options to be implemented at this time to ensure dilution continues. These options should be described in sufficient detail to provide certainty of their practical implementation in a timely manner.

32. In relation to water quality in the N02 pit pond, further discussion between experts is necessary to determine appropriate consent conditions, but I consider there is likely to be suitable solutions to overcome the issues raised.

MSR maintenance

33. In response to Dr Meredith's concerns regarding how maintenance of the MSR would be undertaken, Mr Sinclair has appended a standard operating procedure for sludge removal to his evidence. I understand there is largely no concerns with the procedure but note the discussions during the course of the hearing regarding this maintenance and how discharges during this time can be addressed. Based on the applicant's comments, I consider it appropriate to include a condition on the consent to avoid discharges into the wetland/stream during maintenance works. This seems to be

reasonably simple to achieve and will prevent any potential impacts associated with sludge removal or discharges of untreated water from the CC02 underdrain.

34. I recommend a consent condition is included requiring maintenance in accordance with the procedure. Also, based on Dr Massey's supplementary s42A report, I also recommend a condition requiring the removed sludge to be disposed of off-site at a facility authorised to receive the material.

Water quality monitoring of Oyster Gully and Surveyors Gully Streams

35. Dr Meredith recommended that water quality monitoring of Oyster Gully Stream and Surveyors Gully Stream was undertaken to ensure there is no new, unexpected sources of AMD from the site.

36. Dr Weber in evidence has suggested that as there are no seeps discharging into these locations, a visual inspection undertaken on a 3 monthly basis during the active closure phase to confirm no seepage is occurring is all that is required.[2] Dr Weber considers that if a seepage was observed into a stream, this would then justify further monitoring.[3]

37. Based on the discussions during surface water conferencing, my understanding is that the applicant has agreed to continue monitoring water quality in Oyster Gully Stream at CC12 but that due to the very small area of works within the Surveyors Gully catchment, monitoring of Surveyors Gully Stream is not required.

38. I support the continued monitoring of water quality at CC12 but recommend this is captured in the consent conditions with appropriate actions in the event that water quality issues are identified.

Discharge limits and monitoring – Tara Stream

39. Based on the evidence presented by the applicant, the surface water conferencing and supplementary report of Dr Massey, I understand there remains a number of aspects of the necessary discharge limits, monitoring parameters, methods and timeframes that are not agreed between the parties.

[2] Para 139
[3] Para 139

40. I believe there is general agreement regarding the location where monitoring is needed as the compliance points at CC02-tele during the active closure phase and at the base of the Tara Pond spillway/stilling basin in the post-closure period.

41. While there is a need to discuss the finer details of the water quality monitoring programme, conceptually at least regarding what needs to be included in the consent conditions is largely in agreement. I am therefore hopeful that with further discussion between experts the finer details can mostly, if not all, be agreed.

TARPS

42. I agree that TARPs are an appropriate tool to use in this context and I consider that the amendments to date have been useful in order to avoid exceeding water quality limits and removing reliance on investigations as the last resort by bringing those forward in the process.

43. I do, however, consider there needs to be greater certainty that there are alternative options appropriate for inclusion within the TARPs. As such I recommend that some of the investigations which are to be completed during the active-closure phase (some are currently dependent on performance monitoring) are subject to conditions of consent with the results of the investigations provided to CRC. The purpose of this would be to provide greater certainty that there are alternative options available to the applicant in the event they are required and that these options can be implemented when necessary to avoid water quality limit exceedances.

44. These investigations include the “boron options assessment” which is noted in relation to the N02 pit pond boron concentration TARP and development of the empirical model (as discussed above) to determine if there will be sufficient water storage in the N02 pit pond.

Wetlands and raised spring

<u>Effects of wetland removal</u>

45. Dr Bramley notes that retrospective consent is sought from CRC for the removal of 0.45ha of seepage wetland and wiwi rushland vegetation.[4]

[4] Para 30

46. I disagree with this area and am of the view that consent is required for the removal of 0.65ha. Based on Dr Bramley's Figure 1 (Figure 13 in the "plans bundle"), the areas of wetland removed which require CRC consent are:

    a. E – wiwi rush and seepage outside consented area within pit shell;

    b. F – wiwi rush seepage within SDC consent only; and

    c. I – wiwi rush and seepage within both Selwyn and Ecan consent.

47. My view is on the assumption that:

    a. The area shown as "D – wiwi rush and seepage outside disturbed area but within the MOA" is still present and has not been impacted by works; and

    b. The only area within an existing environment or consented baseline is within the North ELF where consent has been issued by CRC.

48. Dr Grove states that overall, the compensation required is for a total of 1.2-1.4ha of wetland removal across both the SDC and Ecan consents. In his view, the compensation proposed remains inadequate to address the losses of seepage wetlands that has occurred and that the compensation should recreate at least an equivalent area of new habitat rather than enhancing existing habitat.

<u>Effects on wetlands outside MOA</u>

49. In relation to the potential loss of further seepage wetlands, there remains a difference of opinion between the BCL and CRC experts. Dr Griffiths disagrees with Dr Alkhaier regarding the hydrological sources for the seepage wetlands noting that as the wetlands have continued to exist despite a reduction in surface water catchment, the hydrological source is likely partly the result of hydrostatic pressures.

50. Based on Dr Grove's supplementary evidence, there remains doubt regarding the ongoing survival of these seepage wetlands as he considers there will be an adverse effect due to the hydrological changes and that there should be consideration of this impact in the compensation package.

51. Further discussion between the parties may be beneficial to determine the likely effects, if compensation can be provided, or if some other protection or remediation of these areas can be undertaken to address the hydrological impact.

Ngāi Tahu Cultural effects

52. In my Section 42A report I noted further engagement with Te Taumutu Rūnanga would be beneficial to determine potential cultural effects based on the closure

proposal. In coming to this view, I had not assessed the information the applicant provided in the draft MCMP.

53. Mr Pilcher has described the applicant's consultation with MKT, including consultation which occurred following the closure decision. Mr Pilcher notes that recommendations were received from MKT following their review of the closure proposal which were incorporated into the draft MCMP. I note also Mr Sinclair has provided further comments regarding how the recommendations were addressed.

54. I have now had the opportunity to review these recommendations and make the following comments:

    a. Recommendation 1 seeks to ensure monitoring continues of all water ways – As the applicant now proposes to monitor Oyster Gully, I consider that this recommendation has been addressed.

    b. Recommendation 2 seeks to extend restoration to all waterways – I consider that the proposed remediation of Tara Stream to provide mudfish refuge habitat, and/or any compensation for retrospective effects would be consistent with this.

    c. Recommendation 3 seeks robust erosion and sediment control in accordance with the Erosion and Sediment Control Toolbox – I consider the proposal and consent conditions ensures appropriate erosion and sediment control will be undertaken.

    d. Recommendation 4 seeks an accidental discovery protocol (ADP) consistent with Appendix 3 of the MIMP – I consider the proposed ADP is consistent with this recommendation.

NPS-FM/CRPS/CLWRP Objectives and Policies

55. Based on the applicant's evidence, joint witness statements and the revised condition set, I have provided a brief updated assessment of the NPS-FM, CRPS and CLWRP.

56. In terms of the NPS-FM, I consider that other than the objective, the most relevant policies are Policy 1 (Freshwater management gives effect to Te Mana o Te Wai); Policy 3 (Freshwater management is managed in an integrated way that considers the effects on a whole-of catchment basis); Policy 6 (No further loss of values or extent of wetlands); and Policy 9 (The habitats of indigenous freshwater species are protected).

57. Based on the further information provided in relation to the management of N02 pit pond water quality and quantity and the revised set of conditions, I consider that it is now more likely the discharge elements of the proposal could be consistent with Policy 9. Further refinement of the condition set would ensure this is the case.

58. Currently, I consider that the impacts of wetland losses and potential further wetland degradation are contrary to Policy 6 of the NPS-FM, but if sufficient compensation can be agreed, then the proposal would be consistent with the NPS-FM direction.

59. Finally, I remain of the view that the consumptive take of water is not consistent with Te Mana o Te Wai and the overall policy direction set out in the NPS-FM.

60. With regards to the CRPS, based on the wetland compensation proposed and advice from Dr Grove, I consider the proposal remains contrary with Chapter 9 of the CRPS. I do, however, consider that it is now more likely that discharges could meet the appropriate discharge limits for the receiving waterbody and as such the proposal could be consistent with Policy 7.3.6 (subject to conditions). In relation to the abstraction of water, I consider that granting consent for the taking of water for dust suppression and irrigation would be contrary to Policy 7.3.4 as it would result in further over-allocation which is to be avoided.

61. In relation to the CLWRP and discharges into the Tara Wetland/Stream, I consider that the proposal could be consistent with the relevant objectives and policies, particularly Objective 3.8 (in relation to water quality) subject to appropriate conditions.

62. In terms of the retrospective effects of mining activities on wetlands, the CLWRP does not directly address this situation. The policy direction is focused on protecting the significant indigenous biodiversity values of wetlands and only provides for activities within wetlands in circumstances involving the installing, maintaining, operating or upgrading of infrastructure, for wetland enhancement or hapua opening.[5] Where wetland modification occurs, any significant effects are to be offset by other improvements to, or expansion of the same or another wetland.[6] Policy 2A.3 inserted from the NPS-FM, provides similar direction but also has an overall theme to protect wetland values and promote restoration.

63. If it can be determined that the wetland compensation package is adequate to address the effects that have occurred, I consider that the proposal would not be contrary to these policies of the CLWRP. While mining activities cannot come under

[5] Objective 3.17, Policy 4.43 and Policy 4.81.
[6] Policy 4.82.

the exclusions provided for in the CLWRP policies, the overall thrust of the plan is to protect and maintain wetland values. In my view more weight should be given to Objectives 3.17 and 3.18 in the context of this application and as such, the proposal would be at most, inconsistent with the relevant wetland provisions.

64. Finally, with regards to the taking of water, I remain of the view that the consumptive taking of water is contrary to the CLWRP. While the activity has been classified under Rule 5.6, I consider that the objectives and policies relating to taking water are applicable to the activity, even if they are more clearly linked to the Section 5 or Section 11 rules for water takes. The most relevant provisions are Policy 4.7, Policy 4.50, Policy 11.4.23 and Policy 11.4.24. Together these provisions seek to manage the abstraction of water within allocation limits and prevent any over-allocation, or further over-allocation of water where allocation limits are exceeded unless a take is to meet community water supply and stockwater requirements, or is the replacement of an existing consent. As neither of these apply in this situation and the policy direction is very clear and directive, I consider the granting of a consent for the consumptive taking and use of water is contrary to the CLWRP even if the proposed take is relatively small.

Section 104D gateway tests

65. As recorded in the planning joint witness statement, I remain of the view that the proposal cannot pass through the Section 104D(1)(a) “effects” gateway. This is due to the wetland compensation package being considered a positive effect and the adverse effects of retrospective wetland removal coupled with the proposed consumptive take of water meaning the activities will have more than minor adverse effects.

66. With regards to the Section 104D(1)(b) “policy” gateway, when assessing the proposal as a whole, I also remain of the view that the proposal cannot pass this gateway. This is due to the very directive nature of the policies relevant to the abstraction of water in over-allocated catchments and the wetland compensation being currently inadequate to ensure that significant wetland values are protected. As such I consider the proposal is contrary to the CLWRP objectives and policies.

CONCLUSIONS

67. Given the above, particularly the need for further discussion about the details of the monitoring programme and compensation package, at this time I have not changed

my overall recommendation and remain of the view that the consents cannot pass the s104D gateway tests and therefore cannot be granted.

68. I consider there are a number of matters that could be discussed with the BCL experts in the hopes of reaching an agreed condition set, including:

    a. Water quality parameters to be monitored and the timeframes of monitoring;

    b. The aquatic ecology monitoring requirements.

    c. The level of impact of retrospective activities in terms of discharge quality and hydrology (sought to be authorised) on Tara Wetland/Stream and appropriate remediation or compensation for those.

    d. The nature and extent of the compensation package to address retrospective wetland loss and future wetland degradation.

Signed:  Date: 29 October 2021

Name: Adele Dawson
Consultant Consents Planner