# Section 95A-E Resource Management Act 1991



Report and Decision determining whether an application for resource consent should be publicly notified, limited notified or non-notified

RC NUMBER:	RC185622	
STATUS OF ACTIVITY:	Non-complying	
APPLICANT:	Bathurst Coal Ltd	
APPLICATION:	To expand Canterbury Coal Mine (retrospective and future)	
LOCATION:	Canterbury Coal Mine, Bush Gully Road, Malvern Hills	
LEGAL DESCRIPTION OF APPLICATION SITE:	The application site is an applicant-nominated site comprising the following allotments/titles or portions thereof. <sup>1</sup> All of: • Part Lot 3 DP 6591 (CB24B/403, CB7D/1140) A portion of: • Legal Road (North ELF works over Bush Gully Road reserve) • Part Lot 2 DP 6591 (CB24B/403, CB576/48, CB7D/967) • RS 32347 (CB41A/436, CB8B/920) • Part Lot 1 DP 18018 (CB2D/1450, CB7D/965) • Part Lots 2 and 3 DP 6591 (CB651/33, CB7D/969) • Lot 3 DP 8898 (CB5A/1042)	
AUTHOR:	Janette Dovey, Planning Consultant <sup>2</sup>	

<sup>&</sup>lt;sup>1</sup> The application lists the lots comprising the application site on page 11 of the application, but not all of these are included in the list in this report due to the following:

<sup>&</sup>lt;sup>2</sup> I have been engaged by Selwyn District Council to process this resource consent application on its behalf. I am the Director of Bellbird Consulting Group Ltd, a Christchurch-based planning consultancy established in February 2010. I have worked as a planner in Christchurch and Canterbury for over 26 years, comprising 9 years at the Christchurch City Council and over 17 years in private practice. I am a certified Hearings Commissioner and have regularly acted as such for local authorities for over 11 years. My original degree prior to planning study was a Bachelor of Science degree (majoring in Geology). I am a full Member of the New Zealand Planning Institute and have been for over 20 years.



<sup>-</sup> The application was amended during the process and Lot 1 DP 6591 is no longer part of the application site.

<sup>-</sup> I have not included title CB125/165 (1,796m<sup>2</sup>) within the application site at this point, as explained later under heading 'The Site Plan'.

# Contents

Background	
The Application Process	5
The Activity	
The Site Plan	
Interim Summary of Application Parameters	
The Site and Surrounds	14
Operative Selwyn District Plan	15
National Environmental Standards	
Section 95A – Public Notification	
Step 1 – Mandatory public notification	
Step 2 – Public notification precluded in certain circumstances	
Step 3 – Public notification required in certain circumstances	
Section 95D – Adverse Effects	
Land/Adjacent Land	
Permitted Baseline	
Written Approvals	
Consented Baseline	
Consent History	
SDC Consented Baseline - Background	
Consented Baseline Summary	
Consented Baseline vs the Application – Comparison	
SDC/ECan Baseline Interface	51
Assessment	54
'Environment' and 'Amenity Values'	
Relevant Effects	
Indigenous Biological Diversity	57
Cultural Values	67
Archaeological Values	
Noise	70
Spill Light, Glare and Sky Glow	72
Landscape	76
On-site Dust	77
Road Dust	
Buildings and Signage	
Hazardous Substances and Solid Waste	81
Other Earthworks Matters	81



Soil Contamination and Human Health	82
Transport network	83
Fire Risk	85
Overall Amenity Values	
Overall Conclusion on Adverse Effects	
Summary of Main Points	91
Recommendation	92
DECISION	93

### List of Appendices

- Appendix 1 The Figure 1 Site Plan
- Appendix 2 Interim Summary of Application Parameters
- Appendix 3 Application Parameters Background
- Appendix 4 Plan Non-compliance Table
- Appendix 5 Hazardous Substances and Solid Waste Rules
- Appendix 6 Most Relevant Consents Timeline
- Appendix 7 Consented Baseline Summary v3 01-10-2019
- Appendix 8 Ecology Report
- Appendix 9 Cultural Impact Assessment CIA
- Appendix 10 CIA Further Information from Applicant
- Appendix 11 Archaeological and Cultural Report
- Appendix 12 Acoustic Report
- Appendix 13 Lighting Report
- Appendix 14 Landscape Report
- Appendix 15 Transport Report
- Appendix 16 Affected Persons Plans
- Appendix 17 Machinery Tables at larger scale
- Appendix 18 NESCS Report
- Appendix 19 SDC Monitoring Background
- Appendix 20 Stream Catchment Information provided to ECan
- Appendix 21 Applicant RFI Response to ECan Waterbodies
- Appendix 22 Mine Location Context Plans
- Appendix 23 ECan Consented Baseline and Compliance Summary



# Background

- 1. This application seeks to expand the existing (and previously consented) Canterbury Coal Mine operation in the Malvern Hills, and it is both retrospective and future in nature.
- 2. Canterbury Coal Mine ("the Mine") was established through the re-opening of a number of previously operating coalmines. I understand that there is a long history of coal mining in the area, with over 77 mines operating in the Malvern Hills between 1872 and 1986.<sup>3</sup> This Mine was approved by resource consent R303578, which was granted in 2000.
- 3. The operator of the Mine at the time of that 2000 consent was stated to be Canterbury Coal Ltd. The preparation of the site began circa 2001, with mining beginning circa 2002.<sup>4</sup> The current Applicant took over operation of the Mine in 2012 and legal ownership in 2013 as Canterbury Coal (2013) Ltd, a fully owned subsidiary of Bathurst Resources Ltd.<sup>5</sup> The current owner/operator of the Mine and the Applicant for this application is Bathurst Coal Ltd, also a subsidiary of Bathurst Resources Ltd.<sup>6</sup>
- 4. Since that original 2000 consent establishing the Mine, there have been a number of consents varying the operation over time.
- 5. Since circa 2016, Selwyn District Council ("SDC") and the Applicant have disagreed as to what is consented for the Mine. Initially, this was about the number of truck movements associated with the Mine, and, in 2017, the Applicant was formally advised that resource consent was required for increased truck movements.
- I understand that it was also around this time that the Council was receiving complaints from the public with respect to coal trucks, other vehicles, dust and traffic safety. In late June/early July 2017, the Applicant agreed to lodge an application for increased heavy vehicle movements.
- 7. Following this, given that the resource consent application had not been forthcoming, on 21 December 2017 the Council issued an Abatement Notice to essentially require that the Applicant cease truck and trailer movements over a derived figure of 80 movements per week. (The Council applied a derived weekly baseline calculated from the description in the assessment of effects of consent application R303578.) I am advised that the Council did not consider any other aspects of the mining activity at that time, only heavy vehicle movements.
- 8. The Applicant appealed to the Environment Court and applied for a Stay of the Notice. The Stay was granted on 22 December 2017. On 10 January 2018, a Court Minute essentially reactivated the appeal process. A joint Memorandum of the parties was filed on 18 January 2018, with the final



<sup>&</sup>lt;sup>3</sup> R303578 Application Document – Executive Summary

<sup>&</sup>lt;sup>4</sup> From the SDC file monitoring notes

<sup>&</sup>lt;sup>5</sup> Page 9, first paragraph, of the current main application document

<sup>&</sup>lt;sup>6</sup> The SDC files also refer to Eastern Coal Ltd, which was a previous name of Bathurst Coal Ltd

outcome being that the Abatement Notice was withdrawn and cancelled by the Council on 01 February 2018. The joint Memorandum essentially stated that the Applicant would lodge "*a resource consent application for land use Consent for heavy vehicle movements ancillary to coal mining activities carried out at the Canterbury Coal Mine*", but I note that the matter of the consented baseline for heavy vehicle movements was not considered or resolved through this Court process.

- 9. The resulting application for increased heavy vehicle movements was lodged on 16 January 2018 RC185018. I was engaged to process that on behalf of SDC in late February 2018. During that process, it became evident that the increase in heavy vehicle movements was directly related to the increase in the volume of coal being extracted, and that the increased Mine production was not consented, with additional non-compliances being applicable. The Applicant did not agree and considered that all earthworks were consented. I prepared a notification report on the basis of my view, with the recommendation being public notification. At that point, in June 2018, the Commissioner advised by Minute that he considered additional consent applications were necessary and provided opportunity for the Applicant to comment further. Legal opinions on the consented baseline were provided by the Applicant and SDC.
- 10. In short, after much discussion, the Applicant agreed to prepare an application for the expansion of the Mine based on SDC's view of the consented baseline, subject to it being able to continue mining operations at its existing unconsented level during the consenting process.
- 11. Around this time, in September 2018, SDC began receiving noise complaints with respect to nighttime operation of the Mine.
- 12. In September 2018, I contacted ECan on behalf of SDC to obtain copies of the Applicant's ECan applications for earthworks and discharge to water, as the Applicant had advised they were being processed at that time. During that discussion, I was advised that ECan was not aware that SDC land use consent was required for the expansion. Those ECan applications were placed on hold and have now been bundled with the other ECan applications lodged by the Applicant since that time, and these will all be considered jointly, in conjunction with this SDC application.
- The Applicant provided a scoping document and a draft application on a 'without prejudice' basis, requesting comments from SDC. I reviewed these and provided comments on behalf of SDC in September and October 2018.
- 14. This current application was received in November 2018.

# **The Application Process**

15. This application comprises two application documents for land use consent; one for the mining operation on-site (named the 'land use consent application' by the Applicant) and one that provides the transport assessment for all vehicle generation resulting from the mining operation (named the 'traffic consent application' by the Applicant).



- 16. The applications were bundled by SDC due to the integral links between them, noting that the Applicant had agreed that they would be heard, processed and determined as one application in November 2018.<sup>7</sup> Given this, and that they are both land use consent applications for one activity, I consider the names of the documents could potentially cause confusion. Therefore, I refer to the Applicant's 'land use consent application' as the "main application document" in this report, and I refer to the Applicant's 'traffic consent application' as the "vehicle generation application document".
- 17. The main application document was formally received on 20 November 2018 and was 'put on hold' awaiting vehicle generation assessment, which was formally received as the vehicle generation application document on 26 November 2018.
- 18. I note that the applications were given two 'RC' administration numbers when they were lodged. At the time of the Second RFI, given the apparent confusion (with the Applicant advising that they now thought they should be separate applications with separate notification decisions), this administrative step was reviewed. It was decided that, given that the separate application documents are integrally linked and cannot be artificially separated in terms of assessment, one RC number should apply to the bundled land use application, to avoid that confusion and for ease of reference for all to "the application" for this activity. Therefore, some earlier documentation refers to two RC numbers but the later documentation, including this report, refers to one RC185622. Whether the two applications are considered to be two administrative 'RC numbers' that are bundled or one administrative 'RC number' covering the whole bundled application, the process, this report and my recommendation would be the same. The administrative numbering is immaterial to assessment and decision at this stage, and one or two RC numbers could be used; the current preference is to use one number to reflect the land use activity proposed.
- 19. Upon lodgement, it was recognised that the application included an assessment by the Applicant's planning consultant covering the topic areas that were expected. Given the long and involved process that had led to the lodgement of this application and that it would cause further delay if it was to be returned, SDC decided to not make the discretionary determination as to whether the application was complete or incomplete under s.88(3). It was also recognised that this would not be able to be done within 10 working days in any event, given the amount of information provided and the expert input required. The application was simply accepted under s.88 as an application in the prescribed form and including information and an assessment of effects pursuant to Schedule 4, taking into account that it had been prepared by a planning consultant. In the circumstances, it was decided that an RFI could address any issues that arose if the application proved to be incomplete following review by the experts in the following weeks. This was determined to be the most appropriate action for the benefit of all parties. The Applicant was then advised that the application



6

<sup>&</sup>lt;sup>7</sup> Second RFI, Point 3

was accepted, as summarised in the following paragraph. Upon expert review, it was confirmed that the application did not include a significant amount of detailed information and specialist assessment, including, for example, a cultural impact assessment, a lighting assessment, a full ecological assessment and adequate NESCS<sup>8</sup> assessment.

20. The application as a whole was formally received on Monday 26 November 2018. On Friday 30 November 2018, the Applicant queried whether the vehicle generation application document had been accepted under s.88 (email K Hooper (Landpro) to J Burgess (SDC)). It was advised that it had been accepted under s.88 (email J Burgess to K Hooper 3/12/2018). The Applicant then queried whether the main application document had been accepted under s.88 (email J Burgess to K Hooper 3/12/2018). The Applicant then queried whether the main application document had been accepted under s.88 (email K Hooper to J Burgess 5/12/2018). The Applicant was advised that this had also been accepted under s.88 and that processing was underway (email J Burgess to K Hooper 5/12/2018). RC185018 (the previous truck movements application) was then withdrawn on 5 December 2018. The First RFI was sent to the Applicant (email to K Hooper) on 13 December 2018. In January, the Applicant again requested an official letter or another email confirming acceptance of both applications under s.88 (emails K Hooper to S Mailau, SDC, 9/01/2019 and 28/01/2019). Ms Mailau responded (28/01/2019) that SDC does not send out official letters of acceptance under s.88, that the planner would be in touch if an RFI was required and that the timeframes started from the formally received date.

	COUNCIL 'RFI' DATE	APPLICANT INITIAL 'RFI RESPONSE' DATE
FIRST RFI	13 December 2018	15 March 2019
SECOND RFI	30 April 2019	20 May 2019
THIRD RFI (NESCS only)	21 May 2019	05 June 2019

21. Three requests for further information ("RFIs") were made, as follows:

- 22. The Second RFI provided the Applicant with additional opportunity to provide the information already requested in the First RFI or to clarify the First RFI Responses, plus made two additional requests following expert comment, i.e. addressing NESCS and building consent issues.
- 23. The Third RFI provided the Applicant with additional opportunity to provide the NESCS assessment already requested in the Second RFI.
- 24. I note at this point that I do not consider that all of the information necessary to understand and assess the activity has been provided.

<sup>&</sup>lt;sup>8</sup> "NESCS" - Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011



- 25. A significant amount of time elapsed awaiting the cultural impact assessment required. Consultation with Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga and the results of that consultation were requested by SDC in the First RFI<sup>9</sup> in December 2018 and provided on 15 August 2019.
- 26. The NESCS assessment has been an ongoing issue, with it first being requested in the Second RFI in April 2019. It is considered that the assessment provided is inadequate; however, the Applicant has confirmed that it will not provide any further assessment and considers the assessment provided to be adequate. This is discussed later in this report.
- 27. On 13 June 2019, the Applicant was advised that the SDC and ECan applications would be considered jointly and that the notification reports would be presented for consideration at the same time. This issue was considered again after further ECan applications were lodged, and then again confirmed by joint letter from SDC and ECan on 10 October 2019. The Applicant disagrees with this approach and further correspondence has occurred since that time; however, the Councils maintain that the bundling approach is appropriate and necessary. Given this joint process, the applications and RFIs/RFI Responses to SDC and ECan have been shared between the two Councils; if any ECan-related information is relied upon in this report, that has been identified. Some information was provided to ECan, and forwarded to SDC by ECan, after this report was largely completed; therefore, additional information/comment has been added in places within this report as 'Updates' in response to new information.
- 28. A copy of the two application documents, the RFIs and RFI Responses and the separate written approvals for this SDC application have been provided to the Commissioner for review.
- 29. For information purposes, I note that the application documents are not bookmarked and it can be difficult to find information within the appendices. Therefore, I have often referenced the 'pdf page numbers' of the relevant documents in this report.

# The Activity

30. The proposal is to expand Canterbury Coal Mine (retrospective and future). A brief summary of the activity, as per the application, follows.<sup>10</sup> The activity is the open cast mining of coal. All material is free-dug with an excavator. All topsoil and clay is stripped and stockpiled for future use for site rehabilitation. Overburden (located below the topsoil, and above/between the coal seams, and also described as "waste rock" in this application) is loaded onto dump trucks for placement within Engineered Landforms ("ELFs") or worked out pits, stockpiled or placed in the ex-pit ELF (when there is no space available for stockpiling within a completed mine pit at the time the overburden is removed, i.e. the North ELF).<sup>11</sup> All acid producing material is stored in the ELFs. Coal Combustion

<sup>&</sup>lt;sup>11</sup> I understand that no other ex-pit ELFs are proposed, but this will need to be confirmed by the Applicant



8

<sup>&</sup>lt;sup>9</sup> First RFI, Points 12 and 13

<sup>&</sup>lt;sup>10</sup> The mining process is described in section 4.3.3 of the main application document (beginning on page 17)

Residuals ("CCR") – produced primarily from the burning of coal in coal-fired industrial plants and also described as "ash" or "coal ash" in the application<sup>12</sup> – are brought to the site in trucks/truck and trailer units and placed in the ELFs. Coal is crushed and screened on-site and then stockpiled and/or removed from site in trucks or truck and trailer units. At the end of processing, an area is rehabilitated and planted.

- 31. The application states<sup>13</sup> that a variety of mining activities are planned to occur within the Mine Operations Area during the current and coming years and advises that this list provides a good example of the types of activities that occur year on year at the Mine:
  - "Soil stripping and placement in stockpiles;
  - Placement of stripped soils onto final landform ELFs in preparation of rehabilitation;
  - On-going development to extend the coal mining pits of the existing mining operation in NE and SW directions along the strike of the coal seams;
  - Overburden removal and placement;
  - On-going development of overburden ELFs;
  - Coal winning;
  - Ongoing development and maintenance of haul roads and access tracks..;
  - Use of water carts for dust suppression purposes;
  - Maintenance of sedimentation ponds and extension of perimeter cut off drains and other water management and erosion control structures;
  - Maintenance of buildings (both those that meet the definition of building in the SDP and those which do not<sup>14</sup>) and site infrastructure. It is noted that buildings will not move around within the Mine Operations Area;
  - Perimeter and internal fencing;
  - Application of lime and CCR and maintenance of mussel shell beds (established in ponds) for water treatment for management of AMD;
  - Maintenance of environmental monitoring equipment;...
  - Dosing mine affected waters for sediment treatment;
  - On-going implementation of water treatment methodologies;

• Fly Ash – a very fine, powdery material composed mostly of silica made from the burning of coal in a boiler.



<sup>&</sup>lt;sup>12</sup> Main application document, pdf page 412 (page 68 of the Environmental Management Plan): "CCR includes several byproducts produced from burning coal, including:

<sup>•</sup> Bottom Ash – a coarse, angular ash particle that is too large to be carried up into the smoke stacks, so it forms in the bottom of the coal furnace.

CCR is recovered from BCL customer's boiler operations off site, which blend fly and bottom ash prior to delivery to the mine site. CCR is received at site six days a week (Monday – Saturday). Typically, the ratio of fly ash to bottom ash is approximately 1:6."

<sup>&</sup>lt;sup>13</sup> Section 4.3.5, page 26, of the main application document

<sup>&</sup>lt;sup>14</sup> It is not clear what buildings are on-site that "do not" meet the definition of building in the Plan

- Wetland management and planting<sup>15</sup>;
- Rehabilitation of final landforms including planting of cover crops; and
- Exploration drilling and trenching.

Occasionally there are other specific activities that are required to occur at the mine in a particular period. These are included in the Annual Work Plan and may include activities that are required at the request of Council, or that are requirements of consents..."

- 32. With respect to vehicle generation, the application states that consent is sought for the following<sup>16</sup>:
  - "Heavy Vehicle Movements associated with the operation of the CCM to generate an annualised average of 230 Heavy Vehicle Movements per week, up to a maximum of 320 Heavy Vehicle movements per week, via the Preferred Route as shown in Figure 2 [the preferred route is indicated to be Bush Gully Road, Malvern Hills Road(south) to State Highway 77 – two alternative routes are also proposed in the application];

and

 Associated Light and Service Vehicle Movements ["around 1200 per month"<sup>17</sup> with a worstcase scenario for 2019/2020 of 11 service vehicle movements and 291 light vehicle movements per week<sup>18</sup>]."

Heavy vehicles are defined by the application<sup>19</sup> as "Coal Trucks and/or Coal Truck and Trailer units that deliver coal and or ash to and from the CCM. Service trucks are excluded from the definition of heavy vehicle".

- 33. At this point, it is understood that this application for Mine expansion covers a retrospective period beginning in 2013 and extending to present, and future works.<sup>20</sup> In terms of future mining, I understand that the mining of N04-N05 is planned to be completed in 2020 and West Pit Extension in 2024, but this timeframe is indicative only and not part of this application.
- 34. This consent, if granted, will supersede all previous consents for the Mine.
- 35. The conditions proposed by the application are included in the First RFI Response. They are separated into two attachments. Attachment 1 comprises the vehicle generation conditions. Attachment 2 comprises the conditions applicable to the remainder of the activity. (I note that proposed condition 2 (production volume) of Attachment 2 is also amended by the Second RFI Response<sup>21</sup>.)



<sup>&</sup>lt;sup>15</sup> The type of wetland management and planting that is proposed will need to be confirmed by the Applicant.

<sup>&</sup>lt;sup>16</sup> Vehicle generation application document, page 13

<sup>&</sup>lt;sup>17</sup> Vehicle generation application document, page 14

<sup>&</sup>lt;sup>18</sup> Vehicle generation application document, Appendix 3, Abley Traffic Assessment, page 9 (pdf page 65), Table 4.1

<sup>&</sup>lt;sup>19</sup> Vehicle generation application document, pdf page 4

<sup>&</sup>lt;sup>20</sup> As explained in Appendix 3 (Section B) of this report

<sup>&</sup>lt;sup>21</sup> Second RFI Response, letter, section 10

# The Site Plan

- 36. The application site is applicant-nominated and comprises portions of various allotments/titles, as summarised on the front page of this report.<sup>22</sup> It is indicated to be approximately 102.6 hectares in area.
- 37. It is all of that land contained within the 'blue line' (i.e. the Mine Operations Area "MOA") on the"Figure 1 Site Plan" below (also appended as Appendix 1 to this report)

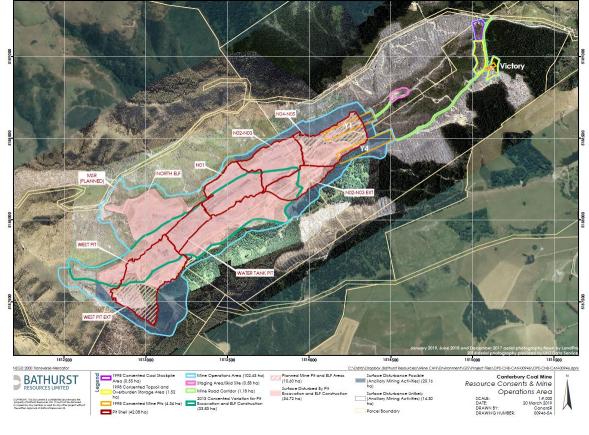


Figure 1 Site Plan<sup>23</sup>

<sup>22</sup> The application lists title CB125/165 (1,796m<sup>2</sup>) as part of the application site. This title is Crown land that is essentially contained within Bush Gully Road close to the intersection of Bush Gully and Malvern Hills Roads – see below (highlighted blue). The application does not propose any specific works within that site, although potentially signage may be proposed. I have not included this title as part of the application site on the cover page of this report at this stage – the Applicant will need to confirm.



<sup>23</sup> Provided in the Second RFI Response, Attachment 4 – I have added white labels for Y1, Y4 and Victory Pits to the north-east only. I note that some of the labels in the Legend of this Figure 1 Site Plan are incorrect, as discussed later in this report.



- 38. The 'blue line' MOA includes the three essentially unworked 'orange line' pits shown (Y1, Y4, Victory), the 'yellow line' topsoil and overburden storage areas and 'purple line' coal stockpile area to the north-east (shown linked by 'bright green line' Mine Road Corridors).<sup>24</sup> The small 'pink line' staging area is also considered part of the site and is linked by a Mine Road Corridor.
- 39. The darker 'green line' represents the area of disturbance currently consented by SDC, i.e. the footprint of the land that can be disturbed by the Mine for all purposes associated with it.<sup>25</sup> Therefore, this 'green line' does not represent the extent of mining pit or coal extraction permitted and covers a greater area.
- 40. The 'red lines' represent the Pit Shells, i.e. the pits where the overburden and coal are extracted from, including all benching required.
- 41. An "ELF" is an Engineered Landform.
- 42. Victory Pit and those parts of Y1 and Y4 outside of the 'red line' Pit Shells are not proposed to be mined as part of this application.
- 43. While all previous consents would be superseded, Victory Pit (including its associated stockpile and storage areas) would still need to remain subject to the parameters of R303578/RC085059. The parameters of this current application cannot extend over Victory Pit and its stockpile/storage areas because increased works in that area have not been discussed or assessed in this application. (It is not known what the operation currently uses the coal stockpile area for to be confirmed by the Applicant.)
- 44. This application supersedes the previous consents for Pits Y1 and Y4, given that they are fully contained within the 'blue line' MOA and assessed.
- 45. A number of features are discussed in this report, e.g. Tara Ponds 1 and 2 and the north-west (NW) seepages, but the application does not provide one plan that clearly shows all main features. In addition to the Figure 1 Site Plan (which it is noted labels the location of the North ELF), these references may assist:
  - the plan in the ecology report by Mr Davis shows a number of the features discussed see Appendix 8 to this report (plan at Appendix 2, page 30),
  - the two Tara ponds (Tara Pond 1 existing and Tara Pond 2 proposed) are shown on page 5 of the Environmental Management Plan – "EMP" (pdf page 349 of the main application document),



 <sup>&</sup>lt;sup>24</sup> Noting that the Legend on the Figure 1 Site Plan should refer to 2000 instead of 1999
 <sup>25</sup> Noting that the Legend on the Figure 1 Site Plan describes this incorrectly

- some of the streams discussed (Tara, Bush Gully and Oyster Gully) are shown on page 16 of the EMP (pdf page 360 of the main application document),
- further stream catchment information (also showing Surveyors Gully Stream) was included in an ECan application and this is appended for information purposes as Appendix 20 to this report,
- the Green ELF that is referred to in the application on occasion is essentially above Tara Pond
   1, with its general location indicated with reference to the "Green ELF Lined Drain" on page 18 of the EMP (pdf page 362 of the main application document).

## **Interim Summary of Application Parameters**

- 46. Given the past history and the significant amount of information provided throughout the application, SDC considered it important that the parameters of the mining operation be clearly summarised to enable understanding and transparency, for the benefit of SDC and the Applicant, and particularly with respect to providing certainty for all.
- 47. However, in this particular case, obtaining the information necessary to clearly understand the activity and assess its effects has been unusually difficult in my experience. The way in which the information has been provided, across numerous documents/reports, means that finding the facts of the matter can be difficult. In addition, confusing or internally conflicting information has been included within the application or was latterly provided in response to the RFIs that sought to clarify matters, and the Applicant has not provided or will not provide some information requested. The difficulties have been experienced by a number of the SDC experts. As a result, significant, and very unusual in my experience, increases in processing hours and consequently costs have resulted.
- 48. In the end, the activity and its parameters are not particularly complicated, but they are numerous and the information provided is confusing. Given the lack of certainty, I do not consider it appropriate that I present a final summary of the application. At this point I have attempted to distil the information provided to give an interim summary of the facts of the application in compact form, and that summary is appended as **Appendix 2**. The background information informing my understanding of the application parameters in Appendix 2 is contained in **Appendix 3** to this report (the headings of both documents match, and the Appendix 2 sections are again copied in under the discussion in Appendix 3).
- 49. This interim summary is not intended to amend the application in any way, but to simply extract the main parameters and understand what the application seeks. It is hoped that this summary will be a useful tool for future ease of understanding and as a basis for further discussion and agreement as to what the parameters of the activity/application are, for the benefit of all parties. Again, the activity



itself is not particularly complicated and agreement as to what is applied for, or clear identification of any differences of opinion, should be relatively easy to achieve.

- 50. I have attempted to provide a significant amount of referencing within this report and in Appendix 3, in order to advise where the information provided was sourced, for the benefit of all. Due to conflicting information, I have had to make assumptions in some places and a number of areas are still not entirely clear, but these issues are identified in Appendix 3. The interim summary is as accurate as it can be at this stage. It cannot be assumed to be entirely correct, with many aspects needing to be confirmed by the Applicant.
- 51. Finally, it must be recognised that the other SDC experts prepared their reports based on the full application documents, and this interim summary was not available for them to rely on. As a result, their assessments, my recommendation and the Commissioner's decision will be made based on all of the application documentation and not on this later summary.

# The Site and Surrounds

- 52. The Mine is generally located within the Malvern Hills, west of Darfield and north of Coalgate. Plans showing the general location of the Mine within the surrounding area are attached as **Appendix 22**.
- 53. The application site (the MOA) currently contains the Canterbury Coal Mine, and the forestry and pasture areas on the outskirts of it. Representative photographs of the Mine are included in the application.<sup>26</sup> As can be seen in these photographs, the Mine generally slopes down to the north-west towards Bush Gully Road, and down to the south-east towards the forestry land.
- 54. I visited the surrounding area twice (on 27 April 2018 and 20 March 2019) and the Mine once (on 20 March 2019).
- 55. On 27 April 2018, I visited the area for around 1.5 hours from 1pm, and drove along Routes 1, 2 and 3. On 20 March 2019, a group of SDC experts undertook a site visit in the morning. We were driven to the Mine by the Applicant's representatives, from Coalgate. We were then escorted around the Mine, with stops at useful points, and then driven back to Coalgate. Following that Mine visit, I separately drove along Routes 1 and 3 again and reviewed the surrounding area.
- 56. The surrounding area is rural in character and appears to be used predominantly for grazing. Bush Gully Road is a gravel road, and, although it is a public road, there is signage at the intersection with Malvern Hills Road advising that only vehicles with fixed radio units can enter the access road. Private land, including two dwellings, also use this section of Bush Gully Road as their access. Malvern Hills and Auchenflower Roads are gravel roads for the most part, with sealed sections where



<sup>&</sup>lt;sup>26</sup> Main application document, Figures 3-5 (pages 21/22) and Figures 9 and 10 (pages 40/41)

approaching intersections with sealed roads. Malvern Hills Road generally winds its way through a rural valley. Auchenflower Road is through more open, flat rural land with a ford midway through.

57. The surrounding area was quiet on both days that I visited, which would not be unexpected in this type of rural environment, with the occasional sound of a voice, chainsaw or vehicle in the distance. In April 2018, on Route 1, I saw three light vehicles and two truck and trailer units in the time that I was there and experienced the road in the absence of dust suppression measures.

# **Operative Selwyn District Plan**

- 58. The application site is zoned Malvern Hills within the Rural Volume of the Operative Selwyn District Plan ("the Plan").
- 59. The following notation applies to Lot 3 DP 8898, which forms part of the application site:

Heritage Building H120 Tunnel – Surveyors Gully

- 60. This Tunnel is located to the south of the application site nominated for this application.<sup>27</sup> (I note that future 'red line' pits (SURV01-03), shown on the plan within the Opus report<sup>28</sup>, are in close proximity to, or at, the location of the Tunnel; however, I confirm that those pits are outside of this application site and not part of this application.)
- 61. I note that Lot 1 DP 23595 contains Wāhi Taonga Management Sites C18 and C20. That lot is located to the south of the Mine and adjoins the lots that form part of the application site.
- 62. It is noted that Mining is defined in the Plan as having the same meaning as "mining" in section 2 of the Crown Minerals Act 1991, and that the Plan definition of Industrial Activity specifically excludes mining. Therefore, for the purposes of the rules, Mining is not an Industrial Activity; it is also not a Rural Activity.
- 63. The Plan indicates<sup>29</sup> that activities in the Malvern Hills are restricted to those that use the natural resources of the area, and the list of those permitted activities is provided at Rule 9.3.1. The activities generally include farming, forestry, conservation, ancillary visitor accommodation/retail/business, transport networks, mining and other industrial activities which involve the use or extraction of natural resources found in the area, education and research, residential, community facilities and temporary military training.
- 64. Therefore, Mining is very clearly anticipated in the Malvern Hills by the Plan, with the other main standards applicable acting in combination to effectively limit the scale of that permitted mining, e.g. earthworks, scale of activity/staff numbers and vehicle movements.



<sup>&</sup>lt;sup>27</sup> Main application document, Figure 4 (page 7) of the Opus report, pdf page 310

<sup>&</sup>lt;sup>28</sup> Main application document, Figure 3 (page 3) of the Opus report, pdf page 306

<sup>&</sup>lt;sup>29</sup> Selwyn District Plan, Rural Volume, Policy B3.4.2

65. This application includes the two application documents, the RFIs and the RFI Responses. I understand that the consideration of a resource consent application may go beyond any limited description of the proposal to the extent covered by those application documents as a whole. I also understand that where an application describes a proposal but does not specifically list a Plan non-compliance, a Council may include that non-compliance and assess it so long as the application documents go to the extent of providing information that would trigger it. In this case, it is my view that the application documents do include information that demonstrates additional non-compliance. A table detailing the Plan non-compliances is appended as **Appendix 4**; however, in summary, the non-compliances relate to the following rule topics:

RULE	ТОРІС	STATUS OF NON-COMPLIANCE
1.7	Earthworks and Setbacks, Volume and Site Rehabilitation	Discretionary
3.4	Buildings and Rural Character	Discretionary
3.15	Relocated Buildings	Controlled
6.1	Outdoor Signs	Discretionary
7.0	Hazardous Substances	Non-complying
8.1	Generation, Storage and Disposal of Solid Waste	Non-complying
9.4	Scale of Non-Residential and Non-Rural Activities	Discretionary
9.13	Activities and Vehicle Movements	Discretionary
9.16	Activities and Noise	Discretionary (potentially <sup>30</sup> )
9.21	Activities and Clearance of Indigenous Vegetation and Indigenous Plant Species	Non-complying

#### Table 1: Summary of non-compliance

66. Therefore, the application is for a **non-complying activity** under the Plan.





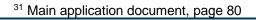
# **National Environmental Standards**

## National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health ("NESCS")

- 67. The NESCS manages activities which involve the disturbance, subdivision or change of use of land which may be contaminated. This is essentially determined by whether or not Hazardous Activities and Industries List ("HAIL") activities have or are likely to have occurred on the site.
- 68. The full NESCS assessment in the main application document is<sup>31</sup>:

**6.4.2 NES for Assessing and Managing Contaminants in Soil to Protect Human Health** The NES does not apply as there is no permanent change of use proposed on this site (the land will be returned to production land after mining), nor any subdivision. It is also noted that the 60,000L fuel tank is already consented.

- 69. Given that allotments comprising the application site were listed on the LLUR (Listed Land Use Register) and that HAIL activities had occurred on the application site, and having obtained further advice from ECan (in a 'contaminated land' capacity), an expert NESCS assessment was requested in the Second RFI on 30 April 2019. The Applicant did not agree that an assessment was required, and correspondence on the matter has been ongoing since that time. The relevant correspondence from/to the Applicant is included in the package of application documents provided to the Commissioner as the 'Third RFI Response'. Those Responses from the Applicant form part of this application.
- 70. In the responses, the Applicant provided some additional information with respect to past activities on the site, and two legal opinions (4 June and 19 July 2019) concluding that NESCS assessment was not required. SDC maintained the view that both change of use and disturbance of soil required assessment, and this was advised to the Applicant on 13 June and 15 July 2019.
- 71. Following further correspondence, at the Applicant's suggestion, SDC sought a legal review of the Applicant's legal opinions and this review concluded that NESCS assessment was required; this was provided to the Applicant on 21 August 2019. The Applicant advised that it did not agree, but that it would provide the NESCS assessment required by SDC. On 27 August 2019, in response to a query from the Applicant's lawyers, I advised that if the Applicant accepted that NES assessment was triggered by change of use in terms of Reg.5(8)(d), then the Regulations applied to the activity and it appeared likely that the activity would not meet Reg.8(3) (*Disturbing soil*), meaning that resource consent would be required under the NESCS. I noted that this would need to be considered by the Applicant's NESCS expert.





- 72. A Preliminary Site Investigation (PSI) prepared by GHD was provided to SDC on 27 September 2019. This essentially concurred with the Applicant's view that the soil disturbance regulations did not apply, which was not in keeping with SDC's legal view or my advice of 27 August; therefore, further assessment was again requested. The Applicant disagreed that this was required.
- 73. Given the continuing disagreement, an NESCS expert was engaged by SDC, Mr Guy Knoyle from Pattle Delamore Partners Ltd, to peer review the PSI. Mr Knoyle was provided with the background correspondence and the Applicant/SDC legal opinions, and was asked to come to his own view on the matter. Mr Knoyle concluded that both the change in land use and soil disturbance activities needed to be considered in accordance with the NESCS requirements, and that a resource consent application needed to be made by the Applicant to suitably address these activities. He considered that the assessment provided to date was inadequate and that further assessment of effects and a draft management plan were required to address change of use and soil disturbance. He recommended that a detailed site investigation ("DSI") be undertaken, but he also acknowledged that qualitative information could be presented in a draft management plan instead. He advised that, in the absence of a DSI, the application would be a discretionary activity for change in land use and soil disturbance. Mr Knoyle's opinion, in the form of a letter, was provided to the Applicant on 8 November 2019.
- 74. In response<sup>32</sup>, the Applicant applied for a "without prejudice" discretionary activity application under the NESCS; however, for 'disturbance of soil' only and not 'change of use'. The Applicant did not provide the additional assessment requested by Mr Knoyle. The Applicant considers the matter to be adequately addressed by the information and assessment provided to date and considers that any effects will likely be dealt with by a management plan (future or existing). On 19 November 2019, the Applicant was advised that SDC did not agree that the matter was adequately addressed, and the information was still required. The final correspondence was forwarded to Mr Knoyle for review and further consideration, and his report is appended as **Appendix 18**. His conclusions will be discussed later, in the assessment of effects.
- 75. In summary, the application provides information that results in SDC considering that a discretionary activity resource consent under the NESCS is required for both change of use and soil disturbance, notwithstanding the Applicant's view (stated to be on a 'without prejudice' basis) that consent is only required for soil disturbance. SDC considers that inadequate information has been provided to assess the adverse effects of the proposal. The Applicant considers that adequate information has been provided. In any event, both SDC and the Applicant agree that a discretionary activity resource consent under the NESCS has been applied for (albeit on a 'without prejudice' basis).
- 76. Therefore, the proposal is a **discretionary activity** under the NESCS.



<sup>&</sup>lt;sup>32</sup> Letter from Lane Neave, 15 November 2019

# Section 95A – Public Notification

## Step 1 – Mandatory public notification

77. Does the application meet any of the following criteria?

		Y	Ν
1.1	The applicant has requested public notification		✓
1.2	Public notification is required under section 95C RMA (no response or refusal to provide information or agree to the commissioning of a report under section 92 of the RMA)	✓	
1.3	The application has been made jointly with an application to exchange recreation reserve land under section 15AA of the Reserves Act		✓

- 78. With respect to sections 95A(3)(b) and 95C (1.2 above), I consider that the Applicant has not provided or will not provide the information considered necessary in order to adequately assess the proposal.
- 79. The First RFI was made in December 2018. The Second and Third RFI requests were made because the Applicant did not provide the information requested or in response to the further information provided. The only exception was that there were two additional requests made in April 2019, in light of new information with respect to the application NESCS assessment being inadequate and the buildings on-site being established without building consent, which raised servicing queries.
- 80. However, it must be recognised that this process did not begin at the lodgement of this application. It has been over two years since an application for increased truck movements was first formally requested by SDC, with abatement action being necessary to have the application lodged in January 2018. My notification report on that application advised that insufficient information had been provided to assess the proposal and further resource consent application for mine expansion was necessary. Since that time, significant assistance has been provided and SDC has continued to work with the Applicant to get to the point where this current application could be prepared, and lodged in November 2018. This involved various 'without prejudice' pre-application stages. I provided comments on a draft scope for this application, advising what information would be required, and then on an incomplete draft of this application, again advising that what was being applied for was not clear and that much of the information requested was still required. A pre-application meeting was then held and the Applicant addressed the many comments/requests made by SDC, expressing disagreement with many of them. However, the Applicant recorded that this meeting was productive for them and I acknowledge that many amendments were made to the application, but a number of aspects were still not addressed (or adequately addressed) in the final application.



81. I also acknowledge that the RFI Responses provided some more information, to varying degrees of detail, but there are still a number of areas where basic information is still required. At this point, the Applicant has not responded to, not clearly responded to or provided conflicting information to SDC, and has advised that it will not provide information in some instances.

### An Example

- 82. To illustrate the difficulties, it may be useful to provide one example at a basic level. The Applicant would not provide a waterbodies plan. As such, SDC cannot assess if compliance is achieved with the waterbody setback rule or complete the assessment of adverse effects on indigenous biological diversity. It is not known what waterbodies were existing within the application site and removed since 2013, what waterbodies exist now, what waterbodies are located within or alongside future Pits or what setbacks are provided/are proposed from waterbodies. The application (and the earlier ECan applications) provide information/plans which indicate that waterbodies (including their upper reaches) are likely to be within the MOA, as discussed in the Second RFI<sup>33</sup>. These waterbodies include Bush Gully Stream, Tara Stream, Oyster Gully Stream and Surveyors Gully Stream, and wetlands.
- 83. A plan of waterbodies was requested over a year ago. Excerpts of the SDC comments on the 'without prejudice' scoping document and draft application are as follows:

### Scoping comments (20 September 2018):

- 8. All aspects of the activity need to be clearly shown on a site layout plan, including but not limited to areas of disturbance, pits, ponds, waterways, buildings/staff facilities, the diesel tank, the ROM pad, loading, parking, storage (including overburden storage) and any waste areas.
- All natural and manmade waterways need to be shown on a site plan (for future reference, R303578 refers to the existence of ephemeral watercourses adjacent to and traversing the then stockpile area and a wetland in the upper reaches of Bush Gully Stream).
- 17. Rule 1.7.1.1 Earthworks near waterbodies this is blank as to compliance. Confirmation re any waterways will be needed.
- 23. Rule 3.13.1.4 Buildings and waterbodies to confirm re waterbodies as per previous comment.

## Draft application comments (10 October 2018):

6. SDC requires that the Applicant provide open and transparent, certain and enforceable information. In my view, this draft application does not provide the information necessary.

#### Figure 5, page 21

31. What is the relevance of this plan? Is it the proposed plan for this application? Is it intended to be indicative of what might occur within the Mine Operations Area? As per the scoping comments, the proposed site layout plan is required and it needs to clearly identify all aspects of the activity, "including but not limited to areas of disturbance, pits, ponds, waterways [noting that these were provided to ECan as I understand it], buildings/staff facilities, the diesel tank, the ROM pad, loading, parking, storage (including overburden storage) and any waste areas."

20

- 84. I recognise that those comments were made to the Applicant based on draft documents on a 'without prejudice' basis and no comments are binding on the Applicant or SDC, but they usefully illustrate that the process of seeking information did not begin at the date of lodgement of this application and has been on-going.
- 85. Once the application was lodged, the First RFI requested a full ecological assessment, as only partial information was provided. At the basic level, I note that this included requests<sup>34</sup> for a full ecological survey of the MOA and of areas beyond the 'blue line' that may be affected by the expanded mining operations and which may support indigenous vegetation remnants or values associated with the four National Priorities, including any relevant areas downstream of the 'blue line'. It was anticipated that this would include identification of all waterbodies, but the detail required was still outstanding when that was received.
- 86. Therefore, in the Second RFI, the request was clarified further, referring to other plans in other applications, e.g. the Sephira plans provided to ECan (see Appendix 20 of this report) and detailing that a waterbodies plan was required.
- 87. In Response, the Applicant did not provide the requested plan. The Response can be reviewed in full in the Second RFI Response, point 6, pages 1 and 2, but essentially it advised that "[*i*]*rrespective of setbacks and waterbody margins the AEE has assessed the effects and determined that the effects of the proposed activities are no more than minor.*" It was advised that a surveyor would mark out areas where works were not appropriate/not allowed. It was also noted that no earthworks were proposed between the 'blue and green lines'. However, all waterbodies are not identified or assessed in the application, it is not clear what the surveyor will be marking out and land disturbance is currently proposed anywhere between the 'blue and green lines'.
- 88. It was clear at this point that the Applicant would not provide the information requested and another request was not made.
- 89. Update, 29 November 2019: Since writing this section, an application for the take and diversion of water has been lodged with ECan (dated 20 September 2019). This application essentially applies for the diversion and taking of surface water (run-off) and shallow groundwater take from throughout the disturbed footprint and the diversion of water flows between catchments and sub catchments (Waianiwaniwa and Upper Selwyn, and Tara, Bush, Oyster and Surveyors Gully Streams). I assume it is retrospective and future in nature.
- 90. I note that the original joint SDC/CRC application (R303578) addressed the diversion of water and the take of water for use in mining operations both were permitted activities, subject to the take being no more than 10m<sup>3</sup> (10,000 litres) per day and the application confirmed compliance with this<sup>35</sup>.



<sup>&</sup>lt;sup>34</sup> Points 40a and 40b

<sup>&</sup>lt;sup>35</sup> Pages 17, 46 and 68 of the R303578 application

- 91. I understand that the water take applied for in the current application is a maximum of 600m<sup>3</sup> (600,000 litres) a day, with the annualised daily average estimated as being 135m<sup>3</sup> per day (135,000 litres), in addition to the 20m<sup>3</sup> (20,000 litres) per day allocated from the rural supply.<sup>36</sup>
- 92. I do not know when the Mine began exceeding the previously compliant level of 10m<sup>3</sup> per day, but the use of water for the coal mining operations will be necessary (predominantly for dust suppression it is assumed, as there is no coal washing on site), and there will be an extensive retrospective component to this water take and diversion application. For example, Bathurst recorded water use at the Mine as being 25 million litres (25,000m<sup>3</sup>) in FY18 and 56 million litres (56,000m<sup>3</sup>) in FY19.<sup>37</sup>
- 93. I also note that SDC current consent RC165238 includes a condition which states: "No water shall be taken from Bush Gully Stream for use in mining operations." However, all of these issues relating to water take and diversion, and any works that removed the headwaters of any streams within the existing mining area or will remove them from the proposed MOA will be addressed by ECan.
- 94. I was not aware of this aspect when requesting the plan of waterbodies on the site. The Applicant did not advise that there was an issue or that it would be applying for an application to take water or divert waterbodies on the site. However, this does not negate the need for a plan of waterbodies to enable assessment under the Selwyn District Plan. Further information on the works proposed within setbacks of the waterbodies remaining and/or the areas where works will be avoided within the MOA is also required.
- 95. I note that the ECan RFI of 18 October 2019 (point 12) requested a map identifying all surface water bodies and other surface water features such as artificial drains and ponds, wetlands, springs and seeps, and any water features that may have been removed (and their previous location). It also noted the seepages/wetlands located outside of the MOA but within the zone of influence of activities (north-west slopes and the south-east gullies) that could be impacted. Potentially the Response to this RFI will provide the necessary information for SDC.
- 96. **Update, 12 February 2020**: The Response to that RFI was received by ECan on 20 December 2019. SDC chose to review this ECan RFI Response information (forwarded to SDC for information purposes by ECan), but I note that the SDC application has not been formally amended or further assessment provided.
- 97. Of significance, this information includes surface water plans (pages 3 and 4 of **Appendix 21** to this report). The page 3 plan indicates surface water as at October 2012, and I note that this plan, prepared by the Applicant, largely matches the plans of streams provided by Sephira in March 2018 (see Appendix 20 to this report), except in relation to some upper reaches of Tara Stream near the

<sup>&</sup>lt;sup>36</sup> I note that this ECan application (CRC201366-368, page 18) states that similar take activities within the North ELF (Bush Gully sub catchment) are already consented. The consented take of water at the North ELF appears to be for land drainage (i.e. the underdrains) and diversion of water (i.e. around the ELF to reduce sediment losses) – CRC175281.
<sup>37</sup> Bathurst Resources Ltd website, Annual Reports, 2018 and 2019



Mine. I note that the Sephira plans in Appendix 20 show part of Bush Gully Stream close to the northeastern extent of the Mine and this is also not shown on the Bathurst plan. The plan at pdf page 360 of the main application document also varies with respect to Bush Gully and Tara Streams. To compare all of the plans provided to SDC and ECan in detail would be time consuming, but, in combination, the plans do generally indicate that some upper reaches of at least Tara, Oyster Gully and Surveyors Gully Streams within the MOA have been or are to be removed/disturbed by the mining operation, and this appears to apply to Tara in particular. (The plans on page 44 of this report assist to a degree in considering what waterbodies have been affected since 2013, as they compare the Mine at March 2013 with that at October 2019.) This effects on the waterbodies will be assessed further by ECan. At this stage I can confirm that the proposal still cannot be clearly assessed against the Selwyn District Plan in terms of works within waterbody setbacks (retrospective and future), areas where works will be avoided (as indicated by the Applicant in the Second RFI Response) and effects on indigenous biodiversity.

- 98. A new vegetation plan was also provided as part of this ECan RFI Response and this is appended on page 2 of Appendix 21 to this report. It identifies significantly more wetlands than were identified to SDC (the plan provided to SDC is provided in the First RFI Response, Attachment 14, Appendix 1, Figure 3 (pdf page 55 of Attachment 14)). However, Mr Davis advises that the issue remains and not all wetlands have been identified.
- 99. This one example of a simple request for a plan showing all waterbodies on the site is basic, but I consider it representative of the difficulties.
- 100. I also note that the difficulties in obtaining information and/or providing guidance since early 2018 have meant that it has not been possible to assist the Applicant through this resource consent process in the usual manner. The planning consultancy (Landpro) that prepared the application and the assessment of effects (and all other 'Bathurst' applications for Canterbury Coal Mine) was no longer involved as SDC's point of contact from March 2019, when the address for service became (and still is) one of the Applicant's staff members, Mr Campbell Robertson, Environmental Manager, but with other staff members, senior management and RMA lawyers also providing information at different times.
- 101. It would appear that the RFI Response letters may not have been prepared by an RMA specialist; however, various other parties were copied in on much of the correspondence to varying degrees at different times, i.e. the Applicant's other staff members, senior management and in-house legal counsel, the planning consultant (Landpro), a different planning consultant (Mitchell Daysh, who may be going to be involved given their attendance at a meeting with SDC Management, but there has been no advice of this – no correspondence has been received from that party) and the RMA lawyers (Lane Neave). Therefore, I conclude that the Applicant had the expertise and knowledge available to them to fully understand what was being requested from them.



102. Given the long duration of the process to date and the continuing information gaps following the 'without prejudice' scoping and draft application comments, the first formal RFI and the First RFI Response, it was decided that SDC had provided adequate opportunity for the information to be provided and it would not continue to repeat information requests after inadequate response. The other experts were asked to consider whether they could come to any conclusions on effects on the basis of the information provided to date. The experts advised with respect to their particular field of expertise, and further information was only requested in the Second RFI where that was identified as being absolutely necessary by the experts (and where additional matters had been raised by other specialists, i.e. the NESCS and building consent issues). The Applicant was then advised of the information gaps in the Second RFI:

#### 1. INFORMATION GAPS

We have worked through the RFI Response and there are some requests that are not responded to or are responded to in part. This, combined with the lack of specific referencing to RFI query numbering in places, has made working through the information rather time intensive.

A fuller and clearer understanding of the proposal would be beneficial; however, given the amount of time that has elapsed since the beginning of this process, i.e. SDC first sought that the increase in trucking movements be addressed by the applicant almost two years ago and RC185018 was lodged over a year ago, we are mindful of the need to avoid further delays.

To that end, I have requested that the other experts write their reports based on the information received to date, and, at this stage, we have only commented on process or areas of disagreement and requested further information where it is necessary in order to define the parameters of the proposal and/or come to a conclusion on adverse effects for the purposes of the notification report. However, please be aware that it may be necessary to request further information again at the substantive stage.

### 103. Following the Second RFI Response, the Third RFI advised:

"It is disappointing that Bathurst has refused to provide SDC with all of the information necessary for it to assess the effects of the proposal. In the end, that is the applicant's choice and I will need to fully consider it is accordance with s.95C, but there is one issue in particular that the applicant may be misunderstanding; therefore, for the applicant's benefit only, I discuss the [NESCS] issue below and provide a further opportunity for the applicant to address it."

- 104. As discussed earlier, on 19 November 2019 the Applicant was advised that SDC did not agree that the NESCS had been adequately addressed and the further information requested was still required.
- 105. The most significant information gaps relate predominantly to the application parameters (i.e. what the activity is/what the application is for), ecology, soil contamination and human health (the NESCS), noise and lighting. In my view, there is also an issue to address with respect to management plans.



- 106. In relation to the application parameters, as discussed previously, the activity and what is being applied for is not entirely clear due to lack of information or conflicting or confusing information being provided. These matters are explained further in Appendix 3 and within the body of this report.
- 107. The ecological information requested but not provided is listed in paragraph 14 of Mr Davis' report at **Appendix 8**. Some of this information was requested in both the First and Second RFIs. The gaps include but are not limited to a plan of waterbodies within the site has not been provided, not all wetlands have been identified and surveyed, there is a lack of survey information, the acid mine drainage invertebrate index was not addressed and no explanation was provided about the implications of Tara Stream/Wetland contamination for downstream Canterbury mudfish in the Waianiwaniwa River system. As a result, Mr Davis has completed a partial assessment based on the information to date and the requested information is still required.
- 108. In terms of the NESCS, the Applicant will not provide the information requested. Mr Knoyle advises that it is likely that existing management plans are already in place to appropriately manage any risks to workers undertaking works within the subject area. However, based on the limited information provided in the AEE and supplemented in the GHD PSI, he is unable to confirm or quantify this.
- 109. The First RFI requests with respect to noise (points 19 to 31) were responded to with a full replacement noise assessment report<sup>38</sup>. The acoustic expert, Dr Trevathan, advises (in **Appendix 12** of this report) that points 23 and 28 of the First RFI were not adequately responded to within that replacement report. These points requested the assumed location of each of the noise sources for each modelling scenario, and a more comprehensive noise monitoring exercise relating to the existing situation including measurements at the upper limits of the meteorological window. As a result of this lack of information, combined with the information provided in the SDC "*Noise Complaints*" Report (discussed further in Appendix 12), Dr Trevathan has come to some interim conclusions only and the requested information is still required.
- 110. The First RFI (point 14, a to h) requested a lighting design and assessment from a suitably qualified expert. In Response, a night-time visual analysis was provided from the Applicant's landscape expert. This provided some of the information requested; however, a lighting design by a lighting expert was not provided and it is not clear what is proposed. Mr Read addresses this in his report at Appendix 13, and comes to some interim conclusions on the effects of the activity. The requested information is still required.
- 111. I note that, in addition to any measures identified in the application, it is proposed that any noise and lighting impacts be managed by future sections in the Environmental Management Plan; however, there is no acoustic or lighting expert explanation of what these management plans might address or cover. Given the interim conclusions of the SDC experts that the activity currently has, and may have



<sup>&</sup>lt;sup>38</sup> First RFI Response, Attachment 9

in future, more than minor adverse effects, I am not certain that the effects of the activity can be appropriately avoided, remedied or mitigated <u>and</u> be undertaken as per the statements in the application. It is not considered appropriate that these potentially significant impacts be left to be assessed after consent is granted when an amended management plan is provided. In particular, if the application was to be notified, any affected parties should be able to consider the proposal and the mitigation proposed by the Applicant.

### Management plans in general

- 112. With respect to management plans in general, the application proposes<sup>39</sup> that adverse effects be managed through updating the existing Environmental Management Plan to address:
  - site rehabilitation,
  - site water management measures,
  - dust management,
  - fire management,
  - slope stability,
  - noise, and
  - lighting.

New management plans are proposed in terms of:

- archaeology, and
- traffic dust suppression.
- 113. Management plans in general are addressed in Appendix 3 of this report (Section S). In brief, in response to the First RFI, the Applicant advised that it would not be providing draft management plans: "*Thus we will not be providing management plans at this stage of the application process and that is standard procedure with adaptive management rather we are expecting to formulate the required ones that give effect to clear objectives and measureable standards once the consent has identified how many are required and the issues they are to address."<sup>40</sup> [sic]*
- 114. My view was advised in the Second RFI<sup>41</sup>:

"It is now common practice, and we consider best practice, to provide (at least) draft management plans at the time of application so that effects can be fully considered by all parties. Given that the activity is currently operating and that such measures should already be



<sup>&</sup>lt;sup>39</sup> First RFI Response, Attachment 2, proposed condition 18

<sup>&</sup>lt;sup>40</sup> First RFI Response, letter, page 3, third paragraph

<sup>&</sup>lt;sup>41</sup> Second RFI, point 14

in place, it was expected that these management plans would be active and available for consideration; however, it is acknowledged that the applicant has refused to provide draft or proposed management plans and instead proposes certification conditions requiring later assessment by SDC experts."

- 115. I continue to consider at least draft management plans necessary for some aspects. A number of activities apply adaptive management processes to the way in which they operate, and, in my experience, it would be expected that at least draft management plans would be provided at the time of application.
- 116. I accept that examples from other consents/consent authorities could be provided to support both views, i.e. there will be examples where draft management plans have been required at application stage and examples where consent conditions require management plans after consent is granted. However, in this case, my main concern relates to the deferral of the assessment of effects, potentially significant adverse effects, until that later time when the management plans are provided, rather than satisfactorily assessing them now as part of the resource consent process. I am concerned that future management plans are proposed instead of providing adequate explanation of how the activity will operate, its likely effects and the mitigation measures proposed at this point.
- 117. Given the potential adverse effects of the proposal and the management history of the Mine over the timeframe of this consent application, with respect to Acid Mine Drainage (AMD) management, clearance of indigenous vegetation, vehicle movement numbers, dust management, noise and lighting in particular (as discussed later in this report), I would consider a more conservative approach appropriate.
- 118. Given that the application indicates that management plans are necessary in order to mitigate adverse effects, I consider that at least a draft of the new sections of the Environmental Management Plan relating to slope stability (noting that only ELF slope stability is specifically addressed in the current EMP), noise and lighting, and the new traffic dust suppression management plan need to be provided to enable full consideration by SDC and any affected parties, and particularly for aspects where the SDC experts have concluded that adverse effects are of significant concern. The Applicant will not provide them at this point.
- 119. It is presumed that management plans addressing the matters relevant to the NESCS are already in place, but the Applicant will not provide them.

### Information sourcing

120. Finally, I note that in order to fill in some of the information gaps and provide useful assessment to the Commissioner, retrospective information has had to be sourced from the SDC files or from the SDC and ECan application documents. I could not have fully understood what was being applied for otherwise. In my opinion, this should not have been necessary, it has taken an unusual amount of time, the activity is still not clearly understood and the length of this notification report is reflective of



the lack of clarity within the application. This report is as accurate as it can be under the circumstances. If the necessary information had been provided or explained, much of the background material within this report would have been unnecessary.

121. The alternative was to simply recommend public notification on the grounds of non-provision of information; however, SDC would have been no further ahead in terms of understanding this activity or its current effects on the environment.

## **Conclusion – Step 1**

- 122. I consider that the Applicant did not provide information requested by the deadline provided (s.95C(2)(a)) and has refused to provide information requested (s.95C(2)(b)).
- 123. As such, I recommend that the application is publicly notified pursuant to sections 95A(2)(a), 95A(3)(b) and 95C.
- 124. There is no requirement to continue through the steps of s.95A. However, I note that the Regulations governing public notification<sup>42</sup> require that notice be served on affected parties. Therefore, a recommendation as to affected parties is required, and this is to be undertaken in accordance with s.95E "Consent authority decides if person is affected person". As noted above, the SDC experts were asked to peer review the application assessments and come to conclusions on adverse effects (to the degree that they are able) based on the information that has been provided at this stage. Given that these assessments/partial assessments have been completed, and that the Commissioner may come to a different view with respect to Step 1 above, this report continues through the steps for the sake of completeness. However, it must be recognised that there are uncertainties due to lack of information. The uncertain aspects are identified in the individual expert assessments.

## **Step 2 – Public notification precluded in certain circumstances**

125. Does the application meet either of the following criteria?

		Y	Ν
2.1	All activities in the application are subject to one or more rules or national environmental standards that preclude public notification		✓
2.2	The application is for one or more of the following, but no other types of activities		
	A controlled activity		✓
	A restricted discretionary or discretionary activity that is a "residential activity" (as defined in section of the 95A RMA)		~



28

<sup>&</sup>lt;sup>42</sup> Resource Management (Forms, Fees, and Procedure) Regulations 2003

A restricted discretionary, discretionary or non-complying activity that is a boundary activity
 An activity prescribed by regulations made under section 360H(1)(a)(i) of the RMA (if

## Step 3 – Public notification required in certain circumstances

126. Does the application meet either of the following criteria?

any) precluding public notification

		Y	Ν
3.1	Any activity in the application is subject to a rule or national environmental standard that requires public notification		~
3.2	The activity has, or is likely to have, adverse effects on the environment that are more than minor in accordance with section 95D of the RMA (s.95A(8)(b))	✓	

- 127. As per the assessment of effects below, I conclude that the activity will have adverse effects on the environment that are more than minor pursuant to s.95D.
- 128. If my recommendation under Step 1 above is not accepted, I recommend public notification pursuant to sections 95A(7)(a), 95A(8)(b) and 95D.
- 129. It is not considered necessary to move on to Step 4 (Special Circumstances) given the conclusions above.

# Section 95D – Adverse Effects

130. Section 95D sets out the requirements for a consent authority that is deciding, for the purposes of s.95A(8)(b), whether an activity will have or is likely to have adverse effects on the environment that are more than minor.

### 95D Consent authority decides if adverse effects likely to be more than minor

A consent authority that is deciding, for the purpose of section 95A(8)(b), whether an activity will have or is likely to have adverse effects on the environment that are more than minor—

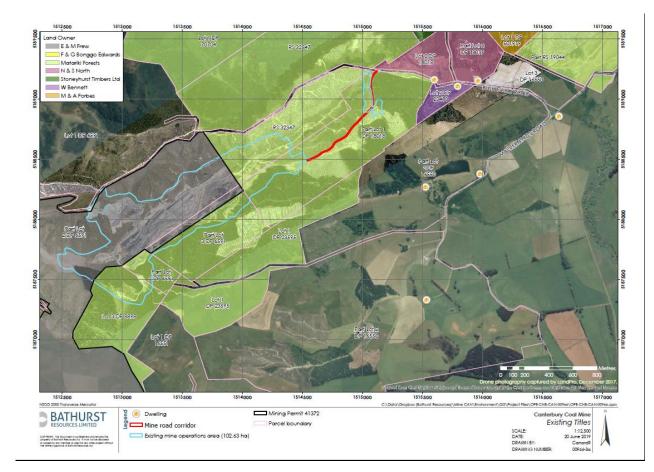
- (a) must disregard any effects on persons who own or occupy—
  (i) the land in, on, or over which the activity will occur; or
  (ii) any land adjacent to that land; and
- (b) may disregard an adverse effect of the activity if a rule or national environmental standard permits an activity with that effect; and



- (c) in the case of a restricted discretionary activity, must disregard an adverse effect of the activity that does not relate to a matter for which a rule or national environmental standard restricts discretion; and
- (d) must disregard trade competition and the effects of trade competition; and
- (e) must disregard any effect on a person who has given written approval to the relevant application.

## Land/Adjacent Land

- 131. Figure 2 below<sup>43</sup> shows that the application site land is owned by E and M Frew ('grey') and Matariki Forests ('light green').
- 132. The application site also includes a small portion of legal road managed by SDC (i.e. where works were undertaken at the North ELF).



133. Any effects on these persons must be disregarded for the purposes of the s.95D assessment.

### Figure 2 Application site ownership plan

134. There was some previous correspondence between the Applicant and SDC with respect to the issue of 'adjacency' under s.95D(a)(ii). This was in relation to the earlier vehicle movements applications



<sup>&</sup>lt;sup>43</sup> This plan was provided to ECan in an RFI Response for CRC184166

(RC185018 – now withdrawn), with both parties obtaining legal opinions on the matter. The Commissioner received copies of those documents as part of that consideration. Suffice it to say that the legal parties were essentially in general agreement with respect to their interpretation of "adjacent" at that time, and my own view accords.

- 135. In summary, it was agreed that the heavy vehicle route along the public roads is not considered to be part of the application site, and properties along the three routes (other than those that are also actually "adjacent" to the application site) are not considered to be "adjacent" for the purposes of s.95D(a)(ii) of the Act.
- 136. It is my understanding that adjacent land can also be considered to be lying near or close, adjoining, continuous, bordering and not necessarily touching.
- 137. The application site has been nominated by the Applicant to be the land within the 'blue line' MOA, and land adjoining that application site is clearly considered "adjacent" for the purposes of s.95D(a)(ii) of the Act. Therefore, the adjoining land owned by E and M Frew and Matariki Forests, as shown in Figure 2 above, is clearly "adjacent". The land opposite the application site on Bush Gully Road at the North ELF (Lot 1 DP 6591, also owned by E and M Frew) and the land opposite the entrance to the Mine on Bush Gully Road (Matariki Forests (RS 32347) and 108 Bush Gully Road<sup>44</sup> (Lot 2 DP 18018 and Part Lot 3 DP 18019)), can also be considered clearly adjacent.
- 138. At this point, I do not consider any other parties fronting Bush Gully or Malvern Hills Roads 'adjacent' due to the distances involved. Given the assessment below, I note that my final recommendation with respect to adverse effects on the wider environment would be public notification regardless of whether any additional parties were identified as being adjacent, due to adverse effects on indigenous biodiversity and cultural values.

## **Permitted Baseline**

- 139. Section 95D(b) states that a consent authority may disregard an adverse effect of the activity if a rule or a national environmental standard permits an activity with that effect. This discretionary consideration is commonly referred to as the permitted baseline.
- 140. The Plan rules are essentially effects-based and work together as a package to enable activities. As noted earlier, the Plan seeks to restrict activities in the Malvern Hills to those that use the natural resources of the area, and a list of the permitted activities is provided at Rule 9.3.1. Again, those activities generally include farming, forestry, conservation, ancillary visitor accommodation/retail/ business, transport networks, mining and other industrial activities which involve the use or extraction of natural resources found in the area, education and research, residential, community facilities and temporary military training.



<sup>&</sup>lt;sup>44</sup> I understand that this site was recently purchased by the Applicant

- 141. Therefore, mining is enabled in the Malvern Hills, but only small-scale operations are permitted as of right. For example, mining would be a permitted activity on this site if:
  - the earthworks were minimal (i.e. most of the cut being under 2m in height and a maximum volume of cut and fill of 5000m<sup>3</sup>),
  - the maximum area of the site covered by mining buildings, loading, storage and waste was 100m<sup>2</sup> or less,
  - only two full-time equivalent (FTE) staff were employed, and
  - vehicle movements of 60 equivalent car movements (ecm) per day were not exceeded, i.e. that would equate to 60 car movements or 20 truck movements or 10 truck and trailer unit movements being permitted per day.
- 142. Therefore, the type of mining anticipated by the Plan as a permitted activity is not large in scale. There are no other non-residential or non-rural activities that would be permitted by the Plan in the Malvern Hills Zone with effects that could be considered similar to the proposed mining operation, given that they are all limited in scale in terms of earthworks, site coverage, staff numbers and vehicle movements in particular.
- 143. There are individual rules that an activity could comply with which might be considered relevant to the baseline, and I note that the application mentions some of these<sup>45</sup>. For example, a rural activity or a small-scale non-rural activity (involving the use or extraction of natural resources or included in the list of activities permitted in the Malvern Hills, with 100m<sup>2</sup> coverage, two FTE staff and compliant vehicle movements) could be permitted by the Plan and could generate noise and lux levels up to the rule standards. However, I am not certain that a rural or small-scale non-rural activity seeking 24 hour operation over five nights and generating a similar degree of directed lighting/sky glow and noise effects would be considered non-fanciful on this site in the Malvern Hills. I note that the receiving environment is a very quiet environment that would not be considered typical for a working rural area, as discussed by Dr Trevathan, and there are no rules in the Plan governing directed lighting and skyglow, other than the glare rules. I also note that both the SDC and Applicant noise experts consider it appropriate that noise limits lower than those permitted by the Plan apply to this activity. Sections 16 and 17 of the Act may also have some relevance in this case - the duties to avoid unreasonable noise and to avoid, remedy or mitigate adverse effects, regardless of whether or not the activity is carried on in accordance with a rule. Therefore, I would not recommend that the discretion to disregard the adverse effects with respect to noise and lighting be exercised at this point.

<sup>&</sup>lt;sup>45</sup> Page 79, section 6.3 of the main application document mentions noise and lighting. I note that Wāhi Taonga Sites are also mentioned, but the application site does not contain a Wāhi Taonga Site; therefore, this is not of relevance to the s.95D permitted baseline consideration for this site. On-site parking and manoeuvring is also mentioned; it is accepted that the effects of the proposed on-site car park and manoeuvring at the offices may be similar to that of a permitted rural or small-scale non-residential activity, and these could be disregarded.



### Forestry

- 144. The loss of indigenous ecological values due to forestry harvesting was raised by the Applicant in the Second RFI Response<sup>46</sup>. The activities are dissimilar in many respects, particularly in relation to the cycle, timing and duration of effects, so they will not be particularly comparable for the purposes of permitted baseline. However, it would be appropriate to consider whether or not a rule or a national environmental standard permits forestry with similar effects on wetlands and/or indigenous vegetation, with respect to disturbance/clearance activities in particular.
- 145. The National Environmental Standard for Plantation Forestry ("NES-PF") has applied since 1 May 2018. However, an overview of the Plan rules applicable to forestry during the time of mining under this application, up until May 2018, identifies that the planting and harvesting of forests was not a permitted activity in the Malvern Hills Zone; it was listed as a restricted discretionary activity<sup>47</sup>. Assessment matters included consideration of views and landforms, significant ecological sites, effects on wetlands, erosion, transport effects, rehabilitation and fire management.
- 146. I note that additional Plan rules specific to waterbodies/wetlands would also have applied, and noncompliance with these would have rendered a forestry activity discretionary or non-complying in status, as follows:
  - all earthworks (including those associated with harvesting or forming tracks<sup>48</sup>, but not those associated with the planting of trees<sup>49</sup>) needed to be set back 20m from a wetland, and 20m or 5m from a river<sup>50</sup>,
  - tree planting was required to be set back 10m from any waterbody<sup>51</sup>,
  - clearance of indigenous vegetation within a wetland was not permitted<sup>52</sup> (unless the vegetation was an understorey within a forest or within an area of failed forest or located on a previously existing forestry access track that was to be re-established<sup>53</sup>),
  - some indigenous vegetation clearance (but not earthworks) was permitted within 20m of a waterbody, subject to it not exceeding 100m<sup>2</sup> per hectare in any continuous 3 year period.<sup>54</sup>
- 147. In summary, plantation forestry was not a permitted activity in the Plan in the Malvern Hills prior to 2018, and resource consent was required for planting and for harvesting. Therefore, forestry did not form part of the permitted baseline prior to May 2018.

<sup>49</sup> As per the definition of Earthworks



<sup>&</sup>lt;sup>46</sup> Second RFI Response, letter, point 7(i)

<sup>&</sup>lt;sup>47</sup> Tree Planting, Rule 2.2.2

<sup>&</sup>lt;sup>48</sup> Part C1, Note 2

<sup>&</sup>lt;sup>50</sup> Rule 1.7.1.1

<sup>&</sup>lt;sup>51</sup> Rule 2.2.1.5

<sup>&</sup>lt;sup>52</sup> Rule 9.21.1.4

<sup>&</sup>lt;sup>53</sup> Rules 9.21.2.2 and 9.21.2.3

<sup>&</sup>lt;sup>54</sup> Rule 9.21.1.5

148. The current situation post-May 2018 is that the NES-PF applies, and it contains detailed provisions relating to all aspects of forestry. However, Regulation 6(2) states that a rule in a plan may be more stringent than the regulations if the rule recognises and provides for the protection of significant natural areas. These are defined as follows<sup>55</sup>:

*significant natural area* means an area of significant indigenous vegetation or significant habitat of indigenous fauna that—

- (a) is identified in a regional policy statement or a regional or district plan as significant, however described; and
- (b) is identified in the policy statement or plan, including by a map, a schedule, or a description of the area or by using significance criteria
- 149. The NES-PF Guidance document<sup>56</sup> clearly identifies that the use of significance criteria to identify a significant natural area ("**SNA**") under the NES-PF is anticipated and these areas are not required to be specifically identified in the district plan; it also includes examples of how to determine when a rule in a plan is more stringent when considering an activity.
- 150. The Selwyn District Plan contains significance criteria and Mr Davis has assessed Tara Wetland, the NW seepages and the North ELF wetlands/seepages as being significant under those criteria. He also considers them to be significant under the Canterbury Regional Policy Statement (CRPS) significance criteria. (I note that the application ecological assessment did not apply the District Plan significance criteria, but did apply those of the CRPS, concluding that the following were ecologically significant: Tara Stream Wetland, Upper Bush Gully Stream and wetlands, the North ELF seepages and the seepages and wetlands in the gullies in the farmland on the northern side of the mine.) Therefore, it is considered that Tara Wetland, the NW seepages and the North ELF wetlands/ seepages are SNAs for the purposes of the NES-PF, noting that currently only Tara Wetland is surrounded by forest.
- 151. The rules of the Plan that recognise and provide for the protection of wetland SNAs are those relating to earthworks, tree planting and the clearance of indigenous vegetation. Having carefully compared these rules with the relevant NES-PF regulations, I conclude that the Plan rules are more stringent and would prevail over the NES-PF where the following works were proposed at the SNAs:
  - earthworks within 20m of the SNAs discretionary under the Plan,
  - tree replanting within 10m of the SNAs discretionary under the Plan,

<sup>55</sup> Section 3 of the NES-PF <sup>56</sup> NES for Plantation Forestry – Plan Alignment Guide [Version 1.0 - May 2018], 4.6.1, page 26



- clearance of indigenous vegetation within the SNAs<sup>57</sup> non-complying under the Plan (except for the clearance of forestry tracks used in the last 50 years, which would be permitted), and
- clearance of indigenous vegetation (over 100m<sup>2</sup> per hectare in a three year period) within 20m of the SNAs – discretionary under the Plan.
- 152. It is my view that these particular types of works would not be permitted; therefore, any effects could not be disregarded.
- 153. The application does not identify any SNAs within the forest within the MOA. In the Second RFI, the Applicant's expert was asked to confirm if all seepages and wetlands in the headwaters of Bush Gully Stream, Tara Stream, Oyster Gully Stream (and potentially Surveyors Gully Stream) were identified and surveyed during the vegetation survey. The Response was:

"Yes, with the exception of some of those areas within cut-over radiata pine forest and within existing pine forest have been surveyed and mapped. While some of the seepages within cut-over pine forest were surveyed they have been highly modified by either harvesting practices or harvesting, aerial herbicide application and in some areas, pines have been re-planted through them. The presence of seepages under the pine forest canopy could not be determined, and given that these areas will be harvested, any remaining indigenous ecological values that may have survived will be lost during harvesting. Seepages in these areas were not able to be mapped from aerial imagery. All wetlands have been surveyed and mapped." [sic]

- 154. Therefore, there are seepages but it is not advised if there are any additional SNAs under the NES-PF.
- 155. At this stage, Mr Davis considers it likely that the wetland areas in the upper SE gullies are SNAs, i.e. the wetland areas generally to the north-east of Tara Pond 1. Whether or not these are within the application site is unclear, as they are close to the boundary; however, setbacks will still apply to them.

### **Outside of SNAs**

- 156. With respect to the clearance of indigenous vegetation that is not within an SNA, the NES-PF allows the clearance of indigenous vegetation within a forest if it:
  - has grown up under the forest,
  - is within an area of failed forest,

<sup>&</sup>lt;sup>57</sup> The Plan exemptions of 'within understorey or failed forest areas' would not apply as the NES-PF would not permit indigenous vegetation to be cleared in SNAs



- is within an area that has been harvested in the previous five years, or
- is overgrowing a forestry track used within the last 50 years.
- 157. Therefore, the adverse effects of indigenous vegetation clearance within these areas could be disregarded when considering the expanded mining operation. However, all of these exemptions do essentially rely on the planting/harvesting/tracks they refer to being lawfully established within/beside areas of indigenous vegetation to begin with. I cannot confirm that; there are no forestry resource consents on the SDC files. Matariki Forests will have 'existing use rights' for the Coalgate Forest, given the long history and the previous Selwyn Plantation Board ownership, but there are no records to identify if any indigenous vegetation within it (if there is any) was avoided or protected in any way previously.
- 158. At this stage, I have no information to the contrary and have assumed that all existing forest planting and harvesting is lawful and, outside of SNAs, the clearance of indigenous vegetation that is an understorey, within failed forest, in an area harvested in the last five years or on an existing forestry track is permitted in conjunction with forestry on the application site, and forms part of the permitted baseline.

## Written Approvals

- 159. The Applicant provided two written approvals with the original application.<sup>58</sup> These were from Matariki Forests and Avoca Trust (E and M Frew). The approvals do not state which properties they relate to, but it could be assumed that they relate to the portions of land owned by these parties immediately adjacent to the application site, and to other land owned by them in the vicinity. I note that the forms are not complete to the degree required by SDC, e.g. the section confirming that the application was provided to, and read by, the parties is not filled out, but I also recognise that these parties own the application site and have contractual arrangements with the Applicant which are likely to give them alternative recourse. Therefore, I consider it reasonable to assume that written approval has been obtained from these parties, subject to the parameters of the application being those listed on the approval form, e.g. a maximum of 60 staff on-site.
- 160. I note that other landowners are also listed on the Certificates of Title for the application site<sup>59</sup>, some in terms of Minerals Only but not all. These parties are Her Majesty the Queen, C Deans, M Weakly and J & J Deans.
- 161. On 4 April 2019, the Applicant provided further written approval forms and these have been provided to the Commissioner. In the Second RFI<sup>60</sup>, SDC advised that these written approvals were not



36

<sup>&</sup>lt;sup>58</sup> Main application document, Appendix 15, pdf pages 694-700

<sup>&</sup>lt;sup>59</sup> Provided in Appendix 2 of the main application document

<sup>&</sup>lt;sup>60</sup> Second RFI, point 5, pages 4-6

accepted as valid and provided the reasons for this. In brief summary, the main reasons were:

- The proposal was very briefly described and in terms of one Plan non-compliance only, i.e. "Application for Heavy Vehicle Movements RC185640", with no mention of Mine expansion.
- No other non-compliances were mentioned and no plans were attached. There was no indication that the parties who provided approval were aware of any aspect other than heavy vehicle movements.
- All but one of the approvals was conditional.
- The owners/addresses did not match the SDC rating database, and the 'official' owners of certain properties had not given approval whereas the occupiers had.
- 162. There was no further comment from the Applicant.

# **Consented Baseline**

163. In considering the effects of the proposal, it is important to recognise what is currently consented as a baseline against which to assess the effects of the expansion.

## **Consent History**

164. The following is a list of the most relevant SDC consents to date:

CONSENT	GRANTED	DESCRIPTION
R303578	2000	Original land use consent that established the current Mine
RC085059	2008	Change of conditions of R303578 to allow year-round overburden extraction
RC135385	2013	Retrospective consent to undertake coalmining and associated activities outside of the area previously approved by R303578
RC135632	2014	Consent to extend the coalmining pit to the south-west (This was the first application made by 'Bathurst' (Canterbury Coal (2013) Ltd)
RC165238	2016	Consent to combine the existing consents (R303578/RC085059, RC135385 and RC135632) into a single replacement document for administration purposes
RC175261	2017	Change of conditions to increase the hours of operation to allow night- time operation on-site

As mentioned earlier, the following application was also made and subsequently withdrawn:

RC185018	Lodged - 16 January 2018	Application to increase heavy vehicle movements	
	Withdrawn - 5 December 2018		



- 165. There were also two diesel tank consents; one in 2014 for 30,000 litres (RC145374) and a new consent replacing that tank with a 60,000 litre tank in 2017 (RC175266).
- 166. An illustrative timeline of the most relevant consents is provided in **Appendix 6**; this may be useful as a quick reference when reviewing the following section.
- 167. It is understood that this current application will replace all of these previous SDC consents.
- 168. Some works subject to this application have already been consented by ECan, i.e. the North ELF and Tara Pond 2 works.
- 169. I understand that ECan is currently processing the following bundled applications:
  - CRC184166 Land use consent to use land for retrospective earthworks from 2012, and future earthworks
  - CRC200500 Discharge permit to renew air discharge and include expanded mine area
  - CRC201366 Water permit to take, use and divert surface water
  - CRC201367 Water permit to take, use and divert groundwater
  - CRC201368 Discharge permit to discharge mine affected water to Tara Stream<sup>61</sup>
  - CRC203016 Discharge permit to discharge coal combustion residual, lime products and mussel shells to land and to land where contaminants may enter water
- 170. The overall status of the ECan bundled applications is non-complying.
- 171. The ECan consented baseline is somewhat complicated, with resource consents for different aspects covering different time periods and different areas of the site. In relation to the discharge of mine influenced water, I understand that ECan and the Applicant still disagree as to whether or not the geographic scope of previous consent CRC170541 covers the entire MOA. As I understand it, the Applicant considers it does, but ECan considers it does not and that there remains a part of the site that will be unconsented in this regard. I understand that the Applicant has not applied to remedy this and the issue has been referred to the ECan Compliance Team. I understand that ECan also considers that there remains an area where the discharge of CCR, lime products and mussel shells to land and ponds is not consented and not applied for in the current applications.
- 172. The ECan Consenting and Compliance Summary for the Mine have been provided to SDC by the ECan Consultant Planner, and these are included for information purposes as **Appendix 23**.
- 173. I have not reviewed the past and current ECan consents in depth, but I have a general understanding and have highlighted some issues in this report where they are apparent to me.

<sup>&</sup>lt;sup>61</sup> I understand that there is an additional application for discharge to water to Tara Stream (CRC191342), but it is currently on hold and will be withdrawn if CRC201368 is granted



174. I understand that the Applicant intends that these SDC and ECan applications will bring consenting of the Mine up to the end of 'Pit N05'. I note that a "*Proposed Mine Plan 2017 – 2024*" is included within the ECan land use application and in this SDC application<sup>62</sup>. This indicates that future mining is intended, continuing along the same line up to the north-east (from N05 up to an "N12" adjoining Bush Gully Road). This expansion would require further resource consents from SDC and ECan.

## **SDC Consented Baseline - Background**

- 175. The consented baseline was explained in detail in the notification report for RC185018 (truck movements (now withdrawn)), in the Adderley Head legal opinion of 24 August 2018 (provided previously in the documents for RC185018) and in the SDC Consented Baseline document prepared for the Applicant.
- 176. In October 2018, the Applicant agreed that the consented baseline as advised by SDC is not at issue in this particular process and confirmed that it would not contest or dispute SDC's position or lodge the application on a "without prejudice" basis. However, the Applicant also noted that this approach would not be legally binding on it or SDC, or the Court, in any separate declaration or appeal proceedings if that were to take place.<sup>63</sup>
- 177. Therefore, this bundled application was made on the basis of the "SDC Consented Baseline", subject to the Applicant being able to continue mining operations at its existing unconsented level during the consenting process, and that baseline is not disputed for the purposes of this consent application.
- 178. The application refers to the SDC Consented Baseline October 2018 (version 2) document; however, in reviewing it now, I consider that the heavy vehicles baseline in that document needs to be amended in a minor way. In short, there was a double-up in summarising the heavy vehicle movements of the R303578 application.<sup>64</sup> An updated October 2019 (version 3) SDC consented baseline document is appended to this report as **Appendix 7** (the deleted text is shown in red strikethrough). I note that the vehicle generation application document expressed the Applicant's view that the effects would be the same regardless of the precise consented baseline<sup>65</sup>, and I agree. This amendment is minor but appropriate for the sake of clarity.

<sup>65</sup> Vehicle generation application document, page 23, third paragraph



 <sup>&</sup>lt;sup>62</sup> Main application document, pdf page 350, page 6 of Environmental Management Plan (Figure 3)
 <sup>63</sup> Email D Spring to J Burgess, 29 October 2018

<sup>&</sup>lt;sup>64</sup> R303578 application (6.5.2, page 53) described the heavy vehicle movements as follows:

<sup>•</sup> On-site coal processing. If this is the case, given a maximum number of working days of 260, an average of 77 tonnes (excluding Sunday) will be required to be moved from the site per day. It is proposed to use truck and trailer units capable of carting an average net load of 25 tonnes. This equates to 3 trucks per day or 6 vehicle movements.

Off-site coal processing. If this is the case, the coal that is won and being stored on the stockpile will need to be transported for
processing as quickly as possible. If enough coal was being won every two to three weeks for transport off-site then there would
be approximately 18 - 27 trucks (32 - 54 truck movements) per day transporting coal offsite over a 2 - 3 day period every two to
three weeks. In the intervening times there would be little or no mine truck traffic.

## **Consented Baseline Summary**

- 179. Given that the SDC consented baseline document was produced for the Applicant (and relied on their extensive background knowledge in understanding it) and that it includes many parameters, it may be useful to provide a simple summary of the three consents that determined the consented location and area of disturbance of the Mine at this point.
- 180. Firstly, I note that the Figure 1 Site Plan 'green line' outline is not quite correct, but I consider it 'close enough' for illustrative purposes. The 'Legend' descriptor for that 'green line' is incorrect and should not be relied upon, i.e. there is not a "2013 Consented Variation for Pit Excavation and ELF Construction" and the 'green line' does not result from one application. I also note that all 'Legend' labels referring to 1998 should refer to 2000, and the main 2000 Consented Mine Pit is not shown. However, none of these aspects are critical to assessment. The following summary should clarify the position.
- 181. Three SDC consents determined the 'green line' consented area of disturbance, as follows.

#### 2000 - R303578

182. The original consent that established the Mine was R303578 (granted 2000). That allowed four pits to be mined, as shown below (the plan is rotated to be roughly in alignment with North at the top).



Figure 3 R303578 consented pits



183. Pit F1 on the plan above is roughly in the centre of the current Mine (and it is sometimes referred to as the Nimmo Mine), and the current Mine is now moving north-east into the western sides of Pits Y1 and Y4. Victory Pit is the small white rectangle at the north-eastern extent.

## 2013 - RC135385

184. This application (made by the previous owner) explains that the purchaser's (Bathurst's) due diligence process had identified that the land disturbance undertaken up until that point may not have been expressly authorised by R303578, and I note that the Applicant's 2013/2014 Work Programme confirmed that this 2013 land use consent to authorise the existing mine footprint was sought as part of the sale of the mine to Canterbury Coal (2013) Ltd<sup>66</sup>. This consent (RC135385) enabled an area of disturbance as below (i.e. all that within the black line outline), noting that Pit F1 on this Figure 4 plan is the same as that shown on Figure 3 above:



Figure 4 RC135385 consented area of disturbance

185. However, a condition of that consent was that "*actual mining*" was only permitted in the pink pit [F1] and the Current Pit, as below:



Figure 5 RC135385 – two consented pits for "actual mining" – pink pit and Current Pit



<sup>&</sup>lt;sup>66</sup>2013/2014 Work Programme, page 5

- 186. What "actual mining" meant was questioned by the Applicant in pre-application discussions, given that the application stated that benching of slopes outside of the pits was included in the area of disturbance. I have reviewed the file and note that the 'Team Leader, Resource Consents' was concerned that the application would allow the entire area of disturbance to be mined, so requested the provision of an additional plan showing the actual pit to be mined. I am comfortable that "actual mining" meant the actual extraction of coal from the ground. The 'Team Leader, Resource Consents' has confirmed<sup>67</sup> that is her recollection and if it had been advised that coal was being physically extracted from the ground from anywhere other than the pink pit and the Current Pit, additional consent would have been required.
- 187. It is noted that the Figure 4 plan above should match the north-eastern half of the 'green line', as Figure 4 is the consented baseline for disturbance in that north-eastern half. When compared to the Figure 1 Site Plan it can be seen that it does not match exactly, but I consider it 'close enough' for the purposes of illustrating the consented baseline on the Site Plan.

## 2014 - RC135632

188. In 2014, the Mine, then owned by Bathurst Resources (under Canterbury Coal (2013) Ltd), sought to expand further to the south-west, and this was granted (RC135632), as per the dashed line below, which is labelled "Approximate Mine Expansion Area".

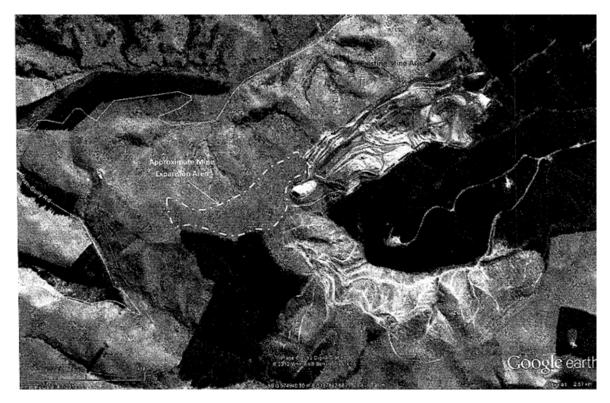


Figure 6 RC135632 consented expansion area - the dashed line



<sup>67</sup> Pers. comm. J Dovey/R Flynn

- The south-western half of the 'green line' on the Figure 1 Site Plan should match the dashed line of Figure 6. However, again, I consider it 'close enough' for illustrative purposes.
- 190. In 2016, these consents were combined into one administrative, replacement consent (RC165238), for ease of use and consistency of conditions only.

## Conclusion

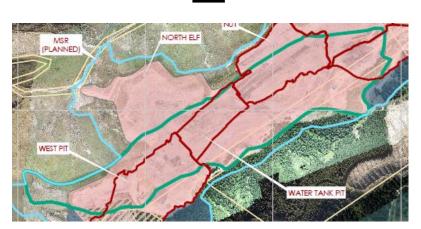
191. In summary, on the Figure 1 Site Plan it can be considered that the south-western 'half' of the 'green line' area of disturbance was consented by RC135632, and the north-eastern 'half' was consented by RC135385. Figure 7 illustrates the consented baseline for area of disturbance very simply:



RC135632 (south-west) (Figure 6 above)



RC135385 (north-east) (Figure 4 above)



The 'green line' consented area of disturbance on the Figure 1 Site Plan

#### Figure 7 The consented areas making up the consented baseline area of disturbance, i.e. the 'green line'

- 192. To provide a 'side by side' comparison of the consented baseline area of disturbance against a 'close to current' area of disturbance for illustrative purposes, the figures on the next page show the Mine as at March 2013 and October 2019. Both of these figures are sourced from Google Earth.
- 193. This first aerial photograph below essentially shows the area of disturbance consented to date in the north-eastern half of the 'green line', i.e. it matches Figure 4 above.





Figure 8 Consented baseline area of disturbance (NE half RC135385) - March 2013 aerial photograph

194. The increased area of disturbance existing as at October 2019 is shown below (noting that the mine disturbance had moved south-west into the 'dashed' consented area of Figure 6 above at that time):



Figure 9 'Current' area of disturbance - October 2019 aerial photograph



195. As explained in Appendix 3 (Section C), it is understood that the maximum area of disturbance now sought by this application totals all of that area within the 'blue line' MOA on the Figure 1 Site Plan.

## **Consented Baseline vs the Application – Comparison**

- 196. As explained above, the 'green line' on the Figure 1 Site Plan represents the total area of land that is allowed to be disturbed by the previous consents; however, it must be recognised that the extent/scale of the mining within that 'green line' was also limited by a number of other parameters in addition to surface disturbance.
- 197. The following table summarises the main parameters; consented vs proposed for the Mine.
- 198. As previous, it must be recognised that these parameters do not cover Victory Pit (and associated stockpile and storage areas), as that area is not assessed in this application and will need to remain governed by the parameters of R303578/RC085059.

	Consented baseline	This Application (retrospective and future)
Location of 'Mine Operations Area' (MOA)	Within the 'green line' on the Figure 1 Site Plan	Within the 'blue line' on the Figure 1 Site Plan
Total area of surface disturbance	Within the 'green line' on the Figure 1 Site Plan	Within the 'blue line' on the Figure 1 Site Plan
Maximum area of land disturbance at any one time	The Applicant considers the total consented to be approximately 35 hectares, including everything. This aspect is unclear, because the information provided in RC135632 was confusing, but I confirm that it would be more than 25 hectares. <sup>68</sup>	42 hectares, excluding land or stockpiles under vegetative cover or land being rehabilitated
Pit locations and benching	NE half (roughly) of 'green line' area on Figure 1 Site Plan: Pink pit and Current Pit could be actually mined, with some benching permitted within the area of disturbance – RC135385	Within the 'red line' Pit Shells on the Figure 1 Site Plan (with "minor adjustments" proposed) Benching is included within those Pit Shells

#### Table 2: Consented vs proposed parameters

RC135632 – SW extent – application stated that, at any one time, the active mine pit [of the whole Mine] would have an exposed area of 6-8 hectares, excluding stockpiles of topsoil or overburden, and the pond areas. The site management plan with that application stated that the total area disturbed and not restored or undergoing restoration should not exceed 5 ha, once the overburden storage areas have been revegetated [again the whole Mine].



<sup>&</sup>lt;sup>68</sup> R303578 – 5 hectares over all pits (including stockpiles and settlement ponds)

RC135385 - NE extent - approximately 25 hectares, including everything

	Y1 and Y4 and Victory Pits able to be mined – R303578/RC085059 SW half (roughly) of 'green line' area on Figure 1 Site Plan: At any one time, the active mine pit will have an exposed area of 6-8 hectares, excluding stockpiles and ponds – located within the dashed line of RC135632 – no specific location shown.	For Pits Y1 and Y4, this application supersedes the previous consents Since all previous consents would be superseded, Victory Pit would be subject to conditions reflecting the parameters of R303578/RC085059, as no assessment of that area has been provided as part of this application
Maximum Coal Production Volume	20,000 tonnes per annum	185,000 tonnes per annum (measurement method to be clarified)
Maximum Pit Depth	50 metres <sup>69</sup>	No limit sought
Excavation and filling	The annual amount necessary to extract 20,000 tonnes of coal within the consented pits. No total figures specified – limited by pit location, size and depth, and the 20,000 tonne per annum coal production volume Some annual examples pre-2013 are: 2006 <sup>70</sup> 10,500 tonnes of coal produced 54,000m <sup>3</sup> (loose) overburden and interburden produced 2009 <sup>71</sup> 23,975 tonnes of coal extracted ~150,000m <sup>3</sup> waste materials (overburden and interburden) extracted	Earthworks including rehandle: 1.8 million bank cubic metres (BCM) per year
Filling with/disposal of CCR and mussel shells	None	CCR – Up to 30,000 dry ash equivalent tonnes per year Up to 50 tonnes of mussel shells per week
Works within wetlands/ Clearance of indigenous vegetation	Tara Wetland affected by Pond 1	Tara Wetland, North ELF wetlands/seepages, NW seepages and potentially the upper SE gullies, and indigenous vegetation in these areas, affected by works



Hours of operation	Within the 'green line' area:	Within the 'blue line' area: No change to the previous hours proposed and consented by RC175261	
	24 hours per day from 6am Monday until 6pm Saturday, except that:	24 hours per day from 6am Monday until 6pm Saturday, except that:	
	- the application and the acoustic assessment stated that only a selection of equipment could operate overnight (as listed in the next section of the table, below)	<ul> <li>only a selection of equipment can operate overnight (as listed in the nex section of the table, below), noting that it is not clear where within the MOA that equipment is proposed to operate – Applicant to confirm.</li> </ul>	
	<ul> <li>all truck movements to and from the mine site are restricted to being undertaken between 7am and 7pm, Monday to Saturday</li> </ul>	<ul> <li>all truck movements to and from the mine site are restricted to being undertaken between 7am and 7pm , Monday to Saturday</li> </ul>	
	- overburden excavation and dumping permitted to occur on Sundays following cessation due to significant rainfall/snowfall	- overburden excavation and dumping permitted to occur on Sundays following cessation due to significant rainfall/snowfall	
	<ul> <li>mining operations permitted to occur on Sundays following cessation due to extreme fire risk</li> </ul>	<ul> <li>mining operations permitted to occur on Sundays following cessation due to</li> </ul>	
		extreme fire risk	
Machinery operated – day and night	Within the 'green line' area, at the times shown:	Within the 'blue line' area (but potentially limited to being within only	
		Within the 'blue line' area (but	
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<sup>72</sup> RC175261 application, acoustic assessment, page 7
 <sup>73</sup> First RFI Response, Attachment 9 – acoustic assessment, page 6, Table 1



		Subject to "minor adjustment" to the location of the 'red line' Pit Shells and "slight variation" in the machinery used. In summary, compared to that consented in 2017 by RC175261: In the early morning 'night-time' (6.00am to 7.30am) and the day-time (7.30am to 8.00pm), the application proposes - • one less 100-120 tonne excavator • three more 50-80 tonne excavator • one more 20-40 tonne excavator • one more 20-40 tonne excavator • one more 50 tonne rigid dump trucks • one more 70 tonne rigid dump truck • one more 40 tonne articulated dump truck • four more generators For the remainder of the night-time from 8.00pm to 6.00am, the application proposes - • one less 100-120 tonne excavator • two more 50 tonne rigid dump trucks • one more 70 tonne rigid dump truck • there may be additional generators <sup>74</sup> (It must also be recognised that "slight variation" in the machinery used was
		anticipated by the Applicant's acoustic expert.)
Night-time lighting	None proposed or consented <sup>75</sup> No mobile lighting towers consented In my view, the best-case scenario would be that some building and machinery lighting (task lights/headlights) could be considered to be consented within the 'green line', but only to that level commensurate with the machinery numbers stated at that time, and only where the effects of that lighting could have been considered less than minor in terms of lighting effects/amenity values, given that no written approvals were provided.	Proposed Fixed lighting associated with the buildings and plant around the site in the following areas: a. Workshop b. Office block c. Coal processing plant Mobile lighting – no limit proposed (There are currently seven diesel- generator-powered mobile lighting towers, each with four luminaires mounted on a pole that can be raised up to 9 metres) Vehicle headlights and safety lights

<sup>&</sup>lt;sup>74</sup> The SDC lighting expert advises that there are currently seven generators operating for the lighting towers at night, so it would appear that it is proposed that there are more than two generators operating at night – the Applicant will need to confirm.
<sup>75</sup> RC175261



		Vehicle-specific task lighting (Currently on excavators, potentially on other machinery, but not confirmed) No limit specified as to number, type or location of lights within the MOA.
Staff numbers	Approximately 10 workers (two staff and eight contractors) on-site at any one time	A maximum of 60 staff (plus visitors to the site, including contractors) is proposed on-site at any one time in the daytime <sup>76</sup> It is not advised how many contractors will work on-site at any one time. A maximum of 15 staff at any one time is indicated to be likely at night-time, but no limit on staff numbers at night is sought Total numbers of staff and shifts operating at night are not set by this application, with shifts being limited by the hours of operation of the Mine only
Buildings on-site	Four buildings proposed. <sup>77</sup> Building areas are " <i>approximate and</i> <i>indicative</i> " <sup>78</sup> : Loader/tractor shed – 150m <sup>2</sup> Portable contractor's office/lunch room – 15m <sup>2</sup> Portable toilet – 2.25m <sup>2</sup> Storage/equipment shed – 9m <sup>2</sup>	Building areas advised in the application <sup>79</sup> are rounded to the nearest whole number: Workshop – 195m <sup>2</sup> Offices – 242m <sup>2 80</sup> Toilet block – 10m <sup>2</sup> Processing plant electrical control room – 20m <sup>2</sup> Supervisors hut – 22m <sup>2</sup> Weather station/radio repeater shed – 9m <sup>2</sup>
Signage	Management signage indicating contact details of the site engineer to be erected at the mine entrance. <sup>81</sup>	Various signs on legal road are existing and proposed <sup>82</sup> No limit sought for health and safety related signs on Bush Gully Road

<sup>&</sup>lt;sup>76</sup> This is effectively set by the written approvals provided from Matariki Forests and Avoca Trust (E & M Frew)

<sup>&</sup>lt;sup>82</sup> As per Figure 8, page 33, of the main application document, and as per Appendix B to the Abley report, pdf page 81 of the vehicle generation application document



<sup>&</sup>lt;sup>77</sup> R303578, RFI Response, 3 June 1999

<sup>&</sup>lt;sup>78</sup> R303578, RFI Response, 21 June 1999

<sup>&</sup>lt;sup>79</sup> Main application document, pages 22 and 23

<sup>&</sup>lt;sup>80</sup> Stated to be 203m<sup>2</sup> but measured as 242m<sup>2</sup> on the building 'Certificate of Acceptance' application plans, to give the Applicant the benefit of any doubt

<sup>&</sup>lt;sup>81</sup> R303578 application, page 20, under Project Staff

	Conditions of consent required/allowed: PW-50 "TRUCKS" signs to be installed north of the intersection of Homebush and Malvern Hills Roads intersection adjacent to Malvern Hills Road, and south of the Bush Gully Road/Malvern Hills Road intersection adjacent to Malvern Hills Road One sign to be erected at the end of the public section of Bush Gully Road (no larger than 1m <sup>2</sup> in size)	Two additional signs proposed at the Bush Gully Road/Malvern Hills Road intersection Application states a large number of signs are proposed on-site and that these are required to provide for health and safety within the mine Unlimited signage on-site is sought, provided it is not visible from a public road No height/size limits are proposed for signs
Vehicle movements	For on-site processing <sup>83</sup> , six truck movements per day, and a peak level of 12 movements per day for limited periods of the year. For off-site processing, a maximum of 54 truck movements per day over a 2-3 day period every 2-3 weeks (with little or no mine truck traffic in the intervening times). Other vehicle movements were service vehicles and those used to transport the approximately 10 workers consented	<ul> <li>A maximum of 730 vehicle movements per week is proposed, comprising:</li> <li>320 heavy vehicle movements (with an annualised average of 230 heavy vehicle movements per week)<sup>84</sup>,</li> <li>119 service vehicle movements (including 108 water cart movements)</li> <li>291 light vehicle movements</li> </ul>
Coal truck routes	Access to the site was via SH77, Malvern Hills Road and Bush Gully Road <sup>85</sup>	Route 1 (the "Preferred Route") is to be used for heavy vehicle movements, i.e. Bush Gully Road, Malvern Hills Road (south) to State Highway 77 <sup>86</sup> Two alternative routes (Routes 2 and 3) are proposed to be used in emergencies/Council-controlled road closures; one or both could be used Route 2 is Bush Gully Road, Malvern Hills Road (north) and Auchenflower Road (east) to SH73 Route 3 is Bush Gully Road and Malvern Hills Road (north) to SH73
Diesel tank	60,000 litres <sup>87</sup>	60,000 litres – no change

<sup>&</sup>lt;sup>83</sup> "*Processing*" was considered to be the washing and screening of coal in previous consent application R303578; however, the consent specifically stated that no washing of coal could be undertaken at the site. The current application proposes screening, but no washing.

<sup>86</sup> Route 1 is also called the Preferred Route in the documents

87 RC175266



50

<sup>&</sup>lt;sup>84</sup> For information purposes, it is noted that the Applicant has advised that the Mine currently operates at a maximum of 120 heavy vehicle movements per week

<sup>&</sup>lt;sup>85</sup> R303578 application (2.1, page 5), and RC135632 application (page 28)

#### 199. Therefore, the expansion of the Mine is reflected predominantly through the combination of:

- the increase in areal extent of potential disturbance (from the 'green line' to the 'blue line'),
- the increase in the extent of the pits. For "*actual mining*", i.e. the actual extraction of coal from the ground, essentially none of the pits are consented except for:
  - those parts that correspond with Y1 and Y4 only (i.e. part of N04-N05),
  - those parts that correspond with Current Pit and pink pit of RC135385 only<sup>88</sup> (i.e. part of Water Tank, a small part of N01 and possibly a small part of N02-N03 Ext), and
  - that part that corresponds with the dashed line of RC135632, Figure 6 above (i.e. that part of West Pit, and potentially part of Water Tank, within the 'green line').
- the increase in coal production volume (from 20,000 tonnes to 185,000 tonnes per annum),
- the increase in the amount of excavation that would be required to extract 185,000 tonnes of coal per annum (as compared to 20,000 tonnes) in the consented pits,
- the increases in the machinery used on-site,
- the increase in the maximum number of staff on-site at any one time in the day (from around 'two plus eight contractors' to 60 plus any contractors),
- the increase in the area and amount of night lighting, and
- the increase in vehicle movements (and particularly heavy vehicle movements from six movements a day with 12 at limited times of the year or the perhaps worst-case scenario maximum of '54 movements per day for three days then none for a fortnight' up to the proposed maximum of 320 movements per week with an annualised average of 230 movements per week).
- 200. It is this increase in the character, intensity and scale of the Mine, from that consented to that proposed, that must be assessed.
- 201. The CCR and mussel shell fill/disposal, the establishment of the North ELF, the works at the Homebush Mine historical workings to the south-west and the works within wetlands/clearance of indigenous vegetation are new aspects of the Mine to be assessed.

## **SDC/ECan Baseline Interface**

202. As mentioned earlier, this activity is not particularly complicated. The consenting history is also not that complicated, and, in my view, what was consented by SDC was very clear up until the south-west

<sup>&</sup>lt;sup>88</sup> The Current Pit and pink pit are shown on Figure 5 above in this report. Unfortunately, the application does not provide one plan with all consented baseline pits shown on it in relation to the proposed MOA and Pit Shells. Pdf page 288 of the main application document does show the pink pit (F1) in relation to the pit shells, so may be useful for orientation. (Pdf page 51 also shows the pink pit, but it does not show the pit shells.)



extension of 2014 and in particular the combining consent of 2016. From 2016, the SDC (and ECan) applications became more confusing and unclear. In addition, the applications were made on a piecemeal basis to SDC and ECan, with only the original application in 1999 being lodged as a joint application to both SDC and the Canterbury Regional Council. I raise this because I consider some brief explanation is necessary as to why there is a substantial difference between a main aspect of the two Council considerations, i.e. SDC has consented 20,000 tonnes coal production volume per year, but ECan has consented water discharges relating to 170,000 tonnes coal production volume per year.

- 203. Up until 2016, it was clear that SDC had consented a maximum of 20,000 tonnes of coal per year (with this "*annual limit*" being formally recognised in application RC135385<sup>89</sup> in July 2013, and the following application for RC135632 stating: "*The proposed activity will not increase the production volume…*"<sup>90</sup>).
- 204. In the RC165238 administrative combining application, dated 26 April 2016, the Introduction stated the following (the relevant part is in red):

# **1. INTRODUCTION**

## 1.1 Overview

The Canterbury Coal Mine (CCM) is located in the Malvern Hills which are situated along the foothills of the Southern Alps at the western edge of the Canterbury Plains (Figure 1). It is a small opencast coal mine which has been developed over previous underground workings until 2003 when opencast mining commenced.

Coal mining has been virtually continuous in the Malvern Hills coalfield since the underground Homebush mine opened in 1872, with at least 87 separate opencast and underground coal mines in the area. There are potentially 170,000 tonnes of coal planned for recovery within the current mine pit area and proposed southern extension. It is expected that the mine life is 20+ years and that >150,000 tonnes of waste rock will be removed each year.

- 205. This would be read as indicating that 170,000 tonnes of coal were being recovered over 20+ years and this would have appeared to match RC135632 (the south-western extension in 2014 the consent prior to this RC165238 combining application). In particular, RC135632 had indicated that:
  - the maximum production volume of 20,000 tonnes would remain the same, i.e. "The proposed activity will not increase the production volume..."
  - there was a remaining total coal resource of around 180,000 tonnes in extended Pit F1, i.e. "Coal recovery by opencast methods and also including the present operational area it is thought that there is potentially 70,000 tonnes of coal for recovery" / "Even with previous



<sup>89</sup> RC135385 application, page 1

<sup>&</sup>lt;sup>90</sup> RC135632 application, page 32, final paragraph under 5.11 Summary of effects

mining it is thought that there is still 70,000 tonnes of coal to be extracted." [sic]<sup>91</sup> and "The extension to the mine is anticipated to extract an additional 110,000 tonnes of coal"<sup>92</sup>

- 206. Therefore, the RC165238 Introduction text of 170,000 tonnes over 20+ years appeared to match the annual production volume of 20,000 tonnes and the total coal resource in RC135632, and it raised no issue for SDC.<sup>93</sup> The RC165238 combining consent was granted on 22 June 2016.
- 207. The ECan CRC170540/541 application lodged to address AMD management (and dated 27 June 2016, two months after the date of the SDC application) began the same, but with some difference in the final sentence, as below:

# **1. INTRODUCTION**

## 1.1 Overview of the Proposal

The Canterbury Coal Mine (CCM) is located in the Malvern Hills which are situated along the foothills of the Southern Alps at the western edge of the Canterbury Plains (Figure 1). It is a small opencast coal mine which has been developed over previous underground workings that were worked until 2003 when opencast mining commenced.

Coal mining has been virtually continuous in the Malvern Hills coalfield since the underground Homebush mine opened in 1872, with at least 87 separate opencast and underground coal mines in the area. It is expected that the mine life is 20+ years and that >850,000 bcm of waste rock will be removed each year.

# 208. Later in the application under the heading *Existing Environment*, the following was included as background information, i.e. that up to 170,000 tonnes of coal per annum could be recovered:

The area that the mine site currently covers is approximately 25 ha in total, including the main mining area, the engineered landform (ELF) sites, and the water management facilities, which comprise the main settling pond and associated water inlet and outlet structures. Coal recovery is by opencast methods, and it is expected that up to 170,000 tonnes of coal per annum could be recovered within the current mine pit area and proposed southern extension.

209. Therefore, the SDC application was indicating a total resource of 170,000 tonnes and the ECan application was indicating 170,000 tonnes per annum. These 2016 applications to SDC and ECan also stated significantly different amounts of waste rock to be removed each year. As per the excerpts above, the SDC application stated >150,000 tonnes and the ECan application stated >850,000 BCM. The use of the 'greater than' symbol is acknowledged, but a consent authority could

<sup>&</sup>lt;sup>93</sup> It is noted that increased truck movements (120 per week) were indicated in RC165238; however, the SDC consented baseline (as explained in the RC185018 notification report) is that the Applicant was advised that these movements were non-compliant and that section was removed from the application; the Applicant is not contesting the SDC consented baseline in this process.



<sup>&</sup>lt;sup>91</sup> Attachment D to the RC135632 application (Bathurst Coal Ltd, Draft Canterbury Coal Site Management Plan, February 2013), the last sentences of pages 6 and 32, (noting that the final plan was issued in August 2014 and was amended to state (page 36): "Even with previous mining it is thought that there is still 170,000 tonnes of coal to be extracted from within the current pit and the proposed extension.")

<sup>92</sup> RC135632 application, top of page 11

expect that the amount of rock removed would be in the vicinity of the number advised. To convert between units (tonnes and BCMs) relies on knowing the exact density of the material being removed and accounting for loose vs in-situ rock, but, from a rough calculation using least dense and most dense, it is clear that the amount advised to ECan is significantly greater than the amount advised to SDC. Combined with the annual production volumes, the ECan application represented a significantly larger operation than that applied for to SDC a couple of months earlier.

- 210. The ECan application form stated that no consents were required for the proposal from SDC, and I understand that ECan was unaware that this scale of operation was not consented by SDC. (As noted earlier, ECan only became aware that the existing Mine was not fully consented in September 2018.) I note that a significant proportion of the earthworks that the discharge to water related to were unconsented by ECan at the time and retrospective application has now been made for those earthworks since 2012 under the LWRP whether or not this is an issue in terms of the validity of the discharge to water is not clear to me at this point.
- 211. The considerable difference between the SDC consent and the ECan discharge to water, in terms of production volume (20,000 tonnes vs 170,000 tonnes a year) and removal of waste rock (>150,000 tonnes vs >850,000 BCM) is due to differences in the information or the clarity of the information provided to the two Councils.
- 212. In my view, this lack of clarity further illustrates the need for a very clear understanding of the parameters of this current application.

# Assessment

- 213. As I understand it, at this notification determination stage, the adverse effects of the proposal on the environment must be considered. Any positive effects that there may be cannot be balanced against these when coming to an overall conclusion as to adverse effect at this notification stage; however, it is appropriate to take conditions/mitigation/compensation proposed into account.
- 214. As discussed above, it is the increase in adverse effect from that consented to that proposed that must be considered. This application covers a retrospective period beginning in 2013 and extending to present, and future works.
- 215. I firstly note that the application states that the application assessment of effects has been completed on essentially a worst-case scenario basis<sup>94</sup>:

"For clarity it is confirmed that, where applicable/appropriate, the effects of the activities described in section 3 are assessed as if they may occur anywhere within the Mine Operations Area. For example noise is assessed as if the activities that generate noise were being undertaken at the outer boundary of the Mine Operations Area (i.e. as close as possible to noise receptors)."



<sup>&</sup>lt;sup>94</sup> Main application document, page 82, third paragraph

216. This statement does not identify what aspects were considered applicable/appropriate to assess anywhere within the MOA, and it is important to recognise that it may not be entirely correct. For example, surface disturbance/clearance of vegetation and ecological effects have not been assessed in this way, e.g. at Tara Wetland, the North ELF, the NW seepages and potentially the upper SE gullies. I note that the location of each noise source modelled was not provided (although it was requested), but the noise effects do not appear to be assessed as if the activities were being undertaken at the outer boundary of the MOA and as close as possible to noise receptors. Some activities may have been modelled at the boundary, but the Applicant has not advised which. This can be clarified by the Applicant's expert, but, at this point, I do not consider that the statement can be relied on entirely.

## 'Environment' and 'Amenity Values'

217. The environment is defined in the Act as follows:

#### environment includes—

- (a) ecosystems and their constituent parts, including people and communities; and
- (b) all natural and physical resources; and
- (c) amenity values; and
- (d) the social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) or which are affected by those matters
- 218. 'Amenity values' is defined in the Act, as follows:

*"amenity values* means those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes"

- 219. Therefore, a site-specific assessment must be undertaken, noting any qualities and characteristics that may contribute to the community's appreciation of an area.
- 220. In considering this particular area, there are a number of qualities and characteristics that will likely contribute to people's appreciation of it. If this application is publicly notified, the community will have opportunity to advise what is valued in this area, but at this stage I note the following:
  - I accept the advice of the Dr Trevathan that there are extremely low background noise levels at night-time. Having visited, I would also consider the area to be relatively quiet in the daytime. Therefore, I would expect that one of the qualities valued by people in this area would be the quietness, and this would be expected to contribute to the pleasantness and aesthetic coherence of the area. However, I also recognise that a smaller scale Mine is consented and that night-time operation of this is also consented; therefore, the impacts of the consented Mine must be recognised as being part of the existing environment.



- Mr Read advises that, away from the local towns, there is no artificial lighting within the general Malvern Hills area other than lighting associated with the Mine and with the occasional farm building, and I would consider it likely that night-time darkness, in combination with the quietness, would be valued.
- The rural character, including open spaces, open views to and from the hills, generally large landholdings, paddocks, sheep, narrow roads, one lane bridges and fords, would also be valued.
- The proximity to a number of local towns may be valued in this area.
- The working character of the area and the way in which its natural resources are used may also contribute to the aesthetic coherence of this particular area, with the consented Mine and the forestry operating nearby.
- The Cultural Impact Assessment explains the importance of the cultural landscape of the wider Malvern Hills area, with a number of cultural sites occurring within that wider area as well as known traditional settlement sites, mahinga kai areas and trails around the upper Waikirikiri (Selwyn) and Waianiwaniwa Rivers.
- The ecological qualities and characteristics of the Malvern Hills include their wetlands (including seepages and a rare peat bog<sup>95</sup>) and the Waianiwaniwa River system (providing key habitat for the threatened Canterbury mudfish and Canterbury galaxias; these aspects are likely to be valued from the local to national level.
- The history and significance of the HNZPT-listed Homebush Homestead will also influence the aesthetic coherence and appreciation of this area.
- I am not aware of any particular recreational attributes in the vicinity at this stage.
- 221. Mr Densem also specifically considers rural amenity in the context of private properties in the vicinity, and those elements are listed in paragraph 37 of his report (Appendix 14).
- 222. Therefore, there are a number of qualities and characteristics of the general area that are likely to contribute to people's appreciation of its pleasantness, aesthetic coherence and cultural attributes.

## **Relevant Effects**

223. The effects of this proposal on the environment will relate to indigenous biological diversity, cultural values, archaeological values, noise, spill light/glare/skyglow, landscape, on-site and road dust, buildings and signage, hazardous substances and solid waste, other earthworks matters, the transport network and overall amenity values.

<sup>&</sup>lt;sup>95</sup> I understand that the Applicant recently purchased the property that this raised peat bog is contained within (108 Bush Gully Road); however, I can confirm that it is outside of the application site and not subject to this application.



224. As noted earlier, all experts have provided assessments based on the information provided in the application; however, it must be recognised that some of these are partial assessments due to lack of information and additional areas of adverse effect may be identified at the substantive stage once the Applicant provides the information necessary. Notwithstanding this, the experts have focused on the main aspects relevant to this notification determination and have been able to reach some conclusions.

## **Indigenous Biological Diversity**

## Statutory Framework Summary

- 225. Section 31 of the Act gives SDC the function of the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of the maintenance of indigenous biological diversity.
- 226. Section 62 requires that a regional policy statement state the local authority responsible for specifying the objectives, policies, and methods for the control of the use of land to maintain indigenous biological diversity.
- 227. The Canterbury Regional Policy Statement ("CRPS") states as follows (relevant excerpts only)<sup>96</sup>:

## Joint responsibilities:

- 1. The Canterbury Regional Council and territorial authorities will have shared responsibility for specifying the objectives, policies and methods for the control of the use of land in the beds of rivers and lakes and in wetlands for maintenance of indigenous biological diversity only where:
  - a territorial authority has identified in a district plan an area of significant indigenous vegetation or a significant habitat of indigenous fauna, that includes a bed of a river or lake or a wetland; or
  - b. there are indigenous vegetation clearance provisions in a district plan that apply to areas of the district that include a bed of a river or lake, or a wetland.

## Territorial authorities:

- 3. Will be solely responsible for specifying the objectives, policies and methods for the control of the use of land for the maintenance of indigenous biological diversity on all land outside of wetlands, the coastal marine area, and beds of rivers and lakes.
- 228. Therefore, for the maintenance of indigenous biological diversity, ECan and SDC have shared responsibility for the use of land in the beds of rivers and in wetlands, and SDC has sole responsibility for the use of land outside of wetlands and the beds of rivers.



<sup>&</sup>lt;sup>96</sup> Chapter 9, Ecosystems and Indigenous Biodiversity

- 229. Chapter 7 of the CRPS, Fresh Water, recognises that district councils control the effects of land uses on the environment generally, with both councils having functions to maintain indigenous biological diversity. It also indicates that local authorities are to support integrated approaches to the management of water and the effects of land uses between regional and district plans, and to work together to manage the adverse effects of land uses on freshwater quality including appropriate controls on land uses.
- 230. The Selwyn District Plan<sup>97</sup> also seeks that remaining wetlands are protected, and degraded areas are restored, and that land use activities are to be managed to protect water quantity and quality. It also indicates that integrated, catchment-based approaches to the management of the District's water resources in conjunction with the Regional Council are to be pursued.
- 231. Therefore, the overlap in functions is recognised by the Act, the CRPS and the Selwyn District Plan, and this overlap is discussed further later in this section.

## ECan Consents for Wetland Removal

- 232. It is noted that ECan has already consented the removal of wetlands at the North ELF and at Tara Wetland (for Tara Pond 2). The forms accompanying the consent applications lodged with ECan for these aspects stated that consent was not required from SDC for these proposals, and ECan staff advised that they were processed on that basis, i.e. on the basis that SDC had already considered and consented the relevant indigenous biodiversity effects. However, consent from SDC had not been obtained and was required for the North ELF and Tara Pond 2; this current SDC application includes these works retrospectively. Given the basis on which they were considered, in my view, SDC cannot simply rely on the ECan consents and indigenous biodiversity effects must be assessed by SDC, in relation to the wetland removal and the indigenous vegetation clearance outside or alongside the wetlands and rivers, at Tara (Tara Wetland/Stream) and the North ELF (wetland/seepages and Bush Gully Stream).
- 233. I note that compensations for the Tara Pond 2 and North ELF works were proposed by the Applicant for the ECan consents.
- 234. Compensation for the Tara Pond 2 wetland removal is proposed in this SDC application (wetland restoration at Bush Gully Stream the same as that consented by ECan), with monitoring proposed for at least five years from restoration planting; this compensation has been taken into account in assessing the effects.
- 235. However, for this SDC application, no compensation for the North ELF works is proposed. This issue was raised in the First<sup>98</sup> and Second<sup>99</sup> RFIs, and opportunity afforded for the Applicant to propose the



58

<sup>&</sup>lt;sup>97</sup> For example, Water Objectives B1.3.5 and B1.3.6 and Policy B1.3.1

<sup>98</sup> First RFI, point 45a

<sup>99</sup> Second RFI, point 8

same compensation to both ECan and SDC. In response to the First RFI, the Applicant indicated that the SDC request was specific to the ECan North ELF consent and that the offset options were still being investigated by the Applicant's consultant ecologists and had not yet been progressed with ECan. The Second RFI asked the Applicant to confirm that the same compensation proposed to ECan would be proposed to SDC for the North ELF works. The Applicant responded that it was not proposing any further mitigation and expressed concern around duplication of advice, noting that collaboration of information and advice would result in saving costs and time - I note that this was the reason why SDC had recommended that the same compensation should be offered, i.e. so that collaboration could occur. The SDC application is now in a position where no compensation is offered for the removal of wetland and the clearance of indigenous vegetation alongside wetlands at the North ELF. It could be considered that the Applicant did not understand the issue but, given the number of experts involved and the ongoing discussions between the Applicant and ECan, this would seem unlikely. In any event, following discussions with SDC about this issue, ECan has decided to put its North ELF compensation process on hold until this current application is resolved. SDC and ECan will consult in relation to the compensation required in future. However, at this stage, no compensation is proposed in this application and it must be assessed on that basis.

236. The Second RFI Response also confirmed that no mitigation/compensation was proposed for the works within or potentially affecting the NW seepages.

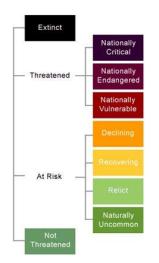
## Assessment of Effects

- 237. Mr Mark Davis, Independent Ecologist, has reviewed the application on behalf of SDC, and his report is appended as **Appendix 8**.
- 238. As detailed earlier, Mr Davis considers that the information provided in the application and RFI Responses is inadequate, with the extent and importance of the ecological values between the 'green' and 'blue lines', and downstream of the 'blue line', being unclear. As noted previously, the information gaps are detailed in paragraph 14 of Mr Davis' report, and include matters such as a plan of waterbodies within the site has not been provided, not all wetlands have been identified and surveyed, there is a lack of survey information and the acid mine drainage invertebrate index was not addressed. An explanation of the implications of contamination for downstream Canterbury mudfish in the Waianiwaniwa River system was also requested. Mr Davis refers to the Canterbury mudfish (Threatened, Nationally Critical) and the Canterbury galaxias (At Risk, Declining) in his report. For information purposes, the following briefly explains this threat classification.
- 239. The New Zealand Threat Classification System (NZTCS) is used to assess the threat status of New Zealand's taxa (species, subspecies, varieties and forma).<sup>100</sup> The classification system is illustrated

<sup>&</sup>lt;sup>100</sup> <u>https://www.doc.govt.nz/about-us/science-publications/conservation-publications/nz-threat-classification-system/</u>



by the Department of Conservation (DOC) as follows<sup>101</sup>:



Relationship of NZTCS categories

#### Figure 10 NZTCS categories

240. The conservation status of all known New Zealand freshwater fish species is listed in New Zealand Threat Classification Series 24, Conservation status of New Zealand freshwater fishes, 2017<sup>102</sup>, published by DOC. The Canterbury mudfish has the 'most threatened' classification of Threatened, Nationally Critical. The Canterbury galaxias is classified as At Risk, Declining. The document includes a discussion on the Canterbury mudfish in particular<sup>103</sup>, copied in below:

# 1.4 Canterbury mudfish (Neochanna burrowsius)

The panel holds particular concern for the Canterbury mudfish. This species was first classified as Nationally Critical in 2009. Since then, its highly fragmented range has further contracted within areas highly intensified for agriculture in Canterbury. Core and peripheral populations are now compromised by drought conditions, exacerbated by abstraction of irrigation water, continued agricultural development leading to loss of wetland and meandering stream habitat, and closure of stock water races. Little has changed to benefit the Canterbury mudfish since it was first classified as Nationally Critical and its persistence is now tenuous. Urgent action to protect Canterbury mudfish habitat is needed to avert its extinction.

- 241. Therefore, any potential impacts on the habitat of the Canterbury mudfish need to be carefully considered, and a precautionary approach is indicated if any adverse effects are uncertain.
- 242. As a consequence of the lack of information in a number of areas, Mr Davis advises that the effects cannot be properly assessed in some instances. A significant amount of information relevant to ecological effects was provided by the Applicant, spread throughout the documents. However, Mr

Dunn, N.R.; Allibone, R.M.; Closs, G.P.; Crow, S.K.; David, B.O.; Goodman, J.M.; Griffiths, M.; Jack, D.C.; Ling, N.; Waters, J.M.; Rolfe, J.R. 2018: Conservation status of New Zealand freshwater fishes, 2017. New Zealand Threat Classification Series 24. Department of Conservation, Wellington. 11 p. <sup>103</sup> Page 4



<sup>&</sup>lt;sup>101</sup> <u>https://www.doc.govt.nz/nature/conservation-status/</u>

<sup>&</sup>lt;sup>102</sup> https://www.doc.govt.nz/globalassets/documents/science-and-technical/nztcs24entire.pdf

Davis has completed a comprehensive review and has been able to complete a partial assessment on the basis of the information that has been provided to date, focusing on the main aspects and locations and his key concerns at this point, and he is confident that these conclusions can be reached. I note that the further information requested but not provided essentially seeks to clarify whether there are additional adverse effects that have not been considered as yet.

- 243. **Update, 27 February 2020**: I note that Mr Davis' completed report was updated on 6 and 27 February 2020 to include addenda comments in response to further information provided by ECan. This information was the ECan RFI Response provided by the Applicant to ECan on 20 December 2019 (and specifically the Vegetation Map at Appendix 21 to this report), and the report of Dr Adrian Meredith (Principal Water Quality Scientist, ECan) provided on 25 February 2020 (and which is now appended to Mr Davis' report).
- 244. Mr Davis provides a summary table of his conclusions at Table 10 (page 25) of his report. He has concluded that the adverse ecological effects of the proposal, with respect to the maintenance of indigenous biological diversity, are significant.
- 245. Many of these significant adverse effects are retrospective, having occurred since 2013, i.e. during the retrospective period of this application. I note that the Act defines effects as including any past, present, or future effect, and does not differentiate between retrospective and future aspects when considering the adverse effects of an application for the purposes of notification.
- 246. There will also be (or are likely to be) significant adverse effects in future in Mr Davis' view, i.e. works associated with proposed Tara Pond 2 and continuing works within the 'blue line' at the NW seepages and the North ELF. Adverse effects on wetlands in the upper SE gullies (located generally to the north-east of Tara Pond 1), may also be significant in future, but inadequate information is available to confirm that at this stage.
- 247. Update, 12 February 2020: A Response to the ECan RFI was provided by the Applicant on 20 December 2019. This provided some further information on the wetlands on the application site, on a Vegetation Map (see Appendix 21, page 2 of this report). Whilst not formally a part of the SDC application, I requested that Mr Davis review this and provide comment in the context of the SDC application. His comments are included as addenda to his report. In short, he still does not consider that all waterbodies have been clearly identified or that all wetlands have been identified and surveyed. Mr Davis has not commented on the removal/disturbance of the headwaters of streams in the area at this stage, and it is expected that ECan will address this further.
- 248. I note that the recent 2019/2020 Annual Plan indicates that all coal will be extracted from N02 pit (up until at least 30 June 2020); this lies alongside the NW seepages. Mr Davis has concluded that the adverse effects of the works to date in that area are more than minor, and I note that ECan also requested further assessment from the Applicant with respect to the impacts on those NW seepages. Works are continuing at the North ELF also. The Annual Plan also indicates rehabilitation at "Oyster".



This would appear to be an area of rehabilitation at the head (and potentially including the headwaters) of Oyster Gully Stream. Therefore, some of the future adverse effects referred to in the paragraph above will be relevant in this coming year (or they may have already occurred).

- 249. In terms of retrospective contamination and any continuing effects of that contamination (in Tara Wetland/Stream in particular), Mr Davis advises<sup>104</sup> that the water quality information indicates that Tara Stream/Wetland has been contaminated within the period of this application, and that this is adversely affecting aquatic invertebrate diversity and may be limiting habitat availability for Canterbury mudfish. He concludes that the effects of contamination on aquatic habitats are likely to be "severe", and that these effects of existing contamination are likely to remain, irrespective of any future discharges.
- 250. Finally, I note that the application identifies that the only work within a wetland/indigenous vegetation clearance is at Tara Wetland, i.e. the works associated with Tara Pond 2, but Mr Davis has identified and assessed additional works that have impacted on wetlands/indigenous vegetation. It must be noted that, even if those limited Tara works that have been applied for were the only works that could be considered to be proposed by this application, which clearly they are not, Mr Davis' conclusion would still be that the adverse effects on Tara Wetland (taking into account the compensation proposed) would range from minor to severe, and would be significant.
- 251. Overall, I accept Mr Davis' opinion and consider the adverse effects on the wider environment relating to the maintenance of indigenous biological diversity will be more than minor.

#### **Retrospective and Existing Contamination**

- 252. As noted earlier, I recognise that there are overlaps in the functions of ECan and SDC. ECan will be responsible for assessing the contamination issues identified and addressing them through this joint process; however, SDC is also responsible for the maintenance of indigenous biological diversity and Mr Davis has significant concerns about Tara Wetland/Stream in particular, with respect to past/existing contamination. This retrospective contamination and any compensation/remediation required will need to be carefully considered in the SDC context at the substantive stage. In my view, the joint process being undertaken will enable a comprehensive and integrated assessment approach, and ECan and SDC are working collaboratively and sharing resources/experts where possible in order to reduce costs. In the past, this was not occurring and both the regional council and SDC were separately monitoring AMD at the Mine in different ways; ECan through the monitoring of discharges to water and SDC through the monitoring of the acid producing potential of the waste rock. The following discusses that monitoring in the SDC context.
- 253. Given Mr Davis' conclusions with respect to retrospective contamination (and its potentially continuing impacts), it was necessary to review the SDC consent background to understand how the Tara



<sup>&</sup>lt;sup>104</sup> Appendix 8 of this report, paragraphs 123-126

Wetland/Stream became contaminated while SDC was monitoring its 'acid leachate' conditions of consent, and to understand if earlier SDC compliance processes had already addressed these retrospective impacts. Little information was provided by the Applicant. A fuller summary of the background information that I reviewed in coming to the following conclusions is contained in **Appendix 19** of this report.

- 254. The Applicant has been monitoring water discharges since late 2012. The discharge sampled, i.e. that was discharged into Tara Wetland, was acidic (pH between 2.9 and 5.6) from late 2012 until at least mid-2016. Of the 19 sampling results over this timeframe<sup>105</sup>, 16 showed a pH of 3.7 or less, i.e. acidic. As I understand it, the overburden test results were advised as being compliant up until 2015 and SDC monitoring was not aware of any significant acidity problems.<sup>106</sup>
- 255. It would appear that 2015 was a pivotal point in the SDC context. As at 2015, there were essentially two separate 'consents' applicable to the Mine within the 'green line':

	R303578/RC085059/RC135385 – the main mine ('NE half') – RC135385 approved Aug. 2013	RC135632 – the SW extension ('SW half) – approved Jan. 2014
Acid leachate conditions	If overburden is acid producing, mining activity is to cease until mitigation is implemented to eradicate the problem or if measures cannot be implemented mining is to be terminated.	If overburden is Potentially Acid Forming, the Applicant is to provide an AMD Management Plan

- 256. The Applicant provided overburden testing results on 22 April 2015<sup>107</sup>, and these were the first to indicate an issue. They advised that there was Potentially Acid Forming rock. These results were advised as being for provided for the RC135632 south-west extension. The Applicant advised it would provide an AMD Management Plan, in accordance with the relevant RC135632 condition. This management plan was received and filed on the SDC monitoring files.
- 257. However, in reviewing that 2015 AMD Management Plan now, the October 2014 testing results were from the current pit of the time, i.e. the Mine, and the south-west extension mining had not begun. If SDC had been made aware that the results were applicable to the Mine of the time and if the pH



<sup>&</sup>lt;sup>105</sup> Provided to ECan in the 2016 CRC170540/541 application, Appendix 3 – it is not known if this data was provided for ECan monitoring purposes prior to this application in 2016. (A copy is also provided in Appendix 19, Table 1, of this report.)

<sup>&</sup>lt;sup>106</sup> Some background information was included in an application, RC135632, but not to the monitoring team <sup>107</sup> Letter, 22 April 2015, K Hooper, Landpro on behalf of Canterbury Coal (2013) Ltd, to J Griffiths, SDC. (Filed on

RC145374/Monitoring/145074 FINAL Compliance SDC LUC [sic])

sampling results had been highlighted, SDC may have required that the mining operation cease from April 2015 until effective mitigation was implemented to "eradicate" the problem.

- 258. However, that is not certain and the mining continued and significant expansion occurred between 2013 and 2017. The acidity issues continued in relation to discharge from the Mine until at least 2017, when ECan consent to address the issue (through the use of CCR and mussel shells) was granted. However, the issues for the Wetland in particular may have continued beyond 2017 and may still be occurring. This is not clear because the sampling point the Applicant has used since 2017 is not at the discharge point to the wetland, but on the other side of this section of wetland where it meets Tara Stream, approximately 75 metres away; ECan will be assessing this further.)
- 259. I have not come to any conclusions based solely on the acidic discharge in isolation. The discussion above focuses on acidity because SDC's AMD measurement method was introduced to address AMD and acid leachate, but I note that acidity is only one indicator of AMD. I also recognise that Mr Davis' conclusion is not based solely on the pH levels of the discharge, with other indicators also being taken into account. In this regard, I note that there is some information with respect to elevated elements/metals in 2014/2015 in the 2015 AMD Management Plan (aluminium, iron, zinc, boron and possibly thallium), but ECan are likely to have more extensive records on this.
- 260. In summary, in my opinion, having fully reviewed the SDC files and as discussed variously in this report, the assumption of SDC over the years, based on the monitoring of overburden results and the resource consent application documents, would have been that the Mine was operating in accordance with the original Engineer's AMD assessment and the SDC consents granted, i.e. the extraction of a maximum of 20,000 tonnes of coal per annum, control of Acid Mine Drainage and minor adverse effects (if any) on indigenous biological diversity. If SDC had been aware of the issues, mitigation measures to 'eradicate the problem' would likely have been required, with the worst-case scenario being that the operation may have had to cease until those AMD issues were eradicated. I understand that there are still aspects of non-compliance with the ECan discharge conditions, and the ECan Consultant Planner will be considering these and the ECan history of consenting and compliance since 2013.
- 261. I note that this application does not propose any compensation or remediation with respect to retrospective or existing/continuing contamination of Tara Wetland/Stream.
- 262. Finally, I advise that I prepared the summary of the history above, and Mr Davis' report was completed before I prepared it; therefore, Mr Davis has not relied upon this summary information when coming to his conclusion on the proposal.



#### Scope of Application Ecological Assessment

263. I note that the scope of the application's main ecological assessment provided in response to the First RFI<sup>108</sup> is limited, and states as follows<sup>109</sup>:

## 1.2 Scope

This report provides an overall assessment of the effects of mine operations on ecological values at the CCM that are over and above the SDC Consented Baseline. This report does not consider the effects of consented mining operations at the CCM, that is, mining operations within the green line shown on Figure 1 (Appendix 1) (labelled 2013 Consented Variation for Pit Excavation and ELF Construction) or effects outside of that area that relate to these consented operations.

An Environmental Management Plan (EMP) (refer to Appendix 9 of Bathurst 2018) has been prepared to guide and manage operations at the CCM. This EMP includes a range of sub-plans to manage a wide range of potential environmental effects associated with the ongoing operation of the mine. It is outside the scope of this report to evaluate the appropriateness of the guidance and proposed responses in this EMP. However, it is worth noting that several of the actual and potential ecological effects of the mines ongoing operations are managed through this EMP.

In addition, some of the information requested by the SDC in the Ecology / Biodiversity section of the RFI is additional to this overall ecological assessment and will be provided separately by Bathurst.

- 264. It is not clear why the expert did not consider assessment of the appropriateness of the measures proposed in the EMP to be necessary as part of the full assessment of ecological effects requested. However, with respect to the first paragraph in particular, the expert does not consider effects outside of the 'green line' that relate to consented mining operations within the 'green line'. As discussed in Appendix 3 (Section B) of this report, this application essentially covers the expanded operation from 2013. The SDC Consented Baseline does not indicate that all mining within the 'green line' is permitted, as discussed earlier in the consented baseline discussion; the 'green line' represents the consented area of disturbance and the other parameters of the baseline limit the consented scale of the operation within that 'green line'.
- 265. The application ecological assessment does not elaborate as to what the expert considers the consented operation within the 'green line' to be or if the effects of the expansion from 2013 have been taken into account. It also does not advise what retrospective ecological effects outside of the 'green line' area have been attributed to past consented mining and therefore excluded from assessment.
- 266. The adverse effects resulting from any AMD discharges at the time they occurred and any long-term impacts of that contamination, are not addressed in the application. Again, I note that no contamination compensation/remediation is proposed by this application.



 <sup>&</sup>lt;sup>108</sup> Provided in the First RFI Response as Attachment 14
 <sup>109</sup> First RFI Response, Attachment 14, page 3

#### Future AMD Effects

- 267. The Applicant seeks to continue to apply adaptive management decision-making processes to the expanded Mine operation. I agree that this type of approach is appropriate for this type of activity, subject to an adequate assessment of effects identifying the foreseeable adverse effects, risks and uncertainties at the outset. With respect to contamination, I understand that the adaptive management process has not been entirely successful, to varying degrees over the last seven years.
- 268. I acknowledge that the Applicant has indicated a trend of improvement in the last couple of years, but I also recognise that the discharge is no longer sampled as it enters the wetland as it was prior to 2017. CRC170451 (granted in 2017) requires the main sampling to be undertaken a maximum of 20 metres below CC02 when there is flow occurring in Tara Stream, and immediately below the discharge point (CC02) when there is no flow. The Applicant uses 'CC02-tele' for monitoring purposes (and has done since 16 October 2017), which appears to be approximately 75 metres from CC02 (as illustrated in Appendix 19, Figure 4) and not compliant with the condition of consent, but that will be separately addressed by the ECan Consultant Planner.
- 269. Given the history of non-compliance and the resultant adverse effects in Mr Davis' view, I consider it important that an assessment of the likely or foreseeable adverse effects, and the likely effectiveness of the management measures (currently undertaken and proposed), is completed. It is important that the adverse effects that can be assessed at this point are assessed to an appropriate level, and that SDC is satisfied that future adverse effects can be adequately avoided or mitigated and that there are mechanisms in place to address this.
- 270. An Environmental Management Plan (EMP) has been provided as part of the application. I recognise that the authors of this version 3.2, Mr D Spring (Lead Author) and Mr E Sinclair (Contributing Author), are mining experts. I consider a management plan to be an effective tool for detailing the measures proposed to manage the adverse effects that have been identified in an assessment of effects, but an EMP is not an assessment of environmental effects for the purposes of a resource consent application.
- 271. Some information has been provided. The 2015 AMD Management Plan included specialist assessment of some aspects and assessment was included in the water discharge application in 2016, but neither are part of this application, the acidity loads are likely to have changed and I note that full compliance was not achieved under that discharge consent in any event. I also recognise that the EMP (section 6.0) provides some summary information. I am not intending to imply that there will be significant adverse effects from future AMD, and the Applicant will already have specialist advice/reports on these aspects, but at this stage further expert assessment is required.
- 272. An AMD specialist engineering geologist has been jointly engaged by SDC/ECan and an assessment of the AMD management methodology, the predictions it is based on, the likelihood of success and the risks and uncertainties involved relating to future AMD will be undertaken at the substantive stage



66

to enable conclusions to be reached on adverse effects on the maintenance of indigenous biodiversity. ECan will be considering the technical aspects of land and water contamination on behalf of ECan and SDC, but particular issues of relevance to SDC might include any acid leachate/soil fertility issues, the necessity for any future land use restrictions due to leachate or disturbance of the ELF capping, the uncertainties and risks associated with mine closure (and the need for a Mine Closure framework) and any financial bonds that might be required.

- 273. Therefore, at this stage, I cannot come to a conclusion as to the effects of future AMD on indigenous biological diversity. The experts involved at the joint substantive stage will advise ECan and SDC.
- 274. Finally, with respect to Mine closure in particular, I note that the Environmental Management Plan indicates<sup>110</sup> that the agreements with the landowners state that all obligations of relevant resource consents must be met by the Applicant. If the Mine closes, I am assuming that the consent will stay with the land unless this is addressed specifically. There may be some legal implications in terms of consent monitoring/enforcement and which party is responsible for AMD adverse effects and/or remediation of, for example, land and wetlands, into the long-term future. This will need to be considered at the substantive stage in conjunction with ECan.

## **Cultural Values**

- 275. The First RFI from SDC required consultation with the relevant Rūnanga, Te Taumutu and Te Ngāi Tūāhuriri, via Mahaanui Kurataiao Ltd ("MKT"). The outcome of this consultation was that a Cultural Impact Assessment ("CIA") was required. This CIA was prepared by Mr Craig Pauling of Boffa Miskell Ltd and provided to SDC on 15 August 2019.
- 276. The CIA is included in the Applicant's First RFI Response documents provided to the Commissioner, and it is appended as **Appendix 9** to this report for ease of reference. The Applicant then provided further information relevant to the CIA; this was also included in the First RFI Response documents provided to the Commissioner and it is appended as **Appendix 10** to this report.
- 277. In summary, the CIA identified a number of areas where the application has the potential to impact on cultural values, i.e. in relation to the involvement of Papatipu Rūnanga as kaitiaki and manawhenua, the consideration of climate change issues, the protection and enhancement of waterways and indigenous biodiversity and the protection of archaeological and heritage sites and values.
- 278. The CIA is comprehensive, and includes a summary of its final recommendations at its Appendix A. Ms Webb has also provided a summary of the impacts identified in the CIA in her report.<sup>111</sup> Therefore, I do not consider it necessary to summarise the CIA again here, but I will highlight some

<sup>&</sup>lt;sup>111</sup> Ms Kirsa Webb, Underground Overground Archaeology Ltd, was engaged by SDC to address archaeological and cultural aspects, and her report is appended as Appendix 11 to this report



<sup>&</sup>lt;sup>110</sup> Main application document, 15.5.3, pdf page 444 (EMP, page 100)

key points made that are specifically relevant to the previous conclusion on the maintenance of indigenous biological diversity, as follows<sup>112</sup>:

- The Rūnanga consider themselves to be affected parties.
- Manawhenua support further consideration of indigenous biodiversity restoration as part of mine rehabilitation.
- The occurrence of non-compliance associated with mine water discharges are a specific concern [noting that the Rūnanga discuss specific issues since mid-2017].
- Contamination of waterways conflicts with Mahaanui Iwi Management Plan ("IMP") policies, is considered unacceptable to Rūnanga and represents an adverse cultural impact that needs to be avoided.
- Remedial action to further enhance Tara and Bush Gully Streams is important.
- The proposal to modify and destroy an area of remnant wetland within Tara Stream [for Tara Pond 2] conflicts with a number of Mahaanui IMP policies and is not supported by manawhenua. It is also considered an adverse cultural impact.
- All remaining wetlands are considered taonga and knowingly destroying even a small area impacts on cultural values.
- 279. Given Mr Davis' conclusions and their relevance to the impacts on cultural values with respect to the protection and enhancement of waterways and indigenous biodiversity, I conclude that the adverse effects on cultural values (as an aspect of the wider environment) will be or are likely to be more than minor.
- 280. I have not continued assessment and come to conclusions on the other aspects covered in the CIA at this point.
- 281. I recommend that Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga are notified as affected parties if this application is publicly notified (and in accordance with "Regulation 10"<sup>113</sup> – SDC will also notify MKT and Te Rūnanga o Ngāi Tahu pursuant to Regulation 10 as I understand it).

# Archaeological Values

282. Ms Kirsa Webb of Underground Overground Archaeology Ltd was engaged by SDC in relation to archaeological and cultural aspects, and her report is appended as **Appendix 11**.



68

<sup>&</sup>lt;sup>112</sup> Refer pages 16, 18 and 19 of the CIA in Appendix 9 of this report

<sup>&</sup>lt;sup>113</sup> Resource Management (Forms, Fees, and Procedure) Regulations 2003

- 283. As noted above, Ms Webb has commented on the CIA and concludes that the potential effects of the proposal on the cultural values of Te Rūnanga o Ngāi Tūāhuriri and Te Taumutu Rūnanga are likely to be significant. I agree with that conclusion.
- 284. Ms Webb also completed a peer review assessment of the report by T O'Connell of Opus, which was included within the application documents as Appendix 7.
- 285. Ms Webb's conclusion is that the adverse effects will be minor to moderate, i.e. minor to more than minor in the RMA context, but with the mitigation proposed rendering all adverse effects with respect to archaeology minor. I accept Ms Webb's opinion. As I understand it, the mitigation proposed and taken into account by Ms Webb is as follows:
  - the obtaining of an Archaeological Authority from Heritage New Zealand Pouhere Taonga ("HNZPT"),
  - the preparation of an Archaeological Management Plan ("AMP"),
  - the investigation and recording of the features identified during the 2018 site survey,
  - the implementation of an on-call procedure including a briefing of mine workers by an archaeologist,
  - provision for the collection and cataloguing of archaeological materials recovered during the course of mining activities,
  - the preparation of an archaeological report upon completion of the works associated with the current proposal, and
  - public interpretation of the historic Homebush Mine at the Glentunnel Museum on completion of the final report.
- 286. In coming to this conclusion, Ms Webb has also assumed that a certification condition would be necessary in relation to the AMP, i.e. a condition which requires that the AMP be submitted to SDC for certification prior to any works beginning in the subject location. The condition would identify matters that would need to be included in the AMP and mechanisms for SDC to require amendments and/or approve the AMP.
- 287. Given the need for an Archaeological Authority, HNZPT is considered to be an affected party.
- 288. The 2019/2020 Annual Work Plan provided by the Applicant to SDC shows that works are/will be occurring at the south-west end of the Mine; however, the depth of the historical workings in this location or if they are being disturbed/affected is unknown. It is assumed that they are not affected, as SDC has not agreed to any earthworks affecting historical workings at this stage. It is noted that an Archaeological Authority from NZHPT would also be required before any works took place if the historical workings were to be affected. The Applicant will need to confirm this.



## Noise

- 289. The consented baseline for the hours of operation of the Mine is 24 hours per day from 6am Monday until 6pm Saturday, subject to only a selection of equipment operating overnight in the consented area defined (i.e. the 'green line'), as per the equipment table in the acoustic assessment with RC175261.
- 290. This proposal is for the same hours, but over the 'blue line' MOA area and subject to a new equipment table.
- 291. I note that written approvals have been provided from E M and M D Frew and Matariki Forests; therefore, any adverse effects on those parties have been disregarded.
- 292. Dr Jeremy Trevathan of Acoustic Engineering Services (AES) was engaged by SDC in relation to noise aspects, and his peer review report is appended as **Appendix 12**.
- 293. Given the extremely low background noise levels in the area at night-time, Dr Trevathan identifies expanded night-time operation as a key concern in relation to noise. He considers a night-time noise limit of 35 dB L<sub>Aeq</sub> to be more appropriate than the 40 dB L<sub>Aeq</sub> night-time noise limit proposed by the Applicant's acoustic expert from Marshall Day Acoustics (MDA), but notes that the predicted noise levels would also comply with this revised limit.
- 294. However, based on actual measures by both MDA and the SDC Environmental Health Officer (EHO), Dr Trevathan is concerned that the modelling does not accurately capture noise from the expanded Mine in weather conditions that are supportive to noise propagation. He considers it likely that noise levels in the worst-case scenario may actually be higher at nearby dwellings.
- 295. As discussed earlier, the potential issue of under-predicted noise levels was raised in the First RFI (point 28) and I understand this was not responded to. Information was also requested about the basis of the modelling, i.e. the assumed location of each of the noise sources for each modelling scenario was requested (point 23), but only general areas were provided in response.
- 296. I note that the application states that the noise effects had been assessed as if the activities that generated the noise were undertaken at the outer boundary, i.e. as close as possible to noise receptors.<sup>114</sup> Some activities may have been modelled at the boundary, but the location of the noise sources has not been provided.
- 297. In considering the modelling further, I note that some Pit expansion areas have not been modelled, particularly on the north side of the Mine, and any works at the North ELF are not included, day or night. Coal extraction has been modelled to occur five to ten metres below the ground surface, and I understand that will not always be the case. A large area of "fixed plant" has been modelled in the "night shift" scenarios; it is assumed that this addresses the operation in the morning from 6.00am to



<sup>&</sup>lt;sup>114</sup> Main application document, page 82, third paragraph

7.30am and potentially the offices overnight, but the noise expert would need to confirm. It is also not clear if the modelling allows different extents of the Mine to operate at the same time or if this is a possible scenario.

- 298. Dr Trevathan concludes that, taking into account the measurements of the SDC EHO (up to 37 dB L<sub>Aeq</sub>) and the potential for special audible characteristics, the noise effects from the expanded Mine area are likely to be minor, and potentially more than minor, for the closest dwellings. Based on the information available at this stage, he considers that there is the potential for minor noise effects out to at least the 30 dB L<sub>A10</sub> contour shown in Appendix D5 of the acoustic assessment. However, because he cannot be confident that the contours shown reliably represent the worst-case scenario, he has been unable to reach a definitive conclusion about the extent of affected parties or whether the noise levels at the closest dwellings will be more than minor.
- 299. He also concludes that the adverse noise effects from trucks passing are likely to be 'at least' minor at
   87 and 108 Bush Gully Road.<sup>115</sup>
- 300. Therefore, whilst firm conclusions cannot be reached without the requested information, there may be more than minor adverse noise effects on the closest dwellings on Malvern Hills and Bush Gully Roads, one of which is considered to be adjacent and the remainder of which are considered to be non-adjacent.
- 301. In considering potentially affected parties for the purpose of serving public notice, I asked Dr Trevathan whether all properties out to at least the 30 dB L<sub>A10</sub> contour on plans D5 and D6 could potentially be affected by noise to an at least minor degree, or only those on the D5 plan. It was advised (pers. comm. 27 September and 11 November 2019) that plan D5 had been identified because that scenario had the highest noise levels at 295 Malvern Hills Road and the EHO had provided measurements for that location; however, there was clearly potential for similar noise levels in the other directions also. Again, inadequate information has been provided to reach a firm conclusion.
- 302. Given the lack of information and that the majority of the properties surrounding the Mine are of a size that would allow more than one dwelling and subdivision in future (20 hectare minimum), as identified on the plans in **Appendix 16**, I consider it appropriate that a conservative approach be taken and all properties subject to at least the 30 dB L<sub>A10</sub> contour resulting from the Mine expansion be considered affected to at least a minor degree for the purposes of serving individual notice. I recognise that the northern extent of the 30 dB L<sub>A10</sub> contour is not well defined by the Applicant, so it has been approximated. I also recognise that if this application is publicly notified, all parties who consider

<sup>&</sup>lt;sup>115</sup> The Applicant advises that the dwelling at 74 Bush Gully Road is currently derelict and abandoned – at this point, it is assumed that this dwelling does not have 'existing use rights' and cannot be replaced, as there are no resource consents on the SDC file and the site is undersize. I note that the owner may provide more information in this regard at submission stage if this application is publicly notified.



themselves affected will be able to lodge a submission in any event; therefore, I consider that any risks resulting from over- or under-identification are small.

- 303. I note that this conclusion on the adverse effects does raise a question in terms of the modelling provided in the earlier application approved for night-time hours in 2017 to a degree (RC175261). For that consent, the noise modelling provided by the Applicant was relied on by SDC in granting consent, but it would appear that the issues identified by Dr Trevathan for this application would also apply similarly to that application. However, at this point, this assessment of the Mine expansion recognises the baseline of the consented Mine operating at night. If, for example, this current application was not granted and noise adverse effects were deemed to be significant, RC175261 may need to be reviewed.
- 304. Finally, I note that the application proposes that a new section on noise be included in the Environmental Management Plan; no details or expert assessment is provided in relation to this. As discussed earlier, and particularly given the potential level of adverse effect, I consider that a draft management plan prepared by an acoustic expert is required for assessment by Dr Trevathan.

## Spill Light, Glare and Sky Glow

- 305. It is understood that the lighting at the Mine consists of a combination of fixed and mobile luminaires for area and task lighting, as well as vehicle headlights, task, and safety lights. The current mobile lighting comprises seven diesel-generator-powered mobile lighting towers, each with four luminaires mounted on a pole that can be raised up to 9 metres in height. (I note that these lighting towers are 'buildings' under the District Plan, and compliant with the height restriction of 12 metres.)
- 306. The Applicant considers there to be a consented baseline level of lighting pursuant to RC175261 (the 'night-time hours of operation' change of conditions consent of 2017, as follows<sup>116</sup>:

#### 5.9.8 Light Emissions

Night time lighting and lights from traffic moving on the site at night are considered to be within the SDC Consented Baseline, given the activities authorised to occur during the night under the existing consent would not be possible without lighting. While not specifically covered in the application (for the reason that lighting was a minor concern and BCL easily complies with the SDP limits and consent therefore was not required to be sought), it would be fanciful to suggest that night time operations could occur without requiring any lighting at all. It is therefore assumed that night time operations that generate light emissions within the permitted activity standards, terms and conditions for light emissions in the SDP are within the SDC Consented Baseline. As the consent conditions and the underlying application are silent on the issue of light emissions, the fall back position in that case is the permitted activity standards which form part of the permitted baseline and therefore need to be disregarded.

More information is however provided in relation to site lighting in this AEE.



<sup>&</sup>lt;sup>116</sup> Main application document, 5.9.8, page 54

- 307. The lighting assessment is provided on page 89 of the main application document.
- 308. The lighting consented baseline was also addressed in the First RFI Response<sup>117</sup>, after the expert lighting design and assessment was requested by SDC (noting that the Applicant did not provide it):

#### Lighting

We have previously discussed what lighting must have been authorised by RC175261 which granted Bathurst the right to operate at night. We are advised that as a matter of law by granting that consent SDC has also granted all ancillary rights necessary to be able to utilise the consent. It is not conceivable that SDC could have expected mining and mining operations to be conducted in the dark without the use of sufficient lighting to meet health and safety requirements and to be able to see to mine etc, and the fact remains that light spill is able to occur as a permitted activity providing the performance criteria in the Selwyn District Plan are met.

- 309. The lack of reference to lighting would appear to be an error made by the Applicant in that 2017 change of conditions application. The application did not mention or apply for any lighting, the assessment of effects did not assess any effects of lighting and the Council s.42A report and decision also did not mention or assess lighting.
- 310. As I understand it, the Council cannot approve a main aspect that was not applied for, and it could not be assumed that the planner processing the application knew what level of lighting was necessary to meet mining health and safety requirements without expert assessment, or that the planner would assess it in the absence of any information that would indicate it. I note that the s.42A report stated: *"The only potential adverse effect of the proposed variation to the hours of operation is noise..."*
- 311. I also note that this was a change of conditions and not a new application. The activity was not changed other than its hours of operation and noise was the only effect assessed as part of this fully discretionary consent application. While 'ancillary' rights may be granted to an applicant upon consent, in my view the 'adverse effects' of a main component of night-time activity, which was not mentioned, applied for or assessed, could not be considered to be granted, whether in error or otherwise.
- 312. The application did include a list of machinery that would operate at night, and it must have been assumed that this machinery was excavating/driving around with task lights/headlights on. The application did state that two generators would operate at night, but did not discuss for what purpose.<sup>118</sup>

<sup>&</sup>lt;sup>118</sup> I note that the current application states that a total of six generators is proposed on-site, but with only two operating at night, and I note that the application's acoustic assessment was completed on that basis. This conflicts with Mr Read's site visit observation of mobile lighting consisting of seven diesel-generator-powered mobile lighting towers. Whether these seven generators are additional to the two assessed by the acoustic expert, or whether only five more are proposed, or whether only two lighting towers are intended to operate is unclear. The acoustic assessment would also need to reflect the final position.



<sup>&</sup>lt;sup>117</sup> First RFI Response, page 4, Lighting

- 313. If it was considered that unlimited and unspecified lighting, including on mobile towers, was approved within the 'green line' by RC175261, SDC may have needed to review this, but this application has superseded it instead so that is not necessary at this point.
- 314. Overall, I do not consider that unlimited and unspecified lighting was approved by RC175261 and consider that lighting effects must be considered. A best-case scenario would be that some building and machinery lighting (task lights/headlights) could be considered to be consented within the 'green line', but only to that level commensurate with the machinery numbers stated at that time, and only where the effects of it could have been considered less than minor in terms of lighting effects/amenity since no written approvals were provided.
- 315. The application (section 5.9.8 excerpt above) states that the "fall back position" is the permitted activity standards. As explained earlier with respect to the permitted baseline, I do not recommend that the discretion to disregard the adverse effects with respect to lighting is exercised.
- 316. I note that written approvals have been provided from E M and M D Frew and Matariki Forests for this application; therefore, any adverse effects on those parties have been disregarded.
- 317. The application does not limit the type, location or numbers of lighting fixtures proposed. I also note that the application proposes that a new section on lighting be included in the Environmental Management Plan; no details or expert assessment is provided in relation to this. As discussed earlier, and particularly given the potential level of adverse effect discussed below, I consider that a lighting design and a draft management plan prepared by a lighting expert are required.
- 318. Mr Andrew Read of Pedersen Read Ltd was engaged by SDC in relation to lighting aspects, and his report is appended as **Appendix 13** (13a and 13b).
- 319. Mr Read considers the adverse effects of the existing operation at the time of his site visit (March 2019) and of the proposed operation.
- 320. The night-time operation proposed is not entirely clear. The application states that night shift occurs during peak production. The months or hours of night shifts are not elaborated on, but I note that the application as currently worded would allow night-time operation all year round, all night, five nights and six mornings a week (8.00pm until 7.30am is night-time under the Plan and the operation starts at 6.00am, i.e. during the 'night-time'). The likely months of peak production are September to February/March, given the number of truck movements anticipated in those months, so night-time operation is probably for six or seven months of the year, perhaps for one 'shift' a night, but no restrictions are proposed in the application. Mr Read states that the Applicant's representatives advised him that the lighting on the night of his pre-arranged site visit was typical; therefore, Mr Read assumes that he observed a representative example of night-time operation.
- 321. Based on his observations, Mr Read concludes that:
  - the adverse effects of direct spill light were insignificant or minor,



- the adverse effects of glare were minor at remoter viewing locations,
- the adverse effects of glare at closer locations, and particularly 295 Malvern Hills Road, were significant,
- for viewing directions which encompass the townships of Glentunnel, Whitecliffs, Coalgate, and Darfield, the sky glow produced at the mine was not significant,
- for viewing directions towards the Malvern Hills and the Southern Alps which do not include sky glow effects from other sources, the sky glow effects were likely to be significant for many.
- 322. Mr Read notes that this application, as at November 2018, indicated that the Applicant was taking steps to address the lighting concerns that had been brought to its attention; however, he was concerned that there was little evidence of the mitigation measures proposed in the application on his March 2019 site visit.
- 323. In terms of the lighting proposed by the application, Mr Read advises that the use of 70° and 0° aiming angles for luminaires is contradictory, with them being either one or the other. He also notes that some of the existing mobile lighting tower luminaires are not appropriate for the application they are being used for. Mr Read advises that the mitigation measures proposed in the application are not clear and are difficult to assess accurately without a detailed lighting plan. Due to the uncertainties, he has not been able to reach a conclusion on the proposal moving forward, but he has provided some suggestions with respect to potential mitigation measures that the required lighting design/plan and assessment might address, for the Applicant's benefit.
- 324. Given that I do not consider the lighting towers in particular were consented when night-time operation was consented in July 2017, I conclude that the retrospective adverse effects of night-time lighting were more than minor on the wider environment. The application does not provide any details, so I do not know the starting date of these adverse effects.
- 325. Mr Read has advised that those affected by the retrospective/existing operation would be similar to those identified by the acoustic expert, but would extend further south and west to include those properties with night views towards the Malvern Hills.
- 326. The acoustic and lighting adverse effects are the most extensive in terms of areal extent; therefore, in combination they identify the affected parties in the vicinity (noting that public notification would address any wider effects). Plans of affected parties in accordance with s.95E and for the purposes of notification have been confirmed by the acoustic and lighting experts, and these are attached as **Appendix 16**. As discussed earlier, there are information gaps but, if the application is publicly notified, I consider any risks resulting from over- or under-identification of affected parties to be small. It is recognised that further affected parties may be identified after any additional information and submissions are fully considered by the experts.



### Landscape

- 327. Mr Graham Densem was engaged by SDC in relation to landscape effects, and his report is appended as **Appendix 14**. His report focuses on the main issues and his main concerns at this point, with respect to landscape and landscape amenity effects resulting from the expansion of the Mine.
- 328. I note that the application proposes (condition 18) that the Environmental Management Plan include a section on site rehabilitation, including final concept plans for the site. If amended, this would be provided to SDC by the end of November each year. In addition, a Rehabilitation Concept Plan is proposed to be provided within the Work Programme to be assessed and certified by SDC experts annually (November). This rehabilitation section/concept plan would likely need input from SDC experts (planning, ecology, landscape) and ECan experts (e.g. ecology, geotechnical and hydrology) as a minimum; therefore, a significant amount of assessment is proposed to be postponed until these annual reviews but it is accepted that this is operationally required by the Applicant, and, at this point, Mr Densem is comfortable that any landscape issues can be addressed progressively, subject to a number of aspects that will need to be addressed, with SDC being able to require amendments where necessary. Mr Densem concludes that a final landform that is satisfactory in aesthetic and landform aspects will be achievable, subject to suitable and enforceable conditions.
- 329. Mr Densem then considers specific effects in the area, recognising that his assessment will overlap with the assessment of other experts. With respect to visual effects from public viewpoints on Malvern Hills Road, Mr Densem concludes that the landscape adverse effects will be/are likely to be more than minor, daytime and night-time. He makes some suggestions as to potential mitigation measures, noting that these may or may not render the adverse effects minor. He also considers that the adverse landscape amenity effects of increased truck movements on dwellings on Malvern Hills and Bush Gully Roads will be more than minor.
- 330. Mr Densem has focused on the adverse effects at potentially the most affected property, 295 Malvern Hills Road, at this point, and notes that he undertook a night-time site visit to the area. He discusses the elements that will contribute to the amenity values of this property, and considers the combination of noise and lighting resulting from the Mine expansion. He concludes that the adverse effects on the farmed land will be more than minor. With respect to the dwelling, Mr Densem considers the landscape adverse effects to be more than minor with daytime effects described as 'Significant' and night-time effects described as 'Major'. I note that this accords with Mr Read's view in terms of lighting impacts and supports the concerns expressed by Mr Trevathan in terms of potential noise. Mr Densem also considers the visual impact of the expanded Mine and states that if the planned expansion area will be in view of the Deans' house, the adverse effects will be 'significant to major'. Finally, Mr Densem considers that mitigation relating to noise, lighting, the limiting of night-time hours and the limiting of expansion eastwards should be considered.



331. I accept Mr Densem's conclusions on the adverse effects, and conclude that adverse landscape and landscape amenity effects will be more than minor on the wider environment, including effects on public viewpoints and private property.

#### **On-site Dust**

- 332. With respect to dust resulting from the works on-site, I note that the Applicant has applied for consent for air discharge and ECan will address the health effects of that discharge. There is also some consideration of nuisance and amenity dust effects within that application which will be useful for SDC. However, I note that the expert air assessment undertaken by Beca Ltd does not mention the CCR (coal ash) at all. The activities undertaken within the MOA are described by that expert, and it is stated that dust discharges from mining activities are typically comprised of a high proportion of coarse particle sizes, but there is no mention of the fine particulate of the CCR. As discussed in Appendix 5 in relation to hazardous substances and solid waste, I understand that up to 30,000 dry ash equivalent tonnes per year of CCR is delivered to the site and stored short-term in a "*storage bunker*"<sup>119</sup> prior to being spread out 100mm thick and then mixed with overburden on the ELF using graders and scarifiers.
- 333. I note that this SDC application states that typically the ratio of the finer fly ash to bottom ash is approximately 1:6 (although the ECan consent does not require this and any ratio would be compliant) and that the CCR is delivered damp to the site, which may be mitigating factors to a degree, but I would have expected the air discharge assessment to at least mention it.
- 334. Before coming to any conclusion on the amenity/nuisance impacts of dust resulting from the Mine expansion, I would require confirmation that the expert was aware of this aspect and specific assessment of any potential dust effects relating to the CCR, including whether any conditions of consent are required with respect to the ratio of fly ash to bottom ash or whether any specific storage, suppression or 'mixing with overburden' methods are required in terms of dust suppression (noting that ECan will address whether any bunded storage area or similar is necessary with respect to water issues). I note that further information with respect to any potential contamination of dust resulting from the reworking of old mines, e.g. Homebush Mine, has also been requested by ECan.
- 335. Currently, the ECan application includes proposed conditions of consent with respect to dust, including that another specific dust management plan is required to be provided (the current dust management section of the EMP is also attached, although it does not cover the matters listed in the proposed condition. The SDC application proposes to update the EMP in relation to dust management (condition 18), although no details are given as to what this might cover, and the following condition is also proposed:



<sup>&</sup>lt;sup>119</sup> Main application document, 10.4.7, pdf page 414, (page 70, EMP)

#### Dust Management

14. The Consent Holder shall use water carts or other similar methods as and when necessary to suppress any dust nuisance arising from its operations on the site.

It is expected that the same mitigation will be proposed to both consent authorities at some stage, to address the health and amenity impacts of dust in a co-ordinated way.

- 336. If this application is publicly notified, further information as to whether or not there are any amenity issues with respect to dust may be provided by affected parties, and this will further inform a view at the substantive stage.
- 337. Therefore, I have not come to a conclusion on this aspect at this stage.
- 338. It is noted that the application for CRC201366-368 indicates that the dust suppression water used onsite will be taken from the rural supply, the Surge Pond and the Dust Pond only<sup>120</sup>:

"At present the water for dust suppression can be taken from the Surge Pond or Dust Pond and it is sought to retain this flexibility."

That application also advises that the Surge Pond will discharge treated water into the Dust Pond<sup>121</sup>. ECan will address any issues of contamination relating to the use of the water from the Surge Pond (or the Dust Pond) for dust suppression on the site.

339. Finally, I note that there is a power transmission line to the north-west of the Mine on the other side of Bush Gully Road, approximately 8-900 metres from the Mine. I understand that this high voltage line is part of the national grid and it is named Benmore-Haywards A. When the original Mine was notified in 1999, Transpower New Zealand made a submission relating to coal dust particulate and the potential for flashovers, corona discharge and sulphur dioxide emissions, and sought consultation and input into the preparation of a dust management plan. Therefore, there may be an issue to address in terms of effects on the national grid for this Mine expansion, and I recommend that Transpower New Zealand be notified in accordance with Regulation 10 if this application is publicly notified.

## **Road Dust**

340. With respect to traffic-related road dust, essentially the same conditions of consent relating to dust on Malvern Hills and Bush Gully Roads have been in place for over 19 years, i.e. since the original consent was granted in 2000. I understand that the complaints to SDC with respect to road dust began in February 2017, and I note that, in April 2016, the administrative 'combining' application, RC165238, stated<sup>122</sup> "BCL has taken the operational decision to move its coal yard activities from the Rolleston yard to the CCM site... In response to this change, direct deliveries on a daily basis are



<sup>&</sup>lt;sup>120</sup> CRC201366-368 application, page 26

<sup>&</sup>lt;sup>121</sup> CRC201366-368 application, page 23

<sup>&</sup>lt;sup>122</sup> Page 4, which was later withdrawn from the application

now required to fulfil customer orders, as limited coal stockpile space is available at the CCM site and at the customer's sites." It is not known when the operational decision referred to was made, potentially 2016. It is also not clear what coal yard activities were moved; perhaps it was the coal crushing and screening component. If so, I note that R303578 did allow for on-site processing to occur (i.e. for the up to 20,000 tonnes a year that was consented). Potentially this move of the 'coal yard activities' to the site contributed to the increase in truck movements, in addition to the increased production, but this is not discussed.

- 341. I note that the process of seeking information about what methods were proposed for dust suppression on the unsealed roads has been ongoing for some time now, noting that two RFIs for RC185018 also sought to clarify this previously. I considered that some level of detail around the basic mechanisms proposed to manage dust was needed, particularly given that conditions of consent relating to dust were already in place but problems were occurring.
- 342. I visited the area in April 2018, and considered the amenity-only<sup>123</sup> adverse effects of dust resulting from traffic movements in the notification report for RC185018<sup>124</sup>. I will not repeat the same assessment here, although it is generally equally applicable. Suffice it to say that, having experienced the adverse dust effects of trucks without effective dust suppression, it was my view that they were more than minor, and not just in relation to dwellings but also on the amenity of the outdoor/working rural environment.
- 343. This current application no longer proposes conditions of consent requiring the prevention of adverse road dust effects (as per RC165238), and instead proposes a section in the Environmental Management Plan (EMP) and a future Traffic Dust Suppression Management Plan (TDSMP) to address road traffic dust.
- 344. The application proposes water cart suppression at this stage; however, there was some conflicting information as to where the water cart would operate.<sup>125</sup> As discussed in Appendix 3 (Section R), it is assumed that the water cart will suppress dust along the full extent of Route 1 from the junction of Bush Gully Road with the mine access road out to the end of the current seal on Malvern Hills Road near State Highway 77; in addition, it will particularly focus on treating "200m either side critical areas"<sup>126</sup>. However, I note that proposed condition 8 does not reflect that the entire route will be treated or refer to Malvern Hills Road at all. I also note that there are areas that are required to have speed limits of 20km/hour and 30km/hour on Route 1, in addition to the 40km/hour areas, but condition 8 does not reference this either.

<sup>&</sup>lt;sup>126</sup> Second RFI Response, Attachment 5. It is assumed "200m either side critical areas" means 100m either side of dwelling locations rather than 200m either side of dwelling locations – Applicant to confirm



<sup>&</sup>lt;sup>123</sup> The report records that I did not consider whether there were any potential human/animal health, commercial farming or waterway/cultural impacts at that time

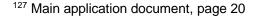
<sup>&</sup>lt;sup>124</sup> Paragraphs 109-117, 143

<sup>&</sup>lt;sup>125</sup> Second RFI, point 11

- 345. The Applicant will not provide a draft of the TDSMP, but proposed condition 8 states that it will include measures to stagger the arrival and departure of heavy vehicles (i. and iii), mitigate dust effects at dwellings which are located within 50 metres of the road for 100m either side of those dwellings and ensure a 40km/hour speed limit. As I understand it, these are all proposed by the application, and the dust management plan provided to ECan in the air discharge application (CRC200500) is the same as that provided in this SDC application; therefore, it is unclear what the TDSMP will additionally cover.
- 346. Overall, without an enforceable condition specifically addressing adverse dust effects, this aspect would rely on the Applicant's management plan. Given the inconsistencies within the application in relation to water cart operation (as discussed in Appendix 3 (Section R)) and the resulting uncertainty, and that the draft management plan has not been provided, I have not come to a conclusion at this notification stage. I note that, if this application is publicly notified, those in the area will be able to comment as to the method and effectiveness of mitigation since the complaints in early 2017, and that will further inform a final view.
- 347. I note that the ECan air discharge application (CRC200500) includes conditions to control on-site dust and a dust management plan for the control of road dust (which is the same as the dust management section of the EMP provided to SDC). I note that only Bush Gully Road is proposed to be dust suppressed in that dust management plan, although the Beca expert assessment also considers Malvern Hills Road. It is expected that some consistency between these applications will be able to be achieved at some point.
- 348. Again, ECan will address any issues of contamination relating to the use of water from treatment ponds for dust suppression on Bush Gully and Malvern Hills Roads.

### **Buildings and Signage**

- 349. I have not considered the effects of these aspects to any degree at this notification stage.
- 350. It is expected that any structural 'reinstatement' issues of relocated buildings will have been addressed in the Certificate of Acceptance/building consent processes undertaken. As already discussed in Appendix 3 (Section N), I am advised that the Applicant has indicated to SDC Building Control that it intends to move the buildings on the site to the north-east in 12-18 months. This application states<sup>127</sup> that the buildings and plant are not anticipated to move within the MOA during the period of works for which consent is currently sought; therefore, this move and consequent reestablishment will require future resource consent.





- 351. In terms of visual effects, at this point the landscape assessment has not identified the buildings to be a significant issue that would affect the wider environment in their current location, although I acknowledge that the landscape assessment also focused on broader issues only at this point.
- 352. The details will be considered further at the substantive stage.

### **Hazardous Substances and Solid Waste**

- 353. The applicability of the rules relating to these aspects are discussed in Appendix 5 of this report. The disposal of CCR and mussel shells into land (the ELFs) is not consented by SDC.
- 354. SDC will rely on ECan's assessment in this regard. The main issues of relevance from SDC's perspective would be any contamination, adverse effects on indigenous biodiversity, odour or dust during storage, implications for the rehabilitation methods proposed and the ability to use the land in future.
- 355. The 60,000 litre diesel tank is already consented by RC175266. The application advises<sup>128</sup> that the only other hazardous substances stored on-site and controlled by the District Plan are LPG, acetylene, WD40, petrol, brake cleaner and oxygen gas, and only in small quantities similar to that anticipated for small-scale non-rural or rural activities. It is noted that hazardous substances are also subject to control under other specific legislation.

### **Other Earthworks Matters**

- 356. ECan and SDC have jointly engaged a geotechnical engineer to advise on other aspects of earthworks. At the point of preparing this section, that assessment has not been completed. Therefore, it has been agreed that all effects relating to geotechnical matters and slope stability (including with respect to the Pits, ELFs, site boundaries, internal roads, etc) will be addressed by ECan in their reporting at this notification stage.
- 357. I note that a geotechnical report and further information was provided to ECan for the consideration of the joint expert on 15 July 2019. It was not provided to SDC; however, ECan forwarded a copy to SDC for information purposes. Whether or not the Applicant considers it to form part of the SDC application is not clear, but neither is it material at this notification stage. At this point, the additional geotechnical information has not been provided to the Commissioner and it is expected that full documentation from ECan will form part of the joint consideration at the substantive stage.
- 358. This application proposes that a new section on slope stability be included in the Environmental Management Plan (recognising that ELF slope stability is already addressed within it to a degree); no details have been provided in relation to this. As discussed earlier, I consider that a draft management plan is required for assessment.





359. It is also understood that ECan will assess other earthworks-related aspects of the Mine expansion such as erosion and sediment control, surface drainage patterns and dust (health effects).

### Soil Contamination and Human Health

- 360. Mr Guy Knoyle of Pattle Delamore Partners Ltd was engaged by SDC in relation to the NESCS, and his report is appended as **Appendix 18.**
- 361. The background to obtaining the information necessary to assess NESCS matters is covered earlier in this report. In brief, the Applicant has applied for a 'without prejudice' discretionary activity under the NESCS, but only in terms of disturbance of soil and not change of use. SDC considers consent is required for both aspects, and has in any event requested further assessment of effects and a draft management plan. The Applicant considers the matter to be adequately addressed by the information and assessment provided to date and considers that any effects will likely be dealt with by a management plan (future or existing).<sup>129</sup>
- 362. Mr Knoyle notes that the draft Site Management Plan, requested in his letter of 8 November 2019, containing a qualitative assessment on the risk to site workers has not been provided. He advises that some limited information has been provided in the Environmental Management Plan included in the main application document with regard to the management of dust related activities; however, no information has been provided with regard to ensuring the other possible exposure routes (e.g. soil ingestion and dermal contact) have been adequately addressed for site workers.
- 363. Mr Knoyle advises that the GHD PSI states that the risk to site workers is suitably managed through the implementation of site operational procedures and a suite of management plans. Mr Knoyle advises that the management plans reviewed do not provide sufficient information to fully assess any potential risk to site workers undertaking activities involving historical workings.
- 364. He advises that the GHD PSI further states that workers undertaking mining activities are protected under "*HSE legislation*"<sup>130</sup>. As such, Mr Knoyle considers it likely that applicable site management plans currently exist to appropriately manage exposure risk to site workers. He considers that it can be presumed that the management plans would be sufficient to address any concerns associated with the historical workings; however, based on the information provided, he advises that this is unable to be confirmed.
- 365. In summary, it is likely that existing management plans are already in place to appropriately manage any risks to workers undertaking works involving historical workings. However, based on the limited information provided in the AEE and supplemented in the GHD PSI, Mr Knoyle is unable to confirm or quantify this.

 <sup>&</sup>lt;sup>129</sup> As per the summary provided to the Applicant in the final email of 19 November 2019, J Dovey to J Leckie
 <sup>130</sup> "HSE" is not referenced, but it is assumed that GHD will be referring to the Health and Safety at Work Act 2015 (HSWA) and any other applicable health and safety legislation



- 366. I note that ECan also requested information regarding dust from historical workings in the context of health effects. The ECan request was for an assessment of the "*potential effects of dust discharges arising from the disturbance of any areas of old mine workings*." The full Response from the Applicant on 20 December 2019 was as follows<sup>131</sup>: "*There is no increased risk regarding dust discharges associated with historic mine workings*."
- 367. I note that the 2019/2020 Annual Work Plan provided by the Applicant to SDC shows that works are/will be occurring at the south-west end of the Mine. However, the depth of the historical workings in this location (i.e. the potentially contaminated land) or if they are being disturbed is unknown; therefore, it is not known if any NESCS-related works are already occurring.

### **Transport network**

- 368. The RFI documentation records the correspondence with the Applicant with respect to the sealing of Route 1. At this stage, the Applicant does not propose that Route 1 is sealed, but states that it is committed to funding the sealing of it.
- 369. Proposed condition 11<sup>132</sup>, which proposes funding of the sealing, was not completed and the information has not been provided since<sup>133</sup>; therefore, it is not clear what amount/portion of road is proposed to be funded.
- 370. I note that the application for CRC200500 (air discharge) indicates that the Applicant has offered to pay for Bush Gully Road sealing only: "*Malvern Hills Road is sealed for 1.6km from SH77 and is unsealed for the further 3.2km to the intersection with Bush Gully Road and beyond. Bush Gully Road is unsealed for its entire length- with 1.6km of this used by mine traffic. BCL has offered to pay for Bush Gully Road to be sealed, if it is successful in gaining consent for increased truck usage applied for to SDC for traffic consent. It is anticipated that this will be reflected as a condition of consent when this consent is granted. (However it is noted that even if the road remains unsealed BCL's experts have concluded that dust effects are no more than minor)."<sup>134</sup>*

and

<sup>132</sup> First RFI Response, Attachment 1

<sup>134</sup> CRC200500 application, page 18



<sup>&</sup>lt;sup>131</sup> Applicant's RFI Response to ECan, point 9, page 23 (20 December 2019 – file named 03\_01 Final Bathurst RFI 19Dec19\_SUBMITTED)

<sup>&</sup>lt;sup>133</sup> The vehicle generation application document (page 19, footnote 3) states:

<sup>&</sup>quot;BCL has commissioned Abley Limited to provide a report detailing the standard of sealing and the costings associated with the proposed sealing. As at the date of lodging this application that work has not been fully completed but will be provided as soon as it is available. It is to be noted that the assessment of effects shows even if the Preferred Route is not sealed the effects are no more than minor, and if the Preferred Route is sealed the effects will be positive." That report has not been provided to date.

"Further to the above, the proposed sealing of Bush Gully Road which is offered as part of the application to SDC for traffic generation will effectively avoid any adverse effects on vegetation and animals."<sup>135</sup>

- 371. Potentially the Applicant was simply seeking to limit ECan's consideration to what it perceived as being the scope of its discretion, i.e. Bush Gully Road, but given the history of inconsistency and confusion, I record that there is an inconsistency there.
- 372. Whilst not a direct part of this consideration of effects, I note for information purposes that Selwyn District Council Assets ("Assets"), which I consider to essentially be akin to a third party for the purposes of this application, are opposed to the conditions proposed in relation to road sealing, sightlines and signage, and have requested that the Applicant enter into a legal agreement to address these. Assets anticipated a draft agreement being prepared during this process; however, there has been no further contact from the Applicant. Therefore, this will be addressed by Assets at the substantive stage. It is expected that Assets will address any issues there may be with respect to works within legal road at the North ELF at that stage also.
- 373. Mr Nick Fuller of Novo Group was engaged by SDC in relation to transport effects, and his peer review report is appended as **Appendix 15**. (I note that Mr Fuller also reported on RC185018, the previous truck movements application, on behalf of SDC.)
- 374. Given that this application does not propose sealing of Route 1 (the Preferred Route), Mr Fuller has focused on assessing the transport safety effects of the proposal without sealing. If the road was to be sealed, Mr Fuller recommends a condition requiring review and certification by the consenting arm of SDC to ensure the effects are acceptable, noting that this would also enable a review of the Mine Access Protocol to ensure that it was consistent with the surrounding transport environment.
- 375. In relation to an unsealed road, Mr Fuller concludes that the effects would not be acceptable and would be more than minor with regard to road safety for all users of Route 1 unless specific measures were carried out. However, he is satisfied that conditions could be developed to mitigate the transport matters to the point where they are minor. The measures listed by Mr Fuller are as follows:
  - a. Submission and approval of a Dust Suppression Management Plan prior to an increase in traffic generation from the Mine;
  - Entering an Agreement with Council regarding improving sightlines and signage as a minimum. This could also include sealing of the Preferred Route (or this matter could be via a separate Agreement);



<sup>135</sup> CRC200500 application, page 29

- c. Including the Mine Access Protocol as a condition of consent, plus updating this document as advised above; and
- d. A requirement to raise community awareness of safe driving practices in the presence of coal trucks.
- 376. I accept Mr Fuller's advice, noting a few points relevant to his measures a. to d. above.
- 377. The traffic generation from the Mine has already increased from that consented; therefore, as per the previous discussion in relation to road dust and amenity impacts, I consider that at least a draft Traffic Dust Suppression Management Plan needs to be provided now for assessment. I note that Mr Fuller considers that the sightlines should be improved before traffic generation increases also (paragraph 50); again, it is already increased and it was expected that the Applicant would continue to work with Assets to resolve this issue. Mr Chamberlain of Assets advises that the last communication with the Applicant was in early 2019, with the understanding being that the Applicant was preparing a design and would be providing further details on road sealing, signage and sightline works once that was completed.
- 378. I note that Mr Fuller recommended the same updates to the Mine Access Protocol in his report on RC185018 as he has in his current report. Given that they were advised to the Applicant and that the amended application still does not include them, and Mr Fuller's conclusion that the adverse effects would be more than minor without those amendments, the technical conclusion would be that the adverse traffic effects will be more than minor at this notification stage. However, I recognise that this should be able to be resolved through amendments to the application/conditions of consent.
- 379. At this point, Mr Fuller has not considered the retrospective/current adverse effects of unconsented vehicle movements, including the 120 heavy vehicle movements a week that the Applicant has advised as the current maximum. As advised above, it was understood that the Applicant was resolving this with Assets, but that has not occurred to date.

#### **Fire Risk**

- 380. The application states: "The CCM has the potential for fire and care needs to be undertaken during the different stages of the mining process to avoid such risks. The site is also surrounded by forestry which provides an additional fire risk."<sup>136</sup>
- 381. The main application document proposes condition 11, which addresses fire risk amongst other aspects of 'hours of operation'. It is noted that this condition was essentially introduced by RC085059 (the 2008 change of conditions to the original R303578).



<sup>&</sup>lt;sup>136</sup> Main application document, page 87

- 382. The condition proposes that mining operations cease in the event of extreme fire-risk conditions or if the National Rural Fire Officer or any person authorised by Fire and Emergency New Zealand declares a total fire ban in any part of the Canterbury region.
- 383. Extreme fire-risk conditions are defined in the proposed condition as:
  - *iv.* "extreme fire-risk conditions" means contemporaneous exceedance of all of the following indices as calculated at the Darfield remote automatic weather station at Whitecliffs:
    - 1. BUI (Build Up Index) in excess of 60;
    - 2. DC (Drought Code) in excess of 300; and
    - 3. FWI (Fire Weather Index) predicted to exceed 30.

The above data is available at https://fireweather.niwa.co.nz

- 384. I note that there is no longer a weather station at Whitecliffs on the 'fireweather' website, so that would need to be updated if this condition was to be accepted in future.
- 385. The Applicant proposes that, once the mining operations cease due to fire-risk or fire ban, they can only continue again once the extreme fire-risk conditions cease to prevail or the total fire ban is lifted, or if one of the landowners, Matariki Forests, provides a certificate addressed to SDC Enforcement confirming that recommencement of mining operations will not cause any adverse effects that are more than minor.
- 386. There have been a number of total fire bans in Canterbury over the years, including five weeks in February/March of 2019, but there are no certificates from a forestry company allowing mining to continue on the SDC files to date (29 November 2019). It is not known if this condition has been actively applied in the past, but it does not appear to have been complied with. The trigger of a fire ban "*in any part of the Canterbury region*" requiring the mine to stop operating would seem extremely conservative. This would also seem to be an onerous condition for SDC to monitor and enforce. If the condition is a voluntary condition to protect the private interests of Matariki Forests, which may well be the case given that it can be waived by Matariki Forests at any time, SDC would be unlikely to take on the monitoring burden of a private agreement essentially addressing liability issues between landowner and 'lessee'. If there are adverse effects that need to be avoided/mitigated in this way, then that would be a different case.
- 387. At this stage, I do not know if the expanded Mine poses a greater fire risk than that already consented or other rural activities. The application indicates that there is risk and that the forest increases that risk, and the conditions proposed would appear to be managing potential significant risk; therefore, I conclude that the application indicates that there will be at least a minor adverse effect and consider Fire and Emergency New Zealand an affected party for service at this point.
- 388. The application proposes that the Environmental Management Plan be updated to cover fire management, to be prepared and certified by SDC after consent is granted. I assume it will include



operational measures and fire and evacuation procedures; some measures proposed to address fire risk are listed in the body of the application.<sup>137</sup>

### **Overall Amenity Values**

- 389. I note that Mr Densem considered that the adverse landscape amenity effects of increased truck movements on dwellings on Malvern Hills and Bush Gully Roads will be more than minor, recognising that this conclusion was in the context of heavy vehicle noise and ground vibrations (assuming dust was to be adequately suppressed). I consider this truck/truck and trailer movements aspect to be an important component of overall amenity values. I assessed this in the notification report of RC185018, and I assess it again below.
- 390. In my view, it is appropriate to consider the effects of traffic as part of my assessment of effects with respect to overall amenity values. I also consider it important that my consideration extends beyond anticipated noise measurements at dwellings, albeit that noise at a dwelling is an important component of amenity, and that I take into account the full meaning of amenity values.
- 391. Putting aside service and light vehicle movements for a moment, a maximum of 320 heavy vehicle movements per week is proposed. I recognise that the application indicates that this peak is likely to occur only in October and January; however, I note that all of the months from September to March are predicted to see significantly increased numbers of truck movements, i.e. between around 260 and 320 movements per week.
- 392. I note that the permitted baseline of the Plan would be 60 equivalent car movements (ecm) per day,i.e. 60 car movements or 20 truck movements or 10 truck and trailer unit movements per day.
- 393. As noted earlier, the consented baseline from R303578 (and continued into the following consents including RC165238) is:

For on-site processing, six truck movements per day, and a peak level of 12 movements per day for limited periods of the year.

For off-site processing, a maximum of 54 truck movements per day over a 2-3 day period every 2-3 weeks (with little or no mine truck traffic in the intervening times).

- 394. For the on-site processing baseline, it would be anticipated that there might be 36 movements per week and a peak of 72 movements per week at limited times of the year.
- 395. For the off-site processing baseline, it would be anticipated there would be intense activity of 54 movements a day for only 2-3 days and then little or no truck traffic would be expected for 2-3 weeks, noting that the truck movements were described similarly by the Applicant in 2014<sup>138</sup>.

<sup>&</sup>lt;sup>138</sup> Page 28 of RC135632 application – "All coal is removed from site for processing and distribution. The current operation results in coal being stored on the ROM pad for up to three weeks and then transported offsite by truck to Rolleston. The transportation process takes up to three days with between 27 - 54 truck movements."



<sup>&</sup>lt;sup>137</sup> Main application document, page 87

- 396. I understand that on-site processing is currently undertaken; therefore, that baseline may be more applicable, but both could be considered relevant in terms of effects.
- 397. The increase from the baselines to a maximum of 320 movements per week will be noticeable, although I recognise that this does not automatically make it adverse. In my opinion, the assessment required is not a compartmentalised assessment of noise and vibration measurement levels and what a person can see from their dwelling, but an overall assessment as to how the level of traffic proposed is likely to impact on people's appreciation of the pleasantness and aesthetic coherence of this particular area. In the context of the existing (and consented) Malvern Hills Road and Bush Gully Road environments, it is my view that the proposed increase in the level of heavy vehicle activity from that consented will result in noise/disturbance and a general level of commercial 'busyness' that will impact on amenity values.
- 398. I note that the application<sup>139</sup> references an "operational baseline" of 120 heavy vehicle movements per week. It is important to recognise that this is not a formal 'baseline' in the RMA context, and I note that a number of the SDC experts queried this aspect. It is instead the maximum number of heavy vehicle movements that are occurring now, unconsented, as advised by the Applicant. I note that complaints have been made to the Council associated with that current level of activity; therefore, at this point I cannot assume that the effect of the current unconsented number of truck movements is accepted or minor.
- 399. With respect to the alternative Routes 2 and 3, I note that the meaning of 'effect' in the Act includes any potential effect of low probability which has a high potential impact. To my mind, the use of any alternative route by heavy vehicles may well have a high potential impact within a short timeframe, although I also recognise that this impact will be tempered to a degree by its temporary nature, depending on duration of use. In addition, I understand that the risk of emergency/Council-controlled road closure is not considered to be great. Any submissions received may inform this view further.
- 400. The consented baseline for other vehicle movements was 'service vehicles and those used to transport the approximately 10 workers consented'. A maximum of 119 service vehicle movements (including 108 water cart movements) and 291 light vehicle movements per week are proposed in this application, noting that some service vehicles will be trucks but are not counted as heavy vehicles as defined by this application. This level of vehicle movement, in combination with the heavy vehicle movements, will also contribute to the impacts on the amenity values of this area.
- 401. I note that no limits are proposed on hours of operation for service and light vehicles, and some nighttime vehicle generation would be anticipated, but no details are provided.



<sup>&</sup>lt;sup>139</sup> Vehicle generation application document, the Appendix 3 Abley report

#### Assessment of Overall Amenity Values

- 402. As noted earlier, the Plan controls the scale of non-rural activities through a combination of the scale of activity (staff and coverage), earthworks and traffic generation rules. The rules are not 'limits' and the reasons for rules indicate that larger scale activities can be appropriate if significant adverse effects on the amenity and character of the receiving environment can be adequately addressed.
- 403. As noted at the beginning of this assessment of effects, there are a number of qualities and characteristics of the general area that will contribute to people's appreciation of its pleasantness, aesthetic coherence and cultural attributes, i.e. amenity values.
- 404. In summary, those considered likely to contribute are the quietness of the area, the night-time darkness, the rural landscape, the proximity to local towns, the working character of the area including the Mine and forestry, the cultural landscape and values, the particular ecological qualities and the Homebush history. It is anticipated that these values will be refined and added to if the application is publicly notified and submissions made.
- 405. It must also be recognised that part of this existing environment is an already consented, relatively small scale mine that is permitted to operate 24 hours, five nights a week. This will already 'modify' some of these qualities and characteristics to a degree, and it is only the increase in effects resulting from the expansion above the baseline since 2013 that must be considered.
- 406. As noted above, I consider character and amenity considerations cannot be reduced to compartmentalised assessments of, for example, compliance with noise standards and what a person can see from a neighbouring property, considered in isolation and 'ticked off' one by one. Whilst each effect is, of course, an important component of amenity, it must also be recognised as being a component of a whole. In my view, the sum of the combination is important and an overall judgment must be exercised, taking the area-specific qualities and characteristics into account.
- 407. In considering the wider environment, I consider that there have been and will be (or are likely to be) significant adverse effects resulting from the Mine expansion on amenity values relating to daytime quietness, night-time darkness, the rural landscape, cultural values and ecological qualities and values.
- 408. I also note that there may be more than minor adverse amenity effects on the wider environment relating to night-time quietness and the nuisance caused by dust.
- 409. Overall, I conclude that the adverse effects on amenity values will be more than minor.

#### **Overall Conclusion on Adverse Effects**

410. Given the mix of retrospective and future aspects, it is perhaps simplest to provide the conclusions in a table. The following summarises the overall conclusions on the level of adverse effect on the wider environment resulting from the proposed Mine expansion.



#### Table 3: Summary of overall conclusions on adverse effects on the wider environment

Effect	Retrospective	Future
Indigenous Biological Diversity	More than minor	More than minor
Cultural Values	More than minor	More than minor
Archaeological Values	No conclusion Works completed in the area of old workings are unknown	Minor
Noise	Minor or more than minor Insufficient information	Minor or more than minor Insufficient information
Glare and Sky Glow	More than minor	Minor or more than minor Insufficient information
Landscape	More than minor	More than minor
On-site Dust	No conclusion Information to be provided	No conclusion Information to be provided
Road Dust	Potential adverse effects	No conclusion Insufficient information
Buildings and Signage	No conclusion at this stage	No conclusion at this stage
Hazardous Substances and Solid Waste	No conclusion at this stage	No conclusion at this stage
Other Earthworks Matters	No conclusion at this stage	No conclusion at this stage
Soil Contamination and Human Health	No conclusion Works completed in the area of old workings are unknown	No conclusion Insufficient information
Transport Network	Not considered at this point Potential adverse effects	More than minor, but conditions expected to render minor
Fire Risk	No conclusion	No conclusion Potential adverse effects
Overall Amenity Values	More than minor	More than minor



411. On the basis of the information provided to date, I conclude that there have been and will be retrospective and future adverse effects on the wider environment resulting from the expansion of the Mine that are more than minor.

## **Summary of Main Points**

- 412. A summary of main points is provided below:
  - 1. The activity is not particularly complicated, but the application is unclear and contains internally conflicting and confusing information.
  - 2. As a consequence, a significant amount of additional time was required in order to understand the activity, with additional file documents having to be reviewed.
  - 3. An interim summary of the application parameters has been provided in Appendix 2, to assist understanding moving forward. The background and sources of information used in compiling that summary are explained in Appendix 3. All SDC experts prepared their reports based on the full application documents and not on this interim summary.
  - 4. The activity is a non-complying activity under the Selwyn District Plan, and a detailed noncompliance table is contained in Appendix 4.
  - 5. The Applicant did not provide information requested by the deadline provided (s.95C(2)(a)) and will not provide information requested (s.95C(2)(b)). Therefore, I have recommended public notification under Step 1.
  - 6. Given that the Commissioner may come to a different view with respect to Step 1, I continued through the Steps, relying on the peer review reports provided by the SDC experts.
  - Given the lack of information, there are a number of aspects where assessment cannot be completed and conclusions cannot be reached. However, I am confident that conclusions can be satisfactorily reached on some aspects.
  - I recommend that the written approvals provided from the landowners of surrounding land, EM & MD Frew and Matariki Forests, are accepted. I recommend that the other written approvals provided are not accepted as valid.
  - I conclude that retrospective and/or future adverse effects on the wider environment are more than minor with respect to indigenous biological diversity, cultural values, glare and sky glow, landscape and overall amenity values.
  - 10. Therefore, if my recommendation under Step 1 was not accepted, I recommend public notification under Step 3.
  - 11. I have also concluded that there may be more than minor adverse effects on the wider environment in relation to noise, and there may be adverse effects in relation to road dust.



- 12. Although it is likely that existing management plans are already in place addressing adverse effects relevant to the NESCS, no conclusion can be reached due to lack of information.
- 13. I have identified recommended affected parties in accordance with s.95E. These are Te Taumutu Rūnanga, Te Ngāi Tūāhuriri Rūnanga, Heritage New Zealand Pouhere Taonga, Fire and Emergency New Zealand and those shown on the plans in Appendix 16. (There may be an issue to address in terms of effects on the national grid; therefore, I recommend that Transpower New Zealand is served notice under Regulation 10 if this application is publicly notified.)

## Recommendation

- 413. I recommend the following.
  - a. That the application be **publicly notified** pursuant to sections 95A(2)(a), 95A(3)(b) and 95C.
  - b. If this is not the decision at Step 1 of section 95A, I recommend that the application be publicly notified at Step 3 pursuant to sections 95A(7)(a), 95A(8)(b) and 95D.
  - c. That Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga be served notice as affected persons.
  - d. That Heritage New Zealand Pouhere Taonga and Fire and Emergency New Zealand be served notice as affected persons.
  - e. That all owners and occupiers of the properties identified on the plans in Appendix 16 of this report be served notice as affected persons.
  - f. That, for the avoidance of any doubt, it be directed that Transpower New Zealand be served notice pursuant to Regulation 10(2)(i) of the Resource Management (Forms, Fees, and Procedure) Regulations 2003, recognising that SDC will also serve notice on other prescribed parties pursuant to Regulation 10.

Reported and recommended by:	Date:
Janette Dovey	02 March 2020
Director, Bellbird Consulting Group Ltd	



# DECISION

I have been provided with and considered all documentation relating to the applications lodged and bundled under RC185622, including the application documents and supporting information and assessments, further information requests and responses, written approvals provided, expert reports prepared for the applicant and Selwyn District Council, and this Section 95A-E report. I note that whilst the application for mine activities was lodged as two documents, they have been bundled and treated as one application by the Council on the basis that they form one inseparable proposal, and this was advised to the applicant in the Councils second further information request of 30 April 2019. I have therefore considered the proposals as one application.

I also note that whilst there remains dispute between the Council and applicant as to the extent of any consents required under the NESCS<sup>140</sup> the applicant has agreed on a without prejudice basis<sup>141</sup> to apply for consent under regulation 11 of the NESCS. I have therefore considered that consent in this decision also.

Having considered the application and report I agree that mandatory public notification is required pursuant to sections 95A(2)a, 95A(3)b, 95C(1)b and 95C(2)a&b as the applicant has not or refuses to provide all information requested under section 92 of the RMA. I agree that the information requested is necessary to enable a full and proper understanding of the proposal and any adverse effects on the environment, and that the extent of responses provided do not adequately address these issues or enable full conclusions as to adverse environmental effects.

I further agree that notwithstanding my conclusion as to public notification above, public notification would still be required under sections 95A(7)a, 95A(8)b and 95D as on the basis of the information provided, the activity will have or is likely to have adverse effects on the environment that are more than minor, in terms of ecological values, cultural values, glare and sky glow, landscape values and amenity values and that there is also insufficient information to reach a conclusion that adverse effects in relation to noise, traffic safety and soil contamination will be minor or less than minor.

Accordingly, I adopt the assessment and recommendations contained in above Section 95A-E report for the reasons contained in that report, and my decision is that the application be **publicly notified** as per the recommendations contained in Paragraph 413 a – f of the above report.

Signed:	Date:
ST	06 March 2020
Commissioner Graham Taylor	

<sup>&</sup>lt;sup>140</sup> National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Public Health <sup>141</sup> Lane Neave letter 15 Nov 2019

