

**NEW ACLAND MINE STAGE 3
EIS EVALUATION REPORT**

ADMINISTRATIVE REVIEW

9 June 2015

NEW ACLAND MINE STAGE 3 EIS EVALUATION REPORT
ADMINISTRATIVE REVIEW

TABLE OF CONTENTS

1.	Overview	6
1.1	The scope of this review	6
1.2	The documents or other material this review considered	6
1.3	What this review does do.....	7
1.4	What this review does NOT do.....	8
1.5	Structure of this review	8
1.5.1	Chapter 2 – Statutory framework.....	8
1.5.2	Chapter 3 – History of the Project	8
1.5.3	Chapter 4 – Legal questions considered	8
1.5.4	Chapter 5 – What must the ‘ <i>evaluation of the project EIS</i> ’ involve to comply with Part 4 of the Act.	9
1.5.5	Chapter 6 – Consideration by Coordinator–General of submissions received after the AEIS.....	9
1.5.6	Chapter 7 – Framework of analysis	9
1.5.7	Chapters 8 to 12 – Summary of the EIS evaluation process.....	9
1.5.8	Chapter 13 – Conclusion.....	10
2.	Statutory framework	13
2.1	Environmental coordination	14
2.2	The EIS assessment process	15
2.2.1	Notice of EIS and draft terms of reference	15
2.2.2	Final TOR	15
2.2.3	Information to assist preparation of EIS	15
2.2.4	Preparation of EIS.....	15
2.2.5	Public notification of EIS	16
2.2.6	Report evaluating the EIS	16
3.	History of the Project	19
3.1	The importance of the history of the Project	19
3.2	The environmental coordination process	19
3.3	Declaration of the Project	21
3.4	Notice of EIS and draft TOR for the initial Project.....	23
3.5	Final TOR for the initial Project	24
3.6	Preparation of EIS for the original Project	24
3.7	Public notification of EIS for the original Project	25
3.8	Proponent revised the Project	26
3.9	Notice of requirement for EIS and draft terms of reference for the revised Project	28
3.10	Final TOR for the revised Project.....	31
3.11	Preparation of EIS for the revised Project	32
3.12	Public notification of EIS for the revised Project	35
3.13	Report evaluating the EIS for the revised Project.....	38
3.13.1	Consideration of the submissions	38
3.13.2	Request for additional information from the Proponent	47
3.13.3	Consideration of EIS and other material.....	53
3.13.4	Report.....	54

3.14	The briefing note process.....	58
3.15	Observation about the history of the Project	67
4.	Legal questions considered	68
4.1	The validity of the declaration	68
4.2	The change to the Project scope	70
5.	What must the ‘evaluation of the project EIS’ involve to ‘comply with part 4 of the Act’?	78
5.1	What ‘must’ the Coordinator-General do?.....	78
5.2	Section 35(1) – ‘The EIS’	79
5.3	Section 35(1) - ‘All properly made submissions and other submissions accepted by the Coordinator-General about the EIS’	79
5.4	Section 35(1) - ‘any other material the Coordinator-General considers is relevant to the project’	80
5.5	Previous submissions	80
5.6	Submissions made after the AEIS	81
5.7	The law on obligations to ‘consider’ identified material.....	81
5.8	The content of the obligation to consider the material listed in section 35(1).....	84
5.9	Effect of Coordinator-General’s status as corporation sole.....	85
5.10	Additional information or comment under section 35(2)	86
5.11	Scope of the obligation to prepare report evaluating EIS	86
5.12	What must the Coordinator-General do personally for the preparation of the report?	88
5.13	That which the Coordinator-General ‘may’ do under section 35(4).....	89
5.14	The ‘environment’	89
5.15	Summary of evaluation requirements	90
6.	Consideration by Coordinator-General of submissions received after the AEIS	92
6.1	Section 35(1) - <i>the EIS</i>	93
6.2	Section 35(1) - <i>properly made submissions</i>	93
6.3	Section 35(1) - other submissions accepted by the Coordinator General about the EIS	93
6.4	Section 35(1) - other material the Coordinator-General considers relevant.....	93
6.5	The further submissions are other submissions accepted by the Coordinator-General about the EIS	94
7.	Framework of analysis	97
8.	Environmental impacts	99
8.1	Land impacts.....	99
8.1.1	What was the evidence or other material held by the Coordinator-General on land impacts?	99
8.1.2	Summary of the process of evaluation of the Project regarding land impacts as described in the report evaluating the EIS	108
8.1.3	Coordinator-General’s conclusion on land impacts.....	112
8.1.4	Observations	113
8.2	Noise and vibration.....	113
8.2.1	What was the evidence or other material held by the Coordinator-General on noise and vibration?	113
8.2.2	Summary of the process of evaluation of the Project regarding noise and vibration as described in the report evaluating the EIS	121
8.2.3	Coordinator-General’s conclusions on noise and vibration.....	125
8.2.4	Observations	126
8.3	Air emissions	126

8.3.1	What was the evidence or other material held by the Coordinator-General on air emissions?.....	126
8.3.2	Summary of the process of evaluation of the Project regarding air emissions – mine and rail spur dust - as described in the report evaluating the EIS.....	137
8.3.3	Coordinator-General’s conclusions regarding mine and rail spur dust	143
8.3.4	Summary of the process of evaluation of the Project regarding air emissions – blast fume - as described in the report evaluating the EIS.....	143
8.3.5	Coordinator-General’s conclusions regarding blast fume	144
8.3.6	Summary of the process of evaluation of the Project regarding air emissions – Road transport – coal dust - as described in the report evaluating the EIS	145
8.3.7	Coordinator-General’s conclusions - Road transport – coal dust emissions	145
8.3.8	Summary of the process of evaluation of the Project regarding air emissions – Greenhouse gas emissions - as described in the report evaluating the EIS	146
8.3.9	Coordinator-General’s conclusions regarding greenhouse gas emissions.....	147
8.3.10	Observations	148
8.4	Traffic and transport	148
8.4.1	What was the evidence or other material held by the Coordinator-General on traffic and transport?.....	148
8.4.2	Summary of the process of evaluation of the Project regarding traffic and transport as described in the report evaluating the EIS.....	161
8.4.3	Coordinator-General’s conclusions regarding traffic and transport	169
8.4.4	Observations	170
8.5	Jondaryan rail load-out facility	170
8.5.1	What was the evidence or other material held by the Coordinator-General on the Jondaryan rail load-out facility?	170
8.5.2	Summary of the process of evaluation of the Project regarding the Jondaryan rail load-out facility as described in the report evaluating the EIS	174
8.6	Ecology	175
8.6.1	What was the evidence or other material held by the Coordinator-General on ecology?.....	175
8.6.2	Summary of the process of evaluation of the Project regarding ecology as described in the report evaluating the EIS	186
8.6.3	Observations	196
8.7	Waste	196
8.7.1	What was the evidence or other material held by the Coordinator-General on waste?.....	196
8.7.2	Summary of the process of evaluation of the Project regarding waste as described in the report evaluating the EIS	200
8.7.3	Observations	206
8.8	Hazard and risk management.....	206
8.8.1	What was the evidence or other material held by the Coordinator-General on hazard and risk management?.....	206
8.8.2	Summary of the process of evaluation of the Project regarding hazard and risk management as described in the report evaluating the EIS	210
8.8.3	Observations	212
8.9	Cultural heritage	213
8.9.1	What was the evidence or other material held by the Coordinator-General on cultural heritage?.....	213
8.9.2	Summary of the process of evaluation of the Project regarding cultural heritage as described in the report evaluating the EIS	217
9.	Economic impacts	220

9.1	What was the evidence or other material held by the Coordinator-General on economic impacts?.....	220
9.2	Summary of the process of evaluation of the Project regarding economic impacts as described in the report evaluating the EIS.....	228
9.3	Observations	230
10.	Social impacts.....	231
10.1	What was the evidence or other material held by the Coordinator-General on social impacts?.....	231
10.2	Summary of the process of evaluation of the Project regarding social impacts as described in the report evaluating the EIS	244
10.2.1	Social impact assessment.....	245
10.2.2	Community and stakeholder engagement.....	246
10.2.3	Health, safety and community infrastructure.....	249
10.2.4	Housing and accommodation.....	252
10.2.5	Regional business development and local content	253
10.2.6	Workforce management.....	254
11.	Matters of national environmental significance.....	258
11.1	The issues.....	258
11.1.1	Matters of national environmental significance as ‘ <i>controlled actions</i> ’ under the <i>EPBC Act</i>	258
11.1.2	The Project as a ‘ <i>controlled action</i> ’ under the <i>EPBC Act</i>	259
11.1.3	Assessment of matters of national environmental significance.....	260
11.2	Listed threatened species and ecological communities	261
11.2.1	What was the evidence or other material held by the Coordinator-General on listed threatened species and ecological communities?.....	261
11.2.2	Summary of the process of evaluation of the Project regarding listed threatened species and ecological communities as described in the report evaluating the EIS	262
11.3	Potential impacts to water resources.....	306
11.3.1	What was the evidence or other material held by the Coordinator-General on potential impacts to water resources?	306
11.3.2	Summary of the process of evaluation of the Project regarding potential impacts to water resources as described in the report evaluating the EIS.....	325
11.3.3	Observations	333
11.4	Management of water resources	334
11.4.1	What was the evidence or other material held by the Coordinator-General on management of water resources?.....	334
11.4.2	Summary of the process of evaluation of the Project regarding management of water resources as described in the report evaluating the EIS.....	334
11.5	Summary of the process of evaluation of the Project regarding the Independent Expert Scientific Committee as described in the report evaluating the EIS	355
11.6	Summary of the process of evaluation of the Project regarding ecologically sustainable development as described in the report evaluating the EIS	357
12.	Coordinator-General’s conclusions.....	360
12.1	Summary of the Coordinator-General’s overall conclusions regarding matters of national environmental significance as described in the report evaluating the EIS	360
12.2	Appendices.....	361
13.	Conclusion	362
13.1	Did the evaluation comply with the requirements of Part 4?.....	362

13.1.1	Did the Coordinator-General personally consider the EIS and properly made submissions about the EIS?	362
13.1.2	Other material considered relevant by the Coordinator-General	371
13.2	Did the Coordinator-General comply with the duty to prepare the EIS evaluation report?	371
13.3	Concluding remarks	371
14.	Acronyms	373
	Annexure A Terms of Reference for this review	374
	Annexure B Index to documents provided by the Coordinator-General's office	375
	Annexure C Correspondence from the Coordinator-General's office confirming all documents provided.....	376
	Annexure D Correspondence clarifying documents	377
	Annexure E Correspondence from Crown Law regarding submissions received after the AEIS.....	378
	Annexure F Correspondence from Coordinator-General dated 5 June 2015.....	379

1. OVERVIEW

1. This review conducts an administrative review for the Queensland Government of the Coordinator-General's evaluation of the New Acland Coal Mine Stage 3 Expansion project environmental impact statement ('EIS')¹ under Part 4 of the *State Development and Public Works Organisation Act 1971* (Qld) ('SDPWO Act') and the EIS evaluation report of 19 December 2014.
2. Elizabeth Wilson QC was briefed to undertake this review and was assisted by barristers Nicole Kefford and Angus Scott.

1.1 The scope of this review

3. The scope of this review is set by the terms of reference.²
4. The terms of reference state that the scope of this review is limited to the EIS evaluation process commencing on 26 October 2012 when New Acland Coal Pty Ltd (*the Proponent*) requested that the Commonwealth Minister approve a variation of the previous proposal under section 156A(3) of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) ('EPBC Act').
5. However, the terms of reference provide that this review may consider documents relating to the EIS evaluation process for the previous proposal that are relevant to that scope.

1.2 The documents or other material this review considered

6. This review is limited only to a '*desk top*' review of the documents held by the Coordinator-General; essentially to identify the documents and process underpinning the EIS evaluation report.
7. The terms of reference make it clear that this review will not take oral evidence, invite submissions or hold private or public hearings.

¹ Reference to the EIS is generally a reference to the EIS publically notified in December 2013, unless the context indicates otherwise.

² The terms of reference are set out in Annexure A.

8. The terms of reference states that this review will only consider documents or other material held by the Coordinator-General relating to the EIS evaluation report.
9. The documents provided by the Coordinator-General's office for this review were vast. There were in excess of 3,500 documents provided as 45 folders of printed material plus electronic copies only of other documents on three USB devices.³
10. The Coordinator-General confirmed by correspondence that all relevant documents and material held by his office in relation to the Stage 3 EIS evaluation report (as per the terms of reference) has been made available for this review.⁴ The Coordinator-General also noted that staff from his office have made themselves available to provide information and answer queries.
11. Clarification was sought from officers of the Coordinator-General's office about a number of documents and staff from the Coordinator-General's office provided the requested assistance to identify particular documents.⁵
12. The Coordinator-General was also requested, by correspondence, to identify '*all documents in relation to the Coordinator-General considering the AEIS submissions*'.⁶ His response is attached as Annexure F.

1.3 What this review does do

13. This review, in accordance with the terms of reference:
 - (a) describes the statutory framework for the EIS evaluation processes under part 4 of the *SDPWO Act*;⁷
 - (b) summarises the process for the evaluation of the Project EIS as described in the EIS evaluation report;⁸
 - (c) identifies the evidence or other material held by the Coordinator-General relating to the EIS evaluation report;⁹ and

³ Annexure B is an index to the documents provided.

⁴ A copy of that correspondence is attached in Annexure C.

⁵ A copy of correspondence with respect to that assistance is attached in Annexure D.

⁶ A copy of this email is attached in Annexure E.

⁷ See Chapter 2. See also Chapter 4.

⁸ See Chapter 7 where it is explained how this term of reference is undertaken in Chapters 8 to 12 of this review.

- (d) expresses an opinion about whether the evaluation of the project EIS complied with Part 4 of the *SDPWO Act*.¹⁰

1.4 What this review does NOT do

- 14. This review does not, in any way, examine the merits of any of the Coordinator-General's decisions or any of the expert opinions sought or held by the Coordinator-General's office.
- 15. The terms of reference make it clear that this review will not express an opinion about the merits of:
 - (a) the Coordinator-General's evaluation of the Project EIS;
 - (b) any expert opinion expressed or sought during the EIS evaluation process or in the EIS evaluation report; or
 - (c) the conditions imposed or recommended by the EIS evaluation report.

1.5 Structure of this review

1.5.1 Chapter 2 – Statutory framework

- 16. Chapter 2 sets out the relevant statutory framework of the *SDPWO Act*.

1.5.2 Chapter 3 – History of the Project

- 17. This history is important to understand the context of the Project and the process of evaluation, demonstrated by the documents, undertaken by the Coordinator-General.

1.5.3 Chapter 4 – Legal questions considered

- 18. Two legal issues were examined:
 - (a) the detail of the description contained in the declaration; and

⁹ See Chapters 8 to 12.

¹⁰ See Chapter 13.

(b) any effect that the change of the scope of the Project had on the EIS evaluation report.

19. Both of these issues were considered and ultimately the conclusion reached that neither issue affected the validity of the process undertaken by the Coordinator-General.

1.5.4 Chapter 5 – What must the ‘*evaluation of the project EIS*’ involve to comply with Part 4 of the Act.

20. The focus of this review is on the Coordinator-General’s evaluation of the EIS.

21. This chapter sets out the Coordinator-General’s obligations (relevant to his evaluation) pursuant to the *SDPWO Act*.

22. These obligations inform whether the Coordinator-General’s evaluation of the Project EIS complied with Part 4 of Act.

1.5.5 Chapter 6 – Consideration by Coordinator-General of submissions received after the AEIS

23. In respect of the Coordinator-General’s obligations, this chapter specifically deals with whether the Coordinator-General must consider submissions received after the AEIS.

24. It is arguable that he does.

25. This chapter also assists with informing whether the evaluation of the Project EIS complied with Part 4 of *SDPWO Act*.

1.5.6 Chapter 7 – Framework of analysis

26. Chapter 7 sets out the general framework of analysis that is undertaken in Chapters 8 to 12.

1.5.7 Chapters 8 to 12 – Summary of the EIS evaluation process

27. A summary of the EIS evaluation process, with reference to relevant documents, is undertaken in Chapters 8 to 12.

1.5.8 Chapter 13 – Conclusion

28. Chapter 13 expresses an opinion whether the evaluation of the Project EIS complied with Part 4 of the *SDPWO Act*.
29. There were a number of matters that the Coordinator must do to comply with Part 4 of the *SDPWO Act*. These requirements are:
 - (a) personal consideration by the Coordinator-General of:
 - (i) the EIS;
 - (ii) all properly made submissions about the EIS;
 - (iii) other submissions accepted by the Coordinator-General about the EIS;
 - (iv) any other material the Coordinator-General considers is relevant to the project; and
 - (b) preparation by the Coordinator-General of a report evaluating the EIS.
30. This review considered each of these matters by examining the Coordinator-General's obligations, pursuant to the *SDPWO Act* and the documents available.
31. For example the Coordinator-General, in the EIS evaluation report, asserts that he considered the EIS and comments and issues raised in submissions on the EIS. There is documentary evidence that shows that he was at least provided with these documents. The Coordinator-General's level of consideration of these documents is unknown and beyond this review.
32. The Coordinator-General asserts that he considered these documents and it is clear that he was provided these documents. The documentary trail is not inconsistent with his assertion.
33. The only area where documentary evidence is lacking is in relation to the Coordinator-General's personal consideration of the further submissions received

after the AEIS. It is arguable that he must personally consider these further submissions.¹¹

34. The EIS evaluation report states that the Coordinator-General considered ‘*comments and issues raised in submissions on the AEIS*’.¹² Later it states that the Coordinator-General ‘*considered...submissions on the EIS and AEIS*’.¹³
35. These assertions that the Coordinator-General did consider the further submissions received after the AEIS are consistent with his public invitations for such submissions. It is also noted that some of the contents of these further submissions are included in the EIS evaluation report and in the conditions prescribed, and recommended, by the Coordinator-General.
36. There is, however, no documentary evidence that those further submissions, or any sufficient summaries of them, were ever actually provided to the Coordinator-General to consider.
37. There is, for example, no briefing note provided to him attaching the further submissions received after the AEIS or any summaries of those submissions.
38. This is not consistent with the process that appears to have been otherwise adopted in which all material considered by the Coordinator-General was provided to him by way of briefing note.
39. This review can only consider the terms of reference by examining the documents; primarily whether documents exist, or not, to support any statutory requirement.
40. If the Coordinator-General did not consider these further submissions received after the AEIS then it is arguable that his evaluation of the Project EIS did not comply with Part 4 of the *SDPWO Act*.
41. At this stage, bearing in mind the limitations of this review to only examine documents, it cannot be conclusively stated that the Coordinator-General did not comply with Part 4 of the *SDPWO Act*.

¹¹ see Chapter 6 of this review

¹² EIS evaluation report page 7.

¹³ EIS evaluation report page 156.

42. However, it can be said, that there is no sufficient documentary evidence to support the requirement that the Coordinator-General personally considered the further submissions received after the AEIS.
43. There is documentary evidence that supports that the Coordinator-General's evaluation of the Project EIS largely complied with Part 4 of the *SDWPO Act*; except for the requirement that the Coordinator-General personally consider the further submissions.
44. As noted earlier, if the Coordinator-General did not consider the further submissions, then it is arguable that he did not comply with the requirement in section 35(1) of the *SDWPO Act*.
45. There is insufficient evidence, on this documentary review, to support the Coordinator-General's assertion that he did consider the further submissions.
46. At this stage, only the Coordinator-General himself can provide the evidence as to whether he considered the further submissions to the requisite standard. Accordingly, further information may be required from the Coordinator-General to determine whether or not this requirement has been satisfied.

2. STATUTORY FRAMEWORK

47. This review scrutinises the environmental impact statement ('EIS') evaluation report as a step in the ongoing approval process for the New Acland Coal Mine Stage 3 Expansion Project ('the Project').
48. This chapter provides an overview of the applicable statutory framework governing the environmental coordination process and the EIS evaluation report.
49. The governing legislation is the *SDPWO Act*. As suggested by the long title to the *SDPWO Act*, it provides for '*State planning and development through a coordinated system of public works organisation, for environmental coordination, and for related purposes*'.
50. Relevantly, for this review, Part 4 of the *SDPWO Act* provides a process of '*environmental coordination*' by which the Coordinator-General can coordinate departments of the Government, as well as local bodies throughout the State, to ensure that a development takes proper account of its environmental effects.¹⁴
51. Over the course of this Project, the *SDPWO Act* has been amended on a number of occasions. Many of the revisions were of no relevance to the Project.
52. This review is conducted by reference to the *SDPWO Act* Reprint 5¹⁵, being the applicable reprint at the time the Proponent applied for the Project to be a '*coordinated project*', with reference to subsequent amendments, including the transitional provisions with respect to such amendments. Where it is necessary to make reference to the specific wording of a provision at a particular point in time, the relevant reprint is noted.
53. Importantly, while the *SDPWO Act* current as at 24 October 2014 was the reprint in place at the time of the Coordinator-General's EIS evaluation report, it has no application to the Project as the amendments incorporated into that reprint were expressed to apply only to projects declared after the amendments took effect.¹⁶

¹⁴ Section 25 of the *SDPWO Act*.

¹⁵ Reprinted as in force on 7 December 2006.

¹⁶ Section 197 of the *SDPWO Act* current as at 24 October 2014.

2.1 Environmental coordination

54. Environmental coordination under Part 4 of the *SDPWO Act* applies to projects that the Coordinator-General declares to be a ‘*significant project*’^{17, 18}
55. There are two types of significant projects under Part 4: a significant project for which an EIS is required and a significant project for which an EIS is not required.¹⁹ The latter involves a more truncated assessment process and may only be declared where the Coordinator-General is satisfied appropriate environmental assessments would be carried out under another Act in relation to the Project and that undertaking the project would not result in broad scale clearing for agricultural purposes.²⁰
56. In considering whether the project should be declared a significant project the Coordinator General must have regard to one or more of the following:
- (a) detailed information about the project given by the proponent in an initial advice statement;
 - (b) relevant planning schemes or policy frameworks, including those of a relevant local government or of the State or the Commonwealth
 - (c) the project’s potential effect on relevant infrastructure;
 - (d) the employment opportunities that will be provided by the project;
 - (e) the potential environmental effects of the project;
 - (f) the complexity of local, State and Commonwealth requirements for the project;
 - (g) the level of investment necessary for the proponent to carry out the project;
 - (h) the strategic significance of the project to the locality, region or the State.²¹

¹⁷ The reference to ‘*significant project*’ was omitted and replaced with ‘*coordinated project*’ on 21 December 2012 when section 325 and Schedule 2 Amendment 9 of the *Economic Development Act 2012* No. 43 commenced. The change was simply a change in terminology – it is otherwise of no significance.

¹⁸ Sections 26, 27 and 28 of the *SDPWO Act*.

¹⁹ Section 26(1) of the *SDPWO Act*.

²⁰ Section 26(2) of the *SDPWO Act*.

²¹ Section 27 of the *SDPWO Act*.

57. The declaration of a significant project is made by gazette notice.²²

2.2 The EIS assessment process

58. The EIS assessment process involves the steps described below.²³

2.2.1 Notice of EIS and draft terms of reference

59. The Coordinator-General must advise the proponent that an EIS is required.²⁴ An EIS is to address the terms of reference (‘TOR’) set by the Coordinator-General.

60. Before setting the TOR, the Coordinator-General may seek comment from the public with respect to the draft TOR within a period specified by the Coordinator-General.²⁵

2.2.2 Final TOR

61. After considering any comments on the draft TOR received within the comment period (assuming comments from the public are sought and provided), the Coordinator-General provides a copy of the finalised TOR to the proponent.²⁶

2.2.3 Information to assist preparation of EIS

62. Having prepared TOR, the Coordinator-General may seek information from other entities to assist in preparation of the EIS. Responses from such entities (received within the response time stipulated by the Coordinator-General) will be considered in the preparation of the EIS.²⁷

2.2.4 Preparation of EIS

63. The proponent of the project prepares an EIS. The EIS is to address, for the whole project, the TOR to the satisfaction of the Coordinator-General.²⁸

²² Section 26(4) of the *SDPWO Act*.

²³ Part 4, Division 3 of the *SDPWO Act* stipulates the assessment process that applies to a significant project for which an EIS is required – see section 29A of the *SDPWO Act*.

²⁴ Section 29(1)(a) of the *SDPWO Act*.

²⁵ Section 29 of the *SDPWO Act*.

²⁶ Section 30 of the *SDPWO Act*.

²⁷ Section 31 of the *SDPWO Act*.

²⁸ Section 32 of the *SDPWO Act*.

2.2.5 Public notification of EIS

64. Once the Coordinator-General is satisfied with the EIS, the proponent must publicly notify details of the EIS and seek comment by submission to the Coordinator-General within a stipulated submission period set by the Coordinator-General.²⁹
65. Submissions about the EIS may be made by any person.³⁰

2.2.6 Report evaluating the EIS

66. At the end of the submission period for the EIS, the Coordinator-General must consider:
- (a) the EIS;
 - (b) all properly made submissions and other submissions accepted by the Coordinator-General about the EIS; and
 - (c) any other material the Coordinator-General considers is relevant to the project.³¹
67. The Coordinator-General may ask the proponent for additional information or comment about the EIS and the project.³² This is referred to in the EIS evaluation report as the AEIS.
68. The acronym ‘*AEIS*’ is not used in the *SDPWO Act*. It is an acronym adopted administratively to describe the information received by the Coordinator-General section 35(2) of the *SDPWO Act*. For consistency this review also uses the acronym ‘*AEIS*’ to describe the information sought and received by the Coordinator-General pursuant to section 35(2) of the *SDPWO Act*.
69. Finally, the Coordinator-General must prepare a report evaluating the EIS.³³

²⁹ Section 33 of the *SDPWO Act*.

³⁰ Section 34 of the *SDPWO Act*.

³¹ Section 35 of the *SDPWO Act*.

³² Sections 35 of the *SDPWO Act*.

³³ Section 35(3) of the *SDPWO Act*.

70. In evaluating the EIS, the Coordinator-General may:
- (a) evaluate the environmental effects of the project and any other related matters;
 - (b) stipulate conditions that are to be included in any:
 - (i) development approval under the planning legislation;³⁴
 - (ii) proposed mining lease under the *Mineral Resources Act 1989* (Qld);
 - (iii) environmental authority under the *Environment Protection Act 1994* (Qld);
 - (iv) proposed petroleum lease, pipeline licence or petroleum facility licence under the *Petroleum and Gas (Production and Safety) Act 2004* (Qld);
 - (v) proposed greenhouse gas injection and storage lease under the *Greenhouse Gas Storage Act 2009* (Qld); or
 - (vi) proposed geothermal production lease under the *Geothermal Energy Act 2010* (Qld);
 - (c) make recommendations:
 - (i) for inclusion of requirements in a designation as community infrastructure made under the planning legislation; and
 - (ii) about conditions (or refusal of an approval) with respect to other approval processes that may apply for a project; and
 - (d) if none of the approval process referred to in paragraph 70(b) above applies with respect to the project, impose conditions on the undertaking of the project.³⁵

³⁴ In Reprint 5, this was the *Integrated Planning Act 1997* (Qld). At the time of the EIS evaluation report, the applicable planning legislation was the *Sustainable Planning Act 2009* (Qld).

³⁵ Section 35(4) of the *SDPWO Act*.

71. With respect to the evaluation of the environmental effects of the project and any other related matters, the Schedule to the *SDPWO Act* defines:

- (a) *'environmental effects'* as *'the effects of development on the environment, whether beneficial or detrimental'*; and
- (b) *'environment'* as including:
 - (a) *ecosystems and their constituent parts, including people and communities;*
 - (b) *all natural and physical resources; and*
 - (c) *the qualities and characteristics of locations, places and area, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community;*
 - (d) *the social, economic, aesthetic and cultural conditions that affect, or are affected by, things mentioned in paragraphs (a) to (c).*

3. HISTORY OF THE PROJECT

3.1 The importance of the history of the Project

72. This history is important to understand the context of the Project and the process of evaluation, demonstrated by the documents, undertaken by the Coordinator-General.

3.2 The environmental coordination process

73. Chapters 8 to 12 of this review contains an administrative review of the Coordinator-General's evaluation of the Project.

74. Before turning to the detail of that review, it is worth noting, in broad terms:

- (a) the history of the Project, in terms of its progression through the environmental coordination process referred to in Part 4 of the *SDPWO Act*; and
- (b) actions taken by the Coordinator-General in evaluating the EIS.

75. In that respect Chapter 3 of the EIS evaluation report states:

In undertaking this evaluation, I have considered the following:

- *initial advice statement (IAS)*
- *EIS and technical reports*
- *comments and issues raised in submissions on the EIS from non-government organisations and members of the public*
- *AEIS*
- *comments and issues raised in submissions on the AEIS from non-government organisations and members of the public*
- *advice received from federal, state and local government agencies*
- *the proponent's responses to information requests.*

76. In terms of the evidence available about what the Coordinator-General considered, this review has been limited to a review of documents and other material held by the Coordinator-General relating to the EIS evaluation process.

77. From the documents provided, it can be ascertained that:
- (a) the Coordinator-General was provided, and did sign, various briefing notes as referred to herein;
 - (b) the briefing notes were means of providing information to the Coordinator-General in a structured and formalised way and often included recommendations for the Coordinator-General to approve decisions and note attached documents and various matters;
 - (c) the briefing note attachments included the documents referred to in paragraph 75 as having been considered by the Coordinator-General, other than '*comments and issues raised in submissions on the AEIS from non-government organisations and members of the public*'³⁶;
 - (d) the briefing notes also attached other documents, such as summaries of submissions, other than summaries of submissions received after the AEIS; and
 - (e) the briefing notes, and attachments such as any summaries of submissions, were prepared by departmental officers; and
 - (f) the departmental officers prepared summaries and notes informing the Coordinator-General of issues throughout the process with the benefit of extensive meetings and communications with government agencies and expert consultants engaged by the Proponent.
78. The briefing note process is set out in detail at paragraphs 163 to 164.
79. This chapter gives an indication of some of the additional work undertaken by departmental officers, as well as noting key briefing notes provided to the Coordinator-General and notable attachments to those briefing notes. It is, however, by no means an extensive summary of the work undertaken by the departmental officers with respect to the Project, which work clearly informed the briefing notes (and its attachments) provided to the Coordinator-General.

³⁶ This phrase is used in Chapter 3 of the EIS evaluation report page 7.

80. Further, given the nature of this review, being one undertaken by reference to documents only, it is not possible to provide an indication of the extent to which the Coordinator-General informed himself through meetings or discussions with departmental officers or by reviewing documents other than those emailed to him or attached to briefing notes.

3.3 Declaration of the Project

81. By letter dated 17 April 2007, the Proponent³⁷ applied to the Coordinator-General for environmental coordination of the Project and provided an initial advice statement in support of its application.³⁸
82. At that stage, the Project involved:³⁹
- (a) the Stage 3 expansion of the New Acland Coal Mine through the development and operation of two new open cut pits (Manningvale and Sabine/Willeroo Pits) producing nine million tonnes per annum with a mine life of approximately 25 to 30 years. The Manningvale pit includes the township of Acland;
 - (b) a new mining lease within MDL 244;
 - (c) diversion of Lagoon Creek, which is otherwise intercepted by the Manningvale Pit;
 - (d) possible pipeline from Toowoomba to facilitate use of one of the waste water streams from the upgraded Wetalla Waste Water Treatment Plant in Toowoomba; and
 - (e) relocation of Jondaryan-Muldu Road.

³⁷ A wholly owned subsidiary of New Hope Corporation Limited – see EIS page ES-4.

³⁸ Letter from New Acland Coal Pty Ltd to Coordinator-General dated 17 April 2007. Doc 1-0006.

³⁹ New Acland Coal Mine Stage 3 Initial Advice Statement pages 6 and 9-14. Doc 1-0005 pages 7 and 10-15.

83. In considering whether to declare the Project a significant project, the Coordinator-General had regard to, inter alia:⁴⁰
- (a) detailed information about the Project given by the Proponent as part of an initial advice statement;
 - (b) the strategic significance of the Project, being, at that time, to produce an alternative fuel supply for the Tarong Power Station by January 2011, it being a facility that supplies approximately 25 per cent of Queensland's baseload electricity requirements;
 - (c) the complexity of approvals: the approval processes that would be coordinated would be the approvals for a '*controlled action*' under the EPBC Act, for a water pipeline under the *Water Act 2000*, for a new mining lease and amended environmental authority and other State approvals;
 - (d) the environmental effects, which included the possible diversion of an ephemeral water course and the removal of listed threatened species; and
 - (e) infrastructure impacts, including the realignment of local government controlled roads under the *Land Act 1994* and the removal of the town of Acland.
84. On 9 May 2007, the Coordinator-General declared the Project to be a significant project for which an EIS is required.⁴¹ The declaration referred to the '*New Acland Coal Mine: Stage 3 Project*'. It was published in the Queensland Government Gazette on 18 May 2007.⁴²
85. On 10 May 2007, the Coordinator-General wrote to the Proponent and advised that the Project had been declared a significant project and that an EIS is required for the Project.⁴³
86. On 24 May 2007, the Project was deemed a '*controlled action*' under section 75 of the *EPBC Act* by the Commonwealth Minister for the Environment and Water

⁴⁰ See section 27 of the *SDPWO Act*. Coordinator-General's Briefing Note dated 9 May 2007. Doc 1-0009.

⁴¹ Section 26(1)(a) of the *SDPWO Act*. Doc 1-0009 Attachment 2.

⁴² Queensland Government Gazette 18 May 2007. Doc 1-0012.

⁴³ See section 29(1) of the *SDPWO Act*. Letter from Coordinator-General to New Acland Coal Pty Ltd dated 10 May 2007. Doc 1-0009 Attachment 4.

Resources (as it then was) due to its potential to have a significant impact on a matter of national environmental significance, namely listed threatened species and communities.⁴⁴ As a consequence, the Project required assessment and approval under the *EPBC Act*. Pursuant to a bilateral agreement between the Australian and Queensland Governments, which agreement is given force under section 87(1)(a) of the *EPBC Act*, the EIS process under the *SDPWO Act* has been accredited to enable the EIS under the *SDPWO Act* to meet the impact assessment requirements under the *EPBC Act*. The interaction between the *SDPWO Act* and the *EPBC Act*, and the significance of the bilateral agreement, is explained in more detail in Section 11.1 below.

3.4 Notice of EIS and draft TOR for the initial Project

87. On 21 July 2007, the Coordinator-General publicly notified:
- (a) that an EIS was required for the Project;
 - (b) where copies of the draft TOR may be obtained, namely online at www.infrastructure.qld.gov.au/eis or at council offices of Rosalie Shire Council, Jondaryan Shire Council and Toowoomba City Council; and
 - (c) that comments on the draft TOR are invited by close of business 20 August 2007.⁴⁵
88. There were 15 submissions received with respect to the draft TOR – 14 from advisory agencies and one from a resident of Acland Township.⁴⁶
89. On 24 October 2007, having regard to these submissions,⁴⁷ the Coordinator-General finalised the TOR.⁴⁸

⁴⁴ Letter from Commonwealth Department of the Environment and Water Resources to Coordinator-General dated 28 May 2007. See sections 18 and 18A of the *EPBC Act*. Doc 1-0014.

⁴⁵ See section 29(1)(b) of the *SDPWO Act*. Coordinator-General's Briefing Note dated 17 July 2007 with attachments including draft newspaper advertisement. Doc 2-0003.

⁴⁶ Copy of submissions. Doc 2-0004.

⁴⁷ as is required in section 30(2) of the *SDPWO Act*. Attachment 3 to the Coordinator-General's Brief dated 22 October 2007 contains an accurate summary of the submissions and details how those amendments were treated in the final TOR. The version of the final TOR attached to the briefing note to the Coordinator-General also contained footnotes cross-referencing the submissions that resulted in amendments. Doc 3-0001.

⁴⁸ New Acland Coal Mine Stage 3 Expansion Project – Terms of Reference for an Environmental Impact Statement dated October 2007. Doc 3-0002.

3.5 Final TOR for the initial Project

90. On 25 October 2007, the Coordinator-General gave the Proponent a copy of the finalised TOR. These TOR had been amended to also reflect a modification to the proposal following the unsuccessful bid to secure long term coal supply contract to the Tarong Power Station.⁴⁹
91. On 12 December 2008, the Commonwealth Department of Environment, Water, Heritage and the Arts (as it then was) notified the Coordinator-General of a request it had received from the Proponent to vary the proposal to allow additional extraction of coal resource within the original proposed mining lease area.⁵⁰ The Coordinator-General indicated that this was considered to be within the scope of the Project as declared.⁵¹

3.6 Preparation of EIS for the original Project

92. On 15 October 2009, the Proponent provided the Coordinator-General with a copy of the EIS (*'the initial EIS'*).⁵²
93. The initial EIS described the proposal as involving *'the staged expansion of the Mine up to a capacity of 10 Mtpa of product coal through the inclusion and progressive development of three new resource areas within MLA 50232'*.⁵³ The three new resource areas were Manning Vale, Willeroo and Sabine.⁵⁴
94. Pursuant to section 32(1)(b) of the *SDPWO Act*, the Proponent elected to expedite part of the Project, namely the construction of an underground pipeline intended to deliver recycled water from Toowoomba Regional Council Wetalla Wastewater Reclamation Facility to the mine site, by providing a separate EIS for the Wetalla

⁴⁹ Letter from Coordinator-General to New Acland Coal Pty Ltd dated 25 October 2007. Doc 3-0001 Attachment 2.

⁵⁰ Letter from Commonwealth Department of the Environment, Water, Heritage and the Arts to the Coordinator-General dated 12 December 2008. Doc 4-0001.

⁵¹ Letter from Coordinator-General to Commonwealth Department of the Environment, Water, Heritage and the Arts dated 3 February 2009. Doc 4-0002.

⁵² In accordance with section 32 of the *SDPWO Act*. Letter from New Acland Coal Pty Ltd to Coordinator-General dated 15 October 2009. Doc 4-0004.

⁵³ New Acland Coal Mine Stage 3 Expansion Project Environmental Impact Statement dated November 2009 page 1. Doc 4-0006 page 31.

⁵⁴ New Acland Coal Mine Stage 3 Expansion Project Environmental Impact Statement dated November 2009 page 3. Doc 4-0006 page 33.

Water Pipeline project.⁵⁵ The Wetalla Water Pipeline EIS and subsequent supplementary report were apparently released for review and comment in July 2008 and October 2008 respectively. The Coordinator-General's report on this part of the Project was apparently released on 19 December 2008 and determined that the Wetalla Water Pipeline could proceed subject to specific recommendations and conditions.⁵⁶

3.7 Public notification of EIS for the original Project

95. On 10 November 2009, the Coordinator-General approved release of the initial EIS for public and advisory comment from Saturday 14 November 2009 to Friday 18 December 2009 on the basis that it substantially met the requirements of the TOR.⁵⁷ The Proponent was informed of the release and its requirements with respect to public notification of the initial EIS by letter dated 11 November 2009.⁵⁸ The initial EIS was publicly notified by advertisements in *The Weekend Australian*, the *Courier Mail* and the *Toowoomba Chronicle* on 14 November 2009.⁵⁹
96. On 16 December 2009, the Proponent was notified of a decision to extend the submission period until 3 February 2010 due to the omission of certain studies relating to groundwater in Appendix G of the initial EIS.⁶⁰ The extension to the submission period for the initial EIS was publicly notified by advertisements in *The Weekend Australian*, the *Courier Mail* and the *Toowoomba Chronicle* on 19 December 2009.⁶¹
97. A total of 51 submissions were received with respect to the initial EIS.⁶²

⁵⁵ New Acland Coal Mine Stage 3 Expansion Project Environmental Impact Statement dated November 2009 page 4 and Brief to Coordinator-General dated 10 November 2009 page 2. Doc 4-0006 page 34 and Doc 4-0005 page 2.

⁵⁶ We note that we have not been provided with any source documents that evidence these matters. The information has been sourced from comments made in a briefing note to the Coordinator-General. Brief to Coordinator-General dated 10 November 2009 page 2. Doc 4-0005 page 2.

⁵⁷ Brief to Coordinator-General dated 10 November 2009. Doc 4-0005.

⁵⁸ Letter from Deputy Coordinator-General to New Acland Coal Pty Ltd dated 11 November 2009. Doc 4-0007.

⁵⁹ Copy of advertisements. Doc 4-0018, 4-0016 and 4-0017.

⁶⁰ Letter from Deputy Coordinator-General to New Acland Coal Pty Ltd dated 16 December 2009. Doc 4-022. Decision recorded in Coordinator-General's Brief for Decision. Doc 4-021.

⁶¹ Copy of advertisements. Doc 4-0028, 4-0029 and 4-0030.

⁶² Copy of submissions. Doc 4-0033 to Doc 4-0083.

3.8 Proponent revised the Project

98. On 9 October 2012, in response to the new government's announcement that the Project would not be supported due to its effects on good quality agricultural land and its proximity to the community, New Hope Group provided a revised Project description to the Coordinator-General.⁶³

99. The key elements of the revised Project were described as:⁶⁴

- *continuation of the existing mining activities to extend to parts of the Manning Vale and Willeroo resource areas within MLA 50232, located to the south and west of the current MLs 50170 and 50216;*
- *production of between 6.5 Mtpa to 7.5 Mtpa of product coal which equates to approximately 14 Mtpa Run-of-Mine (RoM) Coal;*
- *production of between 96 Mt to 122 Mt of product coal over the life of the Project;*
- *construction period commencing in 2015 to 2017, initially involving the construction of site access and roads (including re-alignments), water management structure and additional supporting infrastructure;*
- *maintenance of existing thin seam coal, open cut mining techniques and expansion of the Mine's truck and loader mining fleet;*
- *upgrade of the existing Coal Handling and Preparation Plant (CHPP), RoM and product coal stockpile areas and supporting infrastructure on ML 50170;*
- *tailings disposal with Tailings Storage Facilities (TSFs) located in-pit on Mining Lease Area;*
- *progressive disposal of coarse rejects to cells within the overburden dumps;*
- *emplacement of two out-of-pit spoil dumps containing a total material volume of 56 Mm³ over 170 hectares (ha) associated with the Manning Vale and Willeroo pits;*
- *Generation of three depressed landforms at the end of the mining by backfilling and re-profiling final pits, comprising 523 ha within the total active area of the Project equalling 3 163 ha;*
- *raw water supply from the Wetalla Wastewater Reclamation Facility (WWRF) from Toowoomba via a 45 km pipeline. This project was the subject of a separate EIS process under the SDPWO Act, already exists and is fully operational*
- *a mine surface water management system involving various water management structures staged to accommodate the progressive development of the Mine. These water management structures will be constructed to divert clean water and capture and manage mine area runoff and mine pit water for reuse;*
- *upgrades to the existing administration and heavy vehicle maintenance area on ML 50170;*

⁶³ Letter from New Hope Group to Coordinator-General dated 9 October 2012. Doc 6-0029 to 6-0031.

⁶⁴ Doc 6-0030.

- *relocation and potential upgrade of the power supply to the Project;*
- *diversion of the Jondaryan-Muldu Road around the Manning Vale resource area;*
- *development of a suitable 'off set' strategy to satisfy State and Federal requirements for clearance of significant vegetation within new operational areas on MLA 50232;*
- *preservation of historical items in the Township of Acland;*
- *construction of a new 8km spur rail line from Jondaryan to MLA 50232;*
- *construction of a new Materials Handling and Train Loading Facility on MLA 50232;*
- *partial decommissioning and relocation of existing local telecommunication network within the Project site;*
- *comprehensive progressive rehabilitation program involving continuous monitoring and reporting in line with the agreed post mining land use; and*
- *amendment of NAC's existing EA authorising a sustainable level of environmental harm commensurate to the Project's size and scope.*

100. The amendments were described as:⁶⁵

- *Reduction in the active MLA Project area from 5,069 ha to 3,163 ha representing a 38% reduction;*
- *No mining in the Sabine Area;*
- *Reduction in throughput from 10 Mtpa to:*
 - *Maximum 7.5Mtpa through incremental expansion; and*
 - *Life of Mine to 2029;*
- *Reduction in disturbance footprint by 2,304ha (63%) through:*
 - *Southern areas of MLA excluded from mining (10km from Oakey);*
 - *Acland town excluded from mining; and*
 - *Lagoon Creek excluded from mining (No creek diversion);*
- *Reduction SCL impact by 446 ha (51%):*
 - *427 ha potential SCL to be disturbed;*
- *No requirement for a new CHPP, current CHPP to be upgraded;*
- *No out-of-pit tailing storage facility;*
- *No requirement for a new Raw Water Dam to supply existing and upgraded CHPP;*
- *Reduction of out-of-pit dump down to 2 instead of 4;*
- *No final voids to remain – Final mining pits to be backfilled and profiled to depressed landform to meet sustainable land-use practices;*
- *No requirement for new Mine Industrial Area, upgrade of existing facility;*
- *No diversion of Lagoon Creek;*

⁶⁵ Doc 6-0031.

- *No closure of the Acland Township;*
- *No relocation of significant historical items to an 'Acland Heritage Precinct' off-site e.g., No 2 Colliery;*
- *No relocation of the Acland War Memorial;*
- *Additional construction of a spur rail line from Jondaryan to MLA 50232; and*
- *Decommissioning of the Jondaryan Rail Loading Facility (JRLF);*
- *Additional construction of a new Materials Handling and Train Loading Facility on MLA 50232.*

101. At this juncture the Coordinator-General sought legal advice on the effects of the revised Project description.
102. The potential legal issues raised by the revision of the Project at this juncture are discussed in Chapter 4.
103. On 30 October 2012, the Coordinator-General decided that new TOR for an EIS were required to address the revised Project and that the draft TOR would be issued for public comment.
104. On 9 November 2012, the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (as it then was) wrote to the Coordinator-General and noted that it had, on 26 October 2012, received a request from the Proponent for a variation of a proposal to take an action, effectively seeking permission to vary the application it was making under the *EPBC Act* to reflect the changes to the Project being considered under the *SDPWO Act*. The request for variation of the proposal was accepted under section 156B of the *EPBC Act*.⁶⁶

3.9 Notice of requirement for EIS and draft terms of reference for the revised Project

105. On 26 November 2012, the Coordinator-General wrote to the Proponent and advised that on 30 October 2012 he directed that new TOR for an EIS were required to address the recent modifications to the Project's scope, and that he had

⁶⁶ Doc 6-0050.

now approved release of draft TOR for the EIS for public and advisory agency comment from 1 December 2012 to 4 February 2013.⁶⁷

106. While including terms specific to the revised Project such as the requirement to consider impacts on local towns including Acland, Jondaryan and Oakey, the draft TOR was based on (or generated from) the ‘*generic TOR*’. As such, the draft TOR included requirements for addressing current legislation, policy and procedure⁶⁸ rather than potentially superseded legislation, policy and procedure that applied at the time that the Project was first declared a significant project.
107. On 1 December 2012, the Coordinator-General publicly notified:
- (a) that an EIS was required for the revised Project;
 - (b) where copies of the draft TOR may be obtained, namely online at www.infrastructure.qld.gov.au/eis or at council offices of Rosalie Shire Council, Jondaryan Shire Council and Toowoomba City Council; and
 - (c) that comments on the draft TOR are invited by close of business 4 February 2013.⁶⁹
108. The public notice also noted:⁷⁰
- (a) the key features of the revised Project;
 - (b) that TOR were initially finalised for the Project in October 2007, and an EIS published in November 2009;
 - (c) in response to concerns raised in March 2012 by the incoming State Government about the potential impacts, the Proponent has now significantly reduced and revised the Project’s scope;

⁶⁷ Letter from Coordinator-General to New Hope Corporation Limited dated 26 November 2012. Doc 7-0013.

⁶⁸ Briefing Note to Coordinator-General dated 23 November 2012 (approved 24 November 2012). Doc 7-0010.

⁶⁹ See section 291(1)(b) of the *SDPWO Act*. Coordinator-General’s Briefing Note dated 23 November 2012 and attachments. Doc 7-0010 and 7-0012.

⁷⁰ Doc 7-0012.

- (d) the Coordinator-General has directed that due to the Project modifications, new TOR are required, with input from the public and advisory agencies required on what a new EIS for the revised Project should address; and
 - (e) persons who made a submission on the previous (and now superseded) TOR for the Project (finalised in 2007) will need to make a new submission based on these TOR if they want any comments to be considered.
109. In addition to this public notification, the Coordinator-General wrote to each person (individuals, organisations and government agencies) who made a submission with respect to the original EIS notifying them that the Project had been revised and inviting them to comment on the EIS for the revised Project.⁷¹
110. There were 67 submissions received during the public notification period for the draft TOR for the revised Project – 14 from State government agencies, one from Toowoomba Regional Council, one from the Commonwealth Department of Defence, eight from organisations and 43 from private submitters.⁷²
111. Many of the submissions, particularly those from private submitters, provided comment on the merits of the revised Project itself, not simply the draft TOR.⁷³
112. On 22 March 2013, the Coordinator-General was provided a briefing note recommending approval of the release of the final TOR.⁷⁴ The briefing note attached:
- (a) a list of submitters, grouped by category (private, organisations and government) and, with respect to the 43 private submitters, analysing the estimated proximity of the submitters to the Project site;⁷⁵
 - (b) a summary of key comments made in submissions and how these have been considered by departmental officers in finalising the TOR;⁷⁶

⁷¹ Doc 7-0030.

⁷² Doc 8-0019.

⁷³ Doc 7-0039 – 7-0111.

⁷⁴ Doc 8-0001.

⁷⁵ Doc 8-0019.

⁷⁶ Doc 8-0020.

- (c) a submissions analysis register showing how the comments were considered by the departmental officers;⁷⁷
- (d) a copy of the advertised draft TOR with '*tracked changes*' showing the updates made to the TOR by departmental officers in response to comments made in submissions;⁷⁸ and
- (e) an email from the Commonwealth Department of the Environment confirming that it had provided comment on the proposed final TOR.⁷⁹

113. On 22 March 2013, the Coordinator-General approved the final TOR for the revised Project.⁸⁰

3.10 Final TOR for the revised Project

114. On 22 March 2013, the Coordinator-General gave the Proponent a copy of the finalised TOR for the revised Project.⁸¹

115. On 22 March 2013, the Coordinator-General also wrote to numerous government agencies to inform them that finalised TOR for the revised Project were available on the Department's website.⁸²

116. On 27 March 2013, the Executive Director for Coordinated Project Delivery, a departmental officer from the Coordinator-General's department, wrote to each of the submitters⁸³ thanking them for the information supplied and noting:

- (a) their submission was considered and, where appropriate, resulted in changes to the TOR;
- (b) the final TOR were available on the Department's website;
- (c) once the EIS has been prepared to the satisfaction of the Coordinator-General, it will be released for public comment;

⁷⁷ Doc 8-0021.

⁷⁸ Doc 8-0022.

⁷⁹ Doc 8-0023.

⁸⁰ Brief for Statutory Decision to the Coordinator-General. Doc 8-0001.

⁸¹ Letter from Coordinator-General to New Hope Corporation Limited dated 22 March 2013. Doc 8-0003 Attachment 2.

⁸² Doc 8-0004 to Doc 8-0006, Doc 8-0008 to Doc 8-0014, Doc 8-0016 to Doc 8-0018.

⁸³ Doc 8-0025 to 8-0076.

- (d) advertisements notifying the release and inviting comment on the EIS will be placed in local and state newspapers; and
- (e) all properly made submissions must be considered by the Coordinator-General in his evaluation of the EIS.

3.11 Preparation of EIS for the revised Project

117. Between February 2013 and August 2013, departmental officers participated in a number of technical workshops with respect to each of the following disciplines:⁸⁴

- (a) air;
- (b) noise and vibration;
- (c) groundwater resources;
- (d) heritage;
- (e) terrestrial/offsets;
- (f) strategic cropping land validation; and
- (g) social impact assessment.

118. Attendees at the technical workshops included departmental officers from the Office of the Coordinator-General, representatives of the Proponent, consultants engaged by the Proponent and, depending on the discipline being discussed at the workshop, departmental officers from other State government departments such as the Department of Natural Resources and Mines or the Department of Environment and Heritage Protection. Matters discussed at the workshops included:⁸⁵

- (a) legislation and policies relating to the issue;
- (b) current knowledge of the site;
- (c) overview of potential impacts from the revised Project; and
- (d) proposed assessment methodology.

⁸⁴ See reference to the schedules for these workshops in Doc 9-0001 to Doc 9-0006.

⁸⁵ See Doc 9-0007 to Doc 9-0059.

119. Between 11 September 2013 and 8 October 2013 various government agencies provided preliminary comments with respect to draft chapters of the EIS.
120. On 23 September 2013, the Proponent provided a full draft of the EIS (Version 1) for the revised Project so that it may be reviewed for consistency with the TOR.⁸⁶ Draft EIS Version 1 was a sizeable document (a number of lever arch folders).
121. On 25 October 2013, the Assistant Coordinator-General was provided a briefing note with respect to the results of an adequacy review of the Draft EIS Version 1.⁸⁷ The briefing note:
- (a) attached a copy of the Draft EIS Version 1;
 - (b) noted that departmental officers had undertaken an adequacy review of the draft EIS against the TOR, which review had been informed by consultation with Department of Environment and Heritage Protection, Department of Natural Resources and Mines, Department of Transport and Main Roads and the Commonwealth Department of the Environment;
 - (c) attached advice from the Commonwealth Department of the Environment to the effect that the draft EIS was not suitable for release at that time; and
 - (d) recommended the Assistant Coordinator-General sign a letter to the Proponent confirming that the draft EIS does not yet address the TOR and enclosing a document advising the revisions required to be made to the draft EIS.
122. The briefing note described the key issues requiring changes, including:
- (a) matters of national environmental significance amendments to address the Commonwealth Department of Environment's comments, primarily that the results of further surveys due to occur in weeks needed to be included in the EIS;
 - (b) groundwater, flooding and surface water issues;

⁸⁶ Doc 9-0069.

⁸⁷ Doc 9-0084.

- (c) social impact assessment matters;
 - (d) air quality;
 - (e) noise and vibration; and
 - (f) incorrect cross-references, section references, figure numbers and administrative errors.
123. On 25 October 2013, the Assistant Coordinator-General advised the Proponent that the draft was provided to the Department of Environment and Heritage Protection, Department of Natural Resources and Mines, Department of Transport and Main Roads and to the Commonwealth Department of the Environment and that, having regard to a review of the adequacy of the EIS and the advice received from those agencies, the draft EIS did not warrant release for public notification as it did not adequately address the TOR.⁸⁸ The letter attached an advice with respect to the amendments that were required.⁸⁹
124. Around this same time, the Commonwealth Minister for the Environment notified the Proponent that the revised Project also required assessment and approval under the *EPBC Act* as an action that is likely to have a significant effect on water resources (and that sections 24D and 24E of the *EPBC Act* are controlling provisions⁹⁰).⁹¹
125. An excel spread sheet prepared by departmental officers indicates that the Proponent provided another draft EIS, which was referred to internally as draft EIS Version 2, on 3 December 2013.⁹²
126. Draft EIS Version 2 was reviewed by departmental officers and comments were provided to the Proponent with respect to various aspects of Draft EIS Version 2 between 9 December 2013 and 12 December 2013.⁹³

⁸⁸ Brief for Approval to the Coordinator-General. Doc 9-0084. Letter to New Hope Corporation Limited dated 25 October 2013. Doc 9-0085.

⁸⁹ Doc 9-0086.

⁹⁰ The relevance of the '*controlling provisions*' is described in more detail in Section 11.1 below.

⁹¹ AEIS page 22.

⁹² See Doc 9-0093.

⁹³ See Doc 9-0090 to 9-0093.

127. Revised chapters and further comments on those revised chapters continued to pass between the Proponent and departmental officers between 16 December 2013 and 20 December 2013.⁹⁴
128. On 20 December 2013, the Proponent provided the Coordinator-General with a copy of the EIS for the revised Project.⁹⁵

3.12 Public notification of EIS for the revised Project

129. On 24 December 2013, the Coordinator-General was provided a briefing note for statutory decision recommending he approve the release of the EIS for public notification.⁹⁶ The briefing note:
- (a) attached a copy of the Executive Summary and the EIS on CD;
 - (b) noted that departmental officers had undertaken an adequacy review of the draft EIS against the TOR, which review had been informed by consultation with Department of Environment and Heritage Protection, Department of Natural Resources and Mines, Department of Transport and Main Roads and the Commonwealth Department of the Environment and that amendments to the draft had been requested;
 - (c) attached a review of the draft EIS against the TOR prepared by departmental officers;⁹⁷
 - (d) noted that the key potential impacts discussed in the EIS include the following:
 - (i) location and sensitive receptors – there are two households occupied in the centre of Acland, five sensitive receptors within a one kilometre buffer distance and 40 sensitive receptors within a five kilometre buffer distance;
 - (ii) land impacts – the Project’s ground disturbance and rehabilitation areas equate to approximately 2,030 hectares and will impact on up

⁹⁴ See Doc 9-0004 to 9-0103.

⁹⁵ Letter from New Acland Coal Pty Ltd to Coordinator-General dated 20 December 2013. Doc 9-0105.

⁹⁶ Doc 9-0107.

⁹⁷ Doc 9-0019.

to 1,361 hectares of land mapped as potential strategic cropping land;

- (iii) economic impacts – the EIS states the Project will directly support approximately \$6.6 billion in economic output from construction/capital and operational expenditure and will directly employ up to 260 people during the peak construction phase and approximately 435 people during the peak operational phase;
- (iv) surface water – the Project is not proposing to divert Lagoon Creek, nor seeking any new water allocations;
- (v) groundwater – five aquifers exist within the Project site and the Project will result in drawdown on those aquifers, which aquifers support significant groundwater extraction for stock and domestic use. A submission to the Independent Expert Scientific Committee will be lodged following consideration of the EIS submissions;
- (vi) terrestrial flora and fauna - the overall habitat is generally of poor quality but the Project will result in the clearing of 143 hectares of remnant vegetation and will impact three threatened flora species and two listed fauna species;
- (vii) air quality – modelling indicates that without mitigation measures, there is potential for air quality impacts at seven sensitive receptors;
- (viii) noise and vibration – maximum operational noise from the mining operations at noise sensitive receptors will meet the government’s Planning for Noise Control Guidelines’ sleep disturbance criterion during the worst case temperature inversion condition at all noise sensitive receptors over the life of the Project; and
- (ix) traffic and transport – the Project will result in an increase from the current operation’s 53 movements to up to 80 rail movements to the Port of Brisbane. The Proponent is progressing land acquisition for the eight kilometre rail corridor in order to effect relocation of the rail load-out facility away from the town of Jondaryan.

130. On 24 December 2013, the Coordinator-General approved release of the EIS with respect to the revised Project for public and advisory comment from 18 January 2014 to 3 March 2014 on the basis that it substantially met the requirements of the TOR.⁹⁸ The Proponent was informed of the release and its requirements with respect to public notification of the EIS by letter dated 24 December 2013.⁹⁹ The EIS was publicly notified¹⁰⁰ by advertisements in *The Weekend Australian*, the *Courier Mail* and the *Toowoomba Chronicle* on Saturday 18 January 2014 and in the *Oakey Chronicle* on Wednesday 22 January 2014.¹⁰¹

131. The public notice:¹⁰²

- (a) described the Project as a proposal to ‘*expand operations at [New Acland Coal Pty Ltd’s] existing New Acland Coal Mine, 35 kilometres north-west of Toowoomba. The mine’s yield would increase from the current 4.8 million tonnes per annum (Mtpa) of product coal to up to 7.5 million Mtpa*’;
- (b) stated that the key features of the revised Project were:
 - (i) development of parts of the Manning Vale and Willeroo resource areas;
 - (ii) upgrades to the existing coal handling and preparation plant and supporting infrastructure;
 - (iii) new coal load-out facility and an approximately eight-kilometre rail spur; and
 - (iv) roadworks, water management structures and relocation and potential upgrade of power supply; and

⁹⁸ Brief for Statutory Decision to Coordinator-General dated 24 December 2013. Doc 9-0107.

⁹⁹ Letter from Deputy Coordinator-General to New Hope Corporation Limited dated 24 December 2013. Doc 9-0111.

¹⁰⁰ The version of the EIS that was publicly notified was not identical to that attached to the Brief for Statutory Decision to Coordinator-General dated 24 December 2013. The differences, however, are immaterial.

¹⁰¹ See Doc 9-0122 and 9-1634.

¹⁰² Doc 9-0122.

- (c) noted that the draft EIS supersedes the EIS that was published in 2009 for a larger version of the Project and that individuals and organisations who made a submission on the previous EIS will need to make a new submission on the new draft EIS to have their comments considered.

132. On 17 January 2014, the Acting Executive Director from the Coordinator-General's office wrote to the private individuals who had previously made submissions about the initial EIS and advised them of the release of the EIS for the revised Project. The letter also noted that the EIS for the revised Project *'supersedes the EIS that was published in 2009 for a larger version of the project. All individuals and organisations that made a submission on the previous EIS will need to make a new submission to have any comments considered.'*¹⁰³

133. A total of 1379¹⁰⁴ submissions were received with respect to the EIS.¹⁰⁵ The departmental officer's summary of those submissions is referred to in paragraphs 136 to 138 below.

3.13 Report evaluating the EIS for the revised Project

134. Section 35 of the *SDPWO Act* makes allowance for a number of steps in the preparation of the report evaluation the EIS; a summary of the steps undertaken is briefly outlined below.

3.13.1 Consideration of the submissions

135. On 17 April 2014, the Coordinator-General was provided a briefing note for statutory decision recommending a request be made for additional information to the EIS.¹⁰⁶ The briefing note attached:

- (a) a list of submitters, grouped by category (private, organisations and government) and, with respect to the 43 private submitters, analysing the estimated proximity of the submitters to the Project site;¹⁰⁷

¹⁰³ Doc 9-0156 to Doc 9-0221.

¹⁰⁴ The Brief for Statutory Decision dated 17 April 2014, and subsequent correspondence, states 1397 submissions were made. It seems this may have been a typographical error that has been repeated on a number of occasions.

¹⁰⁵ Copy of submissions. Doc 9-0231 to Doc 9-1609.

¹⁰⁶ Doc 10-0001.

¹⁰⁷ Doc 10-0007.

- (b) a document referred to as the '*EIS Submission Analysis Register*', which was an excel spread sheet prepared by departmental officers recording their analysis of the submissions. The document, with respect to each identified submission, describes:
- (i) the name of the submitter;
 - (ii) the category of submission (namely private, organisations and government);
 - (iii) the proximity of the submitter to the mine;
 - (iv) the component of the Project about which the submission was made;
 - (v) the issue categories and issue topics addressed by the submission. These were selected from defined lists. For example '*Land*' and '*Land – Rehabilitation*' were possible categories and topics respectively;
 - (vi) an overview of the issue: this was a more extensive description of the issue raised by the submission;
 - (vii) the recommendation or suggested mitigation proposed in the submission;
 - (viii) comments by the departmental officers on the submission;
 - (ix) whether action is required with respect to the submission; and
 - (x) direction to the Proponent with respect to the submission;¹⁰⁸
- (c) a disc containing a copy of all of the submissions received;¹⁰⁹ and
- (d) a document listing key issues raised in the submissions.¹¹⁰

¹⁰⁸ Doc 10-0008.

¹⁰⁹ Doc 10-0009.

¹¹⁰ Doc 10-0010.

136. The document containing the analysis of key issues raised by submitters recorded that the local, State and Commonwealth agencies had raised the following key issues in their submissions:¹¹¹

Department of Natural Resources and Mines (DNRM)

- *Offsets areas are located on Strategic Cropping Land*
- *More soil sampling required on topsoil to verify final land use proposal*
- *Make good provisions and identification of boreholders by aquifer required*
- *Impacts of faults in Marburg aquifer on drawdown*
- *Salinization of voids may affect proposed final land use of grazing*
- *1060 hectares of Class 2 and 3 cropping land will be lost, with the post-mining land suitability to be only Class 4 or 5 cropping land – this needs to be improved*

Department of Environment and Heritage Protection (DEHP)

- *Adaptive noise management system should deal with exceedences immediately*
- *Different years for meteorological data use for air (wet year) and noise*
- *Similar inconsistencies in inversions estimations*
- *Limit surface rights areas via an amendment to the mining lease application now*
- *Offsets details required now*
- *Water quality analysis needs work – e.g. downstream points have been used to characterise background water quality*
- *Mine discharge points: detail where uncontrolled releases would occur*

Commonwealth Department of the Environment (DOTE)

- *Further information on offsets proposal*
- *Aquifer faults and groundwater flow*
- *Water quality information for each aquifer*
- *Justification of groundwater no-flow zones*
- *Uncertainty analysis on groundwater modelling*
- *Secondary porosity of intervening sandstones*
- *Describe hydraulic conductivity, not just transmissivity*
- *Peer review of numerical model*
- *Peer review of flooding assessment*
- *Water quality of final voids' impacts on aquifers*

¹¹¹ Doc 10-0010.

Toowoomba Regional Council (TRC)

- *Acknowledges economic benefits of proposal but notes some community concerns exist re current mine and planned expansion. Further consultation should therefore be undertaken*
- *Role of TRC in assessment process uncertain*
- *Over-reliance on offsetting rather than avoid, mitigate, offset as last resort*
- *Insufficient information on existing site values to understand e.g. koala impacts*
- *Emission figures for clearing of woodland and grassland are not specific to local woodlands and grassland and are therefore misleading or inaccurate.*
- *Local road diversions: additional information requested*
- *the Biodiversity Offsets Strategy contains only vague statements of intent.*

137. The document also recorded that the individual submitters raised the following key issues (grouped by key themes):¹¹²

Air quality, blasting, noise*Some issues raised by landholders included:*

- *Lack of understanding of what is being done and how sufficient the mitigation measures are – require better practices than what’s currently undertaken.*
- *Discussion and clarification of the details of sensitive receptors, location, and intent coupled with results information regime to be established as part of the consultation process.*
- *Residents in nearby Brymaroo need to be part of the monitoring, engagement and reporting.*
- *Current monitoring of blasting activities needs to continue for stage 3 and results need to be more widely disseminated.*
- *Better understanding and clarification of the mitigation and management strategies to be put in place for local landholders in relation to these issues.*
- *Insufficient publically available data available on dust, noise, air quality.*
- *Proponent to incorporate and provide detail of the process for noise amelioration and get this information out to the community.*

Road closures, diversion, increased traffic and associated safety concerns*Some issues raised by landholders included:*

- *Clear explanation required of the impacts of Road Closures and the mitigation and management measures being put in place with landholders.*
- *Impacts on the physical delivery of services as a result of closures.*

¹¹² Doc 10-0010.

- *Unclear why roads in the South East of the Acland township will be closed (Botham Road, Greenwood School Road) community and landholders need better understanding of road issues/closures and impacts.*
- *More awareness of road closures, the timing of these the impacts on locals and alternatives.*
- *Clarification of road closures and the methods for consultation, alienation of Acland resulting in the cutting off of access to north east and west, dislocation of the community, logistical issues for local residents*
- *Limited access from Oakey to Acland.*
- *The SIMP does not cover off on changes to roads and the associated mitigation and management strategies.*
- *Only access for one landholder will be via Nungil Road which needs upgrading.*
- *Lack of understanding of the road closures.*
- *Closure of road results in 7 km journey becoming 32kms for one user*
- *Kudo and Silverleigh Road – used by NAC currently, partly an unsealed road, concerned about increased traffic using this road, how will these issues be mitigated.*
- *Increased traffic on Jondaryan/Muldu Road: currently used to move heavy farm machinery, the potential for increased volumes of traffic present safety issues how will these be dealt with.*
- *Re-routing Oakey – Cooya Road increased traffic/speed concerns.*
- *request proactive consultation and strategies to minimise impacts.*
- *Possible restricted property access not clear wants consultation with proponent.*
- *Road closures have the potential to restrict access for heavy farm machinery between landholder properties.*
- *What are impacts on the school buses?*

Groundwater, Surface Water and Flooding

Some issues raised by landholders included:

- *Range of concerns about the accuracy and level of information provide in regard to groundwater issues both specific locational issues and general concerns.*
- *Need more understanding of the closeness of the mine to Lagoon Creek in relation to surface water impacts.*
- *Better understanding of creek flows to assist in understanding impacts of the project.*
- *Better understanding of groundwater impacts on Lagoon Creek.*
- *Better understanding of flood issues associated with the rail line.*

Water Tanks

Some issues raised by landholders included:

- *Polluted water in rain water tanks - monitoring and reporting required by the proponent*

- *Impacts of coal dust in rainwater tanks*
- *What is the proponent doing in relation to contamination of rainwater tanks.*

Bores

Some issues raised by landholders included:

- *Undertake baseline study of impacts on water bores and provide a make good process which will be equal and ensure fair negotiation with impacted bore owners.*
- *More information and assessment of the impact on bores.*
- *Worried about local aquifers.*
- *Shallow fragile aquifer bore, concerned about losing this supply.*
- *Concerns about the bores, have experienced previous bore failure. Insufficient assessment of bores in Stage 3 pits.*
- *Unclear about what mitigation the proponent will offer.*
- *Concerned with the bore testing undertaken.*
- *Concerned about the failure of the bores. What monitoring will be undertaken and what mitigation measures will be provided if this arises.*

Jondaryan Rail Load-out facility/coal stock piles

Some issues raised by landholders included:

- *Noise and dust levels and the impacts on local residents as a result of the on-going use of the Jondaryan stock pile and rail yards. Require consultation and information on mitigation strategies.*
- *Issues affecting Jondaryan are not considered in the EIS.*
- *Clarification of the Jondaryan stock pile in relation to life span, date for end of operation.*
- *Undertake consultation and clarify the timing, process, and shut down of the Jondaryan rail load out.*
- *Consult and clarify with Jondaryan community and keep them informed on the closure of rail load out.*
- *No expansion until the load-out facility is moved.*

...

Health Impacts

Health matters discussed in submissions appear largely to be in connection with concerns in relation to air quality/blasting/noise, including impacts on water tanks, and arising from the Jondaryan rail load-out facility; and mental health concerns, for example, due to feeling disconnected and disengaged by the proposed project. Further information on these matters has been sought.

...

Complaints and Dispute Resolution

Some issues raised by landholders included:

- *Proponent to provide more detail around timeframes to resolves issues, what will be the process undertaken to resolve complaints, how will*

complainant's be informed of the outcome. What will be the process for mediation?

- *Do not listen to community concerns or respond to complaints well.*
- *Clear complaints process and associated timeframes for resolution of issues.*
- *Complaints process needs to be more transparent.*
- *Clearer process, nominated timeframes for resolution more detail of mediation process and how it will work.*

Consultation and engagement

Some issues raised by landholders included:

- *Increase the level, access to and mechanisms for the dissemination of information available.*
- *Proactive not reactive approach to consultation and engagement.*
- *Failed to gain community support (local residents and landholders).*
- *Poor History in the community and outcomes of consultation do not reflect community view.*
- *Approach to engagement and consultation is a concern*
- *What is the role of the community Liaison Officer clearer understanding for the community?*
- *Provision of regular information and services for the community to keep them informed of progress on mitigating impacts*
- *Concerns about the level of consultation undertaken and the efforts made to engage. Of particular concern is the level of landholder consultation undertaken*
- *Past behaviour suggests little or no concern for the community in relation to the Jondaryan stock pile /coal dust issue*
- *Inconsistent approach to consultation and engagement with some landholders at best.*
- *Unresolved concerns that need direct discussion and explanation of the issues that have not been resolved or will impact at a later date.*
- *Limited or no consultation on key issues.*
- *Requesting consultation process in relation to noise and dust impacts.*
- *Requesting discussion and seeking a landholder agreement from New Hope.*
- *Very little personal consultation with near neighbours.*
- *Community Information Centre Limited opening and access.*
- *Relying on Community Reference Group is insufficient to represent the community.*
- *Community Reference Group not well known or understood not a good mechanism for info sharing or as a mechanism for the wider community to raise issues.*
- *Community liaison services insufficient – office often closed.*

- *Received negligible information about the planning of the project and would not consider that they have been consulted.*
- *Need to be involved more regularly with broad communication of issues by the proponent on the issues affecting landholder who is 2km from the project.*
- *Lack of consultation has harvested mis-trust.*
- *Not consulted in relation to the development of the social impact assessment.*
- *Be more flexible with consultation options.*
- *Suggested that the outcomes of consultation do not reflect community and landholder views.*
- *What will NAC do to mitigate impacts and help community better understand?*

Acland township management

Some issues raised by landholders included:

- *Concerns about safety and security for limited occupants of the township.*
- *Maintenance and management required for grounds and existing buildings.*
- *Engagement mechanism required for communication with community.*
- *How can the community influence decisions made.*
- *Clarity in regard to the buildings which are being removed, or repaired when this will happen, notification to community*
- *Concerns about people removing items from vacant buildings and seeking clarification as to the security process that is in place to stop this.*
- *Current arrangements are perceived in the community as bad management by NAC.*
- *Concerned about the impacts on current services, Power supply, telephone and the need for access to Acland for delivery services including utility companies.*
- *What arrangements are in place for the removal of asbestos?*
- *Acland Township and Acland No 2 Colliery of concern- destruction of the social fabric of Acland - require a plan of action and seeking engagement to implement the Plan*
- *Provide opportunities/ mechanism/ incentives to maintain and enhance township.*
- *Why has work started on Acland (removal of buildings etc.) when the EIS process has not been finalised.*

Economic analysis of benefits and project impacts

Many submitters raised concerns with the input/output model used to assess economic benefits of the project and how it was applied in determining economic benefits of the project. Concerns were also raised that the negative impacts on agriculture and the local economy had not been adequately raised. Many submitters attributed recent closures of businesses in Oakey and other areas with the impacts of the mine.

Flora and fauna – including particularly koala impacts

Further information has been requested on management of koala impacts, with targeted mitigation measures to address impacts on koalas across the project area required within a species management plan.

Within the submissions register, requests for additional information on issues such as perceived survey gaps along the rail spur, or disagreements on the absence of significant species, have been included.

138. Finally, the document also noted that there were a number of key themes that emerged from the submissions which the departmental officers believed did not warrant a request for additional information of the Proponent, namely:¹¹³

The proponent will not pay royalties on all of the project area, as for some acquired land the Crown does not hold sub-surface minerals rights

It is understood this applies to some land relating to the project and is likely to have been applicable to other mines across the State.

There has never previously been a requirement to understand the amount of royalties within economic benefits a project may provide to the State. It is not proposed to request further information on this matter from the proponent.

Rather, it is suggested the total amount of economic benefits for the construction and operations phases, as qualified by the proponent in their response to your request for further information on their economic analysis, should be the basis for consideration of the project's economic impacts.

A cost-benefit analysis (CBA) should be required to be undertaken

The TOR for the project did not specify the methodology the proponent was to undertake in order to assess economic impacts. The proponent chose the input/output model, and the request for further information asks why this method was chosen. No direction is included to re-do the economic analysis as a CBA, however as previously discussed extensive questioning has been applied to results obtained from the proponent's economic assessment.

The Acland Sustainable Energy Plan

This plan was proposed by the Oakey Coal Action Alliance and supported by many submitters, and has been cited in recent media. The Plan proposes agricultural, eco-tourism and clean energy production alternatives to mining on the project's land.

No further information on this has been requested as the proponent owns the land it intends to mine on.

Noise and air impacts of transportation of the coal to port of Brisbane

A number of submissions raised concerns with noise impacts of Aurizon's transportation of product on the West Moreton rail line. As these operations are subject to Aurizon's haulage standards, no further information has been requested on this matter.

The Office of the Coordinator-General will convey these concerns to Aurizon and Queensland Rail (QR).

¹¹³ Doc 10-0010.

The EIS notes that EHP, TMR and Darling Downs miners have been working collectively on monitoring emissions, and imposing mitigation measures such as veneering, along the West Moreton Rail since 2013.

Flooding impacts of the existing West Moreton Rail line on Oakey

Concerns were raised by a number of submitters about the influence of the existing West Moreton rail line on flood flows to Oakey.

Further information on flooding impacts due to project-specific infrastructure (e.g. the rail spur) on Jondaryan and Oakey has been requested, however with regard to the existing rail line, OCG will convey concerns raised to the rail owner/operator Aurizon and QR.

Impacts on Strategic Cropping Land (SCL)

Concerns with mining and permanent impacts on good quality agricultural land, along with rejection of the proponent's proposal to return most land to a standard suitable for grazing, were raised.

The request for further information requires the proponent to clarify the applicability of the newly introduced Regional Planning Interests Act 2014 (RPI Act) to the project. If an application for assessment of the project under the RPI Act is to be made, the proponent is to confirm intended timeframes for lodging an application. If a decision on an application is made prior to finalising the AEIS, confirm the decision, including any conditions applied.

In addition, given the changing legislative landscape on SCL, the additional information requires the proponent to confirm legislative requirements that apply to the project to address impacts on potential SCL.

Political decision

Many submitters expressed dissatisfaction with the government's 'change of mind' about the project given an election commitment was made that the project would not proceed. No additional information was requested on this matter.

139. On 17 April 2014, the Coordinator-General signed the briefing note.¹¹⁴

3.13.2 Request for additional information from the Proponent

140. On 17 April 2014, the Coordinator-General wrote to the Proponent noting that he had concluded a review of the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, was seeking additional information to complete the evaluation of the Project.¹¹⁵ The additional information was to address the following topics:

- (a) project approvals;
- (b) project changes;

¹¹⁴ Brief for Statutory Decision to Coordinator-General dated 17 April 2014 and attachments. Doc 10-0001 to Doc 10-0010.

¹¹⁵ Letter to New Hope Corporation Limited dated 17 April 2014. Doc 10-0002.

- (c) nature conservation;
- (d) land issues, including the applicability of the *Regional Planning Interests Act 2014* and impacts on potential strategic cropping land;
- (e) air quality, noise and vibration;
- (f) Jondaryan rail load-out facility;
- (g) water resource issues, including issues with respect to flooding, water tanks, bore impacts and groundwater;
- (h) transport, traffic and roads, including issues with respect to road closures;
- (i) Acland Township;
- (j) health impacts;
- (k) complaints and dispute resolution;
- (l) consultation; and
- (m) economics.

141. Between 30 June 2014 and 27 August 2014, the Proponent provided the Coordinator-General's department with drafts of the additional information for the EIS (referred to as the 'AEIS') for review. Revisions and comments on the revisions were passed between the Proponent and departmental officers. The departmental officers also sought comment from other government agencies with respect to the adequacy of the draft AEIS.¹¹⁶

142. On 18 August 2014, the office of the Coordinator-General wrote to the Department of Natural Resources and Mines, the Department of Environment and Heritage Protection, the Department of Agriculture, Fisheries and Forestry and the Department of State Development, Infrastructure and Planning.¹¹⁷ The letters:

- (a) noted that the Coordinator-General would soon make a decision on release of the AEIS;

¹¹⁶ See Doc 11-0038.

¹¹⁷ Doc 11-0032.

- (b) noted a key issue of interest in submissions made on the EIS was the project's impacts on land use given the proposal to open-cut mine on areas of good quality agricultural land;
- (c) noted that the evaluation report on the Project would be finalised prior to any engagement by the Proponent with the *Regional Planning Interests Act 2014*; and
- (d) sought advice to inform the Coordinator-General's consideration of whether the Proponent has adequately and realistically sought to minimise and mitigate adverse impacts of the project on future land use within the context of what is achievable given areas of high value cropping land will be mined. The advice was sought by way of a short-term interagency advisory group to discuss the issue, with final advices to be provided as part of the comment period on the AEIS.

143. On 27 August 2014, the Proponent provided the AEIS. The AEIS noted amendments made to the revised Project since the release of the EIS in January 2014 include:

- (a) the partial abandonment of Mining Lease Application 50232 effective from 30 June 2014, thereby increasing the distance between the revised Project and the township of Oakey;¹¹⁸
- (b) confirmation that the development of the rail spur and balloon loop will proceed by way of an application for an infrastructure mining lease under the *Mineral Resources Act 1989 (Qld)*;¹¹⁹
- (c) confirmation that the Proponent has obtained approval to increase capacity of the existing mine (without adding equipment and while staying in the same footprint) from 4.8 million tonnes per annum of product coal to 5.2 million tonnes per annum;¹²⁰
- (d) presentation of an updated groundwater assessment;¹²¹

¹¹⁸ AEIS Section 1.4.1 page 9.

¹¹⁹ AEIS Section 1.4.2 page 12.

¹²⁰ AEIS Section 1.4.3 page 12.

¹²¹ AEIS Section 1.4.4 page 12.

- (e) amendment to the post-mine land suitability for disturbed mining areas, primarily by increasing the area of land to be returned to Class 2, 4 and 5 (grazing) land suitability and decreasing the area to be returned to Class 3 (grazing) land suitability;¹²²
- (f) changes to the alignment of a number of roads and the rail spur;¹²³
- (g) the provision of further detail to clarify the basis of the economic impact modelling assessment;¹²⁴ and
- (h) the provision of a Koala Species Management Plan.¹²⁵

144. On 27 August 2014, the Coordinator-General was provided a briefing note for statutory decision recommending the Coordinator-general approve the release of the AEIS for advisory agency and public comment.¹²⁶ The briefing note:

- (a) attached a copy of an overview of the submissions with respect to the EIS;¹²⁷
- (b) attached a copy of the EIS Submissions Analysis Register with information inserted by the Proponent indicating how the AEIS has responded to the submitter comments;
- (c) noted that the departmental officers considered that the final AEIS adequately addresses the request for further information issued on 17 April 2014 and attached an assessment by the departmental officers of the complete AEIS;¹²⁸
- (d) explained that the AEIS responded to key submitter issues and included new information about the Project, including:
 - (i) new groundwater modelling undertaken in response to advice received from the Independent Expert Scientific Committee in April

¹²² AEIS Section 1.4.5 page 13.

¹²³ AEIS Section 1.4.6 page 15.

¹²⁴ AEIS Section 1.4.7 page 15.

¹²⁵ AEIS Section 1.4.8 page 15.

¹²⁶ Doc 11-0038.

¹²⁷ Doc 11-0046.

¹²⁸ Doc 11-0049. The departmental officers also consulted with other government agencies about the adequacy of the AEIS before preparing the briefing note. See, for example, Doc 11-0010 to Doc 11-00

2014, including a sensitivity and uncertainty analysis. The re-modelling indicated greater anticipated drawdown at two of the three impacted aquifers;

- (ii) information about recent approval to increase the production at the existing mine;
- (iii) confirmation of partial abandonment of the mining lease area; and
- (iv) confirmation of details about the assessment process for the rail spur.¹²⁹

145. On 27 August 2014, the Coordinator-General approved the release of the AEIS for advisory agency and public comment from 1 September to 29 September 2014.¹³⁰

146. By letter dated 24 December 2013, the Proponent was informed of the decision to release the AEIS for public and advisory agency comment.¹³¹

147. Advertisements were placed in *The Weekend Australian*, the *Courier Mail* and the *Toowoomba Chronicle* on 30 August 2014 and the *Oakey Champion* on 3 September 2014¹³² that stated:

The proponent has produced additional information to the EIS which responds to key issues raise din submissions received on the 2014 EIS and provides updated information on the project. The Coordinator-General invites your comment on the project.

Submissions close at 5pm on 29 September 2014.

148. The Coordinator-General also signed letters to various local, State and Commonwealth agencies notifying them of the AEIS and inviting those agencies to make submissions. The letters contained the following words:

...I have reviewed the additional information to the EIS and determined that it should be released for public and advisory agency comment.

Your agency is invited to make a submission on the additional information on the EIS and, in particular, to advise:

- *proposed outcome focussed conditions for the Coordinator-General's consideration in preparation of his evaluation report, for regulatory matters relevant to your jurisdiction*

¹²⁹ Brief for Statutory Decision to Coordinator-General dated 27 August 2014. Doc 11-0038.

¹³⁰ Brief for Statutory Decision to Coordinator-General dated 27 August 2014. Doc 11-0038.

¹³¹ Letter from Coordinator-General to New Hope Corporation Limited dated 27 August 2014. Doc 11-0041.

¹³² Brief for Statutory Decision to Coordinator-General dated 27 August 2014. Doc 11-0038.

- *if any information is still outstanding that would prevent your agency from providing the above*
- *any other advice or comment for the Coordinator-General's consideration.*¹³³

149. In addition, the Coordinator-General's office sent previous submitters an email, around the time of the public notification of the AEIS, which stated:¹³⁴

... Thank you for providing a submission on the project. NAC has produced additional information to the EIS which responds to key issues raised in the submissions received on the EIS and provides further information on the project.

The Coordinator-General invites you to have your say on the project. The Coordinator-General will consider submissions on the EIS and the additional information as part of his evaluation of the project's environmental impacts.

Submissions close at 5pm on Monday 29 September 2014.

(Emphasis added)

150. Letters were also sent to submitters stating '*submissions on the project are invited*' until 5pm Monday 29 September 2014.¹³⁵

151. A total of 614 submissions were received prior to 5pm on 29 September 2014.¹³⁶

152. Numerous submissions were received in relation to the AEIS. Many were from private submitters who expressed generalised support or opposition to the Project.

153. Many supporters identified themselves as employees or contractors of the mine or their relatives.

154. Most opposition identified, in general terms, perceived effects of the Project on the environment and agriculture. Many expressed general concerns about the effects of the Project on traffic, groundwater, public health, and on the township of Acland itself. In the main, this involved a reiteration of concerns previously expressed in submissions on the EIS or a generalised comment that measures identified in the AEIS were insufficient.

155. There were some advisory agency submissions that dealt with specific issues raised in the AEIS, notably of the Department of Environment and Heritage Protection, the Department of Natural Resources and Mines, the Department of Transport and

¹³³ Doc 11-0042.

¹³⁴ Doc 11-0064.

¹³⁵ Doc 11-0072.

¹³⁶ Doc 11-0080 to Doc 11-0695.

Main Roads, the Department of Forestry and Fisheries and the Commonwealth Department of Environment. These are detailed below in Chapters 8 to 12.

156. Departmental officers prepared an excel spread sheet recording their analysis of the 614 submissions received in response to this most recent public notification of the Project (referred to herein as the '*further submissions*'). The document, with respect to each identified further submission, describes:¹³⁷
- (a) the name of the submitter;
 - (b) the category of submission (namely private, organisations and government);
 - (c) the component of the project about which the submission was made;
 - (d) the issue topics addressed by the submission. These were selected from defined lists, for example '*Land – Rehabilitation*';
 - (e) an overview of the issue: this was a more extensive description of the issue raised by the further submission; and
 - (f) the recommendation or suggested mitigation proposed in the further submission;
 - (g) comments by the departmental officers on the further submission;
 - (h) whether action is required with respect to the further submission; and
 - (i) direction to the Proponent with respect to the further submission.

3.13.3 Consideration of EIS and other material

157. During the process of reviewing the EIS and the submissions on the EIS, as well as the AEIS and the further submissions (received after the AEIS), the Coordinator-General (or his departmental officers) sought further relevant information from the Proponent and others.
158. The information provided by the Proponent after the public notification of the AEIS is collected in a report dated December 2014.

¹³⁷ Doc 11-0697. We have no documentary evidence that this was ever provided to the Coordinator-General.

159. The administrative review in Chapters 8 to 11 of this review details the other relevant information considered by the Coordinator-General in evaluating the Project.

3.13.4 Report

160. On 18 December 2014, the Coordinator-General was provided a briefing note for statutory decision recommending the Coordinator-General approve the EIS evaluation report in accordance with Part 4 of the *SDPWO Act*.¹³⁸ The briefing note:

- (a) attached a draft of the EIS evaluation report;
- (b) attached a copy of the information clarification to the AEIS dated December 2014;¹³⁹
- (c) observed that key agencies (Department of Environment and Heritage Protection, Department of Natural Resources and Mines, Department of Transport and Main Roads, Department of Agriculture, Fisheries and Forestry and Toowoomba Regional Council) were consulted and provided advice and recommended conditions which, where appropriate, have been included in the attached EIS evaluation report;
- (d) recorded that the Commonwealth Department of Environment had been consulted on the evaluation of potential impacts and adequacy of information about matters of national environmental significance ('*MNES*');
- (e) noted that the EIS evaluation report includes recommended conditions for the *EPBC Act* approval which were prepared in consultation with the Commonwealth Department of Environment; and
- (f) attached a letter from the Commonwealth Department of Environment confirming that the evaluation of the matters of national environmental

¹³⁸ Doc 12-0068.

¹³⁹ Doc 12-0670.

significance provides sufficient information for the Commonwealth Minister for the Environment to make a decision under the *EPBC Act*.¹⁴⁰

161. On 19 December 2014, the Coordinator-General released the ‘*Coordinator-General’s evaluation report on the environmental impact statement*’ dated December 2014 with respect to the revised Project (‘*the EIS evaluation report*’).

162. The EIS evaluation report:

- (a) in Chapter 1, notes that the report provides an evaluation of the EIS and states that the report:
 - (i) summarises the key issues associated with the potential impacts of the Project on the physical, social and economic environments at the local, regional, state, and where relevant, national levels;
 - (ii) presents the findings of the Coordinator-General’s evaluation of the Project based on information including the EIS, AEIS, responses to information requests, submissions made on the EIS and the AEIS documents, and information and advice from advisory agencies and the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development; and
 - (iii) states and imposes conditions and makes recommendations under which the Project may proceed;
- (b) in Chapter 2, summarises details about the Project and the Proponent;
- (c) in Chapter 3, discusses the steps in the Project’s EIS assessment process and again records the information the Coordinator-General says he considered in undertaking his evaluation;
- (d) in Chapter 4, notes the approvals sought by the Proponent for which the EIS evaluation report includes recommended or stated conditions;¹⁴¹

¹⁴⁰ Doc 12-0687.

¹⁴¹ EIS evaluation report pages 9 to 13.

- (e) in Chapters 5 to 8, evaluates the environmental effects of the revised Project, including by:
- (i) evaluating the environmental impacts of the revised Project and noting stated or imposed conditions or recommendations to manage adverse impacts;¹⁴²
 - (ii) considering economic impacts and noting stated or imposed conditions or recommendations to manage adverse impacts;
 - (iii) reviewing the social impacts and noting stated or imposed conditions or recommendations to address social impacts;
 - (iv) assessing matters of national environmental significance and noting stated or imposed conditions or recommendations to manage adverse impacts;
- (f) in Chapter 9, records that:
- (i) in undertaking the evaluation, the Coordinator-General considered *‘the EIS and AEIS prepared for this project, submissions on the EIS and AEIS (including agency advice) and additional documentation provided by the proponent at my request’*;
 - (ii) the Coordinator-General is *‘satisfied that the requirements of the SDPWO Act have been met and that sufficient information has been provided to enable the necessary evaluation of potential impacts, and the development of mitigation strategies and conditions of approval’*;
 - (iii) the Coordinator-General considers that *‘the proponent’s mitigation measures, required by the conditions stated in this report, would result in acceptable overall outcomes and that the conditions in appendices 1-3 provide comprehensive and targeted controls to further manage potential impacts’*;

¹⁴² EIS evaluation report page 13.

- (iv) the Coordinator-General concludes that '*the Project would deliver significant economic benefits to both the local, regional and state economies*';
- (v) the Coordinator-General is satisfied that '*the material supplied by the proponent sufficient addresses any potential impact on MNES for the Project*';
- (vi) the Project is approved subject to the conditions and recommendations in appendices 1-3. The Coordinator-General also expects the Proponent's commitments, as included in the AEIS, to be fully implemented;¹⁴³
- (g) in Appendix 1, stipulated conditions imposed under section 54B of the *SDPWO Act*;
- (h) in Appendix 2, stated conditions for the draft environmental authority for the Project under the *Environmental Protection Act 1994* (Qld), which are stated pursuant to section 47C of the *SDPWO Act*;
- (i) in Appendix 3, included recommendations, made under section 52 of the *SDPWO Act*, with respect to applications for development approvals for the Project. The recommendations relate to:
 - (i) additional recommended conditions of approval for approvals under the *EPBC Act*;
 - (ii) approvals under the *Transport Infrastructure Act 1994* (Qld);
 - (iii) approvals under the *Water Act 2000* (Qld); and
 - (iv) commitments made by the Proponent in Appendix D: Commitments register, AEIS (August 2014).

¹⁴³ Further discussion on conditions and recommendations is contained in Chapter 12.

3.14 The briefing note process

163. The history of the Project outlined above clearly indicates that a formal process was adopted for briefing the Coordinator-General whenever it was necessary for the Coordinator-General to make a decision.

164. At process involved a formal briefing note that attached relevant material to inform the Coordinator-General for the purpose of the Coordinator-General making his decision. This process was adopted at each of the following stages:

- (a) declaration of the Project, for which the briefing note attached:¹⁴⁴
 - (i) a document titled ‘*Assessment for Significant Project Declaration*’ that described the project and assessed it against the criteria in section 27 of the *SDPWO Act*;
 - (ii) a copy of the declaration for execution;
 - (iii) a draft of the government gazette notice;
 - (iv) a letter of advice to the Proponent for execution;
 - (v) a letter of advice to the Commonwealth Minister for Environment and Multiculturalism (as he then was) for execution;
 - (vi) other letters of advice to various Ministers, departments and local governments for execution;
 - (vii) the initial advice statement; and
 - (viii) a draft media release;
- (b) approval of the release of the draft TOR for public comment, for which the briefing note attached:¹⁴⁵
 - (i) the proposed draft TOR;

¹⁴⁴ Doc 1-0009.

¹⁴⁵ Doc 2-0003.

- (ii) a draft of the newspaper advertisement to publicly notify the release of the draft TOR and invite comments;
 - (iii) a letter, for execution, advising the Proponent of the release of the draft TOR;
 - (iv) a draft media release;
- (c) approval of the final TOR, for which the briefing note attached:¹⁴⁶
- (i) the proposed final TOR;
 - (ii) a letter, for execution, advising the Proponent of the release of the final TOR;
 - (iii) a document titled '*Draft Terms of Reference Submission Table*' which, for each of the 15 submissions received with respect to the draft TOR, noted:
 - (A) the name of the submitter;
 - (B) the major issues raised in the submission, for example '*road safety*' or '*climate*';
 - (C) further details with respect to each major issue, for example '*add a sentence noting the impacts of the project on road safety and access for emergency response services*';
 - (D) whether the submission resulted in a change to the TOR;
 - (E) the relevant section of the EIS; and
 - (F) justification for the decision;
- (d) approval of the release of the initial EIS for public and advisory comment, for which the briefing note attached:¹⁴⁷
- (i) the proposed initial EIS;

¹⁴⁶ Doc 3-0001.

¹⁴⁷ Doc 4-0005 to 4-0012.

- (ii) a letter, for execution, advising the Proponent of the release of the initial EIS for public and advisory comment;
 - (iii) letters, for execution, to the Mayor of Toowoomba Regional Council and the State and Federal Members of Parliament over whose electorates the Project is proposed advising of the decision;
 - (iv) a draft advertisement for the *Weekend Australian*, the *Courier Mail* and the *Toowoomba Chronicle*;
 - (v) a locality map;
- (e) approval of an extension of the public submission period, for which the briefing note attached:¹⁴⁸
- (i) a letter, for execution, advising the Proponent of the decision;
 - (ii) letters, for execution, to the Mayor of Toowoomba Regional Council and the State and Federal Members of Parliament over whose electorates the Project is proposed advising of the decision;
 - (iii) a draft advertisement for the *Weekend Australian*, the *Courier Mail* and the *Toowoomba Chronicle*;
 - (iv) proposed media points;
- (f) the Coordinator-General decided that new TOR for an EIS which addresses the revised Project were required, for which the briefing note attached:¹⁴⁹
- (i) a document summarising the EIS process milestones for the Project;
 - (ii) the revised Project description from the Proponent;
 - (iii) maps of the original and revised Project footprints;
 - (iv) a document describing the Proponent's forecast timeframes and EIS process options;

¹⁴⁸ Doc 4-0021 to 4-0027.

¹⁴⁹ Doc 7-0001 to 7-0005.

- (g) approval of the release of the draft TOR for an EIS for the revised Project for public and advisory agency comment, for which the briefing note attached:¹⁵⁰
- (i) the proposed draft TOR for the revised Project;
 - (ii) a draft of the newspaper advertisement to publicly notify the release of the draft TOR for the revised Project and invite comments;
 - (iii) a letter, for execution, advising the Proponent of the release of the draft TOR for the revised Project;
 - (iv) letters, for execution, to the Minister for Environment and Heritage Protection, the Minister for the Department of Natural Resources and Mines and the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (as it then was), advising of the decision;
 - (v) letters, for execution, to the Mayor of Toowoomba Regional Council and the State and Federal Members of Parliament over whose electorates the Project is proposed advising of the decision;
 - (vi) a draft media statement;
 - (vii) a copy of the briefing note regarding the decision that new TOR for the an EIS addressing the revised Project was required;
 - (viii) a copy of a letter from the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (as it then was) regarding its acceptance of a variation to the Project;
 - (ix) a copy of a letter from the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (as it then was) agreeing to the readvertising of draft TOR addressing the revised Project;

¹⁵⁰ Doc 7-0010 to 7-0023.

- (x) a document titled '*Revised Project Overview*' which detailed the scope of the Revised Project;
- (h) approval of the final TOR for an EIS for the revised Project, for which the briefing note attached:¹⁵¹
 - (i) the proposed final TOR for the revised Project;
 - (ii) a letter, for execution, providing the Proponent a copy of the final TOR for the revised Project;
 - (iii) letters, for execution, to advisory agencies and the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (as it then was), advising of the decision;
 - (iv) a document providing background on the EIS process and milestones for the Project;
 - (v) a document titled '*Overview of Submitters, proximity of private submitters to project area*', which noted:
 - (A) the number of submissions from Federal, State and local government agencies, organisations and private individuals;
 - (B) an approximation of the distances from the closest edge of the proposed Project works to the location of private submitters who provided comment on the draft TOR;
 - (vi) a document titled '*Summary of key issues*', which provided a summary of:
 - (A) the main issues raised by key advisory agencies that departmental officers recommended result in changes to the TOR;
 - (B) key areas of interest raised by private submitters/organisations;

¹⁵¹ Doc 8-0001 to 8-0023.

- (C) comments raised by members of the public and organisations that the departmental officers recommend result in changes to the TOR;
 - (D) comments raised by members of the public and organisations about which the departmental officers did not recommend a change to the TOR;
- (vii) a document titled '*Submissions Analysis Register*', which was an excel spread sheet prepared by departmental officers that, for each submission, noted:
- (A) the name of the submitter;
 - (B) the issue category and topics, for example '*air quality*' and '*dust impacts*';
 - (C) described the issue;
 - (D) described the suggested solution;
 - (E) the relevant section of the TOR;
 - (F) whether action was required;
 - (G) directions to the Proponent;
- (viii) the revised draft TOR with tracked changes;
- (ix) a copy of an email from the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (as it then was) confirming that it had no issue with the proposed final TOR;
- (i) approval of the release of the EIS for the revised Project for public and advisory comment, for which the briefing note attached:¹⁵²
- (i) the proposed EIS for the revised Project;

¹⁵² Doc 9-0107 to 9-0119.

- (ii) a copy of a letter from the Commonwealth Department of the Environment endorsing the release of the EIS for public comment;
 - (iii) a draft advertisement for the *Weekend Australian*, the *Courier Mail*, the *Toowoomba Chronicle* and the *Oakey Champion*;
 - (iv) a letter, for execution, advising the Proponent of the release of the EIS for the revised Project for public and advisory comment;
 - (v) letters, for execution, to the Mayor of Toowoomba Regional Council and the State and Federal Members of Parliament over whose electorates the Project is proposed, Directors-General of State Government departments and the Assistant Secretary of the Department of the Environment advising that the EIS for the revised Project is available for comment;
 - (vi) a summary of the EIS process history and milestones for the Project;
 - (vii) a locality map;
 - (viii) a document containing a review by departmental officers of the proposed EIS for the revised Project against the TOR;
- (j) the decision by the Coordinator-General to request additional information to the EIS, for which the briefing note attached:¹⁵³
- (i) a letter, for execution, to the Proponent requesting additional information to the EIS in accordance with section 35(2) of the *SDPWO Act*, which letter attached:
 - (A) a document titled '*EIS Submission Analysis Register*';
 - (B) a document outlining the additional information requirements;

¹⁵³ Doc 10-0001 to 10-0010.

- (ii) a letter, for execution, to the Commonwealth Department of the Environment providing a copy of the request for additional information;
- (iii) a summary of the Project and EIS process background and milestones;
- (iv) a list of submitters, grouped by category (private, organisations and government) and, with respect to the 43 private submitters, analysing the estimated proximity of the submitters to the Project site;¹⁵⁴
- (v) a document referred to as the '*EIS Submission Analysis Register*', which was an excel spread sheet prepared by departmental officers recording their analysis of the submissions. The document, with respect to each identified submission, describes:
 - (A) the name of the submitter;
 - (B) the category of submission (namely private, organisations and government);
 - (C) the proximity of the submitter to the mine;
 - (D) the component of the Project about which the submission was made;
 - (E) the issue categories and issue topics addressed by the submission. These were selected from defined lists. For example '*Land*' and '*Land – Rehabilitation*' were possible categories and topics respectively;
 - (F) an overview of the issue: this was a more extensive description of the issue raised by the submission;
 - (G) the recommendation or suggested mitigation proposed in the submission;

¹⁵⁴ Doc 10-0007.

- (H) comments by the departmental officers on the submission;
 - (I) whether action is required with respect to the submission;
and
 - (J) direction to the Proponent with respect to the submission;¹⁵⁵
- (vi) a disc containing a copy of all of the submissions received;¹⁵⁶
 - (vii) a document listing key issues raised in the submissions;¹⁵⁷
- (k) the decision by the Coordinator-General to release the AEIS for advisory agency and public comment, for which the briefing note attached.¹⁵⁸
 - (i) the AEIS (on disc);
 - (ii) the proposed public notice inviting comment;
 - (iii) a letter, for execution, to the Proponent notifying of the decision;
 - (iv) letters, for execution, to the Mayor of Toowoomba Regional Council and the State and Federal Members of Parliament over whose electorates the Project is proposed, Directors-General of State Government departments and the Assistant Secretary of the Department of the Environment;
 - (v) attached a copy of an overview of the submissions with respect to the EIS;¹⁵⁹
 - (vi) a copy of the request of the Coordinator-General for additional information, which included a copy of the EIS Submissions Analysis Register with information inserted by the Proponent indicating how the AEIS has responded to the submitter comments;
 - (vii) an analysis by departmental officers of the adequacy of the AEIS;
and

¹⁵⁵ Doc 10-0008.

¹⁵⁶ Doc 10-0009.

¹⁵⁷ Doc 10-0010.

¹⁵⁸ Doc 11-0038 to 11-0050.

¹⁵⁹ Doc 11-0046.

- (viii) a copy of an email from the Commonwealth Department of the Environment noting that all outstanding comments on the AEIS have been addressed and the AEIS is adequate;
- (l) approval of the EIS evaluation report, for which the briefing note attached:¹⁶⁰
 - (i) the proposed EIS evaluation report;
 - (ii) the Information Clarification to the AEIS dated December 2014;
 - (iii) letter, for execution, to the Proponent advising of the decision;
 - (iv) letters, for execution, to the Mayor of Toowoomba Regional Council and the State and Federal Members of Parliament over whose electorates the Project is proposed, Directors-General of State Government departments, the Under Treasurer and Treasurer, Ministers of State Government departments and the Assistant Secretary of the Department of the Environment advising of the decision.

3.15 Observation about the history of the Project

165. It is apparent from a review of the documents referred to above, as well as the many other documents provided (an index of which is provided in Annexure C to this review), that the work undertaken by the departmental officers with respect to the Project was considerable. It involved consultation about the extent of information expected in the advance of preparation of the EIS and extensive reviews of the adequacy of the material provided by the Proponent undertaken by the departmental officers, as well as by other government departments.
166. In addition, at every juncture where the Proponent provided significant additional information, public comment was sought with respect to the additional information.

¹⁶⁰ Doc 12-0668 to 12-0687.

4. LEGAL QUESTIONS CONSIDERED

167. In the context of the history of the project and the applicable statutory scheme, two legal issues were examined:

- (a) the detail of description contained in the declaration; and
- (b) any effect that the change of the scope of the Project had on the EIS evaluation report.

168. Both issues were considered and ultimately the conclusion reached that neither issue affected the validity of the process undertaken by the Coordinator-General.

169. For completeness, an analysis of these issues is set out below.

4.1 The validity of the declaration

170. The declaration of the Project in the gazette is in very broad terms. It gives no particulars of what the Project is, other than its name. It may be that if the declaration is so uncertain then it is not a valid declaration under the *SDPWO Act* and the process that followed was not legally valid.¹⁶¹

171. The declaration merely identifies the project by its name, '*the New Acland Coal Mine: Stage 3*'. The question is whether that is a sufficient description of the Project for a valid declaration under section 26 of the *SDWPO Act*.

172. There needs to be some level of precision in the identification of a project for a valid declaration. For example, a declaration that simply said: '*I declare that a project is a significant project*' would not be valid.¹⁶²

173. The extent of particularity in the description of a project required for a valid declaration will depend on an examination of the *SDWPO Act* as a whole.

¹⁶¹ Uncertainty in a declaration may take the declaration outside of the scope of the power to make it: *King Gee Clothing Co Pty Ltd v Commonwealth* (1945) 71 CLR 184 at 194.

¹⁶² Cf. *Mison v Randwick Municipal Council* (1991) 23 NSWLR 734 at 737.A-C.

174. Firstly, the *SDPWO Act* does not prescribe the minimum requirements for identifying a project in a declaration under section 26 of the Act; therefore there is no express statutory requirement for any level of particularity in a declaration.
175. Secondly, the declaration is made at a very early stage; before any preparation of, or consultation on, an EIS for the project. It would be impractical to require a high degree of particularisation of the project at the stage that a declaration is made.
176. Thirdly, precise identification of the project in a declaration is unlikely to contribute to the process under Part 4 of the *SDPWO Act*. Insofar as the functions of the Coordinator-General under that Part are concerned, the Coordinator-General is informed as to the scope of the project by the initial advice statement that must be provided by the proponent under section 27(a) of the *SDPWO Act*. Insofar as the public consultation processes of Part 4 are concerned, members of the public who wish to participate in those processes may be informed as to the scope of the project by the draft terms of reference for the EIS under section 29 and by the EIS itself under section 33. Notably, whilst Part 4 requires the Coordinator-General to ‘publicly notify’ the draft EIS terms of reference (section 29) and the EIS itself (section 33), the declaration is merely required to be made by gazette notice.¹⁶³
177. Fourthly, the *SDPWO Act* contemplates a Coordinator-General’s declaration having effect for the purposes of decision-making powers under other statutory schemes. For example, a declaration for a project that requires development approval under the general planning legislation may have the effect that certain stages of the approval process under that legislation may not apply.¹⁶⁴ To the extent that a level of certainty may be necessary for those other parallel schemes, that certainty may be supplied by the exercise of the Coordinator-General’s powers to impose conditions upon evaluating the EIS.¹⁶⁵ It is more logical for a degree of certainty to be imposed at that stage, after the project has been the subject of the detailed public consultation processes under Part 4 of the *SDPWO Act*, than at the declaration stage when those processes have not yet been undertaken.

¹⁶³ Section 26(4).

¹⁶⁴ Sections 36 and 37 of the *SDPWO Act*.

¹⁶⁵ Section 35(4)(b) of the *SDPWO Act*. Cf. *Mison v Randwick Municipal Council* (1991) 23 NSWLR 734 at 737.A-C.

178. Having regard to the above considerations, the declaration sufficiently identified the Project by identifying its name.

179. The declaration in this case was legally sufficient and therefore valid.

4.2 The change to the Project scope

180. In 2012 the scope of the Project changed. By this time the Coordinator-General had finalised terms of reference, the Proponent had prepared an EIS that had been publicly notified and submissions had been received with respect to this EIS.

181. The Coordinator-General sought and received legal advice at this juncture.

182. The Coordinator-General determined that new terms of reference should be finalised. The Proponent prepared an EIS for the revised Project addressing these new terms of reference. The Coordinator-General then prepared a report that evaluated the EIS for the revised Project.

183. The question thus arises: what EIS is the Coordinator-General bound to evaluate in preparing his report? The initial EIS or the EIS for the revised Project?

184. The *SDPWO Act* does not contain any express authority to change the scope of a project prior to the completion of a Coordinator-General evaluation report.

185. However, it has been held in other jurisdictions that an implied statutory authority exists to amend a development application provided that the amendment does not change the character of the development applied for.¹⁶⁶

¹⁶⁶ *Independent Holdings Ltd v City of Adelaide Planning Commission* (1994) 63 SASR 318 at 326 per King CJ; *Lymberopolous v Minister for Environment and Conservation* (2005) 137 LGERA 96; *Hamserley v Bartle* [2013] WASC 191.

186. The Proponent submitted to the Coordinator-General the following table which compares the original scope of the Project to the changed scope:

Existing Key Elements – New Acland Coal Mine Stage 3 Expansion Project	New key Elements – New Acland Continuation Project	Amendment Register
<p>The key elements of the Project were:</p> <ul style="list-style-type: none"> • Expansion of the existing mining activities by the addition of the Manning Vale, Willeroo and Sabine resource areas within MLA 50232, located to the south and west of the current MLS 50170 and 50216; • Total production up to 10 Mtpa of product coal which equates to approximately 20 Mtpa Run-of-Mine (RoM) Coal; • Production of 279.7 Mt of product coal over the life of the Project; • Construction period commencing in 2010 to 2013, initially involving the construction of site access and roads (including re-alignments), water management structures and additional supporting infrastructure; • Maintenance of the existing thin seam coal, open cut mining techniques and expansion of the Mine's truck and loader mining 	<p>The key elements of the revised Project are:</p> <ul style="list-style-type: none"> • Continuation of the existing mining activities to extend to parts of the Manning Vale and Willeroo resource areas within MLA 50232, located to the south and west of the current MLs 50170 and 50216; • Maximum production rate of 7.5 Mtpa product coal which equates to approximately 14 Mtpa Run-of-Mine (RoM) coal; • Production of 96 Mt to 122 Mt of product coal over the life of the Project; • Construction period commencing in 2015 to 2017, initially involving the construction of site access and roads (including re-alignments), water management structures and additional supporting infrastructure; • Maintenance of the existing thin seam coal, open cut mining techniques and expansion of the Mine's truck and loader mining fleet; • Upgrade to the existing Coal Handling and Preparation Plant (CHPP), RoM and product coal stockpile areas and supporting infrastructure on ML 50170; • Tailings disposal within a series of Tailings Storage Facilities (TSFs) on MLA 50232 comprising in-pit disposal to engineered TSF's in the back filled mine pits of the current and future mine pit areas; 	<ul style="list-style-type: none"> • Reduction in the active MLA Project area from 5,069 ha to 3,163 ha representing a 38% reduction; • No mining in the Sabine area; • Reduction in throughput from 10 Mtpa to: <ul style="list-style-type: none"> ○ Maximum 7.5 Mtpa through incremental expansion; and ○ Life of mine to 2029; • Reduction in disturbance footprint to 2,304 ha (63%) through: <ul style="list-style-type: none"> ○ Southern areas of MLA excluded from mining (10 km from Oakey); ○ Acland town excluded from mining; and ○ Lagoon Creek excluded from mining (no creek diversion); • Reduction SCL impact5 by 446 ha (51%); <ul style="list-style-type: none"> ○ 427 ha potential SCL to be disturbed. • No requirement for a new CHPP, current CHPP to be upgraded; • No out-of-pit tailing storage facility;

Existing Key Elements – New Acland Coal Mine Stage 3 Expansion Project	New key Elements – New Acland Continuation Project	Amendment Register
<ul style="list-style-type: none"> fleet; • Addition of a new Coal Handling and Preparation Plant (CHPP(3)), ROM and product coal stockpile areas and supporting infrastructure on MLA 50232; • Tailings disposal within a series of Tailings Storage Facilities (TSFs) on MLA 50232 comprising an initial engineered out-of-pits of the current and future mine pit areas; • Construction of a new Raw Water Dam (RWD (3)) to supply CHPP 3; • Progressive disposal of coarse rejects to cells within the overburden dumps; • Emplacement of four out-of-pit spoil dumps containing a total material volume of 128.1 Mm³ associated with the Manning Vale, Sabine and Willeroo pits; • Generation of five potential final voids, comprising 560.1 hectares (ha) within the total area of the Project equalling 7 347 ha; • Raw water supply from the Wetalla Wastewater 	<ul style="list-style-type: none"> • Progressive disposal of coarse rejects to cells within the overburden dumps; • Emplacement of two out-of-pit spoil dumps as elevated landforms containing a total of 56 Mm³ and 170 ha associated with the Manning Vale and Willeroo pits; • Generation of depressed landforms at end of mining, comprising 523 hectares (ha) within the total active area of the Project equalling 3 163 ha; • Raw water supply from Wetalla Wastewater Reclamation Facility (WWRF) from Toowoomba via a 45 km pipeline; • A mine surface water management system involving various water management structures staged to accommodate the progressive development of the Mine. These water management structures will be constructed to divert clean water and capture and manage mine area runoff and mine pit water for reuse; • Upgrade of existing administration and heavy vehicle maintenance area on ML 50170; 	<ul style="list-style-type: none"> • No requirement for a new Raw Water Dam to supply existing and upgraded CHPP; • Reduction of out-of-pit dump down to 2 instead of 4; • No final voids to remain – final mining pits to be backfilled and profiled to depressed landform to meet sustainable land-use practices;

Existing Key Elements – New Acland Coal Mine Stage 3 Expansion Project	New key Elements – New Acland Continuation Project	Amendment Register
<p>Reclamation Facility (WWRF) from Toowoomba via a 45km pipeline. This project was the subject of a separate EIS process under the <i>SDPWO Act</i>;</p> <ul style="list-style-type: none"> • A mine surface water management system involving various water management structures staged to accommodate the progressive development of the Mine. These water management structures will be constructed to divert clean water and capture and manage mine area runoff and mine pit water for reuse; • Addition of a new administration and heavy vehicle maintenance area on MLA 50232; • Relocation and potential upgrade of the power supply to the Project; • Diversion of the Jondaryan-Muldu Road around the Manning Vale resource area; • Diversion of Lagoon Creek around the Manning Vale resource area and the progressive re- 	<ul style="list-style-type: none"> • Relocation and potential upgrade of the power supply to the Project; • Diversion of the Jondaryan-Muldu Road around the Manning Vale resource area; • Development of a suitable ‘off set’ strategy to satisfy State and Federal requirements for clearance of significant vegetation within new operational areas on MLA 50232; • Preservation of historical items in the Township of Acland. • Construction of a new 8km spur rail line from Jondarayan to MLA 50232; • Construction of a new Materials Handling and Train 	<ul style="list-style-type: none"> • No requirement for new Mine Industrial Area, upgrade of existing facility; • No diversion of Lagoon Creek; • No closure of the Acland Township; • No relocation of significant historical items to an ‘Acland Heritage Precinct’ off-site eg no 2 Colliery; • No relocation of the Acland War Memorial;

Existing Key Elements – New Acland Coal Mine Stage 3 Expansion Project	New key Elements – New Acland Continuation Project	Amendment Register
<p>establishment of Lagoon Creek along its original alignment including rehabilitation of the riparian and in-stream zones;</p> <ul style="list-style-type: none"> • Development of a suitable ‘off set’ strategy to satisfy State and Federal requirements for clearance of significant vegetation within new operational areas on MLA 50232; • closure of the Acland Township and the relocation of significant historical items to the ‘Acland Heritage Precinct’ off site for tourism and other commemorative purposes; • Construction of a new 8km private haul road as a dedicated transport corridor from the Mine to the Jondaryan Rail Loading Facility (JRLF) which will include supporting road infrastructure changes; • Continued use of the current JRLF on the main western rail line to the east of Jondaryan township; • Decommissioning 	<p>Loading Facility on MLA 50232;</p> <ul style="list-style-type: none"> • Partial decommissioning and relocation of existing local telecommunication network within the Project site; • Comprehensive progressive rehabilitation program involving continuous monitoring and reporting in line with the agreed post mining land use; and • Amendment of NAC’s existing EA authorising a sustainable level of environmental harm commensurate to the Project’s size and scope. 	<ul style="list-style-type: none"> • Additional construction of a spur rail line from Jondaryan to MLA 50232; and • Decommissioning of the Jondaryan Rail Loading Facility (JRLF); • Additional construction of a new Materials Handling Loading Facility on MLA 50232;

Existing Key Elements – New Acland Coal Mine Stage 3 Expansion Project	New key Elements – New Acland Continuation Project	Amendment Register
<p>and relocation of existing local telecommunication network within the Project site;</p> <ul style="list-style-type: none"> • Comprehensive progressive rehabilitation program involving continuous monitoring and reporting in line with the agreed post mining land use; and • Amendment of NAC's existing EA authorising a sustainable level of environmental harm commensurate to the Project's size and scope. 		

187. The changes to the scope of the Project were not so substantial as to change the character of the Project. Whilst the changes to the Project were significant, they did not change the essential character of the Project. The Project remains a project for the increase in the operation of the mine. Whilst the area of the increase in operations has decreased, the general area of the new operations remains substantially the same.
188. The only change that involves new impacts is the relocation of the rail load-out facility and construction of the rail spur. This does not alter the essential character of the Project. It is a modification to one aspect of the Project. The modification is responsive to concerns raised during the consultation stages under Part 4 of the *SDPWO Act* about the effects of transporting coal by truck to the rail load-out facility at Jondaryan. It is unlikely that such a modification, made as a result of consultation processes provided by the *SDPWO Act*, would be intended by Parliament to be impermissible.

189. Further, there is no provision in the *SDPWO Act* which indicated a Parliamentary intention that changes to the project were not permitted prior to the completion of the Coordinator-General evaluation report. Division 3A of Part 4 provides that a proponent may request the Coordinator-General to undertake to evaluate changes to the project *after* the Coordinator-General has completed the evaluation report.
190. It is unlikely that Parliament intended that the Coordinator-General would be required to evaluate the original scope for the project knowing that, in all likelihood, a request will be made after the Coordinator-General's report for an evaluation of changes in scope. It would be strange for Parliament to intend such an artificial exercise.
191. The more likely purpose of division 3A of Part 4 is that it ensures that any of the Coordinator-General's conditions and recommendations, made at the conclusion of the evaluation process, which have been overtaken by changes to the project can be modified to reflect those changes.¹⁶⁷ It is not a purpose of division 3A of Part 4 that a proponent wait until the Coordinator-General finalises an evaluation report on the original project scope before submitting changes to that scope for evaluation by the Coordinator-General.
192. It necessarily follows from the capacity to change the scope of the project for the purposes of the evaluation processes under Part 4, that the EIS may be amended to reflect such changes. The power to do this is supported by section 24AA of the *Acts Interpretation Act 1954*:
- 24AA Power to make instrument or decision includes power to amend or repeal***
If an Act authorises or requires the making of an instrument or decision—
- (a) *the power includes power to amend or repeal the instrument or decision; and*
- (b) *the power to amend or repeal the instrument or decision is exercisable in the same way, and subject to the same conditions, as the power to make the instrument or decision.*
193. In terms of the Coordinator-General's obligation pursuant to section 35 of the *SDPWO Act* the Coordinator-General must consider the EIS for the revised project and prepare a report evaluating the EIS for the revised Project.

¹⁶⁷ See section 35I.

194. No legal impediment arose, pursuant to the *SDPWO Act*, by changing the scope of the Project in 2012.

5. WHAT MUST THE ‘EVALUATION OF THE PROJECT EIS’ INVOLVE TO ‘COMPLY WITH PART 4 OF THE ACT’?¹⁶⁸

5.1 What ‘must’ the Coordinator-General do?

195. The ‘*evaluation of the project EIS*’ is provided for by section 35 of the *SDPWO Act*. At the times relevant to this matter¹⁶⁹ that section provided:

35 *Coordinator-General evaluates EIS, submissions, other material and prepares report*

- (1) *The Coordinator-General must, after the end of the submission period, consider the EIS, all properly made submissions and other submissions accepted by the Coordinator-General about the EIS and any other material the Coordinator-General considers is relevant to the project.*
- (2) *The Coordinator-General may ask the proponent for additional information or comment about the EIS and the project.*
- (3) *The Coordinator-General must prepare a report evaluating the EIS.*
- (4) *In evaluating the EIS, the Coordinator-General may—*
 - (a) *evaluate the environmental effects of the project and any other related matters; and*
 - (b) *state conditions under section 39, 45, 47C, 49 or 49B; and*
 - (c) *make recommendations under section 43 or 52; and*
 - (d) *if division 8 applies to the project—impose, under that division, conditions for the undertaking of the project.*
- (5) *After completing the report, the Coordinator-General must—*
 - (a) *give a copy of it to the proponent; and*
 - (b) *publicly notify the report.*

196. The word ‘*must*’ is used twice in the section, namely:

- (a) in subsection (1), to prescribe matters that the Coordinator-General ‘*must*’ consider; and
- (b) in subsection (2), to prescribe the Coordinator-General’s obligation to prepare a report ‘*evaluating the EIS*’.

¹⁶⁸ Term of reference 4(d).

¹⁶⁹ See Chapter 1 above.

197. Therefore, requirements for the ‘*evaluation of the project EIS*’ to ‘*comply with part 4 of the Act*’, include the requirements that:
- (a) the Coordinator-General consider the matters prescribed in section 35(1); and
 - (b) the Coordinator-General prepare a report ‘*evaluating the EIS*’.
198. The matters which section 35(1) provides the Coordinator-General ‘*must*’ consider are:
- (a) ‘*the EIS*’;
 - (b) ‘*all properly made submissions and other submissions accepted by the Coordinator-General about the EIS*’; and
 - (c) ‘*any other material the Coordinator-General considers relevant to the project*’.

5.2 Section 35(1) – ‘The EIS’

199. As set out in Chapter 4, the EIS the Coordinator General must consider is the EIS for the revised project.

5.3 Section 35(1) - ‘All properly made submissions and other submissions accepted by the Coordinator-General about the EIS’

200. Section 24 of the *SDPWO Act* defines the phrase ‘*properly made submission*’:

properly made submission, for an EIS or a proposed change to a project, means a submission that—

- (a) *is made to the Coordinator-General in writing; and*
- (b) *is received on or before the last day of the submission period; and*
- (c) *is signed by each person who made the submission; and*
- (d) *states the name and address of each person who made the submission; and*
- (e) *states the grounds of the submission and the facts and circumstances relied on in support of the grounds.*

201. The phrase ‘*other submissions accepted by the Coordinator-General about the EIS*’ is a reference to section 34(3) of the *SDPWO Act*, which provides:

... *the Coordinator-General may accept a written submission even if the submission is not a properly made submission.*

5.4 Section 35(1) - ‘any other material the Coordinator-General considers is relevant to the project’

202. The direction in section 35(1) that the Coordinator-General ‘*must ... consider ... any other material the Coordinator-General considers is relevant to the project*’ does not confer discretion on the Coordinator-General. The meaning and effect of the word ‘*must*’ is clear. If there is material which ‘*the Coordinator-General considers is relevant to the project*’, the Coordinator-General ‘*must*’ consider it.

5.5 Previous submissions

203. In this matter, an EIS for the revised Project was prepared after the Proponent changed the scope of the Project. A decision was made to disregard submissions about the initial EIS. A question that arises is: was there an obligation to consider those submissions? Relevant to this question is the leading statement of authority on the judicial review ground of failing to take a relevant consideration into account:¹⁷⁰

(a) *The ground of failure to take into account a relevant consideration can only be made out if a decision maker fails to take into account a consideration which he is bound to take into account in making that decision: Sean Investments Pty. Ltd. v. MacKellar; CREEDNZ Inc. v. Governor-General; Ashby v. Minister of Immigration. The statement of Lord Greene M.R. in Associated Provincial Picture Houses Ltd. v. Wednesbury Corporation, that a decision-maker must take into account those matters which he "ought to have regard to" should not be understood in any different sense in view of his Lordship's statement on the following page that a person entrusted with a discretion "must call his own attention to the matters which he is bound to consider".*

(b) *What factors a decision-maker is bound to consider in making the decision is determined by construction of the statute conferring the discretion.*

204. Section 35(1) requires the Coordinator-General to consider submissions ‘*about the EIS*’. Submissions about the initial EIS are not submissions about the EIS for the revised Project. The only other material that the Coordinator-General must consider is other material considered relevant by the Coordinator-General. It is a

¹⁷⁰ *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1986) 162 CLR 24 at 40 per Mason J.

matter of discretion whether the Coordinator-General considers submissions in response to the initial EIS.

5.6 Submissions made after the AEIS

205. The issue of submissions made after the AEIS is discussed in detail in Chapter 6 of this review.

5.7 The law on obligations to ‘consider’ identified material

206. The law recognises that in general, a high level decision-maker, such as the Coordinator-General, is entitled to rely on departmental summaries of source material in making decisions.¹⁷¹

207. This is recognition of the practical difficulties attending personal consideration of source material by such decision-makers.

208. However, pragmatism gives way to Parliamentary intent when an Act expressly requires a high-level decision-maker to themselves consider submissions or representations in making their decisions.

209. In *Tickner v Chapman*¹⁷², the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (Cth) required the Minister to ‘consider’ representations by members of the public before declaring an area to be protected under that Act. Black CJ held that ‘*the explicit requirement that the Minister consider the representations...removes the process...from the general rule that a Minister is not expected to do everything personally*’.¹⁷³ His Honour held that the obligation required the Minister to ‘*personally consider the representations*’.¹⁷⁴ His Honour held:¹⁷⁵

This does not mean that the Minister is denied the assistance of a staff member in the process of considering the representations. A staff member might, for example, sort the representations into categories. He or she might put together all the representations that are in common form so that they can be considered together. In some cases, a summary of technical supporting material, such as legal and financial documents, might be provided and it would certainly be in order, in my view, for a competent staff member to assist the Minister by making sure that

¹⁷¹ *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1986) 162 CLR 24 at 30-31 per Gibbs CJ, at 37-39 per Mason J and at 63-65 and 65-66 per Brennan J.

¹⁷² (1995) 57 FCR 451.

¹⁷³ at 462.

¹⁷⁴ at 464.

¹⁷⁵ at 464-465.

supporting technical documents were what they purported to be. I would not rule out the possibility of some representations being quite capable of effective summary, yet there would be other cases where nothing short of personal reading of a representation would constitute proper consideration of it.

Examples of the sort of representation that would need to be read personally may be found amongst the 400 or so representations forwarded with, and notionally attached to, Professor Saunders' report. Some of these make important points by the use of photographs and the form of some representations conveys meaning in other ways. Such representations need to be seen to be "considered".

210. Burchett J held:¹⁷⁶

*What is it to "consider" material such as a report or representations? In my opinion, the Minister is required to apply his own mind to the issues raised by these documents. To do that, he must obtain an understanding of the facts and circumstances set out in them, and of the contentions they urge based on those facts and circumstances. Although he cannot delegate his function and duty under s 10, he can be assisted in ascertaining the facts and contentions contained in the material. But he must ascertain them. He cannot simply rely on an assessment of their worth made by others: cf *Jefferies v New Zealand Dairy Production and Marketing Board* [1967] 1 AC 551 at 568-569. It is his task to evaluate them, a task he can only perform after he knows what they actually are.*

211. His Honour observed:¹⁷⁷

If what I have written seems to impose a heavy burden on the Minister, it is necessary to emphasise that Parliament imposed this burden. Doubtless it did so because of the very great power to override the major interests and rights of citizens, and also government agencies, which is involved. Such an authority was not to be conferred on a public servant or ministerial assistant. It is a vast power, which Parliament plainly intended to be exercised at the highest level, with the restraint that great responsibility imposes...It is consistent with the serious purpose of the Act in relation to objects and areas of a special kind that the consideration given to the report and the representations is required to be at a high level.

212. Kiefel J (as her Honour then was) held:¹⁷⁸

To "consider" is a word having a definite meaning in the judicial context. The intellectual process preceding the decision of which s 10(1)(c) speaks is not different. It requires that the Minister have regard to what is said in the representations, to bring his mind to bear upon the facts stated in them and the arguments or opinions put forward and to appreciate who is making them. From that point the Minister might sift them, attributing whatever weight or persuasive quality is thought appropriate. However, the Minister is required to know what they say. A mere summary of them cannot suffice for this purpose, for the Minister would not then be considering the representations, but someone else's view of them, and the legislation has required him to form his own view upon them.

¹⁷⁶ at 476.

¹⁷⁷ at 477.

¹⁷⁸ at 495-496.

213. In *Meshlawn Pty Ltd v The State of Queensland*¹⁷⁹, Applegarth J considered the Chief Executive’s obligation to ‘have regard to’ comments and objections of the local council and police in deciding whether to grant an extended hours trading permit under the *Liquor Act 1992* (Qld). Of that obligation, his Honour held:

[153] I conclude that the statutory obligation upon the Chief Executive to “have regard to” the comments and objections required her to bring her mind to bear upon the facts stated in those objections and the arguments or opinions put forward in them. However, the Chief Executive was not personally required to read data contained in voluminous objections, provided the data was accurately summarised in the material which she in fact read. So far as arguments or opinions put forward in the objections were concerned, the Chief Executive had to give personal consideration to those matters, and could not simply rely upon someone else’s assessment of their worth. Otherwise the Chief Executive would not be having regard to the arguments and opinions that had been put forward but to “someone else’s view of them”. However, the Act did not preclude the Chief Executive from relying upon departmental officers to analyse data about incidents and to report their analysis in the helpful way that they did. In the circumstances it was reasonable to rely upon the analysis of the numerous incidents reported by the police. It was reasonable, in the circumstances, for the comments and objections of the Council and the police to be summarised in the Briefing Notes.

214. In the recent decision in *Koowarta v State of Queensland*¹⁸⁰ (‘Koowarta’) Greenwood J considered the declarations of wild river areas by the Minister under the *Wild Rivers Act 2005* (Qld). Section 13 of that Act provided that:

in preparing a wild river declaration, the matters the Minister must consider include:

- (a) *the results of community consultation on the declaration proposal; and*
- (b) ***all properly made submissions about the declaration proposal; and***
- (c) *any water resource plan or resource operations plan that applies to all or part of the proposed wild river area.*

(emphasis added)

215. Section 15 of the same Act empowered the Minister to make a declaration after considering the matters listed in section 13.

216. Greenwood J held:

[202] Section 15 of the Act identifies the Minister as the person who must consider all properly made submissions. Although it is well recognised that a Minister of State with portfolio responsibility for particular legislation often acts in the discharge of Ministerial responsibilities through public service officers who staff departments of State which support the Minister, the question to be determined as a matter of construction of the Wild Rivers Act is whether s 15 of the Act in terms of its express language, construed in the context of the objectives and purposes of

¹⁷⁹ [2009] QSC 215; affirmed on appeal *Meshlawn v State of Queensland* [2010] QCA 181.

¹⁸⁰ (2014) 316 ALR 724.

the legislation, requires the Minister to personally consider the s 13 matters and personally consider any other matters thought appropriate by him or her. Having regard to ss 15 and 13 and the purpose of the Act recited in s 3, I am satisfied that the proper construction of the provisions requires the Minister to personally consider each of the s 13 matters in exercising the power under s 15.

217. The evidence in Koowarta was that, at the time the Minister decided to make the declarations, he did not have before him, and therefore did not consider, the ‘*properly made submissions*’ that he was required to consider before making his decision. He did not receive those submissions until the day *after* he made his decision. The only material before him at the time of his decision was a draft letter to the Premier, Executive Council Minute and explanatory memorandum for the Governor-in-Council. None of that material disclosed in any way (whether by summary or otherwise) the ‘*properly made submissions*’ that the Minister was required to consider.
218. Because the Minister failed to personally consider matters listed in section 13 at the time of his decision, including ‘*properly made submissions*’, Greenwood J found the Minister’s declarations were invalid.

5.8 The content of the obligation to consider the material listed in section 35(1)

219. It is clear from the text and context of section 35(1) that the Coordinator-General must personally consider the matters listed in section 35(1), including all ‘*properly made submissions and other submissions accepted by the Coordinator-General about the EIS*’.
220. *Tickner v Chapman*¹⁸¹, *Meshlawn Pty Ltd v The State of Queensland*¹⁸² and *Koowarta v State of Queensland*¹⁸³ all support the view that the word ‘*consider*’ in section 35(1) means what it says: the Coordinator-General must personally consider the matters listed in that section. This is consistent with the scheme of Part 4 of the *SDWPO Act* read as a whole.
221. The scheme places the Coordinator-General at the centre of the process that culminates in an obligation on the Coordinator-General to prepare a report evaluating the EIS. Clearly, the matters that section 35(1) requires the

¹⁸¹ (1995) 57 FCR 451.

¹⁸² [2009] QSC 215.

¹⁸³ (2014) 316 ALR 724.

Coordinator-General to consider are intended to inform the Coordinator-General's discharge of that function. For reasons that are detailed below, the Coordinator-General may be assisted in the preparation of the report but ultimately is obliged to retain substantial control over its preparation. It is inconsistent with that obligation to interpret section 35(1) as not requiring the Coordinator-General to personally consider the mandatory considerations listed in section 35(1).

222. There is some suggestion in *Tickner v Chapman*¹⁸⁴, *Meshlawn Pty Ltd v The State of Queensland*¹⁸⁵ and *Koowarta v State of Queensland*¹⁸⁶ that a decision-maker with an obligation to consider submissions may do so with the assistance of summaries of those submissions. However, those cases also support the view that, as a *minimum*, the Coordinator-General's obligation in section 35(1) to consider submissions requires the Coordinator-General to consider each of the facts, arguments and opinions put forward in those submissions. This requires the Coordinator-General to give personal consideration to those facts, arguments and opinions and not rely on someone else's assessment of their worth.

5.9 Effect of Coordinator-General's status as corporation sole

223. The Coordinator-General's duty to give personal consideration to the matters identified in section 35(1) is not diminished by his status as a '*corporation sole*'.
224. The term '*Coordinator-General*' is defined by the *SDPWO Act* as:¹⁸⁷

... the corporation sole constituted under section 8A of the State Development and Public Works Organisation Act 1938 and preserved, continued in existence and constituted under section 8 of this Act.

225. As to corporations sole:¹⁸⁸

The nature of a corporation sole is described in the authorities referred to in the judgment of the learned Chief Justice. A convenient summary can be taken from Stephen's Commentaries On The Laws Of England, 21st. ed. (Vol. 2) pp. 558-9: "Corporations may be aggregate or sole. Corporations aggregate consist of any number of persons united together into one society; such as are the mayor, aldermen, and citizens of a city, the dean and chapter of a cathedral church, and the like. Corporations sole consist of one person only and his successors; of which kind are the monarch, all bishops, all rectors or parsons, and the like. As regards a rector or parson in particular, the endowments of the living are vested

¹⁸⁴ (1995) 57 FCR 451.

¹⁸⁵ [2009] QSC 215.

¹⁸⁶ (2014) 316 ALR 724.

¹⁸⁷ Schedule to the *SDPWO Act*.

¹⁸⁸ *Hubbard Assn of Scientologists International v A-G (Vic)* [1976] VR 119.

in him as for a freehold estate; and this freehold, if vested in him in his natural capacity, would on his death descend to his personal representatives and not to his successor. The law, therefore, has wisely ordained that the parson, qua parson, shall never die, any more than the King, by making him and his successors a corporation, although, unlike the succession to the Crown, there may be vacancies in the chain of office between the death or resignation of one incumbent and the appointment of the next. By this means all the rights of the parsonage are preserved entire to the successor; for the present incumbent, and his predecessor who lived eight centuries ago, are in law one and the same person. And what was given to the one, qua person, was given to the other also. Similarly, the Public Trustee and the Treasury Solicitor are each a corporation sole; the legal personality of the office subsists independently of the actual official holding."

226. Thus, whilst the Coordinator-General is a ‘*corporation sole*’, that corporation is only one person, namely the person occupying the office of Coordinator-General for the time being. Accordingly, that person’s duty to consider the matters identified in section 35(1) falls on that person.

5.10 Additional information or comment under section 35(2)

227. Section 35(2) permits the Coordinator-General to ask the Proponent for additional information or comment. The power is a discretionary power. Generally, therefore, whether the Coordinator-General does, or does not, ask for additional information or comment will be a matter for the Coordinator-General.

5.11 Scope of the obligation to prepare report evaluating EIS

228. Section 35(3) of the *SDPWO Act* provides that the ‘*Coordinator-General must prepare a report evaluating the EIS*’. The question that arises is: what must be included in such a report in order to comply with this obligation?
229. Assistance in answering this question may be found in the jurisprudence concerning the ‘*relevant considerations*’ ground of judicial review; a ground that is only made out when a decision-maker fails to take into account a consideration that they are bound by statute to take into account.¹⁸⁹
230. In *Minister for Immigration v Yusuf*¹⁹⁰, the Tribunal was ‘*bound*’ to have regard to whether an asylum seeker had a ‘*well-founded fear of persecution in their country of origin*’ for a reason mentioned in the Geneva Convention on the status of refugees. This duty however did not translate into a duty to consider every integer

¹⁸⁹ *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1986) 162 CLR 24 at 40 per Mason J.

of the asylum seeker's claim to a fear of persecution. McHugh, Gummow and Hayne JJ observed at 348 [74]:

What is important, however, is that the grounds of judicial review that fasten upon the use made of relevant and irrelevant considerations are essentially concerned with whether the decision-maker has properly applied the law. They are not grounds that are centrally concerned with the process of making the particular findings upon which the decision-maker acts.

231. Their Honours applied these principles in the following way:¹⁹¹

The essence of Ms Yusuf's complaint was that the Tribunal made no finding about whether one of the three principal incidents upon which she relied as revealing past acts of persecution was capable of giving rise to a well-founded fear of persecution. She said that there was an invasion of her house by members of the Hawiye clan during which her husband (and perhaps, she) has been attacked and her husband had been obliged to flee ...

... The house invasion was said by Ms Yusuf to be an important incident demonstrating that she had a well-founded fear of persecution for a Convention reason – membership of a particular race or social group constitute by her Abaskul clan ...

...In its "Discussion of Evidence and Findings" the Tribunal began by saying:

'The Tribunal accepts that the applicant has twice been attacked since the outbreak in 1991 of the civil war in Somalia and that she identified her attackers as being of the Hawiye clan. It notes that the two attacks occurred some time ago and that on each occasion she was assisted by other members of the Hawiye clan.'

On its face this amounts to a finding that the Tribunal was persuaded that there had been only two attacks and was not persuaded that there had been more. That view is reinforced by the Tribunal's later reference to 'the two isolated occasions the applicant encountered problems' and its reference to her having 'twice [come] under attack'.

Further, in rejecting the argument that the two attacks it accepted had occurred could give rise to a well-founded fear of persecution, the Tribunal made a finding that the Hawiye clan was not targeting the Abaskul clan. This finding, being a finding at a higher level of generality than the question of specific incidents, may well explain why the Tribunal made no detailed finding about the house invasion. That being so, it is not demonstrated that the Tribunal made some error of law. It is not shown that it failed to take account of a relevant matter or that it asked itself the wrong question."

232. Thus, the manner in which the Tribunal dealt with the matter made it unnecessary for it to deal with every integer of the asylum-seeker's claimed fear of persecution. The ultimate question the Tribunal had to decide was whether she had a fear for a reason mentioned in the Convention. It was unnecessary for the Tribunal to make findings on whether the alleged past acts of persecution of her were true because it

¹⁹⁰ (2001) 206 CLR 323.

¹⁹¹ *Yusuf* at [87]-[91].

was not satisfied that those acts, if they did occur, was for a reason mentioned in the Convention.

233. Similar reasoning is applicable to the duty provided by section 35(3) of the *SDPWO Act*.
234. The duty is to ‘*prepare a report evaluating the EIS*’. How the report must evaluate the EIS is not prescribed. Reasonable minds might differ as to how to evaluate the EIS. One approach might be to undertake a global evaluation of whether the claims made in the EIS are supported by empirical and objective evidence, without undertaking a detailed analysis of the specific environmental impacts of the project. Another approach might be to analyse in detail the merits of each claim made in the EIS. A report adopting either of these approaches would be a ‘*report evaluating the EIS*’. In neither case could be it said that the report is not a ‘*report evaluating the EIS*’.
235. This is reinforced by the use of ‘*may*’ in section 35(4)(a), which provides that ‘*in evaluating the EIS ... the Coordinator-General may evaluate the environmental effects of the project*’ (emphasis added).
236. There will of course be cases where a report is so deficient that it cannot be said to be in truth a ‘*report evaluating the EIS*’. However, such cases aside, questions about whether a specific matter should or should not be included in the report are not relevant to whether the report meets the description of a ‘*report evaluating the EIS*’. Such questions are questions going to the merits of the report¹⁹², which are questions specifically excluded from the terms of reference for this review.

5.12 What must the Coordinator-General do personally for the preparation of the report?

237. The scope of the Coordinator-General’s obligation to ‘*prepare*’ the evaluation report is informed by the following observations by Brennan J in relation to the functions of a Minister:¹⁹³

A Minister may retain his power to make a decision while relying on his Department to draw his attention to the salient facts ... The Parliament can be taken to intend that the Minister will retain control of the process of decision-

¹⁹² *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1986) 162 CLR 24 at 40 per Mason J.

¹⁹³ *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1986) 162 CLR 24 at 66 per Brennan J.

making while being assisted to make the decision by departmental analysis, evaluation and precis of the material relevant to that decision.

238. Consistently with these observations, it is open to the Coordinator-General to obtain departmental assistance to prepare the report. The drafting of the report, for example, could be undertaken by departmental officials. However, the Coordinator-General must be personally satisfied with the contents of the report. The Coordinator-General's involvement in decisions about the preparation of the report, consideration of material that informs the report, and parts of the report that reveal a deliberative process on his part all assists in showing that the Coordinator-General has exercised the required degree of control.¹⁹⁴

5.13 That which the Coordinator-General ‘*may*’ do under section 35(4)

239. Section 35(4) provides:

- (4) *In evaluating the EIS, the Coordinator-General may—*
- (a) *evaluate the environmental effects of the project and any other related matters; and*
 - (b) *state conditions under section 39, 45, 47C, 49 or 49B; and*
 - (c) *make recommendations under section 43 or 52; and*
 - (d) *if division 8 applies to the project—impose, under that division, conditions for the undertaking of the project.*

240. Section 35(4) uses the word ‘*may*’. Ordinarily, the use of that word in relation to a power means that the power is discretionary.¹⁹⁵ There is no reason to consider that the term ‘*may*’ in this section has any other meaning than conferring a discretionary power.¹⁹⁶

5.14 The ‘environment’

241. Importantly for the discretionary consideration to ‘*evaluate the environmental effects of the project*’ in section 35(4)(a), the term ‘*environment*’ has an extended meaning under the *SDPWO Act*. The schedule contains the following definition of the term:

environment includes—

- (a) *ecosystems and their constituent parts, including people and communities; and*

¹⁹⁴ *Minister for Local Government v South Sydney City Council* (2002) 55 NSWLR 381 at [212]-[215].

¹⁹⁵ Section 32CA(1) of the *Acts Interpretation Act 1954*.

¹⁹⁶ cf *Finance Facilities Pty Ltd v Federal Commissioner of Taxation* (1971) 127 CLR 106 at 134-135 per Windeyer J.

- (b) *all natural and physical resources; and*
- (c) *the qualities and characteristics of locations, places and areas, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community; and*
- (d) *the social, economic, aesthetic and cultural conditions that affect, or are affected by, things mentioned in paragraphs (a) to (c).*

242. Thus the discretionary consideration to ‘*evaluate the environmental effects of the project*’ requires an evaluation of the effects of the Project on all aspects of the ‘*environment*’ included within the extended meaning of the *SDPWO Act*.

5.15 Summary of evaluation requirements

243. In summary, to comply with Part 4 of the *SDPWO Act*, the evaluation of the project EIS must involve:

- (a) personal consideration by the Coordinator-General of:
 - (i) the EIS;
 - (ii) all properly made submissions about the EIS;
 - (iii) other submissions accepted by the Coordinator-General about the EIS;
 - (iv) any other material the Coordinator-General considers is relevant to the project;
- (b) preparation by the Coordinator-General of a report evaluating the EIS.

244. There is some support for the view that the obligation to give personal consideration to submissions is satisfied by consideration of summaries of those submissions. However, as a minimum, the Coordinator-General must give personal consideration to the facts, arguments and opinions put forward in the submissions and not rely on someone else’s assessment of their worth. A summary could satisfy this requirement if it sufficiently summarised the facts, arguments and opinions in each submission.

245. The Coordinator-General may be assisted in the preparation of the report evaluating the EIS. This assistance may involve his officers undertaking the actual

drafting on his behalf, provided that he maintains control over the process and satisfies himself with the contents of the final version of the report ultimately adopted by him.

246. The Coordinator-General has a high level of discretion as to what is contained in the report evaluating the EIS. Provided the report undertakes an evaluation of the EIS, the content of the report is a matter for the discretion of the Coordinator-General.

6. CONSIDERATION BY COORDINATOR-GENERAL OF SUBMISSIONS RECEIVED AFTER THE AEIS

247. As set out in Chapter 3, the Coordinator-General exercised his power under section 35(2) of the *SDPWO Act* to seek additional information about the EIS from the Proponent. The Proponent supplied the additional information sought in a document that was described in the EIS evaluation report as the AEIS.

248. The Coordinator-General approved a briefing note recommending further public notification in relation to the Project after the AEIS was received.¹⁹⁷

249. The public notification attached to the briefing note contained an invitation to members of the public to make submissions:

*... the proponent has produced additional information to the EIS which responds to key issues raised in submissions received on the 2014 EIS and provides updated information on the project. The Coordinator-General invites your comment on the project*¹⁹⁸

250. The Coordinator-General also signed letters to various local, State and Commonwealth agencies notifying them of the AEIS and inviting those agencies to make submissions. The letters contained the following words:

...I have reviewed the additional information to the EIS and determined that it should be released for public and advisory agency comment.

Your agency is invited to make a submission on the additional information on the EIS and, in particular, to advise:

- *proposed outcome focussed conditions for the Coordinator-General's consideration in preparation of his evaluation report, for regulatory matters relevant to your jurisdiction*
- *if any information is still outstanding that would prevent your agency from providing the above*
- *any other advice or comment for the Coordinator-General's consideration.*¹⁹⁹

251. In response to the Coordinator-General's invitation, 614 submissions were received (referred to herein as the 'further submissions').

252. The question that arises is: Was the Coordinator-General legally obliged to consider the further submissions?

¹⁹⁷ Doc 11-038.

¹⁹⁸ Doc 11-040.

¹⁹⁹ Doc 11-042.

253. The matters which section 35(1) of the *SDPWO Act* obliges the Coordinator-General to consider are set out above. Those matters are:

- (a) the ‘*EIS*’;
- (b) ‘*properly made submissions*’;
- (c) ‘*other submissions accepted by the Coordinator-General about the EIS*’;
- (d) ‘*other material the Coordinator-General considers relevant*’.

254. Each of these matters is examined in the context of the further submissions.

6.1 Section 35(1) - *the EIS*

255. The further submissions are not the *EIS*.

6.2 Section 35(1) - *properly made submissions*

256. The further submissions are not ‘*properly made submissions*’ either: they were made after the period for making submissions stated in the public notice of the *EIS*.²⁰⁰

6.3 Section 35(1) - *other submissions accepted by the Coordinator General about the EIS*

257. The further submissions are arguably ‘*other submissions accepted by the Coordinator General about the EIS.*’ This is discussed in more detail in paragraphs 264 to 274 below.

6.4 Section 35(1) - *other material the Coordinator-General considers relevant*

258. If the further submissions were considered relevant by the Coordinator-General he would be obliged to consider them. It is established that the legislature may make a designated fact a condition upon which a decision-maker’s jurisdiction may depend.²⁰¹ That fact may be a particular state of mind of the decision-maker.²⁰² That the Coordinator-General ‘*considers*’ material to be relevant is such a fact. That fact triggers the Coordinator-General’s obligation to consider that material. However, that obligation is not engaged unless the Coordinator-General has

²⁰⁰ Sections 24 and 33.

²⁰¹ *Minister for Immigration v Eshetu* (1999) 197 CLR 611 at 650 [127] per Gummow J.

²⁰² *Minister for Immigration v Eshetu* (1999) 197 CLR 611 at 651 [130] and [131] per Gummow J.

positively formed the opinion that material *is* relevant. This is a matter of discretionary judgment for the Coordinator-General.

259. There is no documentary evidence that the Coordinator-General did, or did not, form the opinion that all of the further submissions were relevant. This lack of documentary evidence, on this particular issue, is not surprising.
260. However, there is a body of evidence that the Coordinator-General did form the opinion that the further submissions were relevant:
- (a) he publicly invited submissions after receipt of the AEIS;
 - (b) he stated in the EIS evaluation report that he had considered them; and
 - (c) some of them were referred to in the EIS evaluation report.²⁰³
261. However, it is impossible to conclude, only on a review of the documents, the state of mind of the Coordinator-General.
262. As is noted elsewhere in this review, this is a document review that does not involve the calling of evidence from witnesses.
263. It is therefore not possible to express a definitive conclusion, based on the documents, as to whether the Coordinator-General considered the further submissions to be relevant.

6.5 The further submissions are other submissions accepted by the Coordinator-General about the EIS

264. The *SDPWO Act* does not define ‘*other submissions accepted by the Coordinator-General about the EIS*’. Section 34(3) empowers the Coordinator-General to accept submissions even if they are not properly made submissions. Submissions accepted by the Coordinator-General about the EIS are ‘*other submissions accepted by the Coordinator-General about the EIS*’.
265. The Coordinator-General approved further public notification following receipt of the AEIS, with an invitation to members of the public to make submissions. The

²⁰³ EIS evaluation report page 151.

letters to the various local, State and Commonwealth agencies indicated that their submissions would be considered.

266. There is no formal record of a decision by the Coordinator-General to accept the further submissions.
267. However, his approval of the various notices inviting the further submissions conferred authority on the officers of his Department to accept those submissions on his behalf.²⁰⁴ It is clear that those officers did accept those submissions. The documents show that those officers' deliberations in the preparation of the EIS evaluation report were informed by a detailed consideration of the submissions about the AEIS.²⁰⁵
268. Were the further submissions '*submissions ... about the EIS*'?
269. The acronym '*AEIS*' is not used in the *SDPWO Act*. It is an acronym adopted administratively to describe the information received by the Coordinator-General under section 35(2) of the *SDPWO Act*. That section empowers the Coordinator-General to:
- ... ask the proponent for additional information or comment about the EIS and the project.*
270. The acronym '*AEIS*' is a shorthand way that was adopted to describe the information that the proponent provided the Coordinator-General under this section: '*additional information ... about the EIS*'.
271. The word '*about*' is '*a word of connection suggesting connection of subject matter*'.²⁰⁶ The subject matter of the AEIS is the EIS. It is arguable, therefore, that the subject matter of the further submissions (about the AEIS) is therefore also the EIS.

²⁰⁴ It is recognised that the nature, scope and purpose of a statutory function may be one that the repository of the function may exercise through the agency of others because administrative necessity indicated that it is impractical for him to act otherwise than through his officers responsible to him: *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1986) 162 CLR 24 at 38 per Mason J. The administrative function of '*accepting*' a submission, which involves no more than filing the submission for the purpose of its use in the evaluation process, is a function that appears to fall within this category.

²⁰⁵ See for example 8.73 of the EIS evaluation report and Doc 11-0697.

²⁰⁶ *R v NM* [2013] 1 Qd R 374.

272. This argument is reinforced by the statutory context. The evident purpose of the Coordinator-General's power to seek further information under section 35(2) of the *SDWPO Act* is to inform his report evaluating the EIS, which he has a mandatory obligation to prepare under section 35(3). Submissions about additional information provided under section 35(2) contextualise that information.
273. This argument is also supported by the documentary evidence:
- (a) the notification of the AEIS actually published in newspapers stated: '*The proponent has produced additional information to the EIS which responds to key issues raised in submissions received on the 2014 EIS and provides updated information on the project. **The Coordinator-General invites your comment on the project***'.²⁰⁷ (emphasis added)
 - (b) emails to previous submitters at around the time of the public notification of the AEIS stated: '*The Coordinator-General invites you to have your say on the project. **The Coordinator-General will consider submissions on the EIS and the additional submissions** as part of his evaluation of the project's environmental impacts*'.²⁰⁸
 - (c) letters to submitters were also sent stating '*that submissions **on the project** are invited*'.²⁰⁹
274. It is therefore reasonably arguable that the further submissions were '*other submissions accepted by the Coordinator-General about the EIS*'.
275. If that argument is accepted the Coordinator-General was obliged by section 35(1) of the *SDWPO Act* to consider those submissions.
276. For the reasons explained above, consideration under section 35(1) means personal consideration of those submissions by the Coordinator-General.

²⁰⁷ Doc 11-0073.

²⁰⁸ Doc 11-0064.

²⁰⁹ Doc 11-0072.

7. FRAMEWORK OF ANALYSIS

277. Chapters 8 to 11 of this review identifies the documents and the process²¹⁰ underpinning the Coordinator-General's evaluation of the Project culminating in the EIS evaluation report.
278. With respect to each issue addressed by the Coordinator-General in the EIs evaluation report, this review:
- (a) identifies the evidence or other material held by the Coordinator-General relating to the EIS evaluation report²¹¹, including the information with respect to the Project held, or prepared, by departmental officials;
 - (b) summarises the process for the evaluation of the Project EIS as described in the EIS evaluation report.²¹² This is done by making specific reference to statements in the EIS evaluation report relating to the Coordinator-General's evaluation of an issue, which often involves:
 - (i) a description of the issue identified by the Coordinator-General;
 - (ii) a statement of the Coordinator-General's evaluation of potential impacts associated with the issue;
 - (iii) a statement of the Coordinator-General's evaluation of mitigation and management measures, including by reference to commitments made by the Proponent and referred to by the Coordinator-General, and conditions said to be imposed by the Coordinator-General;
 - (c) summarises the Coordinator-General's conclusion on the issue; and
 - (d) makes, on occasion, some observations about the documents, or process, and the EIS evaluation report.

²¹⁰ as demonstrated by the documents

²¹¹ See terms of reference 4 (a) of this review.

²¹² See terms of reference 4 (b) of this review.

279. Chapter 13 of this review expresses an opinion about whether the evaluation of the Project complied with Part 4 of the *SDPWO Act*.²¹³
280. In these chapters, unless otherwise specified, the acronyms TOR and EIS refer to documents prepared after the change of scope in 2012.

²¹³ See terms of reference 4 (d) of this review.

8. ENVIRONMENTAL IMPACTS

281. Chapter 5 of the EIS evaluation report contained the Coordinator-General's evaluation of environmental impacts other than matters of national environmental significance, which were dealt with in Chapter 8.

282. The major environmental effects were considered under the following headings:

- (a) Land impacts;
- (b) Noise and vibration;
- (c) Air emissions;
- (d) Traffic and transport;
- (e) Jondaryan rail load-out facility;
- (f) Ecology;
- (g) Waste;
- (h) Hazard and risk assessment; and
- (i) Cultural Heritage.

283. Each of these topics is addressed below.

8.1 Land impacts

8.1.1 What was the evidence or other material held by the Coordinator-General on land impacts?

TOR

284. With respect to the issue of land impacts, the TOR required the Proponent to address potential impacts and mitigations measures with respect to:

- (a) Land use and tenure;²¹⁴
- (b) Topography, geology and soils;²¹⁵

²¹⁴ TOR Section 5.2.1 pages 19 to 22.

- (c) Land contamination;²¹⁶ and
- (d) Scenic amenity and lighting.²¹⁷

EIS

285. Appendix E to the EIS indicates that these issues are predominantly addressed in EIS Chapter 4 – Land Resources, with the issue of Scenic amenity and lighting largely addressed in EIS Chapter 15 – Visual Amenity and Lighting.²¹⁸
286. EIS Chapter 4 – Land Resources *‘describes the existing environment, details the potential impacts on land resources as a result of the revised Project and prescribes mitigation measures to prevent or minimise these impacts.’*²¹⁹
287. Impacts detailed in the EIS include:
- (a) one *‘inactive’* stock route that may potentially be affected.²²⁰ (A submission from the Department of Natural Resources and Mines with respect to the EIS confirmed that Jondaryan-Mudlu Road is a dedicated stock route that is currently classified as inactive)²²¹;
 - (b) impact on up to approximately 1,361 hectares of land mapped as potential strategic cropping land;
 - (c) impact on land mapped as good quality agricultural land, in particular with approximately 54 per cent of the revised Project site impacting on Class A good quality agricultural land and 34 per cent of the revised Project site impacting on Class B good quality agricultural land. Land in the road and rail corridor is similarly impacted;²²²

²¹⁵ TOR Section 5.2.2 pages 22 to 27.

²¹⁶ TOR Section 5.2.3 page 27.

²¹⁷ TOR Section 5.2.4 pages 27 to 29.

²¹⁸ See EIS Appendix E pages 26 to 42.

²¹⁹ EIS page 4-1.

²²⁰ EIS Section 4.2.2 page 4-6.

²²¹ Submission 444.

²²² EIS Section 4.5.3 pages 4-30 to 4-32. See also EIS Appendix G.1.5 Soil Technical Report – Rail and Road page 31.

- (d) the potential for final out-of-pit dumps (elevated landforms) and final voids (depressed landforms) to result in unusable post-mined land;²²³
- (e) risk of land contamination for the revised Project area from hydrocarbon spills and from the potential for acid, neutral, saline and metalliferous drainage;²²⁴
- (f) potential for contamination arising from the need to relocate the Acland Tip in order to access the resource beneath it;²²⁵ and
- (g) erosion risk from land disturbance.

288. The EIS recognises that:²²⁶

- (a) *‘[g]iven the revised Project will involve open cut mining, the potential to affect land suitability is significant’*; and
- (b) *‘it is anticipated that there will be a net reduction in the land suitability rating as a result of the revised Project’*.

289. The EIS also addresses other potential impacts, and provides detail about why those potential impacts are not an issue for the Project. One example of such an issue relates to forestry products. The EIS records that there are no State-owned or privately-owned forest products that will be affected by the revised Project.²²⁷

290. In addition to identifying impacts with respect to land resources, the EIS includes details of mitigation and management measures to address those impacts. Those measures and commitments are summarised in Section 4.12 – Table 4-48.²²⁸ Such measures includes those identified in:

- (a) the Final Land Form Technical Report in Appendix G.1.8, which outlines the design parameters for the final landform in detail;²²⁹

²²³ EIS Section 4.5.4 page 4-32.

²²⁴ EIS Section 4.6.4 page 4-50.

²²⁵ EIS Section 4.6.3 page 4-48.

²²⁶ EIS section 4.5.4 page 4-32.

²²⁷ EIS page 4-15.

²²⁸ EIS pages 4-91 to 4-92.

²²⁹ EIS page 4-35.

- (b) the Final Land Use and Rehabilitation Management Plan in Appendix J.2 to the EIS, which details rehabilitation matters;²³⁰
 - (c) the Topsoil Management Plan in Appendix J.3, which is an initiative to ensure the efficient use of this valuable resources and is intended to improve the revised Project's rehabilitation performance;²³¹ and
 - (d) a Life of Mine Plan, which helps to inform the mine closure planning process and establishes a basis for final landform design and management.²³²
291. EIS Chapter 15 – Visual Amenity and Lighting *'provides a description of the existing landscape character and visual amenity of the revised Project. It also identifies potential visual impacts of the revised Project and mitigation and management measures proposed to avoid or minimise adverse impacts'*.²³³
292. The EIS notes the potentially visually prominent elements of the revised Project as including:²³⁴
- (a) mining pit areas;
 - (b) out-of-pit spoil dumps (un-rehabilitated) and elevated landforms (rehabilitated);
 - (c) voids (un-rehabilitated) and depressed landforms (rehabilitated);
 - (d) associated infrastructure, including a new train load-out facility, a rail spur to the train load-out facility, upgrade of the existing coal handing and processing plant, a new materials handling facility and re-alignment of Jondaryan-Muldu Road; and
 - (e) night lighting.

²³⁰ EIS page 4-35 and 4-66.

²³¹ EIS page 4-66.

²³² EIS page 4-85.

²³³ EIS Chapter 5 page 15-1.

²³⁴ EIS page 15-25.

293. The EIS concludes that:²³⁵

... approximately eight of the 44 sensitive receptors would have an expansive view of the various works begin undertaken for the revised Project ... Primarily, traffic on Oakey-Cooyar would have the highest level of visibility over the revised Project site. However, as the traffic is considered as a temporary receptor, impacts are considered to be minor. Sensitive receptors within Acland would also have views of the revised Project site due to its proximity, but suitable mitigation measures such as vegetation screening will minimise visual impacts.

294. In addition, with respect to the impact of lighting, the EIS concludes that lighting is expected to create a glow in the night sky that will be visible from surrounding areas.

295. The mitigation and management measures and commitments proposed to address the visibility and visual impacts are outlined in Table 15-6.²³⁶

Submissions on the EIS

296. A briefing note was provided to the Coordinator-General attaching a disc containing a copy of all of the submissions on the EIS.²³⁷ The briefing note also attached a summary of the submissions. This summary records that the local, State and Commonwealth agencies raised the following key issues, relevant to land impacts:²³⁸

Department of Natural Resources and Mines (DNRM)

- *Offsets areas are located on Strategic Cropping Land*
- *More soil sampling required on topsoil to verify final land use proposal*
- *Salinization of voids may affect proposed final land use of grazing*
- *1060 hectares of Class 2 and 3 cropping land will be lost, with the post-mining land suitability to be only Class 4 or 5 cropping land – this needs to be improved²³⁹*

297. This document also notes that there were a number of key themes that emerged from the individual submissions:²⁴⁰

Impacts on Strategic Cropping Land (SCL)

Concerns with mining and permanent impacts on good quality agricultural land, along with rejection of the proponent's proposal to return most land to a standard suitable for grazing, were raised.

²³⁵ EIS page 15-49.

²³⁶ EIS page 15-49.

²³⁷ Doc 10-0008.

²³⁸ Doc 10-0010.

²³⁹ Submission 444.

²⁴⁰ Doc 10-0010.

The request for further information requires the proponent to clarify the applicability of the newly introduced Regional Planning Interests Act 2014 (RPI Act) to the project. If an application for assessment of the project under the RPI Act is to be made, the proponent is to confirm intended timeframes for lodging an application. If a decision on an application is made prior to finalising the AEIS, confirm the decision, including any conditions applied.

In addition, given the changing legislative landscape on SCL, the additional information requires the proponent to confirm legislative requirements that apply to the project to address impacts on potential SCL.

298. A review of the submissions shows that the summary provided to the Coordinator-General is a reasonable one.²⁴¹
299. The main theme of submissions opposing the Project was its perceived effect on agricultural land. In particular, many submissions expressed concern that the Project would impair the productivity of land traditionally used for agriculture. A particular concern was that mining on land would render it unsuitable for cropping.
300. There were also a small number of submissions with respect to visual amenity²⁴² and lighting.²⁴³ Some of those submissions sought to illustrate effects on visual amenity by use of photos taken from the area surrounding the mine that show blasting conducted at the mine. One submission proposed a curfew on lights used at the mine from 11pm to 5am.

AEIS

301. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, required additional information to complete the evaluation of the Project.²⁴⁴ Information required in response to issues raised in submissions, with respect to land impacts, included:²⁴⁵
- (a) clarification of applicability of the *Regional Planning Interests Act 2014* (Qld) to the Project and, if an application is to be made, the intended timeframe for lodging an application;

²⁴¹ See, for example, Submission 296 pages 90 to 92, Submission 466 pages 3 to 7, Submission 514 page 4.

²⁴² Submission 292 pages 39 to 41 regarding the adequacy of the analysis, Submission 296 page 106 and Submission 568 regarding the ‘*overburden atrocities*’ and offensive visual impact of out-of-pit dumps.

²⁴³ See, for example, Submission 55, Submission 284, Submission 296 page 106, Submission 474 and Submission 568.

²⁴⁴ Doc 10-0002.

²⁴⁵ Doc 10-0004.

- (b) confirmation of legislative requirements that apply to the Project to address impacts on potential strategic cropping land;
- (c) confirmation that the mining lease application has been amended to include surface rights areas;
- (d) confirmation of the total surface area impacted by the Project activities;
- (e) information on the outcomes of grazing trials to date; and
- (f) updates to the commitments register and Environmental Management Plan as required.

302. With respect to land impacts, in response to the Coordinator-General's letter of 17 April 2014, the AEIS:

- (a) confirms that the *Regional Planning Interests Act 2014* applied to the revised Project, as the Project site is mapped entirely within a priority agricultural area and contains large areas of strategic cropping areas (being areas mapped as potential strategic cropping land under the former *Strategic Cropping Land Act 2011 (Qld)*);²⁴⁶
- (b) confirms an application will be made under the *Regional Planning Interests Act 2014 (Qld)* prior to construction;²⁴⁷
- (c) confirms amendment to the mining lease application to exclude the Acland area and part of the southern area;²⁴⁸
- (d) identifies that the total disturbance footprint for the Project is estimated at 1,815 hectares, a reduction of 215 hectares compared to that reported in the EIS;²⁴⁹
- (e) provides detail on the current outcomes of grazing trials and indicates that the Proponent is committed to the continuation of its grazing trials project for five years with the longer term goal of developing a sustainable pastoral

²⁴⁶ AEIS Section 5.1.2.1 page 4.

²⁴⁷ AEIS Section 5.1.2.1 page 4.

²⁴⁸ AEIS Section 5.1.2.3 page 4.

²⁴⁹ AEIS Section 5.1.2.4 page 8.

management regime for rehabilitated mined land and to demonstrate that beef raised on such land is not contaminated and is suitable for commercial production;²⁵⁰

- (f) in response to the submissions raising concerns about the impact on strategic cropping land (including submissions by Department of Natural Resources and Mines,²⁵¹ Toowoomba Regional Council²⁵² and private submitters²⁵³) commits to undertake further soil surveys to update the Topsoil Management Plan and the Final Land Use and Rehabilitation Plan,²⁵⁴ as well as otherwise addressing the concerns raised.²⁵⁵ The Proponent also commits to engage a consultant to assess the impacts of the revised Project in the context of the *Regional Planning Interests Act 2012* (Qld) requirements;²⁵⁶
- (g) in response to submissions expressing concern about the stock route, commits to re-align Jondaryan-Muldu Road and acknowledges that an approval process will be undertaken for the re-alignment of the inactive stock route;²⁵⁷
- (h) notes that tree planting activities are proposed to mitigate visual impact;²⁵⁸ and
- (i) notes that it is unlikely the Project will substantially increase the existing visual impact of night time glow – the existing mine already provides some luminance in the night sky.²⁵⁹

²⁵⁰ AEIS Section 5.1.2.5 pages 11 to 17. See also AEIS Section 5.3.24.36 page 253.

²⁵¹ Submission 444, particularly at pages 4 to 8.

²⁵² Submission 466, particularly at pages 3 to 7.

²⁵³ See, for example, response to private submitter 284 in AEIS Section 5.3.19.1 pages 182 to 183.

²⁵⁴ See, for example, AEIS Sections 5.2.9.44 and 5.2.9.45 page 103, Section 5.2.10.19 page 107.

²⁵⁵ See, for example, AEIS Section 5.2.9.12 pages 78 to 84, Sections 5.2.9.15 and 5.2.9.15 page 86, Sections 5.2.10.20 and 5.2.10.21 page 107, Section 5.2.10.91 page 134, Section 5.2.9.49 page 103, Section 5.3.51.9 page 331, Section 5.3.51.19 page 336.

²⁵⁶ For example in AEIS Section 5.2.9.11 page 78, Section 5.2.10.11 and 5.2.10.13 page 106, Section 5.3.22.29 page 228. See also AEIS Appendix D Commitments Register page 4, Commitments 96 to 99, 101 and 102.

²⁵⁷ See, for example, private submission 292 and response in AEIS Section 5.3.22.6 page 216.

²⁵⁸ AEIS Section 5.3.72.6 pages 366 to 367.

²⁵⁹ AEIS Section 5.3.7.19 pages 152 to 153, Section 5.3.19.12 pages 191 to 192, Section 5.3.24.38 page 254, Section 5.3.34.1 page 285 to 286, Section 5.3.72.6 pages 366 to 367.

303. The overall commitments by the Proponent with respect to Land Resources and Visual Amenity are collected in AEIS Appendix D.

Further submissions received after the AEIS

304. On 18 August 2014, the office of the Coordinator-General wrote to the Department of Natural Resources and Mines, the Department of Environment and Heritage Protection, the Department of Agriculture, Fisheries and Forestry and the Department of State Development, Infrastructure and Planning. The letters:

- (a) note that the Coordinator-General would soon make a decision on release of the AEIS;
- (b) note a key issue of interest in submissions made on the EIS was the Project's impacts on land use given the proposal to open-cut mine on areas of good quality agricultural land;
- (c) note that the evaluation report on the Project would be finalised prior to any engagement by the Proponent with the *Regional Planning Interests Act 2014* (Qld); and
- (d) seek advice to inform the Coordinator-General's consideration of whether the Proponent has adequately and realistically sought to minimise and mitigate adverse impacts of the Project on future land use within the context of what is achievable given areas of high value cropping land will be mined. The advice was sought by way of a short-term interagency advisory group to discuss the issue, with final advices to be provided as part of the comment period for the AEIS.²⁶⁰

305. The Department of Agriculture, Forestry and Fisheries made a submission:²⁶¹

- (a) noting that the Project is mapped entirely within a priority agricultural area identified in the Darling Downs Regional Plan and that priority agricultural land uses may occur within the Project area;

²⁶⁰ Doc 11-0032.

²⁶¹ Further Submission 72.

- (b) noting that any land use change that adversely impacts a priority area land use is inconsistent with the Darling Downs Regional Plan;
- (c) noting that the Darling Downs Regional Plan aims to protect priority area land uses within priority agricultural areas, and to maximise opportunities for co-existence of resource and agricultural land uses within priority agricultural areas; and
- (d) suggests this may be overcome if the Proponent considered ways of returning the Project area to a condition suitable for the undertaking of a priority area land use, or developing equivalent land elsewhere in the priority agricultural area to be used for a priority area land use.

306. Otherwise, further submissions received after the AEIS on this issue substantially repeated previously expressed concerns as to the effect of the Project on agricultural land.

Information clarification to the AEIS

307. Further information was also provided by way of clarification to the AEIS in December 2014. The information provides a justification for the reliance in the AEIS on particular information with respect to agricultural trends.²⁶²

Briefing notes to the Coordinator-General

308. Each of the documents referred to above, other than the further submissions (received after the AEIS), was provided to the Coordinator-General as attachments to briefing notes.

8.1.2 Summary of the process of evaluation of the Project regarding land impacts as described in the report evaluating the EIS

309. The evaluation of land impacts is addressed in Part 5.1 of the EIS evaluation report and is divided into two parts:

- (a) '*disturbance footprint*';²⁶³ and
- (b) '*mine pits and voids*'.²⁶⁴

²⁶² Information Clarification to the AEIS page 27.

²⁶³ EIS evaluation report pages 14 to 16.

Disturbance footprint

310. The disturbance footprint section of the EIS evaluation report states the disturbance footprint for the Project is 1,815 hectares.²⁶⁵ It notes that this is a 60 per cent reduction compared to the footprint under the original scope of the Project.²⁶⁶ It notes that post-mining, the Proponent has committed to return the majority of the land to self-sustaining pasture for grazing.²⁶⁷
311. The disturbance footprint section of the EIS evaluation report contains an evaluation of ‘*mitigation and management measures*’.²⁶⁸ It states those measures include:
- (a) progressive rehabilitation of mined land as new pit areas are opened up;²⁶⁹
 - (b) rehabilitation post-mining of other disturbance areas, such as haul roads, the rail spur, mining infrastructure area and Coal Handling Preparation Plant;²⁷⁰
 - (c) preparation of a Topsoil Management Plan;²⁷¹ and
 - (d) preparation of a Final Land Use Management Plan.²⁷²
312. The EIS evaluation report states that the Topsoil Management Plan:²⁷³
- (a) details how topsoil will be stripped, stockpiled and maintained, particularly to protect it from erosion; and
 - (b) provides the proposed method of re-applying topsoil post-rehabilitation, how re-seeding would be applied to establish vegetation to avoid soil loss from erosion, and the management measures that will be implemented to improve the early survival success of re-established vegetation.

²⁶⁴ EIS evaluation report pages 16 to 17.

²⁶⁵ EIS evaluation report page 14.

²⁶⁶ EIS evaluation report page 14.

²⁶⁷ EIS evaluation report page 14.

²⁶⁸ EIS evaluation report pages 14 to 16.

²⁶⁹ EIS evaluation report page 15.

²⁷⁰ EIS evaluation report page 15.

²⁷¹ EIS evaluation report page 15.

²⁷² EIS evaluation report page 15.

²⁷³ EIS evaluation report page 15.

313. The EIS evaluation report states that the Proponent has committed to undertake further soil surveys to refine the Topsoil Management Plan prior to commencing topsoil stripping.²⁷⁴
314. The EIS evaluation report states that the Final Land Use Management Plan is the Project's long-term rehabilitation, use and management strategy and includes:²⁷⁵
- (a) erosion control procedures;
 - (b) revegetation goals;
 - (c) success targets and criteria;
 - (d) long-term monitoring;
 - (e) reporting on revegetation success and remediation strategies if required; and
 - (f) management of protected areas within the Project area, such as the Lagoon Creek conservation management zone, offsets areas and threatened species translocation sites.
315. The EIS evaluation report notes that the Proponent's rehabilitation strategy will be informed by data from trials using cattle run by Acland Pastoral Company on rehabilitated land from its existing operation.²⁷⁶ The trials will gather data about the success of rehabilitated land and the quality of beef from cattle run on the revegetated pasture.²⁷⁷ Acland Pastoral Company has sought input for the trials from a local university and a contracted agricultural specialist, as well as using the local farming expertise of Acland Pastoral Company staff.²⁷⁸
316. The EIS evaluation report states that the Coordinator-General imposes conditions that require:²⁷⁹
- (a) '*detailed requirements for pre-mining soil surveys*';²⁸⁰

²⁷⁴ EIS evaluation report page 15.

²⁷⁵ EIS evaluation report page 15.

²⁷⁶ EIS evaluation report page 14.

²⁷⁷ EIS evaluation report page 15.

²⁷⁸ EIS evaluation report page 14.

²⁷⁹ EIS evaluation report pages 15 to 16.

- (b) *‘undisturbed reference sites of the same soil type’;*
- (c) *‘rehabilitation be undertaken to re-establish discrete land units, with each to be assigned a specific land use suitability’;*
- (d) *‘rehabilitated land is to meet set success criteria on matters such as soil attributes, plant density, yield of harvestable material, and botanical composition’;*
- (e) *‘at least 50 per cent of the total area of the post-disturbance land must meet or exceed those classifications’;*
- (f) *‘the post-disturbance land value of each land unit is to be sustained on an ongoing basis and obtainable without the use of irrigation’; and*
- (g) *‘an annual report of the findings and outcomes of the rehabilitation of disturbed land is to be made publicly available’.*

Mine pits and voids

317. The mine pits and voids section of the EIS evaluation report notes that the combined area for the Willeroo, Manning Vale East and Manning Vale West pits is estimated at 1,201 hectares. The final void areas would total around 475 hectares, with depths of between 40 and 70 metres.²⁸¹
318. The EIS evaluation report states that the Proponent has committed to infilling around two-thirds of mined areas, with final voids estimated to total around 457 hectares.²⁸² It states that the Proponent intends to slope the outer edges of voids so that grazing can occur there.²⁸³
319. The EIS evaluation reports states that, within the pits, the voids will be benched and profiled to allow some grazing within the voids. However, it notes that this

²⁸⁰ This is said to *‘ensure the rehabilitation of agricultural land is enhanced’*. The surveys are said to be *‘in order to confirm the values of the land before it is disturbed’* and *‘to confirm the different soil types and qualities within the disturbance footprint’*.

²⁸¹ EIS evaluation report page 16.

²⁸² EIS evaluation report page 16.

²⁸³ EIS evaluation report page 16.

use will be constrained due to the likelihood that each of the three voids will feature permanent lakes due to groundwater flows.²⁸⁴

320. The EIS evaluation report states that, to account for land permanently affected by mine voids, the Coordinator-General has '*conditioned*' that equivalent land is to be secured, and the land's agricultural values improved and managed until the mining lease is surrendered.²⁸⁵ It states that the equivalent land is to be '*like for like*' so that the land that is secured with its tenure protected by covenant has the same proportions, and same area, of priority area land use to non-priority area land use (as defined in the State Government's Queensland land use mapping program²⁸⁶) as the land to be permanently affected by land voids²⁸⁷.
321. The EIS evaluation report states that the Coordinator-General has set conditions to require the Proponent to improve the productivity of these equivalent land areas from the time they are secured.²⁸⁸ It states that improvements could be targeted at controlling soil erosion, pest and weeds, better land management practices and land use.²⁸⁹ It further states the Coordinator-General has set conditions on land rehabilitation that require final landforms to be safe, non-polluting and stable.²⁹⁰

8.1.3 Coordinator-General's conclusion on land impacts

322. The EIS evaluation report states that the Coordinator-General is '*satisfied that the Proponent's commitments, management plans and the conditions I have set will minimise the impacts on agricultural land disturbed by mining.*'²⁹¹
323. The EIS evaluation report states that prior to construction, the Project will need to apply for a regional interest development approval under the *Regional Interests Planning Act 2012* (Qld).²⁹² It states that the Proponent's application will need to include detail about impacts in accordance with the Act's application

²⁸⁴ EIS evaluation report page 16.

²⁸⁵ EIS evaluation report page 16.

²⁸⁶ Priority area land use is defined as a highly productive agriculture land use, including cropping horticulture, irrigated agriculture and plantations: EIS evaluation report page 16. Non-priority area land use is defined as an agricultural land use that includes grazing, production forestry, intensive animal husbandry and dairy: EIS evaluation report page 16.

²⁸⁷ EIS evaluation report page 16.

²⁸⁸ EIS evaluation report page 16.

²⁸⁹ EIS evaluation report page 16.

²⁹⁰ EIS evaluation report page 16.

²⁹¹ EIS evaluation report page 16.

²⁹² EIS evaluation report page 16.

requirements.²⁹³ It states that *'the soil verification measures I [the Coordinator-General] have conditioned in this report will complement the information required to be provided as part of a RIDA'*.²⁹⁴

8.1.4 Observations

324. It is noted that the EIS evaluation report did not include any reference to visual amenity. However despite this topic being the subject of a dedicated chapter in the EIS it did not feature heavily in the submissions. Careful consideration of the submissions reveals it was an issue about which there was little comment. Further, in the handful of submissions that raised visual amenity, the issue was not the sole, or dominant, focus of those submissions.

8.2 Noise and vibration

8.2.1 What was the evidence or other material held by the Coordinator-General on noise and vibration?

TOR

325. The TOR required the Proponent to describe the impacts of noise and vibration generated during the pre-construction, construction, operational and decommissioning phases of the Project.²⁹⁵

EIS

326. Appendix E to the EIS indicates that these issues are addressed in EIS Chapter 11 – Noise and Vibration.²⁹⁶

327. EIS Chapter 11 – Noise and Vibration *'provides an assessment of the potential noise and vibration impacts of the revised Project.'*²⁹⁷

328. The assessment involves consideration of:²⁹⁸

- (a) the background noise environment;
- (b) local and regional meteorology that may affect noise levels;

²⁹³ EIS evaluation report page 16.

²⁹⁴ EIS evaluation report pages 16 to 17.

²⁹⁵ TOR Section 5.7 pages 46 to 47.

²⁹⁶ See EIS Appendix E pages 63 to 66.

²⁹⁷ EIS Chapter 11 page 11-1.

²⁹⁸ EIS Chapter 11 page 11-1.

- (c) applicable noise and vibration criteria;
- (d) results from the three dimensional noise model that was developed;
- (e) potential noise and vibration impacts at the nearest sensitive receptors from the mining operation;
- (f) low frequency noise impacts from the mining operations;
- (g) blasting noise and vibration impacts;
- (h) noise impact from the proposed rail spur;
- (i) road traffic noise impacts on public roads;
- (j) impacts on animals; and
- (k) mitigation measures for the revised Project to minimise the potential for impacts.

329. The EIS records that:²⁹⁹

- (a) by implementing noise management and mitigation measures including reduced night time operation and using attenuated equipment, the predicted noise levels from the mining operation will meet the relevant noise criteria at all noise sensitive receptors over the life of the revised Project, as well as meeting the sleep disturbance criteria during the worst case temperature inversion condition at all noise sensitive receptors over the life of the revised Project;
- (b) the cumulative noise impact from both the revised Project and the existing Mine during the early stage of the revised Project's life will comply with noise criteria;
- (c) un-weighted noise levels from the revised Project's mining operation are predicted to comply with low frequency noise criteria; and

²⁹⁹ EIS Section 11.9 page 11-51.

(d) road and rail traffic noise impacts comply with the Department of Transport and Main Roads and Queensland Rail criteria, respectively.

330. The EIS also recognises that ‘*Ground vibration and air blast overpressure due to blasting have the potential to impact amenity and damage buildings and infrastructure*’.³⁰⁰ Analysis of the potential impacts indicates that due to the distance between the mining areas and the nearest sensitive receptor, vibration impact would be minimal.³⁰¹

331. The mitigation measures proposed by the Proponent as commitments to reduce the Project’s potential noise impact are outlined in Section 11.8 of the EIS.³⁰² The measures include a Noise and Vibration Management Plan, a copy of which is included in EIS Appendix J.11. The Proponent also provides a Local Stakeholder Engagement Plan in EIS Appendix J.18, outlining the process that will be used to manage complaints.

Submissions on the EIS

332. A briefing note was provided to the Coordinator-General attaching a disc containing a copy of all of the submissions on the EIS.³⁰³ The briefing note also attached a summary of the submissions. This summary records that the local, State and Commonwealth agencies raised the following key issues, relevant to noise and vibration:³⁰⁴

Department of Environment and Heritage Protection (DEHP)

- *Adaptive noise management system should deal with exceedences immediately*
- *Different years for meteorological data use for air (wet year) and noise*
- *Similar inconsistencies in inversions estimations*

333. A review of the submission by the Department of Environment and Heritage Protection, indicates the Department:³⁰⁵

(a) raised concerns about the adequacy of the modelling reported in the EIS;
and

³⁰⁰ EIS Section 11.7.7 page 11-44.

³⁰¹ EIS Section 11.7.7 page 11-46.

³⁰² EIS page 11-49.

³⁰³ Doc 10-0008.

³⁰⁴ Doc 10-0010.

³⁰⁵ Submission 332.

- (b) observed that *‘the Noise Management Plan provided by the Proponent relies heavily on real time noise monitoring in Acland to achieve compliance with proposed noise limits through implementation of a risk based approach particularly for operations in Manning Vales East Pit through immediate management actions’*;
- (c) suggested that the Proponent should *‘commit to make real time monitoring data available at the request of EHP to observe any exceedance (or near exceedance) events and to demonstrate the effectiveness of the adaptive management measure/s taken’*.

334. Toowoomba Regional Council also raised concerned with respect to potential noise impacts, particularly with respect to the adequacy of the information with respect to cumulative noise impacts and difficulties in verifying the modelling carried out for the EIS. It requested more detail with respect to these matters.³⁰⁶

335. The summary of submissions prepared by departmental officers also records that the individual submitters raised the following key issues with respect to blasting and noise:³⁰⁷

Air quality, blasting, noise

Some issues raised by landholders included:

- *Lack of understanding of what is being done and how sufficient the mitigation measures are – require better practices than what’s currently undertaken.*
- *Discussion and clarification of the details of sensitive receptors, location, and intent coupled with results information regime to be established as part of the consultation process.*
- *Residents in nearby Brymaroo need to be part of the monitoring, engagement and reporting.*
- *Current monitoring of blasting activities needs to continue for stage 3 and results need to be more widely disseminated.*
- *Better understanding and clarification of the mitigation and management strategies to be put in place for local landholders in relation to these issues.*
- *Insufficient publically available data available on dust, noise, air quality.*
- *Proponent to incorporate and provide detail of the process for noise amelioration and get this information out to the community.*

³⁰⁶ Submission 466.

³⁰⁷ Doc 10-0010.

336. Finally, the document also notes that there were a number of key themes that emerged from the submissions about which the departmental officers did not recommend a request for additional information, namely (in relation to noise and vibration):³⁰⁸

Noise and air impacts of transportation of the coal to port of Brisbane

A number of submissions raised concerns with noise impacts of Aurizon's transportation of product on the West Moreton rail line. As these operations are subject to Aurizon's haulage standards, no further information has been requested on this matter.

The Office of the Coordinator-General will convey these concerns to Aurizon and Queensland Rail (QR).

The EIS notes that EHP, TMR and Darling Downs miners have been working collectively on monitoring emissions, and imposing mitigation measures such as veneering, along the West Moreton Rail since 2013.

337. A review of the submissions shows that the summary provided to the Coordinator-General is a reasonable one.
338. The issue of impact from noise³⁰⁹ and vibration from blasting³¹⁰ was repeatedly raised in submissions on the EIS. It was one of the main themes in submissions by private submitters, particularly those living in the local area. Submitters complained about existing noise levels, particularly from the Jondaryan rail load-out facility. Concerns were raised that noise levels would increase as a result of the Project. One submitter proposed a curfew on trains between 1pm and 5am. Another submission attached an independent report of a noise consultant raising issues with the adequacy of the modelling.³¹¹

AEIS

339. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, required additional information

³⁰⁸ Doc 10-0010.

³⁰⁹ See, for example, Submission 5, Submission 17, Submission 55, Submission 190, Submission 201, Submission 228 page 28, Submission 269, Submission 273, Submission 284 pages 24 to 25, Submission 286, Submission 292 pages 34 to 36, Submission 296 pages 42 to 55 and attached 7 page letter from Acoustics RB Pty Ltd, Submission 368, Submission 475, Submission 487.3, Submission 503 pages 60 and 84 to 89, Submission 568.

³¹⁰ See, for example, Submission 284 pages 25 to 26, Submission 503 page 90.

³¹¹ Submission 296. The AEIS responded, in general terms, to this submission by providing justification for its modelling. The response does not make specific reference to the independent report.

to complete the evaluation of the Project.³¹² Information required in response to issues raised in submissions, with respect to noise and vibration, included:³¹³

- (a) amendment of the commitments register to include specific commitments listed in individual chapters regarding management and mitigation of noise and vibration impacts;
- (b) discussion, in the commitments register, of specific commitments on the management and minimisation of noise from rail spur operations, including day and night-time scenarios;
- (c) acknowledgment that a number of submissions raised concerns with noise impacts from Aurizon's transport of product on the West Moreton rail line, and that these operations are subject to Aurizon's haulage standards;
- (d) consideration of how key data on noise and vibration could be regularly shared and discussion of the proposed frequency of data sharing;
- (e) confirmation of how regular information will be provided for affected landholders and the wider community to keep people informed of progress and examples of mitigating impacts; and
- (f) updates to the commitments register, Environmental Management Plan and Social Impact Management Plan as required.

340. With respect to noise and vibration, in response to the Coordinator-General's letter of 17 April 2014, the AEIS:

- (a) updates the commitments register in AEIS Appendix D to include further commitments made to manage the risk of noise impacts in response to issues raised in the submissions on the EIS;³¹⁴
- (b) discusses the specific commitments on the management and minimisation of noise from rail spur operations, including day and night-time scenarios;³¹⁵

³¹² Doc 10-0002.

³¹³ Doc 10-0004.

³¹⁴ AEIS Section 5.1.3.1 page 18.

- (c) acknowledges that a number of submissions raised concerns with noise impacts from Aurizon's transport of product on the West Moreton rail line, and that these operations are subject to Aurizon's haulage standards;³¹⁵
- (d) notes the Proponent proposes to publicly issue an environmental monitoring report, presenting a summary of noise and vibration monitoring data, on a monthly basis;³¹⁶
- (e) responds to concerns raised by the Department of Environment and Heritage Protection about the modelling, including by providing further information and acknowledging errors that needed correcting,³¹⁷ and commits to provide interpreted data to the Department within a week of it being requested³¹⁸;
- (f) responds to concerns raised by Toowoomba Regional Council, by providing further explanation about the modelling undertaken;³¹⁹
- (g) responds to general concerns raised by private submitters about noise impacts, including by committing to implement suggestions by submitters, such as planting a tree screen;³²⁰
- (h) responds to general concerns raised by private submitters about impacts from blasting;³²¹ and
- (i) records additional commitments by the Proponent to address concerns raised in submissions, including a commitment to publicly issue an

³¹⁵ AEIS Section 5.1.3.2 pages 18 to 19.

³¹⁶ AEIS Section 5.1.3.3 pages 19 to 20.

³¹⁷ AEIS Section 5.1.3.4 page 20.

³¹⁸ AEIS Section 5.2.4.10 Issue 10 to Section 5.2.4.15 Issue 15 pages 28 to 36.

³¹⁹ AEIS Appendix D Commitment 305.

³²⁰ AEIS Section 5.2.10.44 Issue 44 to Section 5.2.10.45 Issue 45 pages 116 to 118.

³²¹ See, for example, AEIS Appendix D Commitment 310 and AEIS Section 5.3.1.3 page 138, Section 5.3.3.1 page 140, Section 5.3.6.1 pages 144 to 145, Section 5.3.8.1 pages 155 to 156, Section 5.3.10.4 pages 158 to 159, Section 5.3.12.9 page 168, Section 5.3.15.1 pages 174 to 175, Section 5.3.17.3 pages 181 to 182, Section 5.3.19.7 pages 188 to 190, Section 5.3.21.2 to 5.3.21.3 pages 208 to 210, Section 5.3.22.30 page 229, Section 5.3.24.8 pages 238 to 240, Section 5.3.24.23 pages 246 to 247, Section 5.3.24.24 pages 247 to 248, Section 5.3.24.43 page 257, Section 5.3.27.3 pages 269 to 270, Section 5.3.35.1 pages 286 to 287, Section 5.3.43.2 page 297, Section 5.3.44.2 pages 298 to 300, Section 5.3.44.36 pages 312 to 313, Section 5.3.72.2 pages 361 to 362.

³²² See, for example, Section 5.3.19.9 pages 190 to 191, Section 5.3.44.3 page 300, Section 5.3.72.2 pages 362 to 363.

environmental monitoring report on a monthly basis. It is expected that effective communications will reduce the potential for nuisance impacts.³²³

341. The overall commitments by the Proponent with respect to Noise and Vibration are collected in AEIS Appendix D.

Further submissions received after the AEIS

342. There were numerous private submissions in which submitters substantially reiterated their concerns regarding noise.
343. The Department of Environment and Heritage Protection also made a further submission in which it set out a series of recommended conditions for the Project.³²⁴

Information clarification to the AEIS

344. Further information was also provided by way of clarification to the AEIS in December 2014. It includes:
- (a) a '*response to submissions 284 and 286*', with respect to monitoring and modelling of noise;³²⁵ and
 - (b) further details about the cost of noise attenuation measures;³²⁶ and
 - (c) further information about the proposed real-time noise monitoring network.³²⁷

Briefing notes to the Coordinator-General

345. Each of the documents referred to above, other than the further submissions (received after the AEIS), was provided to the Coordinator-General as attachments to briefing notes.

³²³ AEIS Section 5.1.3.4 page 20.

³²⁴ Further submission 231.

³²⁵ Information Clarification to the AEIS pages 25 to 26.

³²⁶ Information Clarification to the AEIS page 28.

³²⁷ Information Clarification to the AEIS page 28.

8.2.2 Summary of the process of evaluation of the Project regarding noise and vibration as described in the report evaluating the EIS

346. The EIS evaluation report states that for the management of noise and vibration, the Coordinator-General requires that '*the Project is able to operate without creating adverse noise impacts for sensitive receptors (SRs), such as homesteads, located close to the mine*'.³²⁸
347. The EIS evaluation report states that the Proponent is required to ensure that activities that have the potential to cause vibration impacts are undertaken in accordance with the *Guideline – Noise and Vibration from Blasting* (Department of Environment and Resource Management 2006).³²⁹ It states that noise objectives are measured at the locations of sensitive receptors.³³⁰
348. The EIS evaluation report states that noise from the Project's mine and rail spur could affect nearby sensitive receptors, including homesteads and businesses.³³¹ It states that 44 sensitive receptors (43 homesteads and one business) are located within ten kilometres of the mine.³³² It states that around 40 homesteads are located within five kilometres of the Project site.³³³ It states that four sensitive receptors will be located within 700 metres of the MLA (infrastructure) 700001, with the closest being a business located 400 metres from the line.³³⁴

Mine and rail spur noise

Impacts

349. The EIS evaluation report states that construction activities associated with the expansion of the Coal Handling Preparation Plant, mining infrastructure area, materials handling facility and the construction of new dams, the train load-out facility and rail spur will occur during the day.³³⁵ It states that this is not expected to result in excessive noise.³³⁶

³²⁸ EIS evaluation report page 17.

³²⁹ EIS evaluation report page 17.

³³⁰ EIS evaluation report page 17.

³³¹ EIS evaluation report, page 17.

³³² EIS evaluation report page 17.

³³³ EIS evaluation report page 17.

³³⁴ EIS evaluation report page 17.

³³⁵ EIS evaluation report page 19.

³³⁶ EIS evaluation report page 19.

350. The EIS evaluation report states that during operations, noise will be generated from the use of drilling rigs, excavators, loaders, and water and dump trucks; and from blasting, which will be the noisiest activity.³³⁷ It states that activities at the Coal Handling Preparation Plant and use of conveyor systems may also be audible for people nearby.³³⁸
351. The EIS evaluation report states that up to 80 rail movements per week will occur when the mine is at peak production.³³⁹ It states that construction of the rail line and train load-out facility will occur during the day and is not expected to result in noise exceedance.³⁴⁰
352. The EIS evaluation report states that noise modelling was undertaken, considering the mine's program of works for the years 2019, 2023 and 2029.³⁴¹ It states that the modelling was undertaken on the assumption equipment will be used that utilises noise attenuation measures.³⁴²
353. The EIS evaluation report states that the modelling looked at worst-case³⁴³ and neutral meteorological conditions³⁴⁴ and the impact on sound travelling.³⁴⁵ The report states that modelling indicates there would likely be a 4-6 dB(A) difference between the two noise levels.³⁴⁶
354. The EIS evaluation report states that noise levels were modelled for day, evening and night-time scenarios to account for the proposed 24-hour operation of the mine.³⁴⁷ It states that the results confirm that for stability class D and F, the mine can meet the *Environmental Protection (Noise) Policy 2008* objectives at nearby sensitive receptors.³⁴⁸

³³⁷ EIS evaluation report page 19.

³³⁸ EIS evaluation report page 19.

³³⁹ EIS evaluation report page 19.

³⁴⁰ EIS evaluation report page 19.

³⁴¹ EIS evaluation report page 19.

³⁴² EIS evaluation report page 19.

³⁴³ Worst case is where meteorological conditions would make sound more likely to travel, termed as Stability Class F: EIS evaluation report page 19.

³⁴⁴ Neutral conditions are termed as Stability Class D: EIS evaluation report page 19.

³⁴⁵ EIS evaluation report page 19.

³⁴⁶ EIS evaluation report page 19.

³⁴⁷ EIS evaluation report page 19.

³⁴⁸ EIS evaluation report page 19.

355. The EIS evaluation report states that additional modelling was conducted for the rail spur.³⁴⁹ It states that modelling indicated that noise levels would be lower than the Queensland Rail Code of Practice noise criteria.³⁵⁰

Mitigation and management measures

356. The EIS evaluation report states that the Proponent has prepared a Noise and Vibration Management Plan that includes commitments and measures to mitigate noise impacts and adhere to *Environmental Protection (Noise) Policy 2008* standards, including:³⁵¹

- (a) investing in noise attenuating equipment;
- (b) conducting real-time noise monitoring at sensitive receptors;
- (c) implementing an adaptive noise management program;
- (d) changing operational procedures (scheduling noisier operations during the day, using topsoil and overburden dumps as noise barriers, limiting speed of heavy vehicle traffic on haul roads);
- (e) improving the Proponent's complaint management processes; and
- (f) reporting (monthly) on performance against noise objectives.

357. The EIS evaluation report states that the mine's current operation has implemented a Trigger Action Response Plan trial.³⁵² It states that the Trigger Action Response Plan has used real-time noise-monitoring, which has resulted in instructions being relayed to site to cease or modify operations.³⁵³ The report states that the Proponent has advised that improvements to noise levels have been achieved due to the Trigger Action Response Plan trial.³⁵⁴

358. The EIS evaluation report states that the Coordinator-General has set noise limits in the draft Environmental Authority for both mine and rail spur noise.³⁵⁵ It states

³⁴⁹ EIS evaluation report page 20.

³⁵⁰ EIS evaluation report page 20.

³⁵¹ EIS evaluation report page 20.

³⁵² EIS evaluation report page 21.

³⁵³ EIS evaluation report page 21.

³⁵⁴ EIS evaluation report page 21.

³⁵⁵ EIS evaluation report page 21.

that the Proponent must achieve these limits at the locations of all sensitive receptors.³⁵⁶

Vibration

Impacts

359. The EIS evaluation report states that during operation the Proponent may undertake up to eight single blast events per week.³⁵⁷ It states that blasting is required to loosen overburden in mine pits.³⁵⁸ It further states that no sensitive receptors would be located within one kilometre of blasting.³⁵⁹

Management and mitigation measures

360. The EIS evaluation report states that the EIS predicted that vibration and overpressure standards would be met for all sensitive receptors, once mitigation measures are applied.³⁶⁰ It states that vibration levels are expected to be minimal beyond 100 metres from the site.³⁶¹
361. The EIS evaluation report states that measures proposed to manage noise and vibration impacts from blasting include:³⁶²
- (a) conducting blasting in accordance with the Department of Environment and Heritage Protection's Ecoaccess guideline *Noise and Vibration from Blasting*;
 - (b) restricting blasting to specific time periods – 7am to 6pm Monday to Friday, and 9am to 1pm Saturday;
 - (c) notifying nearby residents who would like to receive advance warning about blast events; and
 - (d) for blasting that occurs within 1.5 kilometres of a sensitive receptor, undertaking multiple-pass blasting, which would use smaller amounts of explosives.

³⁵⁶ EIS evaluation report page 21.

³⁵⁷ EIS evaluation report page 21.

³⁵⁸ EIS evaluation report page 21.

³⁵⁹ EIS evaluation report page 21.

³⁶⁰ EIS evaluation report page 21.

³⁶¹ EIS evaluation report page 21.

³⁶² EIS evaluation report pages 21 to 22.

8.2.3 Coordinator-General's conclusions on noise and vibration

Noise

362. The EIS evaluation report states that the Coordinator-General is '*satisfied that the Proponent's investment in noise attenuated equipment, coupled with the adaptive noise management program, will effectively manage noise caused by mining operations*'.³⁶³
363. The EIS evaluation report states that the Proponent must meet conditions that the Coordinator-General has stated in the draft Environmental Authority for all mine-related noise.³⁶⁴ The conditioned noise limits address average noise levels, as well as measures intended to minimise the occurrence of short, sharp sounds that cause night-time sleep disturbance. It notes also conditions that state that if monitoring indicates potential for exceedance of noise limits, the Proponent must immediately implement noise abatement measures to avoid exceeding limits.³⁶⁵ It states that the Proponent is '*conditioned*' to publicly report on noise on a monthly basis.³⁶⁶
364. The EIS evaluation report notes that, to ensure rail-related noise limits are met, the Coordinator-General has stated conditions in the draft Environmental Authority for noise limits between 10pm and 7am on all days.³⁶⁷

Vibration

365. The EIS evaluation report states that the Coordinator-General is satisfied that the measures proposed to manage noise and vibration impacts, along with the conditions stated in Appendix 2 of the report, will be sufficient to manage the impacts of blasting.³⁶⁸
366. The EIS evaluation report states that the Coordinator-General has set conditions that control airblast overpressure and ground vibration peak particle velocity in line with the limits set in the *Guideline – Noise Vibration from blasting* (Department of Environment and Resource Management 2006).³⁶⁹ It states that other conditions

³⁶³ EIS evaluation report page 21.

³⁶⁴ EIS evaluation report page 21.

³⁶⁵ EIS evaluation report page 21.

³⁶⁶ EIS evaluation report page 21.

³⁶⁷ EIS evaluation report page 21.

³⁶⁸ EIS evaluation report page 22.

³⁶⁹ EIS evaluation report page 22.

that control potential disturbance from blasting are also included in Appendix 2 of the report, including that a Blast Monitoring Program is to be developed that shows compliance with set limits.³⁷⁰

367. The EIS evaluation report states that conditions also set blast monitoring criteria and reporting requirements.³⁷¹ It also notes the restrictions imposed on when blasting may occur.³⁷²

8.2.4 Observations

368. While there is no briefing note or other document indicating that the Coordinator-General was provided with a copy of the further submissions (received after the AEIS), the conditions in relation to noise and vibration impacts recommended by the Department of Environment and Heritage Protection, in its further submission, are included in Appendix 2 of the EIS evaluation report.³⁷³

8.3 Air emissions

8.3.1 What was the evidence or other material held by the Coordinator-General on air emissions?

TOR

369. The TOR required the Proponent to consider air quality issues and their mitigation, including all relevant coal rail transport-related dust mitigation measures.³⁷⁴
370. In addition, the TOR required the Proponent to address greenhouse gas emissions, including the potential for abatement measures.³⁷⁵

EIS

371. Appendix E to the EIS indicates that the air quality issues are addressed in EIS Chapter 9 and the greenhouse gas emissions issues are addressed in EIS Chapter 10.
372. EIS Chapter 9 – Air Quality *‘provides a description of the existing air quality within the vicinity of the study area for the revised Project. It also identifies*

³⁷⁰ EIS evaluation report page 22.

³⁷¹ EIS evaluation report page 22.

³⁷² EIS evaluation report page 22.

³⁷³ EIS evaluation report pages 175 to 177.

³⁷⁴ TOR Section 5.5 pages 42 to 44.

³⁷⁵ TOR Section 5.6 pages 44 to 45.

*potential air quality impacts for the revised Project and the required mitigation measures proposed to avoid or minimise adverse air quality impacts’.*³⁷⁶

373. The assessment involves consideration of:

- (a) the regulatory framework;
- (b) the existing environment, including sensitive receptors, climate, meteorology and existing air quality;
- (c) sources of air emissions during construction, operation and closure and potential for impact;
- (d) results from dispersion modelling on sources considered to have the potential to exceed the ambient air quality objectives;
- (e) predicted concentrations and cumulative impacts as compared to ambient air quality objectives; and
- (f) mitigation measures for the revised Project to achieve compliance with ambient air quality goals.

374. The EIS records that:

- (a) sources of air emissions include:³⁷⁷
 - (i) dust from mining;
 - (ii) dust from coal transportation;
 - (iii) dust from mine and mine infrastructure construction;
 - (iv) dust from rail spur and balloon loop construction;
 - (v) dust from decommissioning mining areas and infrastructure;
 - (vi) dust from decommissioning the Jondaryan rail load-out facility;
 - (vii) exhaust emissions from mining equipment and transportation; and

³⁷⁶ EIS Chapter 9 page 9-1.

³⁷⁷ EIS Section 9.4.1 pages 9-19 to 9-23.

- (viii) nitric oxide and nitrogen dioxide from blasting;
- (b) the predicted dust deposition rates from the revised Project are not likely to have detectable adverse effects on pasture or crops;³⁷⁸
- (c) the modelling results shown the revised Project with the adoption of adaptive air quality management will comply with the air quality objectives;³⁷⁹
- (d) water quality in rain tanks is unlikely to exceed the water quality levels in the Australian Drinking Water Guidelines and, in consultation with affected landholders, the Proponent is committed to sampling water quality in rain water tanks should air quality monitoring exceed the air quality objectives in the *Environmental Protection (Air) Policy 2008* or dust nuisance goals;³⁸⁰ and
- (e) the additional 27 weekly rail movements along the South West System are unlikely to increase fugitive coal dust emissions along the rail corridor due to the implementation of the South West System Coal Dust Management Plan and the advanced train load-out facility, which will replace the Jondaryan rail load-out facility and will include a veneering system (i.e. a system to apply a biodegradable polymer onto the surface of the loaded coal to reduce coal dust lift-off from wagons).

375. The mitigation measures proposed by the Proponent as commitments to control dust are outlined in Section 9.5.1 of the EIS.³⁸¹ In addition, the Proponent proposes:

- (a) fume management procedures, which have been included in the Air Quality Management Plan in EIS Appendix J.10;³⁸²
- (b) implementation of a dust forecasting system to provide daily predictions of upcoming meteorological conditions and potential risk of air quality

³⁷⁸ EIS Section 9.4.5 page 9-56.

³⁷⁹ EIS Section 9.4.5 page 9-57.

³⁸⁰ EIS Section 9.4.5 page 9-57.

³⁸¹ EIS Section 9.5.1 pages 9-61 to 9-63.

³⁸² EIS Section 9.5.2 page 9-63.

impacts from mining operations from the revised Project and allow adaptive measures to be implemented;³⁸³

- (c) air quality monitoring requirements that include real-time monitors, as well as monthly, and quarterly monitoring;³⁸⁴
- (d) utilisation of adaptive air quality management, which can involve the suspension or modification of operations in response to:
 - (i) potential dust risk predictions from the dust forecasting system;
 - (ii) warning or exceedance alarms from the strategic real time air quality monitoring system; and
 - (iii) observation of significant dust generation during visual monitoring of mining activities;³⁸⁵
- (e) reduction of the potential for dust nuisance through the Local Stakeholder Management Plan in EIS Appendix J.18, which provides for:³⁸⁶
 - (i) effective communications with local stakeholders;
 - (ii) a clearly identified point of contact should local stakeholders have comments or concerns;
 - (iii) a well defined process to ensure any issues are dealt with promptly and, where possible, satisfactorily;
 - (iv) a well defined system of recording any incidents or concerns;
- (f) recording and investigating dust concerns in accordance with the process provided in the Air Quality Management Plan;³⁸⁷ and
- (g) acquisition of land and relocation of sensitive receptors (or treatment of residences) in the event that air quality impacts cannot be adequately

³⁸³ EIS Section 9.5.3 pages 9-63 to 9-64.

³⁸⁴ EIS Section 9.5.4 pages 9-64 to 9-65.

³⁸⁵ EIS Section 9.5.5 page 9-66.

³⁸⁶ EIS Section 9.5.6 page 9-67

³⁸⁷ EIS Section 9.5.6 page 9-67.

managed by dust minimisation activities and adaptive air quality management.³⁸⁸

376. EIS Chapter 10 – Greenhouse Gas Emissions:

assesses the potential greenhouse gas impacts and climate change vulnerability of the revised Project by:

- *estimating the direct and indirect greenhouse gas emissions resulting from the revised Project;*
- *identifying mitigation measures to reduce greenhouse gas emissions; and*
- *undertaking a preliminary climate change risk assessment for the revised Project.*³⁸⁹

377. The EIS records that:

- (a) the major sources of greenhouse gas emissions are direct emissions from diesel combustion (61 per cent) and indirect emissions from consumption of electricity (37 per cent);³⁹⁰
- (b) mitigation measures include:³⁹¹
 - (i) reducing fuel usage from operations (improving operational efficiency) by, amongst other things, improving mining pit design to reduce haulage distances;
 - (ii) reducing electricity usage from operations by using power factor correction equipment and LED lighting where practical;
- (c) the Project has a low vulnerability to climate change.³⁹²

378. A summary of mitigation measures and commitments with respect to greenhouse gas reduction and climate change are included in Section 10.8 of the EIS.³⁹³

Submissions on the EIS

379. A briefing note was provided to the Coordinator-General attaching a disc containing a copy of all of the submissions on the EIS.³⁹⁴ The briefing note also

³⁸⁸ EIS Section 9.5.7 page 9-67.

³⁸⁹ EIS Chapter 10 page 10-1.

³⁹⁰ EIS Section 10.4.3 page 10-5.

³⁹¹ EIS Section 10.5 pages 10-7 to 10-9.

³⁹² EIS Section 10.7 page 10-12.

³⁹³ EIS page 10-13.

attached a summary of the submissions. This summary records that the local, State and Commonwealth agencies raised the following key issues, relevant to air quality:³⁹⁵

Department of Environment and Heritage Protection (DEHP)

- *Different years for meteorological data use for air (wet year) and noise*
- *Similar inconsistencies in inversions estimations*

380. This summary of key issues also records that the individual submitters raised the following key issues with respect to air quality:³⁹⁶

Air quality, blasting, noise

Some issues raised by landholders included:

- *Lack of understanding of what is being done and how sufficient the mitigation measures are – require better practices than what’s currently undertaken.*
- *Discussion and clarification of the details of sensitive receptors, location, and intent coupled with results information regime to be established as part of the consultation process.*
- *Residents in nearby Brymaroo need to be part of the monitoring, engagement and reporting.*
- *Current monitoring of blasting activities needs to continue for stage 3 and results need to be more widely disseminated.*
- *Better understanding and clarification of the mitigation and management strategies to be put in place for local landholders in relation to these issues.*
- *Insufficient publically available data available on dust, noise, air quality.*
- *Proponent to incorporate and provide detail of the process for noise amelioration and get this information out to the community.*

Water Tanks

Some issues raised by landholders included:

- *Polluted water in rain water tanks - monitoring and reporting required by the proponent*
- *Impacts of coal dust in rainwater tanks*
- *What is the proponent doing in relation to contamination of rainwater tanks.*

Health Impacts

Health matters discussed in submissions appear largely to be in connection with concerns in relation to air quality/blasting/noise, including impacts on water tanks, and arising from the Jondaryan rail load-out facility; ...

³⁹⁴ Doc 10-0008.

³⁹⁵ Doc 10-0010.

³⁹⁶ Doc 10-0010.

381. Finally, the document also notes that there were a number of key themes that emerged from the submissions about which the departmental officers did not recommend a request for additional information, namely:³⁹⁷

Noise and air impacts of transportation of the coal to port of Brisbane

A number of submissions raised concerns with noise impacts of Aurizon's transportation of product on the West Moreton rail line. As these operations are subject to Aurizon's haulage standards, no further information has been requested on this matter.

The Office of the Coordinator-General will convey these concerns to Aurizon and Queensland Rail (QR).

The EIS notes that EHP, TMR and Darling Downs miners have been working collectively on monitoring emissions, and imposing mitigation measures such as veneering, along the West Moreton Rail since 2013.

382. A review of the submissions shows that the summary provided to the Coordinator-General is a reasonable one.
383. The Department of Environment and Heritage Protection, in its submission, did raise concerns about the adequacy of the modelling reported in the EIS.³⁹⁸
384. Having reviewed the submissions, the following additional comments can be made with respect to them.
385. The Department of Health expressed concerns that:³⁹⁹
- (a) the modelled PM₁₀ air emissions exceed the goal specified by the *Environmental Protection (Air) Policy 2008*;
 - (b) it is essential, for the real time monitoring system to be effective, for the monitoring stations to be placed in locations that provide accurate representation for the impact on sensitive receivers; and
 - (c) the Darling Downs Hospital and Health Service is concerned that the Proponent has not appropriately assessed the increase in risk to human health at the surrounding sensitive receptors of respiratory illness and symptoms due to exceedances of the air quality goals.

³⁹⁷ Doc 10-0010.

³⁹⁸ Submission 332.

³⁹⁹ Submission 410.

386. The Department of Health suggested the Proponent should:
- (a) provide further assessment and clarification in relation to the suitability of the proposed locations of the air monitoring stations to ensure accurate information for timely introduction of the adaptive air quality management measures;
 - (b) undertake PM_{2.5} monitoring to validate assumptions used within the assessment which indicate compliance with the air quality goals; and
 - (c) provide a commitment to liaise with the Darling Downs Hospital and Health Service with respect to the monitoring of air emissions generated from the Project site.
387. Toowoomba Regional Council also raised concerned with respect to potential air quality impacts, particularly with respect to dust impacts from road and rail transport. It suggested the inclusion of detailed dust suppression measures that will avoid dust air impacts and address the issues raised by the community in the past. It also suggested the Proponent consider planting trees or consider other mechanisms to address issues with air quality.⁴⁰⁰
388. This issue of air quality was a regular theme in submissions.⁴⁰¹ The effects of coal dust on public health was the primary concern raised. One submitter supplied a photograph of coal dust stained houses. Others gave personal accounts of how they believed the existing operations of the mine had affected their health. One such account stated:⁴⁰²

I have lived in Jondaryan for around fourteen years and after the New Hope Coal Group started production my health has declined. I struggle to breathe and everyday chores are increasingly harder to accomplish. I am currently on my absolute limit for medication at help for respiratory (sic) problems. I recently went overseas for a five week holiday and whilst I was away I found I no longer needed

⁴⁰⁰ Submission 466.

⁴⁰¹ See, for example, Submission 5, Submission 17, Submission 55, Submission 139, Submission 190, Submission 201, Submission 228, Submission 269, Submission 273, Submission 284 pages 10 to 20, Submission 285, Submission 286, Submission 292 pages 26 to 34, Submission 296 pages 56 to 67 and attached email from Pacific Environment, Submission 318, Submission 368, Submission 419, Submission 473, Submission 475, Submission 476, Submission 486, Submission 487.1, Submission 487.3, Submission 503 pages 59 and 80 to 83, Submission 511, Submission 512, Submission 513, Submission 514, Submission 520, Submission 527, Submission 547, Submission 548(2), Submission 550, Submission 558, Submission 568. The AEIS responded, in general terms, to Submission 296 by providing justification for its modelling. The response does not make specific reference to the independent report.

⁴⁰² Submission 486.

medication and I could breathe much easier and in fact I had no problems at all with my breathing and even felt much better. Unfortunately on returning to my home with-in a few days my respiratory (sic) problems returned ...

389. Other private submissions contained similar accounts.
390. A small number of submissions were made with respect to greenhouse gas emissions.⁴⁰³

AEIS

391. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, required additional information to complete the evaluation of the Project.⁴⁰⁴ Information required in response to issues raised in submissions, with respect to air quality, included:⁴⁰⁵
- (a) amendment of the commitments register to include specific commitments listed in individual chapters regarding management and mitigation of air impacts;
 - (b) discussion, in the commitments register, of specific commitments on the management and minimising of dust;
 - (c) consideration of how key data on air could be regularly shared and discussion of the proposed frequency of data sharing;
 - (d) confirmation of how regular information will be provided for affected landholders and the wider community to keep people informed of progress and examples of mitigating impacts; and
 - (e) updates to the commitments register, Environmental Management Plan and Social Impact Management Plan as required.

⁴⁰³ See, for example, Submission 292 page 34, Submission 296 page 106.

⁴⁰⁴ Doc 10-0002.

⁴⁰⁵ Doc 10-0004.

392. With respect to air quality issues, in response to the Coordinator-General's letter of 17 April 2014, the AEIS:

- (a) updates the commitments register in AEIS Appendix D to include further commitments made to manage the risk of air quality impacts in response to issues raised in the submissions on the EIS;⁴⁰⁶
- (b) discusses the specific commitments on the management and minimisation of dust from rail spur operations;⁴⁰⁷
- (c) notes the Proponent proposes to publicly issue an environmental monitoring report, presenting a summary of air quality monitoring data, on a monthly basis;⁴⁰⁸
- (d) responds to concerns about the effect of dust in water tanks;⁴⁰⁹
- (e) responds to concerns raised by the Department of Environment and Heritage Protection about the modelling, including by providing further information;⁴¹⁰
- (f) responds to concerns raised by the Department of Health by explaining further the modelling provided in the EIS and committing to liaise with Darling Downs Hospital and Health Service with respect to air quality monitoring for the revised Project;⁴¹¹
- (g) responds to concerns raised by Toowoomba Regional Council by:⁴¹²
 - (i) explaining the adequacy of the modelling undertaken;
 - (ii) noting that it is not responsible for the transportation of coal along the rail network;

⁴⁰⁶ AEIS Section 5.1.3.1 page 18.

⁴⁰⁷ AEIS Section 5.1.3.2 pages 18 to 19.

⁴⁰⁸ AEIS Section 5.1.3.4 page 20.

⁴⁰⁹ AEIS Section 5.1.5.2 pages 29 to 30.

⁴¹⁰ AEIS Section 5.2.4.10 to Section 5.2.4.15 pages 28 to 36.

⁴¹¹ AEIS Section 5.2.5.2 pages 62 to 63.

⁴¹² AEIS Section 5.2.10.41 pages 113 to 114, Section 5.2.10.42 pages 114 to 116 and Section 5.2.10.43 page 116 and Section 5.2.10.66 pages 126 to 127.

- (iii) explaining results of past monitoring of the Jondaryan rail load-out facility;
 - (iv) explaining why tree planting is not an effective means of minimising dust emissions from the revised Project;
- (h) responds to general concerns raised by private submitters about air quality impacts;⁴¹³ and
- (i) records additional commitments by the Proponent to address concerns raised in submissions, including a commitment to publicly issue an environmental monitoring report on a monthly basis. It is expected that effective communications will reduce the potential for nuisance impacts.⁴¹⁴

393. The EIS also responds to concerns in submissions about greenhouse gas emissions and climate change.⁴¹⁵

394. The overall commitments by the Proponent with respect to Air Quality are collected in AEIS Appendix D.

Further submissions received after the AEIS

395. There were numerous submissions in which private submitters substantially reiterated their concerns regarding coal dust.

⁴¹³ See, for example, AEIS Section 5.3.1.2 pages 136 to 137, Section 5.3.3.2 pages 141 to 142, Section 5.3.6.2 pages 145 to 146, Section 5.3.7.2 page 147, Section 5.3.7.4 page 147, Section 5.3.7.5 pages 148 to 149, Section 5.3.8.1 pages 154 to 155, Section 5.3.10.3 pages 157 to 158, Section 5.3.12.4 pages 163 to 164, Section 5.3.12.9 pages 166 to 168, Section 5.3.12.10 pages 169 to 171, Section 5.3.15.2 pages 175 to 177, Section 5.3.17.2 pages 180 to 181, Section 5.3.19.3 pages 185 to 186, Section 5.3.19.4 page 187, Section 5.3.19.5 pages 187 to 188, Section 5.3.20.2 pages 199 to 201, Section 5.3.21.1 pages 207 to 208, Section 5.3.22.15 pages 219 to 221, Section 5.3.22.27 page 227, Section 5.3.24.5 pages 236 to 238, Section 5.3.24.8 pages 238 to 240, Section 5.3.24.25 pages 248 to 249, Section 5.3.24.42 pages 256 to 257, Section 5.3.24.44 to 5.3.24.49 pages 257 to 262, Section 5.3.25.3 pages 264 to 265, Section 5.3.27.5 page 271, Section 5.3.31.1 pages 276 to 277, Section 5.3.33.2 pages 283 to 284, Section 5.3.35.3 pages 288 to 289, Section 5.3.37.5 pages 290 to 291, Section 5.3.40.1 to 5.3.40.3 page 292 to 294, Section 5.3.41.2 page 295, Section 5.3.43.1 page 297, Section 5.3.44.10 pages 303 to 305, Section 5.3.44.38 page 313, Section 5.3.44.44 to 5.3.44.46 pages 316 to 317, Sections 5.3.48.1 to 5.3.48.3 and 5.3.48.6 pages 319 to 320 and 322, Section 5.3.49.4 to 5.3.49.5 pages 325 to 326, Sections 5.3.50.1 to 5.3.50.3 pages 326 to 328, Section 5.3.51.21 pages 337 to 338, Section 5.3.52.2 pages 345 to 346, Section 5.3.63.1 page 354, Section 5.3.65.1 pages 355 to 356, Section 5.3.67.1 pages 357 to 358, Section 5.3.68.1 pages 358 to 359, Section 5.3.69.1 to 5.3.69.2 pages 359 to 360, Section 5.3.72.3 pages 363 to 364.

⁴¹⁴ AEIS Section 5.1.3.4 page 20.

⁴¹⁵ See, for example, Section 5.3.22.29 page 228, Section 5.3.24.37 pages 253 to 254.

396. The Department of Environment and Heritage Protection also made a further submission in which it set out a series of recommended conditions with respect to air quality.⁴¹⁶

Information clarification to the AEIS

397. Further information was also provided by way of clarification to the AEIS in December 2014. It includes:

- (a) a direct response to submissions 284 and 286, with respect to monitoring and modelling of air quality;⁴¹⁷ and
- (b) clarification that the annual greenhouse gas emissions from the operation of the revised Project represent 0.12 per cent of Queensland's greenhouse gas emissions, not the 1.6 per cent claimed in a submission (having erroneously compared the emissions for the revised Project for the whole life of the Project to Queensland's annual emissions).⁴¹⁸

398. It also provided further results of tank water testing undertaken in 2010, 2011 and 2012, together with observations about the results and an explanation about the likely causes of elevated metal results.⁴¹⁹

Briefing notes to the Coordinator-General

399. Each of the documents referred to above, other than the further submissions (received after the AEIS), was provided to the Coordinator-General as attachments to briefing notes.

8.3.2 Summary of the process of evaluation of the Project regarding air emissions – mine and rail spur dust - as described in the report evaluating the EIS

400. The EIS evaluation report states that the EIS and the additional information to the EIS assessed impacts against the *Environmental Protection (Air) Policy 2008* objectives.⁴²⁰ It states that the Proponent must meet all objectives at all Project

⁴¹⁶ Further submission 231.

⁴¹⁷ Information Clarification to the AEIS pages 25 to 26.

⁴¹⁸ Information Clarification to the AEIS page 28.

⁴¹⁹ Information clarification to the AEIS page 1.

⁴²⁰ EIS evaluation report page 22.

stages.⁴²¹ It states that air objectives are measured at the locations of sensitive receptors.⁴²²

401. The EIS evaluation report states that the Proponent has modelled the extent of dust and particulate emissions from the mining activity in the surrounding area.⁴²³ It states that:⁴²⁴

- (a) 44 potential sensitive receptors were identified within ten kilometres of the Project;
- (b) the sensitive receptors identified include homesteads of grazing properties, residential premises within the township of Acland and a single commercial premise;
- (c) approximately 40 sensitive receptors are located within five kilometres of the Project site;
- (d) during the preparation of the AEIS, a sensitive receptor to the north of the Project site was purchased by the Proponent and is no longer considered a sensitive receptor;
- (e) four sensitive receptors are located within approximately 700 metres of the new rail spur; and
- (f) the two sensitive receptors closest to the rail spur are located around 400 to 500 metres from the proposed location of the rail spur.

Impacts

402. The EIS evaluation report states that over the life of the mine, air quality will periodically change as a result of activities such as blasting, haulage, excavation works, and coal processing and stockpiling.⁴²⁵ It states that during dry seasons (June to September), the concentration of airborne particulates from Project and

⁴²¹ EIS evaluation report page 22.

⁴²² EIS evaluation report page 22.

⁴²³ EIS evaluation report page 22.

⁴²⁴ EIS evaluation report pages 22 to 23.

⁴²⁵ EIS evaluation report page 23.

non-Project activities in the area may be exacerbated due to low rainfall and, in the colder months, poorer atmospheric dispersion.⁴²⁶

403. The EIS evaluation report states that potential air quality impacts at the sensitive receptor locations were evaluated in the EIS and AEIS using four CALPUFF modelling scenarios.⁴²⁷ It states that modelling was conducted for the years 2019, 2023 and 2029.⁴²⁸ The scenarios were used to:⁴²⁹
- (a) predict and quantify the Project's air quality impacts, should only typical industry dust control measures be applied; and
 - (b) establish the effectiveness of proposed additional dust management controls, including a pre-emptive and adaptive air quality management program.
404. The EIS evaluation report states that, due to prevailing easterly winds, sensitive receptors located west of mining operations were evaluated to have the highest potential to experience air quality impacts.⁴³⁰ The report states that there are eight sensitive receptors for which air quality objectives may be exceeded over the life of the mine.⁴³¹
405. The EIS evaluation report states that the Proponent does not anticipate negative air impacts on any of the identified sensitive receptors located in close proximity to the rail spur and train load-out facility.⁴³²

Mitigation and management measures

406. The EIS evaluation report states that the Proponent has committed to implementing best practice air quality management measures, including:⁴³³
- (a) minimising drop-height during materials extraction and handling;

⁴²⁶ EIS evaluation report page 23.

⁴²⁷ EIS evaluation report page 23.

⁴²⁸ EIS evaluation report page 23.

⁴²⁹ EIS evaluation report page 23.

⁴³⁰ EIS evaluation report page 23.

⁴³¹ EIS evaluation report page 23.

⁴³² EIS evaluation report page 24.

⁴³³ EIS evaluation report pages 24 to 25.

- (b) using a sealed haul road from the Coal Handling Preparation Plant to the train load-out facility;
- (c) limiting on-site traffic speeds to 60 kilometres an hour;
- (d) watering of exposed areas, with a focus on stockpiles and high traffic areas;
- (e) progressive rehabilitation behind active pit areas, with vegetation cover established as soon as possible;
- (f) installation of automatic water sprinklers and dust curtains within the mining infrastructure areas, including the Coal Handling Preparation Plant, materials handling facility, run-of-mine bins and connecting conveyor belts; and
- (g) veneering and profiling of loaded wagons and sweeping of coal from sills at the train load-out facility.

407. The EIS evaluation report states that the Proponent has committed to a predictive and adaptive air quality monitoring and management program.⁴³⁴ It states that the program is provided in the Air Quality Management Plan.⁴³⁵ It states that key elements of that program are:⁴³⁶

- (a) daily dust forecasts emailed to site management providing likely meteorological conditions and associated dust risk;
- (b) active air quality monitoring, including:
 - (i) three real-time PM₁₀ monitors located to the east, west and at the centre (Acland) of the Project area;⁴³⁷
 - (ii) one real-time total suspended particles monitor;
 - (iii) a meteorological station taking hourly readings, located at Acland;
 - (iv) four PM₁₀ monitors taking quarterly readings;

⁴³⁴ EIS evaluation report page 25.

⁴³⁵ EIS evaluation report page 24.

⁴³⁶ EIS evaluation report page 24.

⁴³⁷ These will provide an indication of upwind and downwind conditions at the mine and assist the Proponent to understand the effects of mining activities on emission levels: EIS evaluation report at page 26.

- (v) more than 20 dust deposition gauges surrounding and central to the Project area recording dust fall-out, measured monthly;
 - (c) alarm notification generated by data collected from the PM₁₀ monitors continually measuring compliance with relevant *Environmental Protection (Air) Policy 2008* objectives; and
 - (d) visual observation of dust generation from site areas.
408. The EIS evaluation report states that the Air Quality Management Plan presents a hierarchy of controls to be applied by management, including.⁴³⁸
- (a) additional watering;
 - (b) suspension of activities (such as dozer operations and overburden dumps); and
 - (c) reduction, relocation or ceasing of some or all mining activities.
409. The report states that the Air Quality Management Plan confirms that, should real-time monitoring indicate an exceedance, the Department of Environment and Heritage Protection will be advised.⁴³⁹ The report states that the Proponent must also report to the Department of Environment and Heritage Protection on actions taken to ensure compliance with the conditions of the draft Environmental Authority.⁴⁴⁰
410. The EIS evaluation report states that the Proponent proposed to install a single real-time total suspended particles monitor to inform the dust forecasting system.⁴⁴¹ The report states there are no Australian Standards to specify its operation.⁴⁴² The report states that the Coordinator-General has '*conditioned the Proponent to install a TSP high-volume sampler, with this instrument to be operated in accordance with the relevant Australian Standard, near the real-time*

⁴³⁸ EIS evaluation report page 24.

⁴³⁹ EIS evaluation report page 24.

⁴⁴⁰ EIS evaluation report page 24.

⁴⁴¹ EIS evaluation report page 24.

⁴⁴² EIS evaluation report page 24.

modified TSP TEOM'.⁴⁴³ It states that this will be used to calibrate the results from the real-time air quality monitor.⁴⁴⁴

411. Having regard to the proximity of two sensitive receptors to mine pits east and west of the town of Acland, and to enhance the Project's air quality monitoring dataset, the report states that the Coordinator-General has '*conditioned the Proponent to install additional TSP monitors at Acland and to the east of the mining operations*'.⁴⁴⁵ It states that these two total suspended particles monitors will be in addition to the meteorological station, PM₁₀ monitors and dust deposition gauges already proposed for Acland.⁴⁴⁶
412. The EIS evaluation report states that the Coordinator-General has '*conditioned*' that the Proponent develop an Air Emissions Management Plan that includes a program for reviewing and continuously improving dust management practices.⁴⁴⁷
413. The EIS evaluation report states that to ensure that dust will be minimised during the loading of coal onto wagons at the train load-out facility and transporting of coal along the rail spur and onto the public rail network to port, the Proponent has committed to:⁴⁴⁸
- (a) an enclosed overhead bin that will deliver coal to each rail wagon as part of the train load-out system;
 - (b) veneering and profiling the loaded coal to minimise dust emissions during transport; and
 - (c) coal being loaded by side tipper into a hopper as part of the train load-out system.
414. The EIS evaluation report states that to minimise air quality impacts, the Coordinator-General requires the Proponent to prepare and implement a coal dust management plan that accords with the existing South West System Coal Dust

⁴⁴³ EIS evaluation report page 24.

⁴⁴⁴ EIS evaluation report page 24.

⁴⁴⁵ EIS evaluation report page 24.

⁴⁴⁶ EIS evaluation report page 26.

⁴⁴⁷ EIS evaluation report page 26.

⁴⁴⁸ EIS evaluation report page 26.

Management Plan.⁴⁴⁹ It states that the Coal Dust Management Plan must identify specific control measures to minimise dust emissions from loaded and unloaded train wagons, and be approved by the Department of Transport and Main Roads before significant construction works commence.⁴⁵⁰ It states that the Coal Dust Management Plan will specify that veneering will continue to be undertaken for the life of the Project.⁴⁵¹

8.3.3 Coordinator-General's conclusions regarding mine and rail spur dust

415. The EIS evaluation report states that the Coordinator-General is '*satisfied that, based on the predictive modelling undertaken, coupled with the implementation of an adaptive AQMP for mining operations and the CDMP for coal loading and rail operations, dust emissions resulting from the Project's construction and operation can be suitably managed.*'⁴⁵²

416. The EIS evaluation report states that, to ensure dust impacts are managed, the Coordinator-General has '*conditioned*' in the draft Environmental Authority that the Proponent must not exceed the relevant *Environmental Protection (Air) Policy 2008* limits at any sensitive receptor during any stage of the Project.⁴⁵³

8.3.4 Summary of the process of evaluation of the Project regarding air emissions – blast fume - as described in the report evaluating the EIS

417. The EIS evaluation report states that the Coordinator-General requested additional information from the Proponent about blast fume events at the existing mine.⁴⁵⁴ It states blast fume events are occurrences where the fumes from a mining blast travel beyond a mining lease boundary.⁴⁵⁵

418. The EIS evaluation report states that the Proponent confirmed that the mine's last blast fume event was in 2011, when it was found that fume likely travelled beyond the western boundary of ML50216.⁴⁵⁶ It states that since this event the Proponent introduced stronger blast fume management protocol, which were reviewed by the

⁴⁴⁹ EIS evaluation report page 26.

⁴⁵⁰ EIS evaluation report page 26.

⁴⁵¹ EIS evaluation report page 26.

⁴⁵² EIS evaluation report page 26.

⁴⁵³ EIS evaluation report page 26.

⁴⁵⁴ EIS evaluation report page 26.

⁴⁵⁵ EIS evaluation report page 26.

⁴⁵⁶ EIS evaluation report page 26.

Department of Natural Resources and Mines.⁴⁵⁷ It states that to date, no further blast fume events have occurred.⁴⁵⁸

Impact

419. The EIS evaluation report notes that noxious fumes from blasting events have potential to cause adverse health impacts on persons who become exposed.⁴⁵⁹ The report states that blasting events will only be undertaken during daylight hours and will not generally be undertaken on Sundays or public holidays.⁴⁶⁰

Mitigation and management measures

420. The EIS evaluation report states that the Proponent has confirmed that currently neighbours of the mine are informed in advance about the timing and nature of upcoming blast events and has committed to continue doing so for the Project.⁴⁶¹
421. The EIS evaluation report states that the Proponent has prepared fume management procedures in accordance with the Department of Natural Resources and Mines' *Queensland Guidance Note QGN 20 v3: Management of oxides of nitrogen in open cut blasting*.⁴⁶²
422. The EIS evaluation report also states that the *Coal Mining Safety and Health Act 1999* (Qld) and the *Explosives Act 1999* (Qld) regulate fume and blasting events in Queensland.⁴⁶³ It notes that the Mines and Explosives Inspectorates monitor compliance with those Acts.⁴⁶⁴

8.3.5 Coordinator-General's conclusions regarding blast fume

423. The EIS evaluation report states that the Coordinator-General acknowledges that the Proponent has committed to implement fume management procedures as part of the Air Quality Management Plan to prevent and manage exposure to noxious fumes that may result from blasting events.⁴⁶⁵ It states that the Proponent has

⁴⁵⁷ EIS evaluation report page 26.

⁴⁵⁸ EIS evaluation report page 26.

⁴⁵⁹ EIS evaluation report page 27.

⁴⁶⁰ EIS evaluation report page 27.

⁴⁶¹ EIS evaluation report page 27.

⁴⁶² EIS evaluation report page 27.

⁴⁶³ EIS evaluation report page 27.

⁴⁶⁴ EIS evaluation report page 27.

⁴⁶⁵ EIS evaluation report page 27.

committed to ensure blasting events only occur during daytime hours of operation and generally not on weekends.⁴⁶⁶

8.3.6 Summary of the process of evaluation of the Project regarding air emissions – Road transport – coal dust - as described in the report evaluating the EIS

Impact

424. The EIS evaluation report states that around 200,000 tonnes of coal will be transported by road to customers in south-east Queensland and northern New South Wales.⁴⁶⁷ It states that public submitters raised concerns about uncovered coal trucks and air pollution.⁴⁶⁸

Mitigation and management measures

425. The EIS evaluation report states that empty trucks must be covered during road transportation to meet compliance with the Department of Transport and Main Roads' *Smart practice guide load containment requirements for haulage of coal on Queensland public roads* (2014).⁴⁶⁹ The report states that the only exception to this is when a wetting containment system, such as veneering, is established.⁴⁷⁰

426. The EIS evaluation report states that the Coordinator-General requires the Proponent to develop and implement a Coal Dust Management Plan for road transportation tasks.⁴⁷¹ It states that the Coal Dust Management Plan must address how coal dust emissions will be minimised while loading, hauling and offloading coal, and for empty vehicles travelling to site.⁴⁷² It states that the plan must be prepared in accordance with the Smart Practice Guide and is to state that contractors who transport product coal must also adhere to the guide.⁴⁷³

8.3.7 Coordinator-General's conclusions - Road transport – coal dust emissions

427. The EIS evaluation report states that road dust emissions can be effectively managed through the establishment and implementation of a Coal Dust Management Plan in accordance with the Department of Transport and Main

⁴⁶⁶ EIS evaluation report page 27.

⁴⁶⁷ EIS evaluation report page 27.

⁴⁶⁸ EIS evaluation report page 27.

⁴⁶⁹ EIS evaluation report page 27.

⁴⁷⁰ EIS evaluation report page 27.

⁴⁷¹ EIS evaluation report page 28.

⁴⁷² EIS evaluation report page 28.

⁴⁷³ EIS evaluation report page 28.

Roads' *Smart practice guide load containment requirements for haulage of coal on Queensland public roads* (2014).⁴⁷⁴ It states that the Coal Dust Management Plan will describe how compliance with the guide will be achieved by the Proponent and state the requirements for road transport contractors.⁴⁷⁵

8.3.8 Summary of the process of evaluation of the Project regarding air emissions – Greenhouse gas emissions - as described in the report evaluating the EIS

428. The EIS evaluation report states that the Proponent must report on greenhouse gas emissions under the *National Greenhouse and Energy Reporting Act 2007* (Cth).⁴⁷⁶ It states that Act prescribes an accounting methodology and includes the following scope definitions for emissions attributable to the Project:⁴⁷⁷

- (a) scope 1 (direct emissions) - must be reported;
- (b) scope 2 emissions (indirect emissions from the consumption of purchased electricity) - must be reported; and
- (c) scope 3, which includes all indirect emissions that are not included in scope 2, and are a consequence of the activities of the facility but occur at sources or facilities not owned or controlled by the entity – reporting not mandatory and was not assessed by the Proponent in the EIS.

Impacts

429. The EIS evaluation report states that the main contributors to scope 1 and scope 2 greenhouse gas emissions from the Project include:⁴⁷⁸

- (a) direct carbon dioxide emissions from combustion of diesel in mining equipment and trucks;
- (b) indirect carbon dioxide due to consumption of electricity; and
- (c) carbon dioxide from mining.

⁴⁷⁴ EIS evaluation report page 28.

⁴⁷⁵ EIS evaluation report page 28.

⁴⁷⁶ EIS evaluation report page 28.

⁴⁷⁷ EIS evaluation report page 28.

⁴⁷⁸ EIS evaluation report page 28.

430. The EIS evaluation report states that the Project is estimated to generate 2.4 megatonnes of carbon dioxide over the life of the mine.⁴⁷⁹

Mitigation and management measures

431. The EIS evaluation report states that the Proponent has committed to reporting carbon dioxide emissions under the *National Greenhouse and Energy Reporting Act 2007* (Cth).⁴⁸⁰ It states that, to minimise emissions, the Proponent has committed to:⁴⁸¹

- (a) reducing fuel usage;
- (b) reducing electricity use;
- (c) using alternative fuels;
- (d) analysing and reporting on emissions; and
- (e) using efficient production technologies.

432. It states that the Environmental Management Plan presents additional measures, including:⁴⁸²

- (a) capturing or flaring coal seam gas;
- (b) carbon sequestration; and
- (c) contributions to research and industry bodies.

8.3.9 Coordinator-General's conclusions regarding greenhouse gas emissions

433. The EIS evaluation report states that the Coordinator-General is '*satisfied that the emissions assessments provided in the EIS adequately quantified the Project's Scope 1 and 2 GHG*'.⁴⁸³

434. The EIS evaluation report notes the Proponent's commitment to report emissions under the *National Greenhouse and Energy Reporting Act 2007* (Cth).⁴⁸⁴ The

⁴⁷⁹ EIS evaluation report page 28.

⁴⁸⁰ EIS evaluation report page 29.

⁴⁸¹ EIS evaluation report page 29.

⁴⁸² EIS evaluation report page 29.

⁴⁸³ EIS evaluation report page 29.

report states that the Coordinator-General is satisfied that the Proponent is aware of the requirements of that Act *'and has committed to implementing measures to reduce GHG emissions in the design, construction and operation of the Project'*.⁴⁸⁵

8.3.10 Observations

435. While there is no briefing note or other document indicating that the Coordinator-General was provided with a copy of the further submissions (received after the AEIS), the conditions in relation to air quality recommended by the Department of Environment and Heritage Protection, in its further submission, are included in Appendix 2 of the EIS evaluation report.⁴⁸⁶

8.4 Traffic and transport

8.4.1 What was the evidence or other material held by the Coordinator-General on traffic and transport?

TOR

436. The TOR required the Proponent to provide:
- (a) an assessment of traffic impacts including the transport arrangements for permanent and temporary workforce associated with all phases of the Project;
 - (b) a description of methods to ensure safety at rail crossings, on roads where conflict with traffic and haulage vehicles is likely, including school bus routes and any necessary intersection upgrades;
 - (c) results of consultation with landholders who would be impacted by Project works such as road realignments, installation of crossings, or delay/interruption to road access, and how landholder concerns had been taken into account in the development of mitigation measures;
 - (d) detail of proposed infrastructure alterations;
 - (e) recommendations about how identified impacts will be mitigated so as to maintain safety, efficiency and condition of each mode of transport;

⁴⁸⁴ EIS evaluation report page 29.

⁴⁸⁵ EIS evaluation report page 29.

⁴⁸⁶ EIS evaluation report pages 173 to 174.

- (f) a transport management plan and draft road-use management plan; and
- (g) conditions of approval for transport management impacts.⁴⁸⁷

EIS

437. Appendix E to the EIS indicates that the traffic and transport issues are addressed in EIS Chapter 13.
438. EIS Chapter 13 – Traffic and Transport ‘*provides a description of the existing traffic and transport conditions within the vicinity of the revised Project. It also identifies potential traffic impacts from the revised Project and the required mitigation measures proposed to avoid or minimise any adverse impacts on the transport environment and existing transport infrastructure*’.⁴⁸⁸
439. The assessment involves consideration of:
- (a) the regulatory framework;
 - (b) the existing traffic and transport environment, including:
 - (i) a description of the existing infrastructure, state controlled roads, local roads and school bus routes;
 - (ii) road crash data;
 - (iii) scheduled road improvements;
 - (iv) a description of the location of police and emergency services;
 - (v) details of public transport services;
 - (vi) details of relevant rail and port facilities; and
 - (vii) details of the main airports in the vicinity of the revised Project;
 - (c) background traffic data;
 - (d) details of the existing road level of service;

⁴⁸⁷ TOR Section 5.9 pages 52 to 56.

⁴⁸⁸ EIS Chapter 13 page 13-1.

- (e) a project overview including details of:
 - (i) project time frames;
 - (ii) proposed site access and haul roads;
 - (iii) proposed realignment of Jondaryan-Muldu Road and Cherrys Road and proposed road closures for part of 14 roads;
 - (iv) the means of access to Acland and the roads within Acland that will remain accessible to the surrounding community;
 - (v) the locations of the rail-road (level) crossings that will be impacted by the revised Project;
 - (vi) rail transportation, including proposed:
 - (A) maximum number of trains per week, namely up to 80 (compared to 53 for the existing operation);
 - (B) closure of the Jondaryan rail load-out facility and construction of a new rail spur and balloon loop;
 - (C) track design and construction for the rail spur, and associated infrastructure;
- (f) details associated with the project construction phase, including with respect to construction working hours, construction workforce traffic, construction equipment and materials, heavy vehicles and oversized vehicles required to deliver construction equipment and traffic demand associated with construction phase traffic;
- (g) details associated with the project operation phase including with respect to operation working hours, operation workforce traffic, operation equipment and materials, expected volume of road coal transportation and traffic demand associated with construction phase traffic and decommission phase traffic;

- (h) results from traffic modelling for the peak construction year, an operation year and the ten year horizon;
- (i) predicted traffic impacts on existing links and intersections;
- (j) impacts on school bus routes, access to Acland and train level crossings; and
- (k) mitigation measures for each of the peak construction phase and the operational phase.

440. The EIS records that:

- (a) road coal transportation during the operational phase will be in the order of 0.20 million tonnes per annum;⁴⁸⁹
- (b) the additional traffic generated by the revised Project during the construction and operational phases is estimated at a maximum of 360 and 240 vehicles per day respectively;⁴⁹⁰
- (c) the additional traffic does not impact on the existing level of service on the surrounding roads, which are forecast to operate with in the acceptable thresholds;⁴⁹¹
- (d) detailed intersection assessment will be undertaken during the preliminary design phase of the revised Project when the traffic demand and other infrastructures are confirmed through the EIS process;⁴⁹²
- (e) the Proponent will ensure that all road intersections required for the revised Project are adequate to safely cater for the construction and operation traffic volumes;⁴⁹³
- (f) a school bus service will be directly affected by the revised Project and will need to be gradually relocated to the proposed new access road to Acland once the revised Project enters into the construction and operation phase,

⁴⁸⁹ EIS Section 13.8.4 pages 13-36 to 13-37.

⁴⁹⁰ EIS Section 13.10.1 page 13-40.

⁴⁹¹ EIS Section 13.10.1 page 13-40.

⁴⁹² EIS Section 13.11.4 page 13-46.

⁴⁹³ EIS Section 13.11.4 page 13-46.

but no significant impacts are anticipated to the operation and safety of the school bus service;⁴⁹⁴

- (g) access to Acland will be maintained at all times during the revised Project's construction and operation phase;⁴⁹⁵ and
- (h) four key train level crossings will be impacted by the traffic movements generated by the revised Project during the construction and operation phase: the EIS stated that a detailed Australian Level Crossing Assessment Model had been undertaken and a Australian Level Crossing Assessment Model report was attached as EIS Appendix G.8.4.⁴⁹⁶

441. The mitigation measures proposed by the Proponent as commitments to minimise the impact of traffic movements during the peak construction phase and the operational phase are outlined in Section 13.15 of the EIS.⁴⁹⁷

442. The EIS identified that detailed intersection assessment should still be undertaken during the preliminary design phase of the revised Project when the traffic demand and other infrastructures are confirmed through the EIS process.⁴⁹⁸

443. Chapter 15 of the EIS also touched on transport related issues in that it records that lighting '*has the potential to cause impacts to the operation of the Oakey Airbase and Training Centre*'. Further detail of the identified hazards is provided in EIS Appendix J.17 - Aviation Hazard Management Plan that outlines the measures proposed to mitigate this particular impact.⁴⁹⁹ It explains that the Army Airfield at Oakey is the primary training facility for Army Aviation in Australia. Identified hazards presented by the Project include:

- (a) circuit area flying restrictions as the Project will encroach on low level flights, particularly because of blasting operations in active pits within the Circuit Area;⁵⁰⁰

⁴⁹⁴ EIS Section 13.12.1 page 13-46.

⁴⁹⁵ EIS Section 13.12.2 page 13-47.

⁴⁹⁶ EIS Section 13.12.3 page 13-47.

⁴⁹⁷ EIS pages 13-50 to 13-51.

⁴⁹⁸ EIS Section 13.14 page 13-49.

⁴⁹⁹ EIS page 15-46.

⁵⁰⁰ EIS Appendix J.17 page 13.

- (b) northern training area transit route flying restrictions as the Project will encroach upon the transit route to the only suitable training area with hilly terrain;⁵⁰¹
- (c) increased light pollution which adversely impacts on night operations, particularly when using night vision goggles;⁵⁰²
- (d) increased dust levels impacting on visibility as well as aircraft engine performance and the conduct of maintenance activities;⁵⁰³
- (e) damage to the air traffic radar caused by dust and blasting,⁵⁰⁴ and
- (f) restricted use of the instrument approaches and outer marker because many of the approaches involve over-flying the Project site, presenting an issue with respect to maximum height of obstacles.⁵⁰⁵

444. With respect to those risks, the Aviation Hazard Management Plan notes that confirmation was awaited with respect to acceptability of proposed action strategies with respect to the first two issues and a medium risk was associated with the third issue.⁵⁰⁶

Submissions on the EIS

445. A briefing note was provided to the Coordinator-General attaching a disc containing a copy of all of the submissions on the EIS.⁵⁰⁷ The briefing note also attached a summary of the submissions. This summary records that the local, State and Commonwealth agencies raised the following key issues, relevant to traffic and transport:⁵⁰⁸

Toowoomba Regional Council (TRC)

- *Local road diversions: additional information requested*

446. Toowoomba Regional Council requested further detail with respect to traffic issues, including querying the effect of temporary closures of the Western Railway

⁵⁰¹ EIS Appendix J.17 page 14.

⁵⁰² EIS Appendix J.17 page 15.

⁵⁰³ EIS Appendix J.17 page 16.

⁵⁰⁴ EIS Appendix J.17 page 21.

⁵⁰⁵ EIS Appendix J.17 page 22.

⁵⁰⁶ EIS Appendix J.17 page 24.

⁵⁰⁷ Doc 10-0008.

⁵⁰⁸ Doc 10-0010.

(such as occurred in 2011 due to the floods).⁵⁰⁹ Toowoomba Regional Council also expressed concerns that local roads had not been adequately addressed in the EIS.⁵¹⁰ The AEIS responded with the claim that the EIS complied with relevant legislative requirements and added:

The RMP and the TMP for the revised Project will be undertaken when the detailed transport routes have been confirmed which would only occur once the detail design has been completed and the project execution contracts have been awarded.

447. The officer summary also records that the individual submitters raised the following key issues with respect to traffic and transport:

Road closures, diversion, increased traffic and associated safety concerns

Some issues raised by landholders included:

- *Clear explanation required of the impacts of Road Closures and the mitigation and management measures being put in place with landholders.*
- *Impacts on the physical delivery of services as a result of closures.*
- *Unclear why roads in the South East of the Acland township will be closed (Botham Road, Greenwood School Road) community and landholders need better understanding of road issues/closures and impacts.*
- *More awareness of road closures, the timing of these the impacts on locals and alternatives.*
- *Clarification of road closures and the methods for consultation, alienation of Acland resulting in the cutting off of access to north east and west, dislocation of the community, logistical issues for local residents*
- *Limited access from Oakey to Acland.*
- *The SIMP does not cover off on changes to roads and the associated mitigation and management strategies.*
- *Only access for one landholder will be via Nungil Road which needs upgrading.*
- *Lack of understanding of the road closures.*
- *Closure of road results in 7 km journey becoming 32kms for one user*
- *Kudo and Silverleigh Road – used by NAC currently, partly an unsealed road, concerned about increased traffic using this road, how will these issues be mitigated.*
- *Increased traffic on Jondaryan/Muldu Road: currently used to move heavy farm machinery, the potential for increased volumes of traffic present safety issues how will these be dealt with.*
- *Re-routing Oakey – Cooya Road increased traffic/speed concerns.*
- *request proactive consultation and strategies to minimise impacts.*

⁵⁰⁹ Submission 466.

⁵¹⁰ Submission 466.

- *Possible restricted property access not clear wants consultation with proponent.*
- *Road closures have the potential to restrict access for heavy farm machinery between landholder properties.*
- *What are impacts on the school buses?*

448. A review of the submissions shows that the summary provided to the Coordinator-General is a reasonable one.

449. In addition, it is noted that the Department of Transport and Main Roads, in its submission:

- (a) expressed its general satisfaction with the EIS; but
- (b) raised concerns about:⁵¹¹
 - (i) the adequacy of the report regarding level crossings in EIS Appendix G.8.4 in that the report records that the Australian Level Crossing Assessment Model has not, in fact, been used to assess the requirements for existing and proposed level crossings;
 - (ii) the failure of the EIS to address all State-controlled road intersections; and
 - (iii) the adequacy of the analysis of road safety impacts, given the EIS focuses on the Warrego highway and contains little analysis or discussion of road safety risk on other local or state roads; and
- (c) suggested conditions to be imposed on the Project.

450. The Department of Health expressed concerns about traffic safety issues and suggested that the Proponent should commit to on-going meetings with the Darling Downs Hospital and Health Service.⁵¹²

451. With respect to potential aviation impacts, the Commonwealth Department of Defence lodged a submission with respect to the Aviation Hazard Management Plan. While the Department was generally satisfied with the content of the plan, it noted that the Aviation Hazard Management Plan does not address the Defence

⁵¹¹ Submission 236.

⁵¹² Submission 410.

(Areas Control) Regulations for Army Aviation Centre Oakey. The Department suggested that the Proponent be required to include a statement that if the Defence (Areas Control) Regulations height assessment is triggered, the Proponent will seek a specific assessment and approval through the Defence⁵¹³. This concern was noted in the Submissions Analysis Register with a direction to the Proponent that a response to the submitter issue was required.⁵¹⁴ It did not, however, feature in the EIS Submissions Analysis – Key Themes.⁵¹⁵

452. Submissions were also received from individuals directly impacted by proposed road alignments and through whose property the proposed rail spur may be located, requesting the Proponent consult with them to minimise the impact of the final location of the roads realignment and proposed rail spur.⁵¹⁶
453. There were also numerous submissions from individuals expressing general concern about traffic impacts including with respect to the additional distance they will need to travel as a consequence of road closures and impacts on the roads as a consequence of transporting coal by road.⁵¹⁷

AEIS

454. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, required additional information to complete the evaluation of the Project.⁵¹⁸ Information required in response to issues raised in submissions, with respect to traffic and transport, included:⁵¹⁹

- (a) a response to the concerns raised in a number of the submissions from nearby landholders that there is limited clarity with regard to the need for road closures and that travel distances could be significantly increased, for example by up to 32 kilometres, with the response to include:

⁵¹³ Submission 194.

⁵¹⁴ Doc 10-0008.

⁵¹⁵ Doc 10-0010.

⁵¹⁶ Submissions 16 and 17.

⁵¹⁷ See, for example, Submission 139, Submission 284 pages 26 to 28, Submission 285, Submission 296 pages 36 to 42 and attached email from Pacific Environment, Submission 473, Submission 474, Submission 475, Submission 503 pages 8 to 9, Submission 508, Submission 514, Submission 520, Submission 550, Submission 564, Submission 568.

⁵¹⁸ Doc 10-0002.

⁵¹⁹ Doc 10-0004.

- (i) detail of the impacts for each nearby landholder affected by road closures and diversions who has raised the topic in their submission on the EIS; and
 - (ii) discussion of any additional distances each landholder would have to travel to access their properties and the nearest townships or locations such as Acland, Jondaryan, Oakey and the New England Highway;
- (b) discussion of the additional distances service vehicles (including emergency and other services) would need to travel due to road alterations/closures;
 - (c) a response to concerns about possible disruptions to nearby businesses, including, for example, if road closures have the potential to restrict movement of farm machinery between landholder properties;
 - (d) a response to safety concerns about movement of farm machinery that currently occurs on Jondaryan-Muldu Road if the road is subject to an increase in traffic due to road closures;
 - (e) discussion of the concerns with the proposed increased use of the partly unsealed Kudo-Silverleigh Road;
 - (f) confirmation of consultation with submitters who raised concerns about road impacts, and detail about the outcomes of the consultation;
 - (g) detail on how impacts of road closures and diversions will be managed and mitigated; and
 - (h) updates to the commitments register, Environmental Management Plan and Social Impact Management Plan as required.
455. With respect to traffic and transport issues, in response to the Coordinator-General's letter of 17 April 2014, the AEIS:
- (a) clarifies the need for road closures to accommodate the extension of the mine area during the construction and operations phase and to

accommodate key infrastructure requirements for the revised Project such as for the proposed realignment of the Jondaryan-Muldu road around the Manning Vale West resources area and the proposed railway crossings facilities;⁵²⁰

- (b) provides tables detailing the additional distances that landholders would need to travel to access their properties, with one landholder (located in Acland) having to travel an additional 31 kilometres to access Jondaryan-Muldu Road;⁵²¹
- (c) provides a table detailing the additional distances that landholders would need to travel to access key townships, with the greatest distance being 30 kilometres for landholders located along Jondaryan-Muldu Road heading to Acland;⁵²²
- (d) provides a table detailing the additional distances service vehicles (including emergency and other services) would need to travel, with the greatest distance being 19 kilometres from Jondaryan to Acland but noting the travel distance from Toowoomba to Acland would be reduced by eight kilometres;⁵²³
- (e) confirms that the proposed road closures will not restrict safe farm machinery movement between landholders properties;⁵²⁴
- (f) confirms no expectation of increased traffic on the partly unsealed Kudo-Silverleigh Road;⁵²⁵
- (g) provides detail of proposed consultation;⁵²⁶ and
- (h) refers to the EIS for detail of the proposed mitigation measures for both the construction and operational phase and notes that detailed mitigation measures and strategies will be outlined in the Road Use Management Plan

⁵²⁰ AEIS Section 5.1.6.1 pages 54 to 55.

⁵²¹ AEIS Section 5.1.6.2 pages 55 to 57.

⁵²² AEIS Section 5.1.6.3 page 57.

⁵²³ AEIS Section 5.1.6.4 pages 57 to 58.

⁵²⁴ AEIS Section 5.1.6.5 pages 58 to 59.

⁵²⁵ AEIS Section 5.1.6.6 page 59.

⁵²⁶ AEIS Sections 5.1.6.10, 5.1.9 and 5.1.10 pages 60 to 61 and 68 to 116, particularly at 5.1.6.10 page 60 to 61 and Section 5.1.10.1.2 pages 81 to 82.

and Traffic Management Plans to be undertaken when the Project execution contracts have been awarded.⁵²⁷

456. In response to the submission from the Department of Transport and Main Roads, the AEIS:

- (a) notes that an accredited Australian Level Crossing Assessment Model report is being undertaken by Queensland Rail and notes the Proponent commits to ensure that appropriate mitigation measures are implemented based on the design consideration outlined in that report and subsequent discussion with the rail authorities;⁵²⁸
- (b) provides intersection analysis for additional intersections and level crossings, which results are said to indicate that all intersections assessed have sufficient capacity to accommodate the additional traffic related to the construction and operational phase of the revised Project. AEIS Appendix J provided the related intersection counts;⁵²⁹ and
- (c) notes that the adequacy of the analysis of road safety impacts can only be undertaken upon confirmation of the transport routes for the revised Project but commits to ensure appropriate road safety audits are undertaken during detailed design stage.⁵³⁰

457. With respect to other submissions, the AEIS:

- (a) indicates that the Proponent will liaise with key regulatory agencies, including Darling Downs Hospital and Health Services as suggested by the Department of Health;⁵³¹
- (b) responds to queries raised by Toowoomba Regional Council, although the response largely indicates that further information could only be provided at detailed design stage;⁵³²

⁵²⁷ AEIS Section 5.1.6.8 pages 59 to 60.

⁵²⁸ AEIS Sections 5.2.3.8 and 5.2.3.10 pages 24 to 25.

⁵²⁹ AEIS Section 5.2.3.1 pages 12 to 21.

⁵³⁰ AEIS Section 5.2.3.15 pages 25 to 26.

⁵³¹ AEIS Section 5.2.5.2 pages 62 to 63.

⁵³² AEIS Sections 5.2.10.47 to 5.2.10.59 pages 119 to 122 and Section 5.2.10.64 pages 124 to 125.

- (c) commits to proactively consulting with private submitters directly affected to realignment of the roads and by the location of the proposed rail spur;⁵³³
- (d) provides direct responses to numerous other private submissions about road closure impacts and other traffic issues;⁵³⁴ and
- (e) in response to the submission by the Commonwealth Department of Defence above aviation impacts, commits to seek a specific assessment and approval through that Department if the height assessment criteria in the Defence (Area Control) Regulations are triggered.⁵³⁵

458. The overall commitments by the Proponent with respect to transport and traffic are collected in AEIS Appendix D.

Further submissions received after the AEIS

459. There were numerous private submissions in which submitters substantially reiterated their concerns regarding traffic impacts.

460. The Department of Transport and Main Roads provided a submission indicating its overall acceptance of the AEIS. The submission stated that ongoing consultation with transport authorities was required and recommended a series of conditions.⁵³⁶

Information clarification to the AEIS

461. Further information was also provided by way of clarification to the AEIS in December 2014. It included further clarification about road closure issues and included a commitment to fully seal Acland-Sabine Road, which is proposed to be the new access route to Acland.⁵³⁷ The Proponent also committed to ensure that the planned upgrade to Acland-Sabine Road is completed before any of the current access roads to Acland Township are closed for the revised Project.⁵³⁸

⁵³³ AEIS Section 5.3.2.1 to 5.3.2.3 pages 139 to 140 and AEIS Section 5.3.3.3 page 142.

⁵³⁴ See, for example, AEIS Sections 5.3.19.10 and 5.3.19.11 page 191, Section 5.3.20.5 pages 203 to 204, Section 5.3.24.20 to 5.3.24.22 pages 245 to 246, Section 5.3.33.3 page 284, Section 5.3.34.2 page 286, Section 5.3.35.2 page 288, Section 5.3.44.4 to 5.3.44.5 pages 300 to 301, Section 5.3.46.1 page 319, Section 5.3.51.17 page 335, Section 5.3.52.4 page 347, Section 5.3.61.1 page 353, Section 5.3.68.1 page 358, Sections 5.3.70.1 and 5.3.70.2 page 360 to 361, Section 5.3.72.5 pages 365 to 366.

⁵³⁵ AEIS Section 5.2.2 page 10.

⁵³⁶ Submission 80.

⁵³⁷ Information Clarification to the AEIS pages 10 to 11.

⁵³⁸ Information Clarification to the AEIS page 18.

Briefing notes to the Coordinator-General

462. Each of the documents referred to above, other than the further submissions (received after the AEIS), was provided to the Coordinator-General as attachments to briefing notes.

8.4.2 Summary of the process of evaluation of the Project regarding traffic and transport as described in the report evaluating the EIS

463. The EIS evaluation report states that 7.5 million tonnes of coal per annum will be transported off-site.⁵³⁹ It states that the majority of that amount, 7.3 million tonnes, will be transported by rail on the West Moreton rail line to the Proponent's coal-loading facility at the Port of Brisbane.⁵⁴⁰ The Proponent proposes to relocate the load-out facility, currently located at Jondaryan, to the mine site.⁵⁴¹ Coal will be loaded at that facility and transported by trains via an eight kilometre rail spur to the West Moreton rail line.⁵⁴²

464. The EIS evaluation report states that 0.2 million tonnes of coal per annum will be trucked from the mine by third party contractors to domestic consumers (an increase from 0.15 million tonnes per annum).⁵⁴³

465. The EIS evaluation report states that the Project will not use fly-in fly-out arrangements or on-site workers' camps.⁵⁴⁴ It states that staff will commute to site from the local area.⁵⁴⁵

466. The EIS evaluation report states that the Proponent has developed an aviation hazard management plan to manage potential impacts on the Oakey Army Aviation Centre.⁵⁴⁶ It states that, provided the mitigations are applied to mining operations, no impacts on operational airspace are expected to occur.⁵⁴⁷

⁵³⁹ EIS evaluation report page 29.

⁵⁴⁰ EIS evaluation report page 29.

⁵⁴¹ EIS evaluation report page 29.

⁵⁴² EIS evaluation report page 29.

⁵⁴³ EIS evaluation report page 29.

⁵⁴⁴ EIS evaluation report page 30.

⁵⁴⁵ EIS evaluation report page 30.

⁵⁴⁶ EIS evaluation report page 30.

⁵⁴⁷ EIS evaluation report page 30.

State-controlled and local roads

467. The EIS evaluation report notes that local roads surrounding the mine are generally unsealed accesses to rural properties, or dual lane roads that travel through local towns, including Acland, Muldu, Jondaryan and Oakey.⁵⁴⁸ Local roads are controlled by Toowoomba Regional Council.⁵⁴⁹
468. The EIS evaluation report states that key state-controlled roads near the Project include:⁵⁵⁰
- (a) Warrego Highway (Toowoomba-Dalby);
 - (b) New England Highway (Yarraman-Toowoomba);
 - (c) Gore Highway (Millmerran-Goondiwindi);
 - (d) Oakey-Cooyar Road;
 - (e) Pechey-Maclagan Road;
 - (f) Oakey-Connection Road; and
 - (g) Acland-Silverleigh Road (partial closure proposed for the Project).
469. The EIS evaluation report states that the Project's potential impacts on intersections, level crossings, road pavement, congestion and safety were considered in the EIS and AEIS.⁵⁵¹
470. The EIS evaluation report states that the Department of Transport and Main Roads' *Guidelines for Assessment of Road Impacts of Development* was used to assess impacts on state-controlled roads and to consider the impacts on local roads.⁵⁵² It states that, in assessing the Project's impacts on state-controlled roads, the *Guidelines for Assessment of Road Impacts of Development* requires any road with a predicted increase in traffic of more than five per cent caused by a project to be

⁵⁴⁸ EIS evaluation report page 30.

⁵⁴⁹ EIS evaluation report page 30.

⁵⁵⁰ EIS evaluation report page 30.

⁵⁵¹ EIS evaluation report page 30.

⁵⁵² EIS evaluation report page 30.

evaluated to determine if the impacts are acceptable and whether mitigation is required.⁵⁵³

Transport network capacities

471. The EIS evaluation report states that evaluation of levels of service for surrounding roads has determined that Project traffic would not adversely affect road link capacities by greater than five per cent.⁵⁵⁴
472. The EIS evaluation report states that the Coordinator-General has '*conditioned*' the Proponent to finalise a road impact assessment during the detailed design and planning stage.⁵⁵⁵ It states that the Coordinator-General has also '*conditioned*' that, dependent on the findings of the road impact assessment, the Proponent is required to finalise a Road-use Management Plan for all Project stages, and reach agreement with Toowoomba Regional Council and the Department of Transport and Main Roads on the plan, in advance of construction.⁵⁵⁶ It states the Road-use Management Plan must show how the Project will ensure the efficient use of the road network, and minimise road-based trips on all state-controlled and local roads.⁵⁵⁷ It further states that the Coordinator-General has recommended a condition that the Project must maintain the safety, condition and efficiency of rail and state-controlled and local roads during the construction and operation of the Project.⁵⁵⁸

Intersections

473. The EIS evaluation report states that access to the Project will be provided at the junction of the new internal mining infrastructure area Northern Access Road and the State-controlled Oakey-Cooyar Road.⁵⁵⁹
474. The EIS evaluation report states that the Coordinator-General's conditions require that intersection upgrades be undertaken in accordance with State and local road planning design policies, principles and manuals.⁵⁶⁰ It states that approval for

⁵⁵³ EIS evaluation report page 30.

⁵⁵⁴ EIS evaluation report page 30.

⁵⁵⁵ EIS evaluation report page 30.

⁵⁵⁶ EIS evaluation report page 31.

⁵⁵⁷ EIS evaluation report page 31.

⁵⁵⁸ EIS evaluation report page 31.

⁵⁵⁹ EIS evaluation report page 31.

⁵⁶⁰ EIS evaluation report page 31.

these works will need to be obtained under the *Transport Infrastructure Act 1994* (Qld) no later than six months before construction begins.⁵⁶¹ It states that the Coordinator-General requires that Traffic Management Plans be developed for each location where the Proponent will undertake road works and at site access points adjoining state-controlled roads.⁵⁶²

475. The EIS evaluation report states that the ‘*SIDRA*’ five-intersection modelling tool was used by the Proponent to assess the potential impacts on existing intersections from resulting traffic.⁵⁶³ It states that the only intersection likely to experience increased saturation levels is the junction at Jondaryan-Sabine Road/Warrego Highway.⁵⁶⁴ It states that by 2021, delays at this intersection are predicted to occur and the intersection will begin to perform unsatisfactorily.⁵⁶⁵ The report states that the upgrade of this intersection will need to be finalised to the satisfaction of the Department of Transport and Main Roads and Toowoomba Regional Council within the road impact assessment.⁵⁶⁶

476. The EIS evaluation report states that the Coordinator-General has recommended a condition that requires the Proponent to erect new signage to indicate the route to Acland on the Oakey-Cooyar/Acland-Sabine Road, which will become the main southerly access to Acland.⁵⁶⁷

Level crossings

477. The EIS evaluation report states that the EIS identified two existing rail crossings likely to be impacted by the Project:⁵⁶⁸

- (a) Oakey Connection Road/Oakey-Cooyar Road; and
- (b) Jondaryan-Sabine Road/Warrego Highway.

478. The EIS evaluation report states that new rail crossings are proposed at Jondaryan-Sabine and Childs Road to accommodate the new rail spur.⁵⁶⁹

⁵⁶¹ EIS evaluation report page 31.

⁵⁶² EIS evaluation report page 31.

⁵⁶³ EIS evaluation report page 31.

⁵⁶⁴ EIS evaluation report page 31.

⁵⁶⁵ EIS evaluation report page 31.

⁵⁶⁶ EIS evaluation report page 31.

⁵⁶⁷ EIS evaluation report page 31.

⁵⁶⁸ EIS evaluation report page 32.

479. The EIS evaluation report states that the Proponent has committed to liaise with Queensland Rail and Aurizon to ensure measures are put in place to maintain level crossing safety.⁵⁷⁰ It states the Proponent will require the Department of Transport and Main Roads' approval where changes to existing and new rail crossings are proposed.⁵⁷¹ It states that the Coordinator-General has recommended a condition stating that the Proponent must prepare an Australian Level Crossing Assessment Model that must:⁵⁷²

- (a) address current and existing traffic flow and train movements, expected future traffic flow, and mitigation measures to address any issues identified to maintain safety; and
- (b) aim to reduce road traffic congestion at the locations of level crossings and the risks associated with road and rail conflicts.

480. The EIS evaluation report states that the Coordinator-General is '*satisfied Queensland Rail will consider the most appropriate treatment at the locations of level crossings to maximise the safety and protection of transport network users*'.⁵⁷³

Road closures and realignments

481. The EIS evaluation report states that 12 local roads and one State-controlled road near the Project site are proposed to be closed, partially closed or realigned.⁵⁷⁴ It states that ten closures are required to facilitate expansion of the mining areas, two to realign the Jondaryan-Muldu Road around the mining lease, and one to establish the rail spur.⁵⁷⁵ It states that the realignment of Jondaryan-Muldu Road will be constructed and maintained by the Proponent.⁵⁷⁶

482. The EIS evaluation report states that the EIS confirms that access to Acland will be maintained during all stages of the Project.⁵⁷⁷ It states that access to Oakey will be

⁵⁶⁹ EIS evaluation report page 32.

⁵⁷⁰ EIS evaluation report page 32.

⁵⁷¹ EIS evaluation report page 32.

⁵⁷² EIS evaluation report page 32.

⁵⁷³ EIS evaluation report page 32.

⁵⁷⁴ EIS evaluation report page 32.

⁵⁷⁵ EIS evaluation report page 32.

⁵⁷⁶ EIS evaluation report page 32.

⁵⁷⁷ EIS evaluation report page 32.

south-east via the Oakey-Cooyar and Acland-Sabine roads.⁵⁷⁸ It states that the Proponent proposes to upgrade the latter road to support it becoming the main access to the south of Acland.⁵⁷⁹

483. The EIS evaluation report states that the diversion of Jondaryan-Muldu Road to the west of the Project site will mean that travelling to Jondaryan south-west from Acland via Muldu will take longer.⁵⁸⁰
484. The EIS evaluation report states that submissions on the EIS and AEIS raised concerns about road closures, diversions, and the additional travel times and distances that could result.⁵⁸¹ It states that landholders closest to the Project site may incur additional travel distances of up to 31 kilometres due to road closures and realignments.⁵⁸²
485. The EIS evaluation report states that the AEIS presented response times of key emergency services accessing the township of Acland from the surrounding localities of Jondaryan, Oakey, Goombungee, Toowoomba and Highfields.⁵⁸³ It states that potential increased emergency service response times due to road closures and realignments pose risks for some residents near the Project site.⁵⁸⁴ It states that for emergency vehicles travelling to Acland, increased travel distances from Jondaryan and Goombungee could be up to 19 and ten kilometres respectively.⁵⁸⁵ It states that emergency access from Oakey is not likely to increase substantially, and may be reduced from Toowoomba with the use of Oakey-Cooyar Road.⁵⁸⁶
486. The EIS evaluation report states that one school bus route (route S24) could be impacted by proposed road closures.⁵⁸⁷ It states that the Proponent proposes to gradually relocate the route to align with the new access road to Acland.⁵⁸⁸

⁵⁷⁸ EIS evaluation report page 32.

⁵⁷⁹ EIS evaluation report page 32.

⁵⁸⁰ EIS evaluation report page 33.

⁵⁸¹ EIS evaluation report page 33.

⁵⁸² EIS evaluation report page 33.

⁵⁸³ EIS evaluation report page 33.

⁵⁸⁴ EIS evaluation report page 33.

⁵⁸⁵ EIS evaluation report page 33.

⁵⁸⁶ EIS evaluation report page 33.

⁵⁸⁷ EIS evaluation report page 33.

⁵⁸⁸ EIS evaluation report page 33.

487. The EIS evaluation report states that in seeking to close or divert roads, the Proponent is obliged to obtain prior approval from the Department of Natural Resources and Mines under the *Land Act 1994* (Qld).⁵⁸⁹ It states that the Proponent has committed to consult with the Department of Natural Resources and Mines about road closures prior to the commencement of construction works.⁵⁹⁰
488. The EIS evaluation report states that, to address the additional travel distances on the route from Muldu and Acland south-west to Jondaryan, the Coordinator-General has set a condition requiring the Proponent to provide alternative access travelling south-west from Acland to Jondaryan.⁵⁹¹ It states that this access is to be spray sealed and maintained in accordance with Part 2, Pavement Structural Design, of the Ausroads standard.⁵⁹²
489. The EIS evaluation report states that notification of road closures will be conducted at the detailed design stage following a thorough assessment of the Proponent's road impact assessment by the Department of Transport and Main Roads and Toowoomba Regional Council.⁵⁹³
490. The EIS evaluation report notes that the Proponent has consulted with Queensland Police Service in relation to travel distances for emergency services.⁵⁹⁴

Rail transportation

491. The EIS evaluation report states that rail movements from the Project will increase from the current 53 trains per week to up to 80.⁵⁹⁵ However, the total number of trains on the West Moreton line will not increase in the short term because of the reduction of rail transportation by other freight users.⁵⁹⁶ It states that upgrades to the West Moreton rail system may be required in the long term.⁵⁹⁷
492. The EIS evaluation report states that the Proponent is required to gain approval from the Department of Transport and Main Roads under the *Transport (Rail*

⁵⁸⁹ EIS evaluation report page 33.

⁵⁹⁰ EIS evaluation report page 33.

⁵⁹¹ EIS evaluation report page 33.

⁵⁹² EIS evaluation report page 33.

⁵⁹³ EIS evaluation report page 33.

⁵⁹⁴ EIS evaluation report page 33.

⁵⁹⁵ EIS evaluation report page 33.

⁵⁹⁶ EIS evaluation report page 33.

⁵⁹⁷ EIS evaluation report page 33.

Safety) Act 2010 (Qld) to construct the rail spur and loop to connect with the existing West Moreton line.⁵⁹⁸

Aviation

493. The EIS evaluation report notes that the Oakey Army Aviation Centre is approximately nine kilometres south of the Project site.⁵⁹⁹ The report states that the Project has the potential to interfere with aircraft communications, flight paths and navigation if it is not appropriately designed and managed.⁶⁰⁰ It states that the Army's concerns included potential light pollution, dust and vibration from mine blasting, and training and low-level flight restrictions over the mine.⁶⁰¹
494. The EIS evaluation report states that the Proponent has designed the Project in accordance with the State Planning Policy and the Toowoomba Regional Council Planning Scheme provisions, which guide development in the vicinity of aviation facilities.⁶⁰² The report states that the aviation hazard management plan in the EIS aims to address the Army's concerns and outlines mitigation and management measures, including:⁶⁰³
- (a) controlling night lighting by screening and orienting lights inwards;
 - (b) employing dust mitigation measures to control dust from Project activities;
 - (c) ongoing monitoring of all activities likely to impact the Army's operations; and
 - (d) establishing a community liaison officer to be a facilitator between the Army and the Proponent to ensure all operational concerns can be addressed.
495. The EIS evaluation report states that the tallest component of the Project will be the out-of-pit dumps at 45 metres, which is below the specified height restriction of 90 metres.⁶⁰⁴

⁵⁹⁸ EIS evaluation report page 34.

⁵⁹⁹ EIS evaluation report page 34.

⁶⁰⁰ EIS evaluation report page 34.

⁶⁰¹ EIS evaluation report page 34.

⁶⁰² EIS evaluation report page 34.

⁶⁰³ EIS evaluation report page 34.

⁶⁰⁴ EIS evaluation report page 34.

8.4.3 Coordinator-General's conclusions regarding traffic and transport

496. The EIS evaluation report states that the Coordinator-General is '*satisfied that the Proponent's assessment satisfactorily identifies that the Project will generate additional traffic on state-controlled and local roads that will require upgrades to a number of intersections and level crossings*'.⁶⁰⁵ The report states that the Coordinator-General has conditioned the Proponent to upgrade affected intersections and to construct a new site access intersection in order to maintain an equivalent level of service for the road network.⁶⁰⁶ It further states that, in the short-term, conditions require the Proponent to obtain pre-construction approval from the Department of Transport and Main Roads and Toowoomba Regional Council on all roadworks improvements.⁶⁰⁷
497. The EIS evaluation report states that to mitigate additional travel distances between Jondaryan and Acland the Coordinator-General has set a condition requiring a new access road to be created and sealed.⁶⁰⁸
498. The EIS evaluation report states that there will be no short-term worsening of the performance of the West Moreton rail, although upgrades may be required in the long term.⁶⁰⁹
499. The EIS evaluation report states that the Coordinator-General is satisfied that the Proponent has adequately considered the Oakey Army Aviation Centre and that implementation of the Aviation Hazard Management Plan and consultation with the Australian Army will ensure operational airspace is not adversely affected.⁶¹⁰
500. The EIS evaluation report states that the Coordinator-General concludes that impacts on transport networks will be effectively managed to ensure that no worsening of current network conditions occurs.⁶¹¹ The report notes the Proponent's commitment to engage with various transport authorities during the construction and operational phases of the Project to achieve this outcome.⁶¹²

⁶⁰⁵ EIS evaluation report page 34.

⁶⁰⁶ EIS evaluation report page 34.

⁶⁰⁷ EIS evaluation report page 34.

⁶⁰⁸ EIS evaluation report page 34.

⁶⁰⁹ EIS evaluation report page 34.

⁶¹⁰ EIS evaluation report page 35.

⁶¹¹ EIS evaluation report page 35.

⁶¹² EIS evaluation report page 35.

8.4.4 Observations

501. While there is no briefing note or other document indicating that the Coordinator-General was provided with a copy of the further submissions received after the AEIS, conditions recommended by the Department of Transport and Main Roads, in its further submission (received after the AEIS), were included in the EIS evaluation report (in Appendix 3 Schedule 2) as recommended conditions for approvals under the *Transport Infrastructure Act 1994* (Qld).⁶¹³

8.5 Jondaryan rail load-out facility

8.5.1 What was the evidence or other material held by the Coordinator-General on the Jondaryan rail load-out facility?

TOR

502. The decommissioning of the Jondaryan rail load-out facility was proposed as one of the changes to the Project. It was not the subject of any targeted request in the TOR.

EIS

503. Section 2.3.6 of the EIS identifies that the construction of a new train load-out facility on the mining lease, and the associated decommissioning of the Jondaryan rail load-out facility, would:⁶¹⁴

- (a) reduce the potential for dust and noise impacts at Jondaryan;
- (b) improve amenity at Jondaryan through the removal of coal stockpiles;
- (c) address a key concern for the local community.

⁶¹³ EIS evaluation report pages 208 to 211.

⁶¹⁴ Page 2-16.

Submissions on the EIS

504. A briefing note was provided to the Coordinator-General attaching a disc containing all of the submissions on the EIS.⁶¹⁵ The briefing note also attached a summary of the submissions. This summary records that individual submitters raised the following key issues:⁶¹⁶

Jondaryan Rail Load-out facility/coal stock piles

Some issues raised by landholders included:

- *Noise and dust levels and the impacts on local residents as a result of the on-going use of the Jondaryan stock pile and rail yards. Require consultation and information on mitigation strategies.*
- *Issues affecting Jondaryan are not considered in the EIS.*
- *Clarification of the Jondaryan stock pile in relation to life span, date for end of operation.*
- *Undertake consultation and clarify the timing, process, and shut down of the Jondaryan rail load out.*
- *Consult and clarify with Jondaryan community and keep them informed on the closure of rail load out.*
- *No expansion until the load-out facility is moved.*

505. A review of the submissions shows that the summary provided to the Coordinator-General is a reasonable one.⁶¹⁷

506. Impacts from the Jondaryan rail load-out facility was a regular feature in submissions, particularly those of private submitters. Concerns were raised as to noise and dust levels caused by the load-out facility. Submitters raised concerns that there was insufficient certainty as to when the facility would cease operations. One submission also raised a concern about the fact that the Proponent has not formulated its policy for ‘*land cleansing*’ before returning the site to grazing land.⁶¹⁸

AEIS

507. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in

⁶¹⁵ Doc 10-0008.

⁶¹⁶ Doc 10-0010.

⁶¹⁷ See, for example, Submission 41, Submission 139, Submission 256, Submission 273, Submission 284, Submission 294, Submission 368, Submission 503, Submission 511, Submission 512, Submission 514, Submission 579.

⁶¹⁸ Submission 514 page 4.

accordance with section 35(2) of the *SDPWO Act*, required additional information to complete the evaluation of the Project.⁶¹⁹ Information required in response to issues raised in submissions, with respect to the Jondaryan rail load-out facility, included:⁶²⁰

- (a) a commitment to not increase production beyond the existing maximum output approved for stage 2 until the Jondaryan facility is decommissioned and relocated, having regard to the numerous concerns expressed regarding impacts of the existing rail load-out facility at Jondaryan;
- (b) clarification of the timeframe for closure and relocation of the rail load-out facility and the process for rehabilitation of the area;
- (c) indication of the intended land use after the facility is decommissioned; and
- (d) an update to the commitments register and Environmental Management Plan as required.

508. With respect to the Jondaryan rail load-out facility, in response to the Coordinator-General's letter of 17 April 2014, the AEIS:

- (a) contains a commitment that, although an increase in throughput has been approved (from 4.8 million tonnes per annum to 5.2 million tonnes per annum), the Proponent will not increase throughput at the existing rail load-out facility at Jondaryan;⁶²¹
- (b) clarifies that the Jondaryan rail load-out facility will be closed within 24 months of obtaining a grant of the mining lease and all other relevant approvals for the revised Project;⁶²²
- (c) contains a decommissioning management strategy;⁶²³
- (d) indicates that following cessation of train loading activities at Jondaryan, decommissioning and rehabilitation of the Jondaryan rail load-out facility

⁶¹⁹ Doc 10-0002.

⁶²⁰ Doc 10-0004.

⁶²¹ AEIS Section 5.1.4.1 page 24.

⁶²² AEIS Section 5.1.4.2 pages 24 to 25.

⁶²³ AEIS Section 5.1.4.2 pages 25 to 26.

site will be conducted over a two year period, with the site to be ultimately used for grazing;⁶²⁴ and

- (e) provides detail of the proposed consultation with the Jondaryan community to ensure information is available regarding activities specific to the Jondaryan rail load-out facility;⁶²⁵ and
- (f) responds to the submissions raising concerns about impacts from the existing Jondaryan rail load-out facility.⁶²⁶

509. The overall commitments by the Proponent with respect to the Jondaryan rail load-out facility are collected in AEIS Appendix D.

Further submissions received after the AEIS

510. Various submissions were received in which submitters substantially reiterated their concerns with the continued operation of the Jondaryan rail load-out facility.

511. The Department of Environment and Heritage Protection also made a further submission in which it expressed concern about the current application by the Proponent to increase throughput (from 4.8 to 5.2 million tonnes per annum) at the Jondaryan rail load-out facility as part of Stage 2. The Department was of the view that while the increase in volume was not environmentally profound, given the community concern about the Jondaryan rail load-out facility, the Proponent ought address the concerns through a structure community consultative process.⁶²⁷

Information clarification to the AEIS

512. Further information was also provided by way of clarification to the AEIS in December 2014. It noted that, in response to the concerns of residents of Jondaryan, the Proponent has applied to amend its Environmental Authority to

⁶²⁴ AEIS Section 5.1.4.2 pages 24 to 26 and Section 5.1.4.3 page 26. See also AEIS Section 5.3.51.19 page 336.

⁶²⁵ AEIS Section 5.1.4.4 pages 26 to 27 and Section 5.1.10.1.3 pages 82 to 85.

⁶²⁶ AEIS Section 5.3.5.1 page 142, Section 5.3.7.3 page 147, Sections 5.3.14.1 to 5.3.14.3 pages 172 to 174, Section 5.3.17.1 pages 179 to 180, Section 5.3.19.8 page 190, Section 5.3.23.1 to 5.3.23.6 pages 229 to 235, Section 5.3.27.2 pages 268 to 269, Section 5.3.27.4 pages 270 to 271, Section 5.3.44.52 page 318, Section 5.3.48.5 page 321, Sections 5.3.49.1 to 5.3.49.3 pages 322 to 325, Section 5.3.51.20 pages 336 to 337, Section 5.3.51.23 page 338, Section 5.3.73.1 pages 368 to 369.

⁶²⁷ Further submission 231.

reduce the stockpile capacity at the Jondaryan rail load-out facility from 600,000 tonnes to 250,000 tonnes.⁶²⁸

Briefing notes to the Coordinator-General

513. Each of the documents referred to above, other than the further submissions (received after the AEIS), was provided to the Coordinator-General as attachments to briefing notes.

8.5.2 Summary of the process of evaluation of the Project regarding the Jondaryan rail load-out facility as described in the report evaluating the EIS

514. The EIS evaluation report states that the Proponent proposes to construct a new train load-out facility at the mine.⁶²⁹ It states that this proposal responds to local community concerns during the EIS process about noise and dust and truck movement impacts from the existing load-out facility at Jondaryan.⁶³⁰
515. The EIS evaluation report states that the train load-out facility will be constructed to the south of the mining lease application and will link into the West Moreton rail system.⁶³¹ It states that construction and commissioning is anticipated to take two years.⁶³²
516. The EIS evaluation report states that to ensure timely construction, the Coordinator-General has set a condition that the train load-out facility will be the sole distribution point for all railed product produced by the Project from the day of first operations of stage 3.⁶³³
517. The EIS evaluation report states that it is the Coordinator-General's expectation that activities at the Jondaryan rail load-out facility would cease once the new train load-out facility is operational.⁶³⁴
518. The EIS evaluation report states that the relocation of the rail load-out facility will positively benefit the residents of Jondaryan.⁶³⁵

⁶²⁸ Information Clarification to the AEIS page 13.

⁶²⁹ EIS evaluation report page 35.

⁶³⁰ EIS evaluation report page 35.

⁶³¹ EIS evaluation report page 35.

⁶³² EIS evaluation report page 35.

⁶³³ EIS evaluation report page 35.

⁶³⁴ EIS evaluation report page 35.

⁶³⁵ EIS evaluation report page 35.

8.6 Ecology

8.6.1 What was the evidence or other material held by the Coordinator-General on ecology?

TOR

519. With respect to the issue of ecology, the TOR required the Proponent to identify and outline mitigation and management measures with respect to:⁶³⁶

- (a) nature conservation values;
- (b) species, communities and habitat of local, regional or state significance in sensitive environmental areas;
- (c) terrestrial flora;
- (d) terrestrial fauna; and
- (e) aquatic biology and ecology.

EIS

520. Appendix E to the EIS indicates that these issues are predominantly addressed in EIS Chapter 7 – Terrestrial Ecology and Chapter 8 – Aquatic Ecology.

521. EIS Chapter 7 – Terrestrial Ecology ‘*describes the existing environment for terrestrial ecology that may be affected by the revised Project and the measures required for the mitigation of those potential impacts.*’⁶³⁷

522. Chapter 7 describes:

- (a) the relevant policies and legislation applicable to the management of ecological and biodiversity values for the revised Project;
- (b) the existing environment, which was based on a desktop assessment together with a program of field surveys conducted over the past 13 years;⁶³⁸ and

⁶³⁶ TOR Section 5.3 pages 28 to 36.

⁶³⁷ EIS Chapter 7 page 7-1.

⁶³⁸ EIS Section 7.4 page 7-6.

- (c) the results of the desktop analysis and field surveys, namely that the Project site (and its surrounds in the case of fauna) contains:
- (i) ten regional ecosystems within the disturbance area, three of which are endangered regional ecosystems;⁶³⁹
 - (ii) three species of grasses listed as threatened under the *Nature Conservation Act 1992* (Qld) and the *EPBC Act* - Lobed bluegrass, Finger panic grass and Belson's panic;⁶⁴⁰
 - (iii) threatened fauna species – the Grey-headed Flying-fox and koala.⁶⁴¹

523. In terms of the assessment of impact of the revised Project, the EIS records that the revised Project will result in:

- (a) the clearing of 142.9 hectares containing nine regional ecosystems;
- (b) the clearing of 64.7 hectares that contains three threatened ecological communities;⁶⁴²
- (c) the clearing of 10.3 hectares of habitat used by the koala, but koala habitat will be retained along Lagoon Creek,⁶⁴³ and
- (d) the temporary reduction in foraging habitat for the Grey-headed Flying-fox as a result of the clearing of vegetation, but areas of suitable habitat will be retained, especially along Lagoon Creek.⁶⁴⁴

524. The mitigation measures proposed by the Proponent to manage the impact of the revised Project on terrestrial ecology values are included in the Environmental Management Plan in Appendix J.19,⁶⁴⁵ and are specifically described in:

- (a) the Biodiversity Offset Strategy in EIS Appendix I, which addresses the offset needs for threatened ecological communities and listed species, as well as regional ecosystems and State protected species;⁶⁴⁶

⁶³⁹ EIS Section 7.5.1 pages 7-62 to 7-64.

⁶⁴⁰ EIS Section 7.5.2 pages 7-64 to 7-65.

⁶⁴¹ EIS Section 7.5.3 pages 7-65 to 7-77.

⁶⁴² EIS Section 7.7.1 page 7-78.

⁶⁴³ EIS Section 7.7.3 page 7-83.

⁶⁴⁴ EIS Section 7.7.3 page 7-83.

⁶⁴⁵ EIS Section 7.9 page 7-86.

- (b) the Bluegrass Offset Management Plan in EIS Appendix J.8;⁶⁴⁷
- (c) the Conservation Zone Management Plan in EIS Appendix J.6;⁶⁴⁸
- (d) the Threatened Species Translocation Plan in EIS Appendix J.7;⁶⁴⁹
- (e) the Construction Phase Management Plan, which is to be prepared by the construction contractor to be implemented during the construction of the revised Project;⁶⁵⁰ and
- (f) the Pest and Weed Management Plan in EIS Appendix J.9.⁶⁵¹

525. In addition, the Proponent has committed to take reasonable steps to keep the Project site free of Class 1 and Class 2 declared animal pests and will not permit employees, contractors or visitors to bring domestic animals onto the Project site.⁶⁵²

526. Chapter 8 – Aquatic Ecology *‘describes the existing environment for aquatic ecology that may be affected by the revised Project and the measures required for the mitigation of these potential impacts.’*⁶⁵³

527. Chapter 8 describes:

- (a) the relevant policies and legislation applicable to the management of ecological and biodiversity values for the revised Project;
- (b) the existing environment, which was based on a desktop review and field surveys to verify the information collected in the desktop review;⁶⁵⁴ and
- (c) the results of the desktop analysis and field surveys.

528. In terms of the assessment of impact of the revised Project, the EIS describes the revised Project activities and their potential impacts upon aquatic ecosystem

⁶⁴⁶ EIS Section 7.9.1 pages 7-85 to 7-88.

⁶⁴⁷ EIS Section 7.9.2 page 7-88.

⁶⁴⁸ EIS Section 7.9.2 pages 7-88 to 77-89.

⁶⁴⁹ EIS Section 7.9.2 page 77-89.

⁶⁵⁰ EIS Section 7.9.2 page 7-89.

⁶⁵¹ EIS Section 7.9.2 page 7-90.

⁶⁵² EIS Section 7.9.2 pages 7-90.

⁶⁵³ EIS Chapter 8 page 8-1.

⁶⁵⁴ EIS Section 8.4 page 8-3.

values, as well as proposed management for the potential impacts. The activities that potentially have impact are:⁶⁵⁵

- (a) removal of terrestrial vegetation;
- (b) water management infrastructure;
- (c) groundwater changes;
- (d) construction of waterway crossings; and
- (e) movement and operation of vehicles and machinery.

529. The mitigation and monitoring measures proposed by the Proponent to assist in protecting and, where possible, enhancing the aquatic values potentially impacted by the revised Project are described in Section 8.6 of the EIS.⁶⁵⁶

530. Overall, the environmental risks from the revised Project to aquatic ecology were assessed as low following implementation of the mitigation measures. This reflects the fact that the habitats are subject to moderate to high levels of existing disturbance.⁶⁵⁷

Submissions on the EIS

531. A briefing note was provided to the Coordinator-General attaching a disc containing a copy of all of the submissions on the EIS.⁶⁵⁸ The briefing note also attached a summary of the submissions. This summary records that the local, State and Commonwealth agencies raised the following key issues, relevant to ecology:⁶⁵⁹

Department of Environment and Heritage Protection (DEHP)

- *Offsets details required now*

Commonwealth Department of the Environment (DOTE)

- *Further information on offsets proposal*

⁶⁵⁵ EIS Section 8.5 pages 8-28 to 8-35.

⁶⁵⁶ EIS pages 8-35 to 8-37.

⁶⁵⁷ EIS Section 8.7 page 8-37 and Section 8-8 pages 8-39 to 8-40.

⁶⁵⁸ Doc 10-0008.

⁶⁵⁹ Doc 10-0010.

Toowoomba Regional Council (TRC)⁶⁶⁰

- *Over-reliance on offsetting rather than avoid, mitigate, offset as last resort*
- *Insufficient information on existing site values to understand e.g. koala impacts*
- *Emission figures for clearing of woodland and grassland are not specific to local woodlands and grassland and are therefore misleading or inaccurate.*
- *the Biodiversity Offsets Strategy contains only vague statements of intent.*

532. The document also records that the individual submitters raised the following key issues with respect to ecology:

Flora and fauna – including particularly koala impacts

Further information has been requested on management of koala impacts, with targeted mitigation measures to address impacts on koalas across the project area required within a species management plan.

Within the submissions register, requests for additional information on issues such as perceived survey gaps along the rail spur, or disagreements on the absence of significant species, have been included.

533. A review of the submissions shows that the summary provided to the Coordinator-General is a reasonable one.

534. The submission by the Department of Environment and Heritage Protection expressed the view that the Proponent should:⁶⁶¹

- (a) commit to develop an Offset Area Management Plan that, as a minimum, addresses the requirements for an offset area management plan as outlined in the Biodiversity Offsets Policy;
- (b) commit to include a monitoring and evaluation program for the Bluegrass offset area as part of the Offset Area Management Plan;
- (c) commit to provide the Department with real property descriptions and global positioning system coordinates of impacts and offset areas once the location of offset areas are legally secured;
- (d) provide an outline of quantitative measures for monitoring water requirements in the Threatened Species Translocation Plan;

⁶⁶⁰ See Submission 466.

⁶⁶¹ Submission 332.

- (e) provide further detail on monitoring in the Threatened Species Translocation Plan;
- (f) commit to include native grassland (including Bluegrass) species in the mine rehabilitation plan;
- (g) commit to:
 - (i) where appropriate, co-locate threatened grassland species in the riparian conservation zone;
 - (ii) exclude (as much as practically possible) grazing from the conservation management zone to promote the restoration of natural ecosystems; and
 - (iii) endeavour to restore the Lagoon Creek riparian areas to a '*functional*' condition based on a biocondition assessment.

535. The submission from the Commonwealth Department of Environment:⁶⁶²

- (a) noted that, during the process of drafting the EIS, it consulted with the Proponent and the majority of the Department's concerns have been addressed in the finalised EIS;
- (b) noted that finger panic grass and lobed bluegrass have been delisted by the Commonwealth; and
- (c) requested further information with respect to:
 - (i) the EPBC offset calculator;
 - (ii) the offset management measures to be used to improve the quality of the offset area over time; and
 - (iii) the viability of translocation of identified species.

536. As noted in the summary by the departmental officers, there were also a number of submissions from individuals expressing general concern about impact on

⁶⁶² Submission 443.

koalas,⁶⁶³ perceived gaps in the survey information⁶⁶⁴ and the unacceptable ecological impacts of the proposal.⁶⁶⁵

537. There were also a small number of submissions with respect to the impacts from weeds and pests.⁶⁶⁶

AEIS

538. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, required additional information to complete the evaluation of the Project.⁶⁶⁷ Information required in response to issues raised in submissions, with respect to ecology and nature conservation, included a request that the Proponent provide targeted mitigation measures to address impacts on koalas across the project area.⁶⁶⁸ It was suggested that the Proponent consider inclusion of staff training, provision of feed trees species within revegetation, fauna movement control devices, identification of fauna collision areas and associated additional protective measures as appropriate.

539. The Proponent was also requested to provide a species management plan in the Environmental Management Plan and update the commitments register as required.

540. In response to the requests by the Coordinator-General in his letter of 17 April 2014, the Proponent engaged an independent consultancy specialised in fauna protection to prepare a Koala Species Management Plan, a copy of which was provided in Appendix B to the AEIS.⁶⁶⁹

541. The Koala Species Management Plan details:⁶⁷⁰

- (a) aims and objectives;

⁶⁶³ See, for example, Submission 139, Submission 228, Submission 284 pages 28 to 29, Submission 296 page 35, Submission 503 pages 65 to 74.

⁶⁶⁴ See, for example, Submission 18, Submission 228, Submission 292 pages 24 to 26, Submission 296 page 35, Submission 503 pages 63 to 65.

⁶⁶⁵ See, for example, Submission 292 pages 25 to 26, Submission 503 pages 46 and 62 to 79 and 92 to 110, Submission 514.

⁶⁶⁶ See, for example, Submission 279, Submission 410 (Department of Health), Submission 477, Submission 487.2.

⁶⁶⁷ Doc 10-0002.

⁶⁶⁸ Doc 10-0004.

⁶⁶⁹ AEIS Section 5.1.1.1 page 3.

⁶⁷⁰ AEIS Section 5.1.1.1 page 3.

- (b) known koala habitat within the revised Project area;
- (c) threatening processes (direct and indirect);
- (d) individual threat management strategies with respect to vegetation clearing, retained vegetation, rehabilitation areas and collision areas;
- (e) improvements and corrective and preventative actions including revegetation with feed tree species and fauna movement control devices;
- (f) a monitoring plan that involves species-specific monitoring protocols, performance criteria and corrective actions, staff training and reporting protocols.

542. Appendix C of the AEIS includes an updated Environmental Management Plan that was updated to incorporate a summary of the Koala Species Management Plan.

543. The AEIS also:

- (a) responds to concerns raised by the Department of Environment and Heritage Protection by:
 - (i) committing to develop an Offset Area Management Plan that is consistent with the Commonwealth and Queensland governments' biodiversity offset policy requirements;⁶⁷¹
 - (ii) committing to prepare a monitoring and evaluation program for the Bluegrass offset area that will form part of the Offset Area Management Plan;⁶⁷²
 - (iii) committing to provide the Department with spatial data of the offset locations once they have been confirmed;⁶⁷³
 - (iv) noting that the need for watering translocated plants will be determined at each weekly inspection;⁶⁷⁴

⁶⁷¹ AEIS Section 5.2.4.16 pages 36 to

⁶⁷² AEIS Section 5.2.4.17 pages 38 to 39.

⁶⁷³ AEIS Section 5.2.4.18 page 39.

- (v) revising the Threatened Species Translocation Plan to provide further detail on monitoring;⁶⁷⁵
- (vi) committing to continue its existing practice of collecting bluegrass seed (as well as promising to collect other species) and using the species in rehabilitation of disturbed areas of the mine;⁶⁷⁶
- (vii) committing to:⁶⁷⁷
 - (A) investigate the potential for the translocation of the identified threatened species to suitable habitat located in the conservation management zone along Lagoon Creek, and to modify the Conservation Zone Management Plan and the Threatened Species Translocation Plan to incorporate those translocation activities;
 - (B) very limited and controlled grazing, to efficiently control fire fuel loads, in the conservation management zone; and
 - (C) implement the Conservation Zone Management Plan together with the Koala Species Management Plan;
- (b) provides the further information requested by the Commonwealth Department of Environment;⁶⁷⁸
- (c) responds to concerns raised by Toowoomba Regional Council, by providing further explanation about the information presented in the EIS, providing a Koala Species Management Plan in Appendix B to the AEIS and committing to prepare an Offset Area Management Plan;⁶⁷⁹ and

⁶⁷⁴ AEIS Section 5.2.4.19 page 39.

⁶⁷⁵ AEIS Section 5.2.4.20 page 39.

⁶⁷⁶ AEIS Section 5.2.4.21 pages 39 to 40.

⁶⁷⁷ AEIS Section 5.2.4.22 pages 40 to 41.

⁶⁷⁸ AEIS Sections 5.2.8.1 to 5.2.8.3 pages 66 to 68.

⁶⁷⁹ AEIS Sections 5.2.10.24 to Section 5.2.10.25 pages 108 to 109, Sections 5.2.10.33 to 5.2.10.40 pages 110 to 113 and Sections 5.2.10.74 to 5.2.10.93 pages 130 to 135.

- (d) responds to general concerns raised by private submitters about impacts on koalas,⁶⁸⁰ perceived gaps in the survey data⁶⁸¹, concerns about inadequate measures to address ecological impacts⁶⁸² and concerns about pests⁶⁸³.

544. The overall commitments by the Proponent with respect to ecology are collected in AEIS Appendix D.

Further submissions received after the AEIS

545. There were numerous private submissions in which submitters substantially reiterated their concerns regarding ecological impacts.

546. The Department of Environment and Heritage Protection made a further submission in which it set out a series of recommended conditions for the Project.⁶⁸⁴

Information clarification to the AEIS

547. Further information was also provided by way of clarification to the AEIS in December 2014. It includes:

- (a) clarification with respect to the Rail Spur Ecology Assessment included in Section 5.3.12.5 of the AEIS and in Section 3.11.8 of the updated Environmental Management Plan;⁶⁸⁵
- (b) further details about the single sighting of the Grey-headed Flying-fox in the revised Project site, the measures taken in the ecology surveys to identify its presence and the availability of habitat for the species,⁶⁸⁶

⁶⁸⁰ See, for example, AEIS Section 5.3.19.13 page 192, Section 5.3.24.18 page 245, Section 5.3.44.34 page 312, Section 5.3.44.42 page 315.

⁶⁸¹ See, for example, AEIS Section 5.3.4.1 page 142, Section 5.3.7.20 pages 153 to 154, Section 5.3.22.10 page 217, Section 5.3.24.18 page 245, Section 5.3.44.6 pages 301 to 302, Section 5.3.44.32 page 311, Section 5.3.44.41 pages 314 to 315.

⁶⁸² See, for example, AEIS Sections 5.3.22.11 to 5.3.22.12 pages 217 to 218, Section 5.3.44.33 page 312, Section 5.3.51.12 pages 331 to 332.

⁶⁸³ See, for example, AEIS Section 5.2.5.5 page 65, Section 5.3.37.5 page 291, Section 5.3.42.1 page 296, Section 5.3.44.43 pages 315 to 316.

⁶⁸⁴ Further submission 231.

⁶⁸⁵ Information Clarification to the AEIS pages 1 to 4.

⁶⁸⁶ Information Clarification to the AEIS page 5.

- (c) clarification of the extent of koala habitat impacted by the revised Project and a commitment to the delivery of the actions in the Koala Management Plan;⁶⁸⁷
- (d) clarification that while Figure 7-7 in the EIS shows there was one incidence of identified Austral cornflower occurring in a location affected by the rail spur, the location data for the Austral cornflower captured by hand-held global positioning system demonstrates that it is in fact within the road reserve of the Jondaryan-Muldu Road and will not be impacted by the proposed rail spur;⁶⁸⁸
- (e) details of the extent of impact on the Grey-headed Flying-fox foraging habitat. An area of 76 hectares will be affected, leaving an unaffected area of 204 hectares within the revised Project area. The affected area is insignificant given the available 785,700 hectares available in the 50 kilometre foraging range of the Grey-headed Flying-fox;⁶⁸⁹
- (f) clarification of details with respect to the residual impact area for Belson's panic and clarification of survey results with respect to the little pied pat and the painted honeyeater;⁶⁹⁰
- (g) an amended Biodiversity Offset Strategy;⁶⁹¹
- (h) clarification of the disturbance footprint;⁶⁹² and
- (i) confirmation that the revised Project will not impact on Coolibah Black Box woodlands.⁶⁹³

Briefing notes to the Coordinator-General

548. Each of the documents referred to above, other than the further submissions (received after the AEIS), was provided to the Coordinator-General as attachments to briefing notes.

⁶⁸⁷ Information Clarification to the AEIS pages 5 to 6.

⁶⁸⁸ Information Clarification to the AEIS page 6.

⁶⁸⁹ Information Clarification to the AEIS page 6.

⁶⁹⁰ Information Clarification to the AEIS pages 7 to 8.

⁶⁹¹ Information Clarification to the AEIS page 8 and Appendix A.

⁶⁹² Information Clarification to the AEIS page 8.

⁶⁹³ Information Clarification to the AEIS page 10.

8.6.2 Summary of the process of evaluation of the Project regarding ecology as described in the report evaluating the EIS

Terrestrial ecology

549. This section only addresses impacts on matters of state environmental significance that are not protected by the *EPBC Act*.⁶⁹⁴

Vegetation and flora

550. The EIS evaluation report states that a total of 144.4 hectares of remnant vegetation will be cleared, including three endangered areas, five areas of-concern and a single area of least-concern regional ecosystems.⁶⁹⁵ It states that the greatest impact to matters of state environmental significance is on *Dichanthium sericeum* and *Astrebla* species on grassland on alluvial plains.⁶⁹⁶

551. The EIS evaluation report states that field surveys have identified three plant species of conservation significance:⁶⁹⁷

- (a) finger panic grass;
- (b) Belson's panic grass; and
- (c) austral cornflower.

552. The EIS evaluation report states approximately 101 hectares of finger panic grass will be cleared within the Manning Vale West pit disturbance area.⁶⁹⁸ The report states finger panic grass is listed in the *Nature Conservation Act 1992 (Qld)* and does not qualify as matters of state environmental significance.⁶⁹⁹

553. The EIS evaluation report states that austral cornflower, listed as vulnerable under the *Nature Conservation Act 1992 (Qld)*, was found in areas adjacent to the rail spur.⁷⁰⁰ However, it states that the revised location of the proposed rail line and balloon loop will avoid impacting this species.⁷⁰¹

⁶⁹⁴ EIS evaluation report page 36.

⁶⁹⁵ EIS evaluation report page 35.

⁶⁹⁶ EIS evaluation report page 36.

⁶⁹⁷ EIS evaluation report page 37.

⁶⁹⁸ EIS evaluation report page 37.

⁶⁹⁹ EIS evaluation report page 37.

⁷⁰⁰ EIS evaluation report page 37.

⁷⁰¹ EIS evaluation report page 37.

554. The EIS evaluation report states that Belson's panic is endangered under the *Nature Conservation Act 1992* (Qld) and listed as vulnerable under the *EPBC Act*.⁷⁰² It states that the Project will impact about 70.8 hectares of this species.⁷⁰³
555. The EIS evaluation report states that both Belson's panic grass and austral cornflower are matters of national environmental significance threatened species and are therefore discussed in section 8 of the EIS evaluation report.⁷⁰⁴
556. The EIS evaluation report states that the Coordinator-General has stated a condition requiring the Proponent to undertake detailed pre-clearance ecological surveys to confirm the presence of endangered, vulnerable and near-threatened plant species.⁷⁰⁵ It notes that permits under the *Nature Conservation Act 1992* (Qld) will be required for clearing shown on flora survey trigger maps to be within an area defined as high risk under the *Nature Conservation Act 1992* (Qld).⁷⁰⁶
557. The EIS evaluation report states that if protected plants are found during pre-clearance surveys, then impacts may require a permit under the *Nature Conservation Act 1992* (Qld) and offsets under the *Environmental Offsets Act 2014* (Qld).
558. The EIS evaluation report states that the Proponent committed that vegetation outside the revised Project disturbance area will not be cleared or impacted.⁷⁰⁷ It states further that all areas to be cleared will have their boundaries surveyed, with particular attention to endangered and of-concern regional ecosystems.⁷⁰⁸
559. The EIS evaluation report states that, to minimise impacts on terrestrial flora during operation, the Proponent has committed to implement an Environmental Management Plan, with sub-plans including:⁷⁰⁹
- (a) Threatened Species Translocation Plan; and
 - (b) Final Land Use and Rehabilitation Plan.

⁷⁰² EIS evaluation report page 38.

⁷⁰³ EIS evaluation report page 38.

⁷⁰⁴ EIS evaluation report page 38.

⁷⁰⁵ EIS evaluation report page 38.

⁷⁰⁶ EIS evaluation report page 38.

⁷⁰⁷ EIS evaluation report page 38.

⁷⁰⁸ EIS evaluation report page 38.

⁷⁰⁹ EIS evaluation report page 38.

560. The Threatened Species Translocation Plan describes the sites south of the Project site where the species will be relocated to, how the translocation will be completed and monitoring of the plan's implementation.⁷¹⁰ The plan provides for the translocation of Belson's panic grass.⁷¹¹
561. The EIS evaluation report states that during construction and operation, the active mining pit areas, out-of-pit dumps, the slopes of depressed landforms and mine infrastructure will be progressively cleared and rehabilitated.⁷¹² It states that the Final Land Use and Rehabilitation Plan outlines the general rehabilitation procedures proposed to return the disturbance areas to their previous land use of grazing with scattered areas of native tree species.⁷¹³ It states that, therefore, impacts on terrestrial flora represent a medium-term impact.⁷¹⁴
562. The EIS evaluation report states that the Coordinator-General has imposed a condition requiring the Proponent to submit a revised environmental offset strategy to relevant parties to satisfy State and Federal requirements for the clearance of environmentally significant vegetation and flora within the Project site.⁷¹⁵
563. The EIS evaluation report states that the Proponent has prepared sub-plans to the Environmental Management Plan that present appropriate actions to effectively manage all clearance, offset and translocation activities.⁷¹⁶ It notes that the Coordinator-General has set maximum allowable clearance limits in the draft Environmental Authority conditions to limit impacts on regional ecosystems.⁷¹⁷
564. The EIS evaluation report concludes that:⁷¹⁸
- (a) impacts on listed threatened flora species under the *Nature Conservation Act 1992* (Qld) will likely be confined to Belson's panic and finger grass;
 - (b) impacts on austral cornflower will be avoided by the Proponent;

⁷¹⁰ EIS evaluation report page 38.

⁷¹¹ EIS evaluation report page 38.

⁷¹² EIS evaluation report page 38.

⁷¹³ EIS evaluation report page 38.

⁷¹⁴ EIS evaluation report page 38.

⁷¹⁵ EIS evaluation report page 38.

⁷¹⁶ EIS evaluation report page 39.

⁷¹⁷ EIS evaluation report page 39.

⁷¹⁸ EIS evaluation report page 39.

- (c) the only listed matters of state environmental significance species is Belson's panic;
- (d) table H4 of the draft Environmental Authority conditions state the maximum authorised impact on this species is 70.8 hectares and this will be offset under the *EPBC Act*;
- (e) appropriate management actions of all other flora species will be provided in conditions for any future clearing permits under the *Nature Conservation Act 1992* (Qld);
- (f) impacts on vegetation communities and flora species will be minimised by implementing the mitigation measures outlined in the EIS, AEIS and Environmental Management Plan; and
- (g) draft Environmental Authority conditions (at Appendix 2 of the EIS evaluation report) provide requirements for post-mining decommissioning and rehabilitation and present the maximum authorised area of impact on endangered and of-concern regional ecosystems and matters of state environmental significance.

565. The Coordinator-General is satisfied that, once finalised and implemented, the environmental offset strategy will adequately satisfy the State and Federal offset requirements for the clearance of environmentally significant vegetation and flora within the Project area.

Terrestrial fauna

566. The EIS evaluation report states that field surveys identified:⁷¹⁹

- (a) the little pied bat;
- (b) the painted honeyeater; and
- (c) the koala.

567. The EIS evaluation report states that the little pied bat is classified as a near threatened species in the *Nature Conservation Act 1992* (Qld). It states that its

⁷¹⁹ EIS evaluation report page 39.

habitat is not classified as matters of state environmental significance and therefore does not require an offset.⁷²⁰ It states that the Coordinator-General requires that the little pied bat be considered in the Fauna Management Plan to avoid impacts during clearing activities.⁷²¹

568. The EIS evaluation report states that the painted honeyeater is classified as vulnerable under the *Nature Conservation Act 1992* (Qld) and therefore its habitat is a matter of state environmental significance.⁷²² It states that the painted honeyeater was observed only once along Lagoon Creek.⁷²³ It states that the Proponent has advised that areas suitable for painted honeyeater foraging will be removed.⁷²⁴ It states, however, that areas suited to the bird will be retained and enhanced through the Lagoon Creek Conservation Zone Management Plan.⁷²⁵
569. The EIS evaluation report states that the Project contains scattered koala habitat.⁷²⁶ It states that the Project will require clearing of known koala refuges and feeding habitats, resulting in a residual impact to koala habitat of 19.5 hectares.⁷²⁷ It states there is potential risk of harm to koalas during vegetation clearing, and construction and operation of the Project.⁷²⁸ The Proponent has prepared a Koala Species Management Plan, which includes the following measures:⁷²⁹
- (a) the staging or limiting of vegetation clearance;
 - (b) the use of an experienced koala spotter to locate fauna prior to clearing of habitat and allow their safe dispersal; and
 - (c) the identification of fauna movement corridors and the use of exclusion fencing around operational mining areas or transport outlets.

⁷²⁰ EIS evaluation report page 39.

⁷²¹ EIS evaluation report page 39.

⁷²² EIS evaluation report page 39.

⁷²³ EIS evaluation report page 39.

⁷²⁴ EIS evaluation report page 39.

⁷²⁵ EIS evaluation report page 39.

⁷²⁶ EIS evaluation report page 39.

⁷²⁷ EIS evaluation report page 40.

⁷²⁸ EIS evaluation report page 40.

⁷²⁹ EIS evaluation report page 40.

570. The EIS evaluation report concludes:⁷³⁰
- (a) the Coordinator-General has set a condition requiring pre-clearance surveys for fauna prior to construction, which must include areas of potential habitat for the painted honeyeater;
 - (b) the Proponent may need to revise its offset requirements if the pre-clearance surveys detect additional threatened or listed species;
 - (c) the Coordinator-General has stated a condition to authorise a maximum impact area of 19.5 hectares for koala habitat;
 - (d) the Coordinator-General has stated a condition requiring an offset for significant residual impacts on koala habitats;
 - (e) the Coordinator-General has stated a condition requiring the Proponent to include details of where and how offsets for koala habitat will be sourced in the environmental offset strategy;
 - (f) the koala habitat should be provided through a land-based offset to ensure a local conservation outcome for koalas; and
 - (g) the Coordinator-General has stated a condition to ensure the delivery of a Koala Species Management Plan meets the requirements of the *Nature Conservation Act 1992* (Qld).
571. The Coordinator-General is satisfied that the potential impacts on koalas and their habitat will be avoided, minimised and mitigated to an acceptable level through the revised Koala Species Management Plan, Proponent commitments and the Coordinator-General's conditions.

Conservation zone buffer

572. The EIS evaluation report states that the riparian zone of Lagoon Creek contains a large amount of ecologically significant remnant vegetation that provides habitat for koalas and a nature corridor and refuge for numerous other fauna species.⁷³¹

⁷³⁰ EIS evaluation report page 40.

⁷³¹ EIS evaluation report page 41.

573. The EIS evaluation report states that the Proponent has committed to rehabilitate the Lagoon Creek conservation zone area to mitigate water quality impacts, potentially reduce erosion and sediment impacts, and restore regional ecosystems and habitat.⁷³² It states that the Proponent will manage a conservation zone, including areas 50 metres either side of Lagoon Creek, in accordance with the Conservation Zone Management Plan.⁷³³
574. The EIS evaluation report states that pre-clearance vegetation mapping confirmed the regional ecosystem 11.3.17 was the historical regional ecosystems associated with Lagoon Creek.⁷³⁴ The report states that the Coordinator-General has set rehabilitation targets in line with its original regional ecosystem status.⁷³⁵ It states that the main components of the Conservation Zone Management Plan include:⁷³⁶
- (a) revegetation and management goals;
 - (b) planned revegetation techniques;
 - (c) rehabilitation acceptance criteria;
 - (d) a monitoring and reporting regime;
 - (e) a maintenance regime for weeds; and
 - (f) a comprehensive long-term management regime.
575. The report concludes:⁷³⁷
- (a) the Coordinator-General is satisfied with the Proponent's proposal not to divert Lagoon Creek and its commitment to conserve and rehabilitate remnant vegetation 50 metres either side of the creek;
 - (b) the Coordinator-General has stated conditions in the draft Environmental Authority that confirms the buffer area and sets rehabilitation targets for the Lagoon Creek conservation zone;

⁷³² EIS evaluation report page 41.

⁷³³ EIS evaluation report page 41.

⁷³⁴ EIS evaluation report page 41.

⁷³⁵ EIS evaluation report page 41.

⁷³⁶ EIS evaluation report page 41.

⁷³⁷ EIS evaluation report page 41.

- (c) the Coordinator-General requires the Proponent to rehabilitate the conservation zone in accordance with a revised Conservation Zone Management Plan;
- (d) the Coordinator-General has imposed conditions requiring the Proponent to meet the Lagoon Creek rehabilitation targets, which specify the minimum percentages to be achieved for matters including native plant species and native perennial grass cover;
- (e) to realise the full benefit of the Lagoon Creek conservation zone, rehabilitation of the creek corridor should occur as soon as possible, and conditions have been set requiring this to occur within two months of the issuing of the Project's Environmental Authority and mining leases;⁷³⁸
- (f) the Coordinator-General requires the Proponent to ensure no net loss of the buffer area, should water treatment ponds or dams need to be constructed within the conservation zone;
- (g) while managed cattle will help to control weed spread in the creek, the Proponent must ensure areas are successfully revegetated and not compromised by over-grazing; and
- (h) appropriate control and management of stock will be required to uphold the creek's function as a fauna corridor.⁷³⁹

Pest plants and animals

576. The EIS evaluation report states that four declared class 2 pest plants and five declared class 2 pest animal species⁷⁴⁰ were recorded on the Project site.⁷⁴¹ It states that the Proponent has committed to implement a Pest and Weed Management Plan.⁷⁴² It states the plan presents an integrated approach to managing declared pest plant infestations, including controlled burns, manual

⁷³⁸ The Coordinator-General has set conditions requiring this to occur within two months of the issuing of the Project's environmental authority and mining leases.

⁷³⁹ This may involve the use of fences and other infrastructure to promote the use of the corridor by fauna.

⁷⁴⁰ *Land Protection (Pest and Stock Route Management) Act 2002* (Qld).

⁷⁴¹ EIS evaluation report page 42.

⁷⁴² EIS evaluation report page 42.

removal and herbicide application.⁷⁴³ It states that the plan identifies integrated pest management treatments, including baiting, trapping and shooting, to adequately control pests.⁷⁴⁴

577. The EIS evaluation report concludes that the Coordinator-General is satisfied that the implementation of the Pest and Weed Management Plan will adequately minimise the potential spread of pest plants and animals from the Project.⁷⁴⁵

Aquatic ecology

578. The EIS evaluation report states that the study area focused primarily on Lagoon Creek.⁷⁴⁶ It stated that field surveys found past land uses have resulted in a moderately disturbed aquatic environment, with limited in-stream habitat, degraded water and exotic weed species.⁷⁴⁷ It states:⁷⁴⁸

- (a) although 16 species of aquatic flora were identified on a desktop review, no endangered, vulnerable or near-threatened species or special least-concern species were located during on-site surveys;
- (b) although fourteen fish species are known to occur in the surrounds of the study area, no species of conservation significance were confirmed during surveys;
- (c) although macroinvertebrate species were recorded in the Project area, none are listed as endangered, vulnerable or near-threatened species or have local or regional significance; and
- (d) although the desktop review identified three species of turtle, none are endangered, vulnerable or near-threatened species or special least-concern species and the EIS suggested the creek is unlikely to support large populations of turtle species.

⁷⁴³ EIS evaluation report page 42.

⁷⁴⁴ EIS evaluation report page 42.

⁷⁴⁵ EIS evaluation report page 42.

⁷⁴⁶ EIS evaluation report page 43.

⁷⁴⁷ EIS evaluation report page 43.

⁷⁴⁸ EIS evaluation report page 43.

579. The EIS evaluation report states potential impacts on aquatic ecology values could arise from Project activities during construction or operation.⁷⁴⁹ It states impacts could include erosion, changes to water quality or flow regimes, loss of habitat, introduction of pests and harm to fauna.⁷⁵⁰
580. The EIS evaluation report states that the Proponent has committed to implement a range of mitigation measures, including:⁷⁵¹
- (a) erosion management in areas of infrastructure development potentially affected by run-off;
 - (b) revegetation of disturbed areas no longer required for operations;
 - (c) controlled releases of mine water;
 - (d) construction of flood levees;
 - (e) fuel and chemical storage procedures to reduce risk of spill; and
 - (f) appropriately designed and constructed crossings of Lagoon Creek that consider its hydraulic behaviour, fauna movement and existing locations of crossings.
581. The EIS evaluation report states that the Lagoon Creek conservation zone buffer area and rehabilitation strategy will also enhance riparian values.⁷⁵²
582. The EIS evaluation report states that the Proponent has committed to conducting more detailed sampling of aquatic environmental values including water quality prior to construction.⁷⁵³ It states that this will establish baseline conditions and prepare a receiving environment monitoring program.⁷⁵⁴ It states that the Proponent has also committed to monitor aquatic flora and fauna before, during and after construction.⁷⁵⁵

⁷⁴⁹ EIS evaluation report page 43.

⁷⁵⁰ EIS evaluation report page 43.

⁷⁵¹ EIS evaluation report page 43.

⁷⁵² EIS evaluation report page 43.

⁷⁵³ EIS evaluation report page 43.

⁷⁵⁴ EIS evaluation report page 43.

⁷⁵⁵ EIS evaluation report page 43.

583. The EIS evaluation report concludes:⁷⁵⁶
- (a) the potential aquatic ecology impacts have been adequately identified in the EIS and AEIS;
 - (b) the proposed mitigation strategies and conditions stated by the Coordinator-General in the draft Environmental Authority will ensure impacts on water quality and aquatic flora and fauna are managed to acceptable standards; and
 - (c) in constructing the haul road over Lagoon Creek, the Proponent is required to abide by the directions included in the *Guideline – Activities in a Watercourse, Lake or Spring Associated with Mining Activities*.
584. The Coordinator-General has conditioned that the haul road crossing of Lagoon creek must not significantly impede the ephemeral flow regime or create a barrier during periods of flow within the creek.

8.6.3 Observations

585. While there is no briefing note or other document indicating that the Coordinator-General was provided with a copy of the further submissions (received after the AEIS), the conditions in relation to ecology recommended by the Department of Environment and Heritage Protection, in its further submission, are included in Appendix 2 of the EIS evaluation report.⁷⁵⁷

8.7 Waste

8.7.1 What was the evidence or other material held by the Coordinator-General on waste?

TOR

586. With respect to the issue of waste, the TOR required the Proponent to provide, amongst other things, an inventory of all wastes to be generated by the Project during the construction, operation and decommissioning phases of the Project, and

⁷⁵⁶ EIS evaluation report page 44.

⁷⁵⁷ EIS evaluation report page 195.

detail the proposed management of solid and liquid waste, included excavated waste and tailings.⁷⁵⁸

EIS

587. Appendix E to the EIS indicates that these issues are predominantly addressed in EIS Chapter 14 – Waste Management.

588. EIS Chapter 14 *‘provides an assessment of the waste management requirements for the revised Project, including the identification of solid and liquid waste streams, regulatory framework, proposed waste management strategies and the expected quantities and waste characteristics.’*⁷⁵⁹

589. The EIS records that:

- (a) all waste generated on-site during the construction, operation and decommissioning phases will be disposed of in accordance with the Waste Management Plan for the revised Project, a copy of which was provided in Appendix J.13;⁷⁶⁰
- (b) the Waste Management Plan provides for:⁷⁶¹
 - (i) waste stream characterisation and separation strategies;
 - (ii) assessment of waste reduction opportunities for identified wastes; and
 - (iii) management of waste in accordance with the waste management hierarchy;
- (c) training will be provided to personnel and contractors in relation to the waste management requirements for the revised Project;⁷⁶²
- (d) aspects of the revised Project that contribute to cleaner production outcomes;⁷⁶³

⁷⁵⁸ TOR Section 5.8 pages 47 to 52.

⁷⁵⁹ EIS Chapter 15 page 14-1.

⁷⁶⁰ EIS Section 14.4.1 page 14-4.

⁷⁶¹ EIS Section 14.4.1 page 14-4.

⁷⁶² EIS Section 14.4.1 page 14-4.

⁷⁶³ EIS Section 14.4.2 page 14-5.

- (e) reporting that will be undertaken with respect to waste tracking;⁷⁶⁴
- (f) the response process for spill containment and remediation;⁷⁶⁵
- (g) waste monitoring and auditing will be undertaken,⁷⁶⁶ and corrective action taken for non-conformances, as well as adaptive management processes adopted.⁷⁶⁷

590. The waste mitigation and management measures and commitments for the revised Project are outlined in Section 14.7.⁷⁶⁸

Submissions on the EIS

591. Toowoomba Regional Council, in its submission, requested that the Proponent clarify the proposed tyre disposal method and investigate the option of recycling the tyres.⁷⁶⁹

592. There were only a very small number of submissions from individuals raising concerns with respect to waste management.⁷⁷⁰ A particular concern raised was of the effect of mine wastewater being released into Lagoon Creek. There was also concern about tyre disposal. Queensland Health raised concerns about the effect of mine wastewater releases on public health.⁷⁷¹

⁷⁶⁴ EIS Section 14.4.3 page 14-6.

⁷⁶⁵ EIS Section 14.4.4 pages 14-6 to 14-7.

⁷⁶⁶ EIS Section 14.4.6 page 14-7.

⁷⁶⁷ EIS Section 14.4.7 page 14-7.

⁷⁶⁸ Page 14-16.

⁷⁶⁹ Submission 466.

⁷⁷⁰ See, for example, Submission 296 page 108, Submission 368, Submission 473, Submission 514.

⁷⁷¹ Submission 410.

AEIS

593. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, required additional information to complete the evaluation of the Project.⁷⁷² No specific information was required with respect to waste management,⁷⁷³ although responses were required to be made to submissions.
594. With respect to waste management, in response to the Coordinator-General's letter of 17 April 2014, the AEIS:
- (a) responded to the submission from Toowoomba Regional Council by noting that the EIS records that tyres will be stored and disposed of in the spoil dumps or transported off-site by a licensed regulated waste transporter to a licensed regulated waste receiver for recycling or disposal;⁷⁷⁴
 - (b) responded to the concerns raised in the submissions.⁷⁷⁵
595. The overall commitments by the Proponent with respect to waste management are collected in AEIS Appendix D.

Further submissions received after the AEIS

596. There were numerous private submissions in which submitters substantially reiterated their concerns regarding waste.
597. The Department of Environment and Heritage Protection made a further submission in which it set out a series of recommended conditions with respect to waste management.⁷⁷⁶

⁷⁷² Doc 10-0002.

⁷⁷³ Doc 10-0004.

⁷⁷⁴ AEIS Section 5.2.10.60 page 123.

⁷⁷⁵ AEIS Sections Section 5.3.33.4 pages 284 to 285, 5.3.51.3 to 5.3.51.6 pages 329 to 330, Section 5.3.24.39 pages 254 to 255.

⁷⁷⁶ Further submission 231.

Briefing notes to the Coordinator-General

598. Each of the documents referred to above, other than the further submissions (received after the AEIS), was provided to the Coordinator-General as attachments to briefing notes.

8.7.2 Summary of the process of evaluation of the Project regarding waste as described in the report evaluating the EIS

General waste

599. The EIS evaluation report states that the EIS predicted that a number of general waste streams would be produced during construction, operation and decommissioning of the Project, including:⁷⁷⁷

- (a) regulated wastes, including hydrocarbon waste such as liquids and oils – waste oils (220 tonnes per annum), greases (52 tonnes per annum), oils filters and absorbents (10.5 tonnes per annum), anti-corrosion agents (radiator fluid and coolant) (50 tonnes per annum), vehicle batteries (120 tonnes per annum) and tyres (750 tonnes per annum);
- (b) standard waste, including food waste, some plastics and paper (190 tonnes per annum);
- (c) recyclables, including paper, cardboard, plastics, glass and aluminium cans (150 tonnes per annum);
- (d) scrap metal and off-cuts from maintenance activities and the construction of infrastructure, including the train load-out facility and Coal Handling Preparation Plant;
- (e) sewage effluent and sludge (25 megalitres per annum and less than 1 tonne per annum respectively);
- (f) decommissioning waste during the several years of rehabilitation of the mining lease, including concrete (less than 5,000 tonnes), and electrical waste (eg cabling) (600 tonnes), steel and metal offcuts (2,000 tonnes); and
- (g) around 146 hectares of vegetation to be cleared from disturbance areas.

⁷⁷⁷ EIS evaluation report page 44.

600. The EIS evaluation report states that waste management strategies for the Project will be consistent with the intent of the waste management hierarchy in Schedule 1 of the *Environment Protection (Waste Management) Policy 2000*, being, in order of preference:⁷⁷⁸

- (a) waste avoidance;
- (b) waste re-use;
- (c) waste recycling;
- (d) energy recovery from waste; and
- (e) waste disposal.

601. The EIS evaluation report states that the Proponent has prepared a Waste Management Plan for the Project, which includes the following strategies:⁷⁷⁹

- (a) minimise scrap metal by producing or procuring only the amount required and ensuring all re-usable steel is sold and removed from site appropriately;
- (b) licensed and certified contractors will remove, track and record any regulated waste such as hydrocarbons and contaminated waste;
- (c) general wastes will be regularly collected and transported to the Oakey landfill by a licensed waste transporter;
- (d) recycled materials will be transported to local material recycling facility;
- (e) re-use of vegetation and garden or green waste; and
- (f) separation of oil and water from the wash-down bay for water treatment and sludge collection and removal.

602. The EIS evaluation report states that some waste products, such as tyres and wooden packing and pallets, will be disposed of in the mine pits post-mining.⁷⁸⁰ The report states that the Coordinator-General has stated conditions that such

⁷⁷⁸ EIS evaluation report page 44.

⁷⁷⁹ EIS evaluation report page 45.

⁷⁸⁰ EIS evaluation report page 45.

practices must not impede or pollute saturated aquifers, compromise the stability of the consolidated landform or pose a risk to mine safety.⁷⁸¹ It states the Coordinator-General has stated conditions for disposing of tyres in pits.⁷⁸² It states that tyres are required to be placed deep in the pits and must not pose a risk.⁷⁸³

603. The EIS evaluation report states that while the current operation has an operational sewage treatment plant on site from which treated effluent is used for dust suppression, a new sewage treatment plant will be constructed to accommodate a greater number of people on site.⁷⁸⁴ It states the new sewage treatment plant will have an additional capacity of 250 persons.⁷⁸⁵
604. The EIS evaluation report states that all sewage from construction areas and offices will be treated on site at the new sewage treatment plant, with the treated effluent drained to an on-site sediment dam and re-used.⁷⁸⁶
605. The EIS evaluation report states that the Coordinator-General has stated conditions to protect the health and wellbeing of people and the environment, including:⁷⁸⁷
- (a) monitoring of effluent to ensure it adheres to contaminant targets before being used for dust suppression and irrigation; treated effluent is not to be sprayed over a sensitive place; and no sewage effluent is to be directly discharged to waterways; and
 - (b) during period of flows when sediment dams containing effluent are full, any release to receiving waters must comply with release limits for chemical properties provided in the stated conditions.
606. The EIS evaluation report states that the EIS confirmed that the Acland tip, located 1.5 kilometres east of Acland, is in the footprint of the Manning Vale East mine pit.⁷⁸⁸ The report states that prior to the relocation of the tip, a suitably qualified person must be engaged to determine the nature and extent of any contamination

⁷⁸¹ EIS evaluation report page 45.

⁷⁸² EIS evaluation report page 45.

⁷⁸³ EIS evaluation report page 45.

⁷⁸⁴ EIS evaluation report page 45.

⁷⁸⁵ EIS evaluation report page 45.

⁷⁸⁶ EIS evaluation report page 45.

⁷⁸⁷ EIS evaluation report page 45.

⁷⁸⁸ EIS evaluation report page 45.

and how any contaminated material can be safely contained on site.⁷⁸⁹ It states that a soil disposal permit under the *Environmental Protection Act 1994* (Qld) would be required to move contaminated material off site.⁷⁹⁰ It states that the Proponent will also need to notify the Department of Environment and Heritage Protection of the location to where the material has been relocated.⁷⁹¹

607. The EIS evaluation report concludes that the Coordinator-General is '*satisfied that the potential impacts of general waste can be adequately managed through the conditions I have stated and through the Proponent's commitments.*'⁷⁹² It states the Coordinator-General is satisfied that developing and implementing a Waste Management Plan will improve waste management practices and reduce the Project's potential waste management risks.⁷⁹³

Mine waste

608. The EIS evaluation report states that open-cut mining will involve stripping overburden and interburden to access the coal resource.⁷⁹⁴ It states the total predicted volume of mine waste for the life of the Project includes approximately 237 million bank cubic metres of overburden and 218 million bank cubic metres of interburden.⁷⁹⁵ It states that during rehabilitation of mine voids, approximately 396 million bank cubic metres of mine waste will be dispensed of in pits, with about 50 million bank cubic metres placed in out-of-pit spoil dumps.⁷⁹⁶
609. The EIS evaluation report states that tailings will be disposed of in in-pit tailings disposal facilities.⁷⁹⁷

⁷⁸⁹ EIS evaluation report page 46.

⁷⁹⁰ EIS evaluation report page 46.

⁷⁹¹ EIS evaluation report page 46.

⁷⁹² EIS evaluation report page 46.

⁷⁹³ EIS evaluation report page 46.

⁷⁹⁴ EIS evaluation report page 46.

⁷⁹⁵ EIS evaluation report page 46.

⁷⁹⁶ EIS evaluation report page 46.

⁷⁹⁷ EIS evaluation report page 46.

610. The EIS evaluation report states that geochemical analysis concluded that the bulk of overburden and interburden is likely to be non-acid forming waste.⁷⁹⁸ It states the geochemical reports found:⁷⁹⁹
- (a) the majority of samples analysed are considered to be non-acid forming;
 - (b) a smaller number of samples were classified as potentially acid forming and low capacity potentially acid forming;
 - (c) weathered mine waste will be saline;
 - (d) non-weathered waste will have low salinity;
 - (e) most samples analysed have neutral to mildly alkaline acidity/alkalinity, however some samples of potentially acid forming and low capacity potentially acid forming waste, including carbonaceous shale, may have slightly acidic acidity/alkalinity; and
 - (f) the potential for poor soils is generally moderate.
611. The EIS evaluation report states that there have been no incidences of acid drainage at the mine since operations commenced.⁸⁰⁰ It states that surface water quality monitoring data from ten years of operations indicated that the alkaline nature of some of the overburden and interburden provides a significant neutralising effect against any potentially acid forming waste.⁸⁰¹ It states that while testing confirmed minor occurrences of metals and metalloids in waste rock, these have not been apparent in water quality data.⁸⁰²
612. The EIS evaluation report states that the current mine's tailings strategy involves progressively constructing in-pit tailings cells.⁸⁰³ It states this practice will continue for the Project, reducing the disturbance footprint.⁸⁰⁴

⁷⁹⁸ EIS evaluation report page 46.

⁷⁹⁹ EIS evaluation report page 46.

⁸⁰⁰ EIS evaluation report page 46.

⁸⁰¹ EIS evaluation report page 46.

⁸⁰² EIS evaluation report page 46.

⁸⁰³ EIS evaluation report page 47.

⁸⁰⁴ EIS evaluation report page 47.

613. The EIS evaluation report states once tailings have settled in dams, water will be recovered from these areas.⁸⁰⁵ It states that the EIS stated that around 50 per cent of water could be reclaimed and re-used as required.⁸⁰⁶ It states the tailings dams will need to be contained to avoid leachates escaping, structurally safe and adequately bunded to avoid contamination escaping during flood events.⁸⁰⁷
614. The EIS evaluation report states the Proponent has committed to:⁸⁰⁸
- (a) developing a mine waste characterisation and management strategy;
 - (b) storing and containing wastes and surface water diversions around waste storages by installing appropriate levee and bunding structures;
 - (c) ongoing evaluation and testing of mine waste material to identify any adverse impacts of the storage or use of mine waste for use in land rehabilitation, or in-pit tailings storage facility tailings water being re-used at the Coal Handling Preparation Plant;
 - (d) monitoring and ongoing review of mine waste as part of the Waste Management Plan and Environmental Management Plan;
 - (e) including mine waste management strategies in the In-pit Tailings Storage Facility and Topsoil Management Plan; and
 - (f) for post-mining rehabilitation, capping tailings storage facilities with inert material, applying topsoil and revegetation.
615. The EIS evaluation report states that the Coordinator-General has stated conditions to ensure handling, storage and use of mine waste does not cause environmental harm.⁸⁰⁹
616. The EIS evaluation report concludes that the Coordinator-General is satisfied that the effective management of mining waste over the life of the Project can be achieved.⁸¹⁰

⁸⁰⁵ EIS evaluation report page 47.

⁸⁰⁶ EIS evaluation report page 47.

⁸⁰⁷ EIS evaluation report page 47.

⁸⁰⁸ EIS evaluation report page 47.

⁸⁰⁹ EIS evaluation report page 47.

8.7.3 Observations

617. While there is no briefing note or other document indicating that the Coordinator-General was provided with a copy of the further submissions (received after the AEIS), the conditions in relation to waste management recommended by the Department of Environment and Heritage Protection, in its further submission, are included in Appendix 2 of the EIS evaluation report.⁸¹¹

8.8 Hazard and risk management

8.8.1 What was the evidence or other material held by the Coordinator-General on hazard and risk management?

TOR

618. With respect to the issue of hazard and risk management, the TOR required the Proponent to:

- (a) provide a hazard and risk assessment;⁸¹²
- (b) prepare an Aviation Hazard Management Plan addressing the potential hazards associated with the Oakey Airbase and the Army Aviation Training Centre at Oakey;⁸¹³
- (c) address cumulative risk;⁸¹⁴
- (d) address the potential impact and mitigation measures with respect to health and safety values, as well as providing a mosquito and pest management plan, detail about how potable water will be treated, stored and tested and an assessment of driver fatigue issues;⁸¹⁵ and
- (e) provide an emergency management plan.⁸¹⁶

⁸¹⁰ EIS evaluation report page 47.

⁸¹¹ EIS evaluation report page 175.

⁸¹² TOR Section 8.1 pages 65 to 66.

⁸¹³ TOR Section 8.1.1 page 66.

⁸¹⁴ TOR Section 8.2 page 67.

⁸¹⁵ TOR Section 8.3 pages 67 to 68.

⁸¹⁶ TOR Section 8.4 pages 68 to 69.

EIS

619. Appendix E to the EIS indicates that these issues are predominantly addressed in EIS Chapter 18 – Health, Safety and Risk.
620. EIS Chapter 18 examines the health, safety and environmental risk issues associated with the revised Project by:⁸¹⁷
- (a) outlining legislative requirements;⁸¹⁸
 - (b) outlining the dangerous goods and hazardous substances associated with the revised Project;⁸¹⁹
 - (c) presenting a risk assessment for the construction, operation and decommissioning phases of the revised Project,⁸²⁰ which risk assessment involved identifying:
 - (i) potential hazards, accidents, spillages, fire and abnormal events that may occur during the construction, operation and decommissioning;
 - (ii) appropriate controls and mitigation factors for the management (including prevention and response measures) for each hazard;
 - (iii) the consequences of each hazardous incident, were it to occur;
 - (iv) possible causes and probability of the causes occurring;
 - (v) appropriate controls and mitigation measures where an extreme or high risk was identified. The hazardous incident was then reassessed with those controls in place;
 - (d) considering cumulative risk;⁸²¹
 - (e) considering the potential impact on community health, safety and quality of life, and addressing pest management, sources of potable water and driver fatigue;⁸²²

⁸¹⁷ EIS Chapter 18 page 18-1.

⁸¹⁸ EIS Section 18.2 page 18-1.

⁸¹⁹ EIS Section 18.3 pages 18-2 to 18-4.

⁸²⁰ EIS Section 18.4 pages 18-4 to 18-17.

⁸²¹ EIS Section 18.5 page 18-17

- (f) addressing emergency response considerations,⁸²³
- (g) providing an Emergency Management Plan;⁸²⁴
- (h) providing an Aviation Hazard Management Plan;⁸²⁵ and
- (i) assessing risks that could impact on local businesses.⁸²⁶

621. The EIS records that the health and safety risk profile for the revised Project is generally low or moderate, with the exception of noise generation, dust, groundwater management, runoff, hydrocarbon leaks, weed and pest management, safety risks from slumping, fire, run off from tailings, dam failure, and clearing of rare and endangered ecosystems, where the risk was assessed as 'high'.⁸²⁷

Submissions on the EIS

622. A briefing note was provided to the Coordinator-General attaching a disc containing a copy of all of the submissions on the EIS. The briefing note also attached a summary of submissions, prepared by departmental officers, noting key issues raised in the submissions. The summary makes no reference to the hazard and risk management topic.

623. There were a small number of submissions with respect to the risk of spontaneous combustion and other fire risks.⁸²⁸ There were also a small number of submissions that suggested that the risk assessment undertaken was inadequate.⁸²⁹

AEIS

624. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, required additional information to complete the evaluation of the Project.⁸³⁰ While the letter did not contain a specific request for additional information in relation to hazard and risk

⁸²² EIS Section 18.7 pages 18-19 to 18-22.

⁸²³ EIS Section 18.8 page 18-22.

⁸²⁴ EIS Section 18.9 pages 18-23 to 18-24 and Appendix J.15.

⁸²⁵ EIS Section 18.10 page 18-24 and Appendix J.17.

⁸²⁶ EIS Section 18.11 pages 18-25 to 18-32.

⁸²⁷ EIS Section 18.4.7 page 18-17.

⁸²⁸ See, for example, Submission 284 pages 21 to 23, Submission 296.

⁸²⁹ See, for example, Submission 296, Submission 514 pages 56 and 57.

⁸³⁰ Doc 10-0002.

management, the letter attached the '*EIS Submission Analysis Register*', which identified information required in response to individually identified submissions.⁸³¹

625. In response to the Coordinator-General's letter of 17 April 2014, and in particular the attached EIS Submission Analysis Register, the AEIS responds to:

- (a) concerns raised in submissions about the risk of spontaneous combustion and other fire risks⁸³² by noting that:
 - (i) the Proponent would continue to undertake a range of operational mitigation measures to reduce the potential for spontaneous combustion;
 - (ii) spontaneous combustion has not been a significant issue for the mine to date;
 - (iii) the Acland-Sabine coal sequence is not as pre-disposed to spontaneous combustion due to its physical and chemical qualities;
- (b) about the adequacy of the risk assessment by noting that a risk assessment had been carried out in accordance with a number of Australian Standards and risk guidelines.⁸³³

Further submissions received after the AEIS

626. There were numerous private submissions in which submitters substantially reiterated their concerns regarding risk.

627. The Department of Environment and Heritage Protection made a further submission in which it recommended a condition regarding risk management.⁸³⁴

⁸³¹ Doc 10-0004.

⁸³² See, for example, AEIS Section 5.3.19.6 page 188, Section 5.3.24.6 page 238.

⁸³³ See, for example, AEIS Section 5.3.24.40 pages 255 to 256, Section 5.3.51.32 page 340.

⁸³⁴ Further submission 231.

Briefing notes to the Coordinator-General

628. Each of the documents referred to above, other than the further submissions (received after the AEIS), was provided to the Coordinator-General as attachments to briefing notes.

8.8.2 Summary of the process of evaluation of the Project regarding hazard and risk management as described in the report evaluating the EIS

629. The EIS evaluation report states that a hazard risk assessment was undertaken in accordance with the relevant Australian standards.⁸³⁵ It states the EIS identified 43 potential hazards.⁸³⁶ The following were considered high risk:⁸³⁷

- (a) noise generation;
- (b) dust;
- (c) groundwater management;
- (d) mine water runoff;
- (e) hydrocarbon leaks;
- (f) pest, plant and animal management;
- (g) safety risks;
- (h) fire;
- (i) run off from tailings;
- (j) dam failure; and
- (k) clearing of rare and endangered ecosystem.

⁸³⁵ EIS evaluation report, page 47: *Risk Management – Principles and Guidelines (Australian Standard /New Zealand Standard AS/NZS:ISO 3100) and Risk Management Guidelines Companion to AZ/NZS 4360:2004 (HB436:2004).*

⁸³⁶ EIS evaluation report page 47.

⁸³⁷ EIS evaluation report page 48.

630. The EIS evaluation report states mitigation measures were informed by statutory obligations including:⁸³⁸
- (a) *Work Health and Safety Act 2011*;
 - (b) *Work Health and Safety Regulation 2011*;
 - (c) *Explosives Act 1999*;
 - (d) *Coal Mining Safety and Health Act 1999*; and
 - (e) *Coal Mining Safety and Health Regulation 2001*.
631. The EIS evaluation report states the Proponent will continue to apply its Risk Management Policy and Strategic and Corporate Risk Management Framework to hazard and risk management strategies and controls for the Project.⁸³⁹
632. The EIS evaluation report states management plans developed to minimise and manage hazards and risks include:⁸⁴⁰
- (a) Emergency Management Plan;
 - (b) Aviation Hazard Management Plan;
 - (c) Pest and Weed Management Plan;
 - (d) Groundwater Monitoring and Impact Management Plan;
 - (e) Air Quality Management Plan;
 - (f) Noise And Vibration Management Plan;
 - (g) Waste Management Plan;
 - (h) In-pit Tailings Storage Facility Management Plan; and
 - (i) Environmental Management Plan (which also addresses nature conservation and cultural heritage).

⁸³⁸ EIS evaluation report page 48.

⁸³⁹ EIS evaluation report page 48.

⁸⁴⁰ EIS evaluation report page 48.

633. The EIS evaluation report states that the Proponent has committed to continue reviewing the existing mine's Emergency Management Plan.⁸⁴¹ It states that the Proponent has developed emergency and evacuation planning and response procedures in consultation with state and regional emergency service providers.⁸⁴² It states commitments for controlling and managing emergencies include:⁸⁴³

- (a) provision of first aid service and fire fighting services;
- (b) establishment and maintenance of contingencies to respond to emergency situations, including consultation with regional emergency service providers;
- (c) conducting periodic emergency simulation drills with local emergency service providers over the life of the Project, including auditing and reviews; and
- (d) targeted hazard and risk mitigation and management strategies and procedures to avoid harm to people and the environment.

634. The EIS evaluation report states extensive legislative requirements are in place that require hazard and risk management to drive business practices at the site.⁸⁴⁴ It states that the Coordinator-General is satisfied that the potential hazards and risks for the Project will be adequately managed throughout the life of the Project.⁸⁴⁵

8.8.3 Observations

635. While there is no briefing note or other document indicating that the Coordinator-General was provided with a copy of the further submissions (received after the AEIS), the condition in relation to risk management recommended by the Department of Environment and Heritage Protection, in its further submission, is included in Appendix 2 of the EIS evaluation report.⁸⁴⁶

636. In relation to the hazards identified in the EIS as potentially '*high risk*', while the EIS evaluation report deals with many of them (usually in other parts of the report

⁸⁴¹ EIS evaluation report page 49.

⁸⁴² EIS evaluation report page 49.

⁸⁴³ EIS evaluation report page 49.

⁸⁴⁴ EIS evaluation report page 49.

⁸⁴⁵ EIS evaluation report page 49.

⁸⁴⁶ EIS evaluation report page 171.

rather than in the ‘*Hazard and risk management*’ section), the EIS evaluation report does not deal with safety risks from slumping or fire. These risks were risks that attracted some attention in the submissions of private individuals.

8.9 Cultural heritage

8.9.1 What was the evidence or other material held by the Coordinator-General on cultural heritage?

TOR

637. With respect to the issue of cultural heritage, the TOR required the Proponent to:
- (a) prepare a Cultural Heritage Management Plan with respect to indigenous cultural heritage, unless an exemption applies under section 86 of the *Aboriginal Cultural Heritage Act 2003 (Qld)*;⁸⁴⁷ and
 - (b) provide an assessment of any likely effect on sites of non-indigenous cultural heritage values and provide strategies to mitigate and manage any negative impacts and enhance any positive impacts.⁸⁴⁸

EIS

638. Appendix E to the EIS indicates that these issues are predominantly addressed in EIS Chapter 12 – Cultural Heritage.
639. It should be noted, however, that EIS Chapter 4, Section 4.2.5 addressed the potential impact on native title and cultural heritage. It identifies the only statutory Aboriginal party for the Project site as the Western Wakka Wakka people, with whom the Proponent have a signed ‘*Co-operation Agreement*’.⁸⁴⁹ The EIS also identified that native title has been extinguished over the route for the rail spur and the area of ML 50232.⁸⁵⁰
640. EIS Chapter 12 ‘*discusses the non-indigenous and indigenous cultural heritage places and values that have been recorded as part of the cultural heritage assessments for the revised Project*’.⁸⁵¹

⁸⁴⁷ TOR Section 5.10 page 56.

⁸⁴⁸ TOR Section 5.11.2 page 57.

⁸⁴⁹ EIS page 4-18.

⁸⁵⁰ EIS page 4-18.

⁸⁵¹ EIS Chapter 12 page 12-1.

641. The assessment involves consideration of:

- (a) the regulatory regime, which comprises State and Federal legislation, as well as regulation under the Toowoomba Regional Council's planning scheme;
- (b) identification of cultural heritage values;
- (c) assessment of the overall significance of the identified cultural heritage values;
- (d) the impact of the revised Project on the identified cultural heritage values; and
- (e) mitigation measures proposed to manage the cultural heritage impacts.

642. The EIS records that:

- (a) Acland No. 2 Colliery is registered as a place of heritage value on the Queensland Heritage Register and recognised as a place of heritage value on the non-statutory National Trust of Queensland Heritage List;⁸⁵²
- (b) Acland No. 2 Colliery and the park reserve located in Church Street are listed as Heritage Places for the purpose of administering the Toowoomba Regional Planning Scheme 2012;⁸⁵³
- (c) the non-indigenous cultural heritage assessment identified the following places as having cultural heritage attributes,⁸⁵⁴ and each was assessed for its significance:⁸⁵⁵
 - (i) the agrarian landscape;
 - (ii) Acland;
 - (iii) the Tom Doherty Park and War Memorial;
 - (iv) Acland No. 2 Colliery;

⁸⁵² EIS Section 12.2.1 page 12-4.

⁸⁵³ EIS Section 12.2.1 page 12-4.

⁸⁵⁴ EIS Section 12.2.5 page 12-6.

⁸⁵⁵ EIS Section 12.2.7 pages 12-8 to 12-14.

- (v) Sugarloaf Mine;
 - (vi) Acland No. 1 / Beith Mine;
 - (vii) Willerloo No. 2 Mine;
 - (viii) Summer Hill Hotel site;
 - (ix) the Oakey to Cooyar Railway Line;
 - (x) Sabine locality;
 - (xi) McIntyre gravesite; and
 - (xii) Wells' Graves and former Presbyterian Church site;
- (d) the revised Project will not directly impact on the 12 '*cultural places*' identified;⁸⁵⁶
- (e) the Proponent has developed the Acland Management Strategy, which is in Chapter 3 Section 3.12 of the EIS and involves retaining items of local historical or heritage significance and enhancing amenity of Tom Doherty Park and the Acland Community Hall;⁸⁵⁷
- (f) the Proponent has developed the Acland Colliery Conservation Management Plan, a copy of which is Appendix J.12 to the EIS and includes 21 management commitments to ensure the former Acland No. 2 Colliery receives a high standard of management and protection for future generations;⁸⁵⁸
- (g) the Proponent is exempt from the requirement for a Cultural Heritage Management Plan as it has a signed '*Co-operation Agreement*' with the Western Wakka Wakka People dated 15 October 2003;⁸⁵⁹
- (h) the Proponent has a signed Cultural Heritage Management Plan with the Western Wakka Wakka People dated 14 July 2006;⁸⁶⁰ and

⁸⁵⁶ EIS Section 12.2.8 page 12-14.

⁸⁵⁷ EIS Section 12.2.9 pages 12-14 to 12-15.

⁸⁵⁸ EIS Section 12.2.9 page 12-15.

⁸⁵⁹ EIS Section 12.3.1 page 12-15.

- (i) the Proponent intends to develop a replacement Cultural Heritage Management Plan with the Western Wakka Wakka People to be the sole instrument governing the management of Aboriginal cultural heritage that may be affected by activities carried out both for the revised Project within the boundaries of MDL 244 and for the proposed rail spur.⁸⁶¹

643. The mitigation measures proposed by the Proponent as commitments to manage the Project's cultural heritage impacts are outlined in Section 12.4 of the EIS.⁸⁶²

Submissions on the EIS

644. A briefing note was provided to the Coordinator-General attaching a disc with a copy of all of the submissions.⁸⁶³ The briefing note also attached a summary, prepared by departmental officers, noting key issues raised in the submissions. That summary makes no reference to the cultural heritage topic.⁸⁶⁴

645. There were, however, a small number of submissions with respect to cultural heritage.

646. In particular, concerns were expressed with the ownership by the mine operator of Acland landmarks such as Tom Doherty Park and the Anzac war memorial. The concerns were that the mine operator, a private company, should not have control of these landmarks as they were important to the community. The submissions also called for more stringent obligations on the Proponent in their stewardship of heritage sites.⁸⁶⁵

AEIS

647. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, required additional information to complete the evaluation project.⁸⁶⁶ No specific requests were made in relation

⁸⁶⁰ EIS Section 12.3.1 page 12-16.

⁸⁶¹ EIS Section 12.3.1 page 12-16.

⁸⁶² EIS page 12-19.

⁸⁶³ Doc 10-0008.

⁸⁶⁴ Doc 10-0010.

⁸⁶⁵ See, for example, Submission 292 page 45 and 83 to 84, Submission 503 pages 14 to 44, Submission 514 page 9 and page 60.

⁸⁶⁶ Doc 10-0002.

to cultural heritage. However, the Proponent was required to respond to issues raised in particular identified submissions with respect to cultural heritage.⁸⁶⁷

648. In response to the Coordinator-General's letter of 17 April 2014, The AEIS responds to concerns raised in submissions about cultural heritage⁸⁶⁸ by noting the consultation which the Proponent had undertaken with the Heritage Officer of the Toowoomba office of the Department of Environment and Heritage Protection and the Toowoomba Regional Council's heritage consultant and reiterating the Proponent's commitments with respect to the protection and maintenance of heritage values. Those commitments include maintaining the historic mine site and avoiding development on or immediately adjoining the historic mine site.

Further submissions received after the AEIS

649. There were numerous private submissions in which submitters substantially reiterated their concerns regarding cultural heritage issues.

Briefing notes to the Coordinator-General

650. Each of the documents referred to above, other than further submissions (received after the AEIS), was provided to the Coordinator-General as attachments to briefing notes.

8.9.2 Summary of the process of evaluation of the Project regarding cultural heritage as described in the report evaluating the EIS

Indigenous cultural heritage

651. The EIS evaluation report states that the Western Wakka Wakka Endorsed Parties are the relevant statutory native title claimants.⁸⁶⁹ In accordance with the *Aboriginal Cultural Heritage Act 2003* (Qld), a cultural heritage management plan is in place with the Western Wakka Wakka Endorsed Parties.⁸⁷⁰
652. The EIS evaluation report states that on 21 October 2014 the Proponent negotiated a revised Cultural Heritage Management Plan with the Western Wakka Wakka

⁸⁶⁷ Doc 10-0004.

⁸⁶⁸ See, for example, AEIS Section 5.3.22.21 pages 223 to 224, Section 5.3.24.33 page 252, Section 5.3.44.1 pages 297 to 298, Section 5.3.44.11 pages 305 to 306, Section 5.3.44.12 page 306, Section 5.3.44.14 page 305, Sections 5.3.44.16 to 5.3.44.27 pages 307 to 310, Section 5.3.44.29 page 310, Section 5.3.51.8 pages 330 to 331, Section 5.3.51.16 pages 334 to 335, Section 5.3.51.34 pages 341 to 343.

⁸⁶⁹ EIS evaluation report page 49.

⁸⁷⁰ EIS evaluation report page 49.

Endorsed Parties.⁸⁷¹ The document was lodged with the Department of Aboriginal and Torres Strait Island and Multicultural Affairs and was approved on 2 December 2014.⁸⁷²

653. The EIS evaluation report states that in addition to the Cultural Heritage Management Plan, the Proponent has committed to cultural heritage awareness training for all personnel and contractors.⁸⁷³ It states that indigenous cultural heritage commitments are included in the AEIS and detailed procedures are in the Environmental Management Plan.⁸⁷⁴
654. The EIS evaluation report concludes that the Coordinator-General is satisfied that the Cultural Heritage Management Plan satisfies the requirements of the *Aboriginal Cultural Heritage Act 2003* (Qld) and *the Native Title Act 1993* (Cth) and details processes for identifying and managing indigenous cultural heritage places and objects.⁸⁷⁵ It states that the Coordinator-General is satisfied with the Proponent's assessment of indigenous cultural heritage in the EIS and AEIS and that any potential impacts can be appropriately managed throughout the life of the Project.⁸⁷⁶

Non-indigenous cultural heritage

655. EIS evaluation report states the EIS and AEIS identified non-indigenous cultural heritage sites.⁸⁷⁷ It states that five of the items previously included in the list now fall outside the boundary of MLA50232.⁸⁷⁸ One of the five items is Acland No. 2 Colliery.⁸⁷⁹ The Proponent owns the land on which the Colliery is located and the EIS confirmed the Proponent's obligations under the *Queensland Heritage Act 1992* (Qld) to maintain and preserve the heritage significance of the site.⁸⁸⁰

⁸⁷¹ EIS evaluation report page 50.

⁸⁷² EIS evaluation report page 50.

⁸⁷³ EIS evaluation report page 50.

⁸⁷⁴ EIS evaluation report page 50.

⁸⁷⁵ EIS evaluation report page 50.

⁸⁷⁶ EIS evaluation report page 50.

⁸⁷⁷ EIS evaluation report page 50.

⁸⁷⁸ EIS evaluation report page 50.

⁸⁷⁹ EIS evaluation report page 50.

⁸⁸⁰ EIS evaluation report page 50.

656. The EIS evaluation report states that the township of Acland also contains items of local historical or heritage importance.⁸⁸¹ The Proponent has committed to preserve and maintain 13 of the 23 historical items in the Acland township as part of the Acland Management Plan.⁸⁸² It states that other items have been removed by the Proponent, with the Proponent citing that some buildings were in disrepair or unsafe.⁸⁸³ It states other items will be donated for beneficial use elsewhere.⁸⁸⁴
657. The EIS evaluation report notes the potential for inadvertent impacts on the 12 heritage sites by clearing and ground disturbance activities.⁸⁸⁵ It states that those potential impacts will be managed under the *Queensland Heritage Act 1992* (Qld).⁸⁸⁶
658. The EIS evaluation report concludes that the Coordinator-General is satisfied that the EIS sufficiently addressed impacts on non-indigenous cultural heritage at the Project site.⁸⁸⁷ It states the Proponent has identified obligations to achieve compliance with the *Queensland Heritage Act 1992* (Qld).⁸⁸⁸ It states the Coordinator-General is satisfied that the Proponent will manage potential impacts and will ensure all relevant duty of care provisions in accordance with the *Queensland Heritage Act 1992* (Qld) are fulfilled.⁸⁸⁹

⁸⁸¹ EIS evaluation report page 50.

⁸⁸² EIS evaluation report page 50.

⁸⁸³ EIS evaluation report page 50.

⁸⁸⁴ EIS evaluation report page 50.

⁸⁸⁵ EIS evaluation report page 51.

⁸⁸⁶ EIS evaluation report page 51.

⁸⁸⁷ EIS evaluation report page 51.

⁸⁸⁸ EIS evaluation report page 51.

⁸⁸⁹ EIS evaluation report page 51.

9. ECONOMIC IMPACTS

9.1 What was the evidence or other material held by the Coordinator-General on economic impacts?

TOR

659. With respect to the issue of economic impacts, the TOR required the Proponent to:
- (a) describe the existing economy in which the Project is located and the economies impacted by the Project;⁸⁹⁰
 - (b) analyse the potential and direct economic impacts of the Project from local, regional, state and national perspectives;⁸⁹¹
 - (c) outline strategies to encourage participation by local industry and the local workforce;⁸⁹² and
 - (d) address the current and future management processes for adjacent properties that are likely to be impacted by the Project during construction and operation.⁸⁹³

EIS

660. Appendix E to the EIS indicates that these issues are predominantly addressed in EIS Chapter 17 - Economics.
661. EIS Chapter 17 *'provides an assessment of the economic impacts of the revised Project, including during construction, operation and decommissioning phases. Strategies to maximise benefits and minimise impacts on local and regional communities are also discussed'*.⁸⁹⁴

⁸⁹⁰ TOR Section 7.1 pages 63 to 64.

⁸⁹¹ TOR Section 7.2 page 64.

⁸⁹² TOR Section 7.2.1 pages 64 to 65.

⁸⁹³ TOR Section 7.2.2 page 65.

⁸⁹⁴ EIS Chapter 17 page 17-1.

662. The assessment involves consideration of:

- (a) a study area that included the defined Postal Areas of 4401 and 4403 and consists of the Acland locality and surrounding rural townships including Jondaryan and Oakey;⁸⁹⁵
- (b) the existing environment in terms of population, community profile, household characteristics and the housing market, employment and regional economic income;⁸⁹⁶
- (c) quantitative and qualitative economic impacts;⁸⁹⁷
- (d) strategies designed to maximise economic benefits from the revised Project;⁸⁹⁸ and
- (e) mitigation strategies for identified economic risks.⁸⁹⁹

663. The EIS states that quantitative economic impacts were assessed using Input – Output modelling. Input – Output modelling provides an estimate of the economic impact of Project expenditure on the domestic economy, including direct, indirect and induced effects.⁹⁰⁰ Direct output impacts are defined as actual Project expenditure required for construction and operation of the Project.⁹⁰¹ Indirect impacts refer to flow-on effects from increased demand for goods and services.⁹⁰² Induced impacts refer to increased economic output, employment and household income that occurs from increased household consumption expenditure.⁹⁰³

⁸⁹⁵ EIS Section 17.1.2 pages 17-2 to 17-3.

⁸⁹⁶ EIS Section 17.2 pages 17-4 to 17-17.

⁸⁹⁷ EIS Section 17.3 pages 17-18 to 17-27.

⁸⁹⁸ EIS Section 17.4 pages 17-27 to 17-31.

⁸⁹⁹ EIS Section 17.5 pages 17-32 to 17-33.

⁹⁰⁰ EIS Section 17.3 page 17-18.

⁹⁰¹ EIS Section 17.3 page 17-18.

⁹⁰² EIS Section 17.3 page 17-18.

⁹⁰³ EIS Section 17.3 page 17-18.

664. Impacts detailed in the EIS include:

- (a) estimated Project expenditure from the Project of \$6.638 billion over the life of the revised Project of which:⁹⁰⁴
 - (i) \$896 million is construction and capital expenditure; and
 - (ii) \$5.743 million is operating costs, with 95 per cent of salary expenditure to be spent in the region and 97 per cent of supply costs to be spent in Queensland;
- (b) estimated output impact of almost \$19 billion, comprising forecast expenditure of \$6.6 billion and total indirect and induced impacts of \$12 billion;⁹⁰⁵
- (c) construction workforce of 260 full time equivalent employees at the construction peak;⁹⁰⁶
- (d) operational workforce of 435 full time equivalent workers per year;⁹⁰⁷
- (e) 80 per cent construction workforce from Brisbane and 95 per cent operation workforce from the region;
- (f) total number of full time equivalent jobs created (including direct, indirect and induced) of 3,082 full time equivalent employees per year from operational expenditure;⁹⁰⁸
- (g) total household income impacts (including direct, indirect and induced) over the life of the revised Project of \$4.877 billion.⁹⁰⁹

665. The EIS records that the expected distribution of the impacts is in similar proportions to the expected outlay of expenditure, highlighting the importance of sourcing labour and materials locally where possible.⁹¹⁰

⁹⁰⁴ EIS Section 17.3 pages 17-19 to 17-20.

⁹⁰⁵ EIS Section 17.3 page 17-21.

⁹⁰⁶ EIS Section 17.3 page 17-21.

⁹⁰⁷ EIS Section 17.3 page 17-21.

⁹⁰⁸ EIS Section 17.3 page 17-22.

⁹⁰⁹ EIS Section 17.3 page 17-23.

⁹¹⁰ EIS Section 17.3 page 17-23.

666. The EIS also records that:

- (a) the revised Project is unlikely to have an impact on housing values as workers for the operational phase are expected to be sourced predominantly from the region and workers for the construction phase are unlikely to relocate to the region;⁹¹¹ and
- (b) the total estimated gross value of impacted agricultural production is \$2.3 million per year (in June 2013 dollars) or \$37 million over the life of the revised Project. It is assumed that rehabilitation during de-commissioning will return the majority of the impacted land to a state suitable for agricultural production.⁹¹²

667. The EIS also outlines strategies for maximising benefits to the local area through employment of local residents and engaging local business.⁹¹³

668. The mitigation strategies proposed to address identified economic risks are included in Section 17.5 of the EIS.⁹¹⁴

Submissions on the EIS

669. A briefing note was provided to the Coordinator-General attaching a disc containing a copy of all of the submissions on the EIS.⁹¹⁵ The briefing note also attached a summary of the submissions. The summary records that the local, State and Commonwealth agencies had raised the following key issues, relevant to economic considerations:⁹¹⁶

Toowoomba Regional Council (TRC)

- *Acknowledges economic benefits of proposal but notes some community concerns exist re current mine and planned expansion. Further consultation should therefore be undertaken*

⁹¹¹ EIS Section 17.3 page 17-26.

⁹¹² EIS Section 17.3 page 17-27.

⁹¹³ EIS Section 17.4 pages 17-27 to 17-31.

⁹¹⁴ EIS pages 17-32 to 17-33.

⁹¹⁵ Doc 10-0008.

⁹¹⁶ Doc 10-0010.

670. This document also note that there were a number of key these that emerged from the individual submissions:

Economic analysis of benefits and project impacts

Many submitters raised concerns with the input/output model used to assess economic benefits of the project and how it was applied in determining economic benefits of the project. Concerns were also raised that the negative impacts on agriculture and the local economy had not been adequately raised. Many submitters attributed recent closures of businesses in Oakey and other areas with the impacts of the mine.

671. Finally, the document notes that there were a number of key themes that emerged from the submissions about which the departmental officers did not recommend a request for additional information, namely:

The proponent will not pay royalties on all of the project area, as for some acquired land the Crown does not hold sub-surface minerals rights

It is understood this applies to some land relating to the project and is likely to have been applicable to other mines across the State.

There has never previously been a requirement to understand the amount of royalties within economic benefits a project may provide to the State. It is not proposed to request further information on this matter from the proponent.

Rather, it is suggested the total amount of economic benefits for the construction and operations phases, as qualified by the proponent in their response to your request for further information on their economic analysis, should be the basis for consideration of the project's economic impacts.

A cost-benefit analysis (CBA) should be required to be undertaken

The TOR for the project did not specify the methodology the proponent was to undertake in order to assess economic impacts. The proponent chose the input/output model, and the request for further information asks why this method was chosen. No direction is included to re-do the economic analysis as a CBA, however as previously discussed extensive questioning has been applied to results obtained from the proponent's economic assessment.

672. A review of the submissions shows that the summary provided to the Coordinator-General is a reasonable one.
673. The main economic theme in submissions opposing the Project questioned whether the net economic impact of the Project would be negative.⁹¹⁷ These submissions argue that the positive economic impacts of the Project have to be weighed against its negative economic impacts through the diminished productivity of agricultural land.⁹¹⁸

⁹¹⁷ See, for example, Submission 201.

⁹¹⁸ See, for example, Submission 284, Submission 285, Submission 296 pages 84 to 88, Submission 318, Submission 418, Submission 514.

674. The Australia Institute made a submission that made the following comments in relation to the economic section of the EIS:⁹¹⁹

The EIS misrepresents the economic impacts of the project in two ways, firstly through inappropriate economic modelling and secondly through selective misrepresentation of the EIS' chapter's own results.

The modelling relied on is known as input-output (IO) modelling which, in the context of project evaluation, has been called 'biased' by the Australian Bureau of Statistics, 'deficient' by the NSW Land and Environment Court and described as regularly 'abused' by the Productivity Commission ...

... Furthermore, the EIS seems to misinterpret the results of research in the economics chapter, Chapter 17. While it suggests that the project is a 'major employer in the region', data presented in Chapter 17 shows all mining represents only 2.5 per cent of local employment. The economics chapter emphasises the importance of agricultural employment to the region (5 times greater than Queensland's average and 5 times greater than mining) and agriculture's contribution to regional economic output (4 times greater than Queensland's average and four times that of mining. Despite this, negative impacts on agriculture are downplayed ...

675. The submission states that Input – Output modelling has the following shortcomings:

- (a) it assumes there are no limits on the amount of resources available in the economy, meaning that labour can be used in one project without taking it away from another project;⁹²⁰
- (b) it is not suitable for assessing projects in smaller regions because they often lack the resources that the model assumes, meaning that local impacts are lost to the wider area;⁹²¹ and
- (c) it assumes that the money spent on this Project would not be spent if it was not spent on this Project.⁹²²

676. The submission states that the preferred method of modelling should be 'cost-benefit analysis' modelling, which assesses the difference the Project would make relative to the next best use of resources. It states that this method is the preferred method of modelling in Queensland Government guidelines. It states that it is unclear why Input – Output modelling and not cost benefit analysis was used.⁹²³

⁹¹⁹ Submission 399 page 3.

⁹²⁰ Submission 399 page 4.

⁹²¹ Submission 399 page 5.

⁹²² Submission 399 page 5.

⁹²³ Submission 399 pages 5 to 6.

677. The submission states that because cost benefit analysis is not used, there is no estimate of what Queensland receives in return for its coal. It states that there is no quantification of royalties or taxes.⁹²⁴ It states that the EIS presents inconsistent employment figures and that the EIS misrepresents the importance of agriculture to the local economy.⁹²⁵ It notes in particular that the negative impact on agriculture is downplayed by omitting indirect and induced impacts (in contrast to the other sections of the EIS that included indirect and induced impacts in the assessment of the positive economic impacts of the Project).⁹²⁶
678. In addition to the submissions criticising the EIS, there were a large number of submissions in support of the Project that point to its positive economic impacts. Many of these were from submitters who would benefit from the Project, including employees and contractors of the Proponent.

AEIS

679. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, required additional information to complete the evaluation of the Project.⁹²⁷ Information required in response to issues raised in submissions, with respect to economics, included:⁹²⁸
- (a) discussion of why Input - Output modelling was used;
 - (b) clarification of whether machinery / equipment purchases were included;
 - (c) clarification of whether taxes and royalties were included in the modelling;
 - (d) if taxes and royalties were included in the modelling, confirmation that those items will be removed;
 - (e) recommendation that induced impacts be removed from the modelling;
 - (f) clarification of some of the calculations used in the modelling; and

⁹²⁴ Submission 399 page 6.

⁹²⁵ Submission 399 page 6.

⁹²⁶ Submission 399 pages 6 to 7.

⁹²⁷ Doc 10-0002.

⁹²⁸ Doc 10-0004.

(g) inclusion of indirect costs flowing from loss of agricultural productivity.

680. In response to the Coordinator-General's letter of 17 April 2014, with respect to economics, the AEIS:

- (a) explains that Input – Output modelling was considered appropriate having regard to the Project and stated that the alternative model would require a Project involving greater expenditure to produce meaningful results;⁹²⁹
- (b) states that expenditure from imports and royalties and taxes have been removed from the modelling;⁹³⁰
- (c) removes induced impacts from the modelling;⁹³¹
- (d) changes calculations in the modelling to take into account the above modifications;⁹³²
- (e) provides further detail and corrects an error in relation to the calculations in the modelling;⁹³³
- (f) includes indirect effects flowing from reduced agricultural productivity in the modelling;⁹³⁴ and
- (g) responds to concerns raised in the submissions.⁹³⁵

Further submissions received after the AEIS

681. There were numerous private submissions in which submitters substantially reiterated their concerns regarding economic issues.

⁹²⁹ AEIS Section 5.1.11.1 page 117.

⁹³⁰ AEIS Section 5.1.11.1 page 117.

⁹³¹ AEIS Section 5.1.11.2 pages 117 to 120.

⁹³² AEIS Section 5.1.11.2 pages 117 to 120.

⁹³³ AEIS Sections 5.1.11.2 and 5.1.11.3 pages 117 and following.

⁹³⁴ AEIS Section 5.1.11.5 pages 4 to 9.

⁹³⁵ See, for example, AEIS Section 5.3.10.1 page 157, Section 5.3.19.16 pages 194 to 195, Section 5.3.20.6 pages 204 to 205, Section 5.3.24.34 page 252, Section 5.3.25.4 page 265, Sections 5.3.29.1 to 5.3.29.6 pages 272 to 275, Section 5.3.30.3 page 276, Section 5.3.51.18 pages 335 to 336.

Briefing notes to the Coordinator-General

682. Each of the documents referred to above, other than the further submissions (received after the AEIS), was provided to the Coordinator-General as attachments to briefing notes.

9.2 Summary of the process of evaluation of the Project regarding economic impacts as described in the report evaluating the EIS

683. The EIS evaluation report states that the economic impact assessment used the ‘*input output*’ method to analyse the Project’s potential impacts.⁹³⁶

684. The EIS evaluation report states that during the two year construction phase the Project would support up to 260 jobs at peak.⁹³⁷ It states that during operations the Project would directly employ up to 435 people, an increase of 135 direct jobs from the mine’s current operation.⁹³⁸ The EIS evaluation report states that the Proponent has committed to recruit local and regional workers where possible.⁹³⁹ It states that the Proponent anticipates 95 per cent of the work force would live in the regional area, in locations such as Oakey, Jondaryan and Toowoomba, with the remaining 5 per cent to be based in Brisbane and regional areas.⁹⁴⁰

685. The EIS evaluation report states direct Project expenditure for the construction phase is estimated at \$900 million.⁹⁴¹ It states that direct economic expenditure for the operations phase is estimated at \$5.7 billion.⁹⁴² It states that, in considering both direct and indirect economic impacts, the total output at the state and national level is estimated at \$1.9 billion during construction and \$10.6 billion during operations.⁹⁴³ It states that from these figures the Proponent identifies a total of \$547 million during construction and \$2.7 billion during operations is estimated to be retained in the regional study area.⁹⁴⁴ It states that the maximum positive household income impact across Queensland (direct and indirect) is estimated at approximately \$348 million from construction expenditure and approximately \$2.9

⁹³⁶ EIS evaluation report page 52.

⁹³⁷ EIS evaluation report page 52.

⁹³⁸ EIS evaluation report page 52.

⁹³⁹ EIS evaluation report page 52.

⁹⁴⁰ EIS evaluation report page 52.

⁹⁴¹ EIS evaluation report page 52.

⁹⁴² EIS evaluation report page 52.

⁹⁴³ EIS evaluation report page 52.

⁹⁴⁴ EIS evaluation report page 52.

billion from operational expenditure.⁹⁴⁵ It states that \$75.7 million is estimated to remain in the regional study area from construction and approximately \$1 billion is estimated to remain in the regional study area from operations.⁹⁴⁶

686. The EIS evaluation report states that the Proponent proposes to return the majority of land to grazing post mining.⁹⁴⁷ It states that this is a reduction from its higher potential use as cropping land.⁹⁴⁸ It states the AEIS estimates the total negative economic impact of the down-scaling of the land's potential use is just over \$30 million.⁹⁴⁹ It states the modelled displacement of post-mining direct annual agricultural employment is estimated at 12 full time equivalents per year, with the indirect impact estimated at seven full time equivalents per year.⁹⁵⁰
687. The EIS evaluation report states the Proponent has committed to:⁹⁵¹
- (a) adhere to the Queensland Resources and Energy Sector Code of Practice for Local Content;
 - (b) include local purchasing provisions in the company's purchasing policy;
 - (c) maximise local employment opportunities over the life of the Project; and
 - (d) provide training and development opportunities for people locally and regionally.
688. The EIS evaluation report states that the Proponent's commitment to return mined land to grazing and the conditions stated by the Coordinator-General will ensure land impacted by mining can contribute to the post-mining economy through continued agricultural use.⁹⁵² It states that conditions requiring the Proponent to secure and improve equivalent land to that lost from the permanent mine voids will also increase agricultural economic benefits for the region post-mining operations.⁹⁵³

⁹⁴⁵ EIS evaluation report page 52.

⁹⁴⁶ EIS evaluation report page 52.

⁹⁴⁷ EIS evaluation report page 53.

⁹⁴⁸ EIS evaluation report page 53.

⁹⁴⁹ EIS evaluation report page 53.

⁹⁵⁰ EIS evaluation report page 53.

⁹⁵¹ EIS evaluation report page 53.

⁹⁵² EIS evaluation report page 53.

⁹⁵³ EIS evaluation report page 53.

689. The EIS evaluation report concludes:⁹⁵⁴

- (a) the Project presents economic and employment opportunities for the Toowoomba Regional Council area, the broader Darling Downs region and Queensland;
- (b) the Coordinator-General is satisfied the ‘*input output*’ methodology took a conservative approach to understand the potential impacts on the local, regional, state and national economies;
- (c) during mining, the conditions the Coordinator-General has set will work to enhance the regional employment opportunities; and
- (d) post mining, the Coordinator-General has set requirements to ensure that agricultural land impacted by the Project will be able to return to its best possible productive use, providing ongoing economic benefits for the agricultural sector in the region.

9.3 Observations

690. The EIS evaluation report did not include any reference to the appropriateness of the model selected, namely Input – Output modelling, as compared to a costs benefit analysis. Careful consideration of the submissions reveals that this was a common criticism of the economic analysis provided by the Proponent.

⁹⁵⁴ EIS evaluation report page 54.

10. SOCIAL IMPACTS

10.1 What was the evidence or other material held by the Coordinator-General on social impacts?

TOR

691. With respect to the issue of social impacts, the TOR required the Proponent to conduct a social impact assessment,⁹⁵⁵ which assessment was to:

- (a) consider the potential for social and cultural impact;⁹⁵⁶
- (b) detail a community engagement strategy;⁹⁵⁷
- (c) undertake a baseline study of the people residing in the Project's social and cultural area, to identify the Project's social issues, potential adverse and positive social impacts, and strategies and measures to address the impacts;⁹⁵⁸
- (d) include a profile of the workforce;⁹⁵⁹
- (e) assess and describe the type, level and significance of the Project's social impacts (both beneficial and adverse) on the local and cultural area, including the potential cumulative social impacts;⁹⁶⁰
- (f) address social impact mitigation strategies and measures;⁹⁶¹
- (g) prepare a social impact management plan;⁹⁶² and
- (h) prepare a local stakeholder management plan.⁹⁶³

⁹⁵⁵ TOR Section 6.1 page 57.

⁹⁵⁶ TOR Section 6.2 page 58.

⁹⁵⁷ TOR Section 6.3 page 59.

⁹⁵⁸ TOR Section 6.1.3 pages 58 to 59.

⁹⁵⁹ TOR Section 6.1.4 pages 60 to 61.

⁹⁶⁰ TOR Section 6.2 pages 61 to 62.

⁹⁶¹ TOR Section 6.3 pages 62 to 63.

⁹⁶² TOR Section 6.3.1 page 63.

⁹⁶³ TOR Section 6.3.2 page 63.

EIS

692. Appendix E to the EIS indicates that these issues are predominantly addressed in EIS Chapter 16 - Social Environment, as well as Chapter 19 – Community Consultation. In addition, Appendix J.14 of the EIS contains a Social Impact Management Plan and Appendix J.18 of the EIS contains a Local Stakeholder Management Plan.
693. EIS Chapter 16 *‘provides an assessment of the social benefits and impacts of the revised Project, including potential changes resulting from the construction, operation and decommissioning phases. Mitigation measures are also identified to maximise benefits and minimise impacts on local and regional communities.’*⁹⁶⁴
694. The assessment involves consideration of:
- (a) a study area that included the defined Postal Areas of 4401 and 4403 and includes local communities of Oakey, Acland, Jondaryan, Muldu and Quinalow, as well as Maclagan, Goombungee and Kulpi;⁹⁶⁵
 - (b) outcomes of community and stakeholder consultation;⁹⁶⁶
 - (c) overview of the Project in terms of the Project workforce, workforce accommodation and hours of operation;⁹⁶⁷
 - (d) the social policy framework including:⁹⁶⁸
 - (i) the *Draft Regional and Resource Towns Action Plan* prepared by the Department of State Development and Infrastructure Planning in response to the issues experienced by Queensland communities in relation to the resource sector;
 - (ii) the Resources Skills and Employment Plan released in February 2012, which focuses on development and implementing training and employment strategies to assist the resources sector meet its workforce needs;

⁹⁶⁴ EIS Chapter 16 page 16-1.

⁹⁶⁵ EIS Section 16.3 page 16-2.

⁹⁶⁶ EIS Section 16.4 pages 16-4 to 16-7.

⁹⁶⁷ EIS Section 16.5 pages 16-7 to 16-10.

⁹⁶⁸ EIS Section 16.6 pages 16-10 to 16-13.

- (iii) the Queensland Government *Major Resource Projects Housing Policy* (2011), which guides and supports better planning for housing in resource communities;
 - (iv) the Queensland Government *Sustainable Resource Communities Policy: Social Impact Assessment for the Mining and Petroleum Industries* (2008), which was developed in response to the rapid expansion of the mining industry and the subsequent pressure on social infrastructure;
 - (v) the *Toowoomba Regional Community Plan* (2010), which describes the community's overall vision for the Toowoomba Regional Council area's preferred long-term future; and
 - (vi) the Toowoomba Regional Planning Scheme 2012;
- (e) the existing social environment, including the key population and demographic characteristics, social infrastructure and community values;⁹⁶⁹
 - (f) population and demography;⁹⁷⁰
 - (g) employment participation and income;⁹⁷¹
 - (h) housing and accommodation;⁹⁷²
 - (i) community values;⁹⁷³
 - (j) community safety;⁹⁷⁴
 - (k) health;⁹⁷⁵
 - (l) social infrastructure;⁹⁷⁶

⁹⁶⁹ EIS Section 16.7 pages 16-13 to 16-17.

⁹⁷⁰ EIS Section 16.8 pages 16-17 to 16-22.

⁹⁷¹ EIS Section 16.9 pages 16-22 to 16-26.

⁹⁷² EIS Section 16.10 pages 16-26 to 16-29.

⁹⁷³ EIS Section 16.11 pages 16-30 to 16-32.

⁹⁷⁴ EIS Section 16.12 pages 16-32 to 16-33.

⁹⁷⁵ EIS Section 16.13 pages 16-33 to 16-34.

⁹⁷⁶ EIS Section 16.14 pages 16-34 to 16-39.

- (m) an impact assessment, involving assessment of the potential social impacts of the revised Project's construction and operation for local and regional communities;⁹⁷⁷ and
- (n) a summary of mitigation measures proposed to manage the social impacts associated with the revised Project.⁹⁷⁸

695. Impacts detailed in the EIS include:

- (a) some land use impacts as a result of changes to property and land use, particularly the change from agriculture to mining, but also changes to Acland and decreased property values;⁹⁷⁹
- (b) increase in the population in the Toowoomba Regional Council area of 33 people;⁹⁸⁰
- (c) need for approximately 55 houses in the Toowoomba Regional Council area to accommodate construction workers while they are on shift and the need for approximately 18 house in Toowoomba Regional Council area and 23 additional houses in the social impact assessment study area to accommodation operational workers;⁹⁸¹
- (d) opportunities for employment with an average of approximately 136 direct jobs during construction, increasing to approximately 260 jobs during the peak construction phase and up to 135 positions during operation;⁹⁸²
- (e) provision of training and apprenticeships for local people;⁹⁸³
- (f) the creation of direct and indirect employment opportunities and opportunities for local and regional businesses to supply goods and services associated with infrastructure construction, as well as longer term activities such as transportation and sale of the coal product;⁹⁸⁴

⁹⁷⁷ EIS Section 16.16 pages 16-40 to 16-64.

⁹⁷⁸ EIS Section 16.18 pages 16-68 to 16-73.

⁹⁷⁹ EIS Section 16.16.1 pages 16-40 to 16-42.

⁹⁸⁰ EIS Section 16.16.2 page 16-44.

⁹⁸¹ EIS Section 16.16.3 page 16-45.

⁹⁸² EIS Section 16.16.4 page 16-47.

⁹⁸³ EIS Section 16.16.4 pages 16-47 to 16-49.

⁹⁸⁴ EIS Section 16.16.5 page 16-50.

- (g) increased competition for skilled and unskilled labour and a decline in local employment opportunities in agriculture;⁹⁸⁵
- (h) one school bus service route will be changed as a result of the Project, potentially resulting in longer school travel times;⁹⁸⁶
- (i) decreased connectivity on and around the mine due to increased vehicle movement;⁹⁸⁷
- (j) potential amenity impacts on the rural and agricultural amenity including as a consequence of increased night lighting creating a glow in the night sky;⁹⁸⁸
- (k) potential community health and safety impacts due to increased road safety issues during construction, increases in heavy vehicles in towns and on local roads and other impacts (such as dust and noise related impacts) associated with mining activities;⁹⁸⁹
- (l) reduced rural and agricultural cohesion;⁹⁹⁰
- (m) employee stress and anxiety related to transition and social dislocation, safety risks associated with travel and limited access to social services in smaller towns;⁹⁹¹ and
- (n) decline in local employment opportunities and decrease in the residential population as a result of the decommissioning of the Project.⁹⁹²

696. The mitigation and management measures and commitments proposed to address social impacts are outlined in Section 16.18 of the EIS.⁹⁹³

⁹⁸⁵ EIS Section 16.16.5 pages 16-51 to 16-52.

⁹⁸⁶ EIS Section 16.16.6 pages 16-52 to 16-53.

⁹⁸⁷ EIS Section 16.16.7 pages 16-54 to 16-55.

⁹⁸⁸ EIS Section 16.16.8 pages 16-55 to 16-56.

⁹⁸⁹ EIS Section 16.16.9 pages 16-57 to 16-59.

⁹⁹⁰ EIS Section 16.16.10 pages 16-59 to 16-61.

⁹⁹¹ EIS Section 16.16.11 pages 16-62 to 16-63.

⁹⁹² EIS Section 16.16.13 page 16-64.

⁹⁹³ EIS pages 16-68 to 16-73.

697. Chapter 17 of the EIS records that:

- (a) the expected distribution of the impacts is in similar proportions to the expected outlay of expenditure, highlighting the importance of sourcing labour and materials locally where possible;⁹⁹⁴ and
- (b) the revised Project is unlikely to have an impact on housing values as workers for the operational phase are expected to be sourced predominantly from the region and workers for the construction phase are unlikely to relocate to the region.⁹⁹⁵

698. EIS Chapter 19 – Community Consultation *‘provides an overview of the consultation program implemented by NAC, which reflects both the formal consultation activities carried out specifically for the revised Project and the existing community and stakeholder engagement activities undertaken as part of NAC’s on-going community consultation program for the Mine’.*⁹⁹⁶

699. EIS Chapter 19 details:

- (a) the communication and engagement objectives;⁹⁹⁷
- (b) stakeholder identification;⁹⁹⁸
- (c) the consultation approach;⁹⁹⁹
- (d) key consultation activities;¹⁰⁰⁰ and
- (e) consultation findings.¹⁰⁰¹

700. The EIS records that contacts with the community have been generally supportive with 64 per cent of stakeholder interactions recorded as positive since the announcement of the revised Project in November 2012.¹⁰⁰²

⁹⁹⁴ EIS Section 17.3 page 17-23.

⁹⁹⁵ EIS Section 17.3 page 17-26.

⁹⁹⁶ EIS Chapter 19 page 19-1.

⁹⁹⁷ EIS Section 19.2 page 19-1.

⁹⁹⁸ EIS Section 19.3 pages 19-1 to 19-2.

⁹⁹⁹ EIS Section 19.4 pages 19-2 to 19-4.

¹⁰⁰⁰ EIS Section 19.5 pages 19-4 to 19-16.

¹⁰⁰¹ EIS Section 19.6 pages 19-16 to 19-21.

¹⁰⁰² EIS Section 19.7 page 19-21.

Submissions on the EIS

701. A briefing note was provided to the Coordinator-General attaching a disc containing a copy of all of the submissions on the EIS.¹⁰⁰³ The briefing note also attached a summary of the submissions. This summary records that the local, State and Commonwealth agencies had raised the following key issues, relevant to social issues:¹⁰⁰⁴

Toowoomba Regional Council (TRC)

- *Acknowledges economic benefits of proposal but notes some community concerns exist re current mine and planned expansion. Further consultation should therefore be undertaken*

702. The document also records that the individual submitters raised the following key issues with respect to social issues:

Road closures, diversion, increased traffic and associated safety concerns

Some issues raised by landholders included:

- *The SIMP does not cover off on changes to roads and the associated mitigation and management strategies.*
- *request proactive consultation and strategies to minimise impacts.*
- *Possible restricted property access not clear wants consultation with proponent.*
- *What are impacts on the school buses?*

Health Impacts

Health matters discussed in submissions appear largely to be in connection with concerns in relation to air quality/blasting/noise, including impacts on water tanks, and arising from the Jondaryan rail load-out facility; and mental health concerns, for example, due to feeling disconnected and disengaged by the proposed project. Further information on these matters has been sought.

...

Complaints and Dispute Resolution

Some issues raised by landholders included:

- *Proponent to provide more detail around timeframes to resolve issues, what will be the process undertaken to resolve complaints, how will complainant's be informed of the outcome. What will be the process for mediation?*
- *Do not listen to community concerns or respond to complaints well.*
- *Clear complaints process and associated timeframes for resolution of issues.*
- *Complaints process needs to be more transparent.*

¹⁰⁰³ Doc 10-0008.

¹⁰⁰⁴ Doc 10-0010.

- *Clearer process, nominated timeframes for resolution more detail of mediation process and how it will work.*

Consultation and engagement

Some issues raised by landholders included:

- *Increase the level, access to and mechanisms for the dissemination of information available.*
- *Proactive not reactive approach to consultation and engagement.*
- *Failed to gain community support (local residents and landholders).*
- *Poor History in the community and outcomes of consultation do not reflect community view.*
- *Approach to engagement and consultation is a concern*
- *What is the role of the community Liaison Officer clearer understanding for the community?*
- *Provision of regular information and services for the community to keep them informed of progress on mitigating impacts*
- *Concerns about the level of consultation undertaken and the efforts made to engage. Of particular concern is the level of landholder consultation undertaken*
- *Past behaviour suggests little or no concern for the community in relation to the Jondaryan stock pile /coal dust issue*
- *Inconsistent approach to consultation and engagement with some landholders at best.*
- *Unresolved concerns that need direct discussion and explanation of the issues that have not been resolved or will impact at a later date.*
- *Limited or no consultation on key issues.*
- *Requesting consultation process in relation to noise and dust impacts.*
- *Requesting discussion and seeking a landholder agreement from New Hope.*
- *Very little personal consultation with near neighbours.*
- *Community Information Centre Limited opening and access.*
- *Relying on Community Reference Group is insufficient to represent the community.*
- *Community Reference Group not well known or understood not a good mechanism for info sharing or as a mechanism for the wider community to raise issues.*
- *Community liaison services insufficient – office often closed.*
- *Received negligible information about the planning of the project and would not consider that they have been consulted.*
- *Need to be involved more regularly with broad communication of issues by the proponent on the issues affecting landholder who is 2km from the project.*
- *Lack of consultation has harvested mis-trust.*

- *Not consulted in relation to the development of the social impact assessment.*
- *Be more flexible with consultation options.*
- *Suggested that the outcomes of consultation do not reflect community and landholder views.*
- *What will NAC do to mitigate impacts and help community better understand?*

Acland township management

Some issues raised by landholders included:

- *Concerns about safety and security for limited occupants of the township.*
- *Maintenance and management required for grounds and existing buildings.*
- *Engagement mechanism required for communication with community.*
- *How can the community influence decisions made.*
- *Clarity in regard to the buildings which are being removed, or repaired when this will happen, notification to community*
- *Concerns about people removing items from vacant buildings and seeking clarification as to the security process that is in place to stop this.*
- *Current arrangements are perceived in the community as bad management by NAC.*
- *Concerned about the impacts on current services, Power supply, telephone and the need for access to Acland for delivery services including utility companies.*
- *What arrangements are in place for the removal of asbestos?*
- *Acland Township and Acland No 2 Colliery of concern- destruction of the social fabric of Acland - require a plan of action and seeking engagement to implement the Plan*
- *Provide opportunities/ mechanism/ incentives to maintain and enhance township.*
- *Why has work started on Acland (removal of buildings etc.) when the EIS process has not been finalised.*

703. Finally, the document also notes that there were a number of key themes that emerged from the submissions which the departmental officers believed did not warrant a request for additional information of the Proponent, namely:

The Acland Sustainable Energy Plan

This plan was proposed by the Oakey Coal Action Alliance and supported by many submitters, and has been cited in recent media. The Plan proposes agricultural, eco-tourism and clean energy production alternatives to mining on the project's land.

No further information on this has been requested as the proponent owns the land it intends to mine on.

704. A review of the submissions shows that the summary provided to the Coordinator-General is a reasonable one.
705. There were a number of submissions that contained general comments about perceived negative social impacts caused by the Project.¹⁰⁰⁵ Generally, these comments referred to the effects of the previous stages of the mine, including decreased amenity in Acland as a result of land acquisitions by the operator and residents leaving the town.
706. There were also a number of submissions critical of the Proponent's consultation processes.¹⁰⁰⁶ A particular criticism was that the local community reference group established by the Proponent was not sufficiently representative of the local community.¹⁰⁰⁷
707. With respect to health issues, the Queensland Ambulance Service made a submission indicating that it did not foresee a negative impact on ambulance service delivery.¹⁰⁰⁸
708. There were minimal submissions addressing the issue of housing and accommodation. The submission by the Toowoomba Regional Council recommended that the effects on housing in Toowoomba be assessed.¹⁰⁰⁹ The Department of Health provided a submission that expressed concern that Jondaryan and Rosalie are listed as areas with a lot of disadvantaged people, and the Proponent has not adequately highlighted strategies to ensure housing availability and affordability is not further stretched for the locals.¹⁰¹⁰
709. With respect to workforce issues, the Department of Aboriginal and Torres Strait Islander and Multicultural Affairs welcomed the commitment from the Proponent to partner with Oakey Reconciliation Council to encourage Aboriginal and Torres Strait Islander people to apply for employment opportunities.¹⁰¹¹ Toowoomba Regional Council expressed concern about workforce issues in its submission and

¹⁰⁰⁵ See, for example, Submission 139, 201, 213, 284, 285, 286, 292, 296, 464, 466, 477.

¹⁰⁰⁶ See, for example, Submission 139, 201, 272, 284, 285, 286, 292, 296, 466.

¹⁰⁰⁷ See, for example, Submission 201, 285.

¹⁰⁰⁸ Doc 10-0030.

¹⁰⁰⁹ Submission 466.

¹⁰¹⁰ Submission 410.

¹⁰¹¹ Submission 23.

requested the Proponent consider the impact on local businesses by having to back-fill positions.¹⁰¹²

AEIS

710. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, required additional information to complete the evaluation of the Project.¹⁰¹³ Information required in response to issues raised in submissions, with respect to social issues, included:¹⁰¹⁴

- (a) further refinement of the Acland Management Plan to include:
 - (i) sufficient detail to understand what the plan will cover, the process for engagement, consultation and the potential involvement of the community;
 - (ii) discussion on the township, Tom Doherty Park and Acland No. 2 Colliery;
 - (iii) clarity about security arrangements, safety arrangements, timing for the removal of buildings, maintenance arrangements, ongoing management, management arrangements for flora and local historical items and future uses for vacant land;
- (b) confirmation of further consultation with local health bodies and members of the community on concerns about air quality, blasting, noise, impacts on water tanks, impacts from the Jondaryan rail load-out facility and mental health concerns;
- (c) further detail about how the complaints and dispute resolution process will operate; and
- (d) an improved engagement program providing further avenues for landholders to be engaged.

¹⁰¹² Submission 466.

¹⁰¹³ Doc 10-0002.

¹⁰¹⁴ Doc 10-0004.

711. In response to this request from the Coordinator-General, the AEIS:

- (a) provides further details about the management of the Acland township¹⁰¹⁵ and an Acland Management Plan in Appendix I to the AEIS which includes:
 - (i) a strategy outlining the items in Acland to be retained and maintained;
 - (ii) details of stakeholder engagement conducted, as well as commitments for on-going engagement;
 - (iii) arrangements with respect to the safety and security of Acland township;
- (b) details of community consultation and engagement commitments, as well as additional information about the evidence held by local health service providers with respect to mental health and the impact of coal dust and noise on health;¹⁰¹⁶
- (c) further detail about how the complaints and dispute resolution process will operate;¹⁰¹⁷ and
- (d) further information and commitments with respect to consultation, including detailed consultation proposal with respect to:¹⁰¹⁸
 - (i) environmental concerns;
 - (ii) Acland, including with respect to the Township and road closures;
 - (iii) Jondaryan, particularly the Jondaryan rail load-out facility;
 - (iv) health issues;
 - (v) complaints procedures; and
 - (vi) general community consultation and engagement;

¹⁰¹⁵ AEIS Section 5.1.7 pages 61 to 63.

¹⁰¹⁶ AEIS Section 5.1.8 pages 63 to 67.

¹⁰¹⁷ AEIS Section 5.1.9 pages 68 to 76.

¹⁰¹⁸ AEIS Section 5.1.10 pages 76 to 95.

- (e) further information about:
- (i) property acquisition;¹⁰¹⁹
 - (ii) changes to work practices at the Jondaryan rail load-out facility and the tangible ‘*community benefits*’;¹⁰²⁰
 - (iii) amenity in Acland, including with respect to changes to streetscapes and housing availability;¹⁰²¹
 - (iv) employment, including with respect to the region’s employment profile, the origin of the workforce, protection of employment opportunities and potential impacts on other business’ capacity to attract staff;¹⁰²²
 - (v) population and housing impacts;¹⁰²³ and
 - (vi) alignment of the Project with planning objectives.¹⁰²⁴

712. The AEIS also provides a specific response to individual submissions,¹⁰²⁵ effectively re-iterating the information provided earlier in the AEIS.

713. The overall commitments by the Proponent with respect social impacts are collected in AEIS Appendix D.

Further submissions received after the AEIS

714. There were numerous private submissions in which submitters substantially reiterated their concerns regarding social impacts.

¹⁰¹⁹ AEIS Section 5.1.10.3.1 pages 97 to 101.

¹⁰²⁰ AEIS Section 5.1.10.3.2 pages 101 to 103.

¹⁰²¹ AEIS Section 5.1.10.3.3 pages 103 to 104.

¹⁰²² AEIS Section 5.1.10.3.4 pages 104 to 109.

¹⁰²³ AEIS Section 5.1.10.3.5 pages 109 to 113.

¹⁰²⁴ AEIS Section 5.1.10.3.7 pages 114 to 116.

¹⁰²⁵ See, for example, AEIS Section 5.2.5.3 pages 63 to 64, Sections 5.2.10.61 to 5.2.10.63 pages 123 to 124, Section 5.2.10.65 pages 125 to 126, Sections 5.2.10.67 to 5.2.10.68 page 127, Section 5.3.7.12 pages 150 to 151, Section 5.3.10.11 pages 160 to 161, Section 5.3.11.1 page 162, Section 5.3.16.1 page 178, Section 5.3.19.2 pages 184 to 185, Sections 5.3.19.14 and 5.3.19.15 pages 192 to 194, Section 5.3.20.1 pages 197 to 198, Section 5.3.20.7 pages 205 to 206, Section 5.3.20.9 pages 206 to 207, Sections 5.3.21.5 to 5.3.21.6 pages 211 to 212, Section 5.3.22.1 pages 212 to 213, Section 5.3.22.8 page 216, Section 5.3.22.18 pages 221 to 222, Section 5.3.22.22 pages 224 to 225, Sections 5.3.22.25 to 5.3.22.26 page 226, Section 5.3.22.28 pages 227 to 228, Sections 5.3.24.27 to 5.3.24.32 pages 249 to 252, Sections 5.3.32.5 to 5.3.32.7 pages 280 to 282, Section 5.3.37.4 page 290.

715. The Darling Downs Public Health Unit lodged a submission indicating it did not wish to comment further on the suitability of the Project.¹⁰²⁶

Information clarification to the AEIS

716. Further information was also provided by way of clarification to the AEIS in December 2014. It included further information about continuing community consultation and community engagement initiatives.¹⁰²⁷

Briefing notes to the Coordinator-General

717. Each of the documents referred to above, other than further submissions (received after the AEIS), was provided to the Coordinator-General as attachments to briefing notes.

10.2 Summary of the process of evaluation of the Project regarding social impacts as described in the report evaluating the EIS

718. Chapter 7 of the EIS evaluation report contained the Coordinator-General's evaluation of social impacts.

719. The social impacts were considered under the following headings:

- (a) Social impact assessment;
- (b) Community and stakeholder engagement;
- (c) Health, safety and community infrastructure;
- (d) Housing and accommodation;
- (e) Regional business development and local content; and
- (f) Workforce management.

720. Each of these topics is addressed below in the summary of the process of evaluation of the Project as described in the report evaluating the EIS.

¹⁰²⁶ Submission 96.

¹⁰²⁷ Information Clarification to the AEIS dated December 2014 pages 10 to 20.

10.2.1 Social impact assessment

721. The EIS evaluation report states that a social impact assessment was conducted as part of the EIS.¹⁰²⁸ It states the social impact assessment addressed the principles of *Social impact assessment guideline* (Department of State Development, Infrastructure and Planning 2013) and the complementary guideline *Managing impacts of major projects in resource communities* (Department of State Development, Infrastructure and Planning 2013).¹⁰²⁹
722. The EIS evaluation report states that the study area for the social impact assessment included the Toowoomba Regional Council local government area and the key localities of Toowoomba, Oakey, Jondaryan and Acland.¹⁰³⁰ The potential positive impacts identified include:¹⁰³¹
- (a) maintaining current, and creating additional, direct and indirect local and regional employment;
 - (b) continued provision of education and training opportunities;
 - (c) increased procurement opportunities for local businesses;
 - (d) preservation of sites of historical significance; and
 - (e) increased community support programs and initiatives.
723. Potential negative impacts identified include:¹⁰³²
- (a) change of land use from agriculture to mining and impacts on rural amenity;
 - (b) impacts from mining operations, including air quality, noise, vibration and water resources;
 - (c) traffic safety and connectivity;
 - (d) impact on local and regional housing markets;

¹⁰²⁸ EIS evaluation report page 54.

¹⁰²⁹ EIS evaluation report page 54.

¹⁰³⁰ EIS evaluation report page 54.

¹⁰³¹ EIS evaluation report page 54.

¹⁰³² EIS evaluation report page 54.

- (e) increased demand for health and education services; and
- (f) community concerns over the level of consultation and engagement processes and procedures.

724. The EIS evaluation report states the social impact assessment could do more to strengthen its social licence to operate in the community.¹⁰³³ It states the Proponent has responded with a series of action plans, which are detailed in the EIS.¹⁰³⁴

10.2.2 Community and stakeholder engagement

725. The EIS evaluation report states the social impact assessment was informed by a broad scale community and stakeholder engagement and consultation undertaken by the Proponent.¹⁰³⁵ Submissions about the EIS and AEIS identified that the engagement and consultation strategy lacked depth.¹⁰³⁶ The EIS evaluation report states that most stakeholders did not find they had sufficient understanding of the mitigation and management strategies for critical impacts, particularly in relation to:¹⁰³⁷

- (a) management of air quality, dust and noise;
- (b) vibration associated with blasting;
- (c) water resources – impacts on bores, water tanks, flooding and groundwater drawdown;
- (d) road closures and impacts for residents and landholders;
- (e) land use moving from agriculture to mining;
- (f) health impacts associated with dust and noise;
- (g) changes to the Acland township and the high level of impacts on the remaining landholder; and

¹⁰³³ EIS evaluation report page 55.

¹⁰³⁴ EIS evaluation report page 55.

¹⁰³⁵ EIS evaluation report page 55.

¹⁰³⁶ EIS evaluation report page 55.

¹⁰³⁷ EIS evaluation report page 55.

- (h) management of Acland Township, War Memorial, Tom Doherty Park and Acland Collier No. 2 heritage site.

726. The EIS evaluation report states that, in response to stakeholder and community feedback, the Proponent has proposed a detailed consultation, engagement and information process.¹⁰³⁸ As part of the enhanced engagement mechanisms, landholders and residents have been divided into three categories:¹⁰³⁹

- (a) category 1 – high priority landholders who are potentially the most impacted;
- (b) category 2 – landholders in close proximity to the mine with fewer impacts;
- (c) category 3 – landholders who may have concerns or interests in the Project.

727. The EIS evaluation report states the revised engagement strategies and commitments include:¹⁰⁴⁰

- (a) using a wider choice of mechanisms to engage and consult with landholders and stakeholders;
- (b) providing straightforward project information to landholders;
- (c) regular timeframes for delivering information;
- (d) clarity about the detail of the information that will be provided for mitigation and management strategies to be adopted on critical issues raised by the community;
- (e) developing a personalised program of consultation and engagement for individual landholders that is specific to their property and issues of concern;
- (f) development and implementation of detailed complaints and disputes resolution plan;

¹⁰³⁸ EIS evaluation report page 55.

¹⁰³⁹ EIS evaluation report page 55.

¹⁰⁴⁰ EIS evaluation report page 56.

- (g) wider communication strategies to enable the community to understand the improved processes and procedures to be adopted for consultation, engagement and information sharing; and
- (h) re-establishing and implementing community engagement sessions.

728. The EIS evaluation report states that to further assist in improving consultation and sharing information with the community the Proponent has already established the following mechanisms:¹⁰⁴¹

- (a) landholder engagement protocols;
- (b) a community reference group made up of a broad cross-section of local and regional representatives;
- (c) a community information centre in Oakey;
- (d) complaint and dispute resolution policy and procedures;
- (e) quarterly newsletter and Proponent website; and
- (f) communication processes to inform all landholders and residents of the improved engagement consultation and information sharing approach to be adopted by the Proponent for the life of the Project.

729. The EIS evaluation report states that the Proponent has committed to a range of engagement and consultation strategies with local and state government agencies, business and community groups, both locally and regionally.¹⁰⁴²

730. The EIS evaluation report concludes:¹⁰⁴³

- (a) the Coordinator-General considers the consultation and engagement processes adopted by the Proponent during the EIS were sufficient to identify community and stakeholder issues;
- (b) the Coordinator-General notes the Proponent's efforts to improve and increase the level of consultation, engagement and information sharing; and

¹⁰⁴¹ EIS evaluation report page 56.

¹⁰⁴² EIS evaluation report page 56.

¹⁰⁴³ EIS evaluation report pages 56 to 57.

- (c) the Coordinator-General has set a condition requiring the Proponent to publicly report on its consultation and engagement plan and complaints and disputes resolution plan.¹⁰⁴⁴

10.2.3 Health, safety and community infrastructure

731. The EIS evaluation report states that during the Social Impact Assessment process and in submissions received on the EIS and AEIS, community and stakeholders raised a number of concerns about health, safety and community infrastructure impacts, including:¹⁰⁴⁵

- (a) dust, air quality, noise and blasting impacts on the health and lifestyle of the remaining Acland landholder, nearby landholders and residents;
- (b) impacts of the Jondaryan rail load-out facility on Jondaryan residents in relation to dust, noise and air quality, and uncertainty about the timing of its decommissioning;
- (c) impacts on water resources and bores;
- (d) road closures, increased distances and travel time, including an increased response time for emergency services;
- (e) changes to the Acland township and the high level of impact on the remaining landholder;
- (f) future management of the Acland township, including the War Memorial, Tom Doherty Park and New Acland Colliery heritage site; and
- (g) increased demand for health services as a result of workforce expansion during construction and operations.

732. The EIS evaluation report states that the Proponent committed to a range of strategies in response to community concerns that form an Adaptable Management

¹⁰⁴⁴ Every six months during pre-construction, annually during construction and the first stage of operation, and for a period of five years following the commencement of construction. The annual report must describe actions taken to inform the community about project impacts and identify that community concerns about the Project impacts have been taken into account when reaching decisions.

¹⁰⁴⁵ EIS evaluation report page 57.

Strategy.¹⁰⁴⁶ It states this strategy includes rigorous and sophisticated monitoring of air quality, noise and blasting events as well as public monthly reporting.¹⁰⁴⁷ It also states the Proponent has committed to conducting targeted consultation with nearby landholders and residents where modelling predicts generation of dust, noise and vibration events, as well as investigating all community concerns promptly and to respond appropriately.¹⁰⁴⁸

733. The EIS evaluation report states Jondaryan residents raised concerns regarding impacts of dust and noise from the existing load out facility and expressed uncertainty over when the facility will be decommissioned.¹⁰⁴⁹ It states that in response the Proponent will improve monitoring, regularly report results, and undertake specific consultation and engagement about the operation of the existing load-out facility.¹⁰⁵⁰ It states that to provide certainty about when that facility will be decommissioned, the Coordinator-General has conditioned that all coal transported from the start of Stage 3 of the Project must be distributed from the train load-out facility on the mining lease.¹⁰⁵¹

734. The EIS evaluation report states that the Proponent consulted with Queensland Health professionals to ascertain if data exists on the effect of existing mining activities in the local area on physical and mental health.¹⁰⁵² It states the following conclusions were reached:¹⁰⁵³

- (a) there is no evidence of elevated respiratory illness for patients within a ten kilometre radius of Acland and there have been no recent increases in respiratory illness in the area;
- (b) local health service providers have not seen any patients who attribute adverse health symptoms to noise, dust or other aspects of the Proponent's operation and have not seen any patients whose symptoms they would attribute to the existing mine's operation; and

¹⁰⁴⁶ EIS evaluation report page 57.

¹⁰⁴⁷ EIS evaluation report page 57.

¹⁰⁴⁸ EIS evaluation report page 57.

¹⁰⁴⁹ EIS evaluation report page 57.

¹⁰⁵⁰ EIS evaluation report page 58.

¹⁰⁵¹ EIS evaluation report page 58.

¹⁰⁵² EIS evaluation report page 58.

¹⁰⁵³ EIS evaluation report page 58.

- (c) health service providers did not identify any presentations by patients in relation to mental health issues related to the Proponent.

735. The EIS evaluation report states that, in summary, there is no epidemiological evidence and no evidence from the experience of the hospital and general practice that would indicate health issues are being caused by the existing mining operation, or would be expected to result from the proposed Project.¹⁰⁵⁴ It states that the Proponent has committed to continue collaborating and consulting with the Darling Downs Hospital and Health Services about the monitoring of future health concerns and any impacts associated with mining operations.¹⁰⁵⁵

736. The EIS evaluation report states that the Acland Management Plan and the Acland No. 2 Colliery Conservation Plan sets out the arrangements and commitments for the management and maintenance of the Acland Township on land owned or intended to be purchased by the Proponent.¹⁰⁵⁶ This includes Tom Doherty Park, which is where the Acland War Memorial is located.¹⁰⁵⁷ It states that the Proponent has committed to involving all relevant stakeholders and the broader community in the implementation and delivery of the Acland Management Plan.¹⁰⁵⁸

737. The EIS evaluation report concludes:¹⁰⁵⁹

- (a) the conditions set by the Coordinator-General require specific reporting during pre-construction, construction and operations that will encourage continuous improvement to the Proponent's plans for collaboration and sharing of information with affected landholders and residents for the life of the Project; and
- (b) the Coordinator-General has set a condition that the new train load-out facility be the sole distribution point for all railed product from the commencement of Stage 3 in response to concerns of Jondaryan residents.

¹⁰⁵⁴ EIS evaluation report page 58.

¹⁰⁵⁵ EIS evaluation report page 58.

¹⁰⁵⁶ EIS evaluation report page 58.

¹⁰⁵⁷ EIS evaluation report page 58.

¹⁰⁵⁸ EIS evaluation report page 58.

¹⁰⁵⁹ EIS evaluation report page 59.

10.2.4 Housing and accommodation

738. The EIS evaluation report states that the EIS assessed there will be negligible impact on the local or regional housing market, as there will be a limited increase in construction and operational workers who will reside in the locality and region. The Project will not use fly-in fly-out workers.¹⁰⁶⁰
739. The EIS evaluation report states that the Proponent has developed a Housing and Accommodation Action Plan that includes:¹⁰⁶¹
- (a) committing to source resident local workers during construction from the Toowoomba Regional Council area to minimise the demand for additional accommodation;
 - (b) committing to maximise local employment, with a 70 per cent target for local workers to minimise the number of new operational workers moving into the area and to reduce demand on the local housing market;
 - (c) committing to consult early with local temporary and short-stay accommodation providers to determine suitability during peak construction periods for construction workers;
 - (d) monitoring availability and cost of rental housing in the Toowoomba region to ensure construction and operational worker housing demands do not impact on affordability;
 - (e) continuing to liaise with local real estate agents about workforce numbers and the availability and suitability of accommodation for the construction and operational workforce; and
 - (f) informing and encouraging operational workers to seek accommodation in areas with greater housing availability and market capacity, based on local knowledge and monitoring of the housing market.

¹⁰⁶⁰ EIS evaluation report page 59.

¹⁰⁶¹ EIS evaluation report pages 59 to 60.

740. The EIS evaluation report concludes:¹⁰⁶²
- (a) the likely impact of additional construction and operation workers on the local and regional housing markets are expected to be minimal;
 - (b) the Coordinator-General recommends the Proponent implement its Housing and Accommodation Action Plan for the Project; and
 - (c) the conditions set by the Coordinator-General requiring reporting will describe the Proponent's actions, outcomes and adaptable management strategies to avoid, manage and mitigate Project-related impacts on the local and regional housing market.

10.2.5 Regional business development and local content

741. The EIS evaluation report states that the Project is expected to generate significant positive economic impact in the Toowoomba region, with a total expenditure of \$547 million during construction and \$2.7 billion during operations estimated to be expended in the regional study area.¹⁰⁶³
742. The EIS evaluation report states that the Proponent has committed to develop and adopt the Queensland Resources and Energy Sector Code of Practice for Local Content 2013.¹⁰⁶⁴ It states a Local Content Action Plan has been developed, which commits to a range of strategies to provide business opportunities for local, regional and Queensland-wide businesses, including:¹⁰⁶⁵
- (a) open and transparent procurement process;
 - (b) ongoing liaison and communication with local suppliers and contractors, through local briefings, register of interest in the Project and fact sheets;
 - (c) increased capability for local suppliers to tender by providing pre-tender training and procurement information sessions; and

¹⁰⁶² EIS evaluation report page 60.

¹⁰⁶³ EIS evaluation report page 60.

¹⁰⁶⁴ EIS evaluation report page 60.

¹⁰⁶⁵ EIS evaluation report pages 60 to 61.

- (d) informing suppliers of potential procurement opportunities in a transparent manner through the development of a procurement plan and implementation of the Local Content Action Plan's strategies.

743. The EIS evaluation report concludes:¹⁰⁶⁶

- (a) the Coordinator-General requires the Proponent to be a signatory to the Queensland Resources and Energy Sector Code of Practice for Local Content 2013 and ensure Queensland suppliers, contractors and manufacturers are given full, fair and reasonable opportunity to tender for Project-related business activities;
- (b) proponents adopting the Queensland Resources and Energy Sector Code of Practice for Local Content 2013 will submit an annual Code Industry Report demonstrating how the principles and framework of the code have been applied; and
- (c) it is the Coordinator-General's expectation that the Proponent's commitments, along with any other initiatives adopted, will be reflected in these reports.

10.2.6 Workforce management

744. The EIS evaluation report states that the social impact assessment identified a range of positive workforce management opportunities including:¹⁰⁶⁷

- (a) direct employment opportunities through the creation of new positions;
- (b) indirect employment opportunities through increased demand for local and regional business activities; and
- (c) provision of education and training opportunities in both mining and agriculture.

745. The EIS evaluation report states that the Proponent has committed to recruiting workers from the local and regional areas as part of its workforce management

¹⁰⁶⁶ EIS evaluation report page 61.

¹⁰⁶⁷ EIS evaluation report page 61.

strategy.¹⁰⁶⁸ It states the Proponent states that the workforce will be predominately drive-in drive-out during construction.¹⁰⁶⁹ It states the Proponent has set a target of recruitment of at least 70 per cent local workers who currently reside in the local and regional study area during the operational phase of the Project.¹⁰⁷⁰ It states the Proponent expects that the remaining 30 per cent would be recruited from the wider South East Queensland region.¹⁰⁷¹

746. The EIS evaluation report states that the Proponent has developed a Workforce Management Action Plan that includes the following commitments:¹⁰⁷²

- (a) equal employment opportunities through a targeted campaign to recruit a diverse workforce including indigenous people, women, school leavers and the unemployed;
- (b) maximise local access to employment opportunities;
- (c) employment of unskilled, semi-skilled and skilled workers;
- (d) provision of structured training programs including apprenticeships and traineeships;
- (e) continued up-skilling and training of staff; and
- (f) target of 20 per cent female staff.

747. The EIS evaluation report states that the Proponent will deliver on these commitments using existing partnerships and will work with education and training providers across private and government sectors.¹⁰⁷³ It states these commitments will be delivered in collaboration with Downs Group Training, University of Southern Queensland, University of Queensland, Oakey State High School, traditional owners and the Oakey Reconciliation Committee.¹⁰⁷⁴

¹⁰⁶⁸ EIS evaluation report page 61.

¹⁰⁶⁹ EIS evaluation report page 61.

¹⁰⁷⁰ EIS evaluation report page 61.

¹⁰⁷¹ EIS evaluation report page 61.

¹⁰⁷² EIS evaluation report pages 61 to 62.

¹⁰⁷³ EIS evaluation report page 62.

¹⁰⁷⁴ EIS evaluation report page 62.

748. The EIS evaluation report states the Proponent has committed to a range of employment strategies to contribute to building and maintaining a diverse workforce, including:¹⁰⁷⁵

- (a) distributing and circulating employment opportunities through interest groups, community groups, local indigenous communities and Oakey Reconciliation Council;
- (b) identifying a new advertising location to reach a diverse range of population groups;
- (c) undertaking recruitment and employment workshops in Oakey to encourage the local population to apply for workforce opportunities;
- (d) meeting with the Queensland Resources Council Women in Mining Group to better understand and overcome barriers to employing women in the mining sector; and
- (e) investigating the potential partnership with the tertiary education sector to conduct a master research project at understanding barriers to employing diverse population groups in the mining sector.

749. The EIS evaluation report states that the Coordinator-General requires the Proponent to:¹⁰⁷⁶

- (a) implement all new commitments to maximise local employment opportunities over the life of the Project, including for indigenous people and other diverse disadvantaged groups;
- (b) provide training and development opportunities locally and regionally to support, and maintain and develop a sustainable skilled workforce and to provide opportunities for people to improve skills and gain employment in the mining sector;
- (c) work in collaboration and partnership with identified stakeholders in the social impact assessment to implement the identified workforce

¹⁰⁷⁵ EIS evaluation report page 62.

¹⁰⁷⁶ EIS evaluation report page 62.

management strategies to ensure that appropriate outcomes are delivered and the strategies can be effectively monitored and reported.

750. The EIS evaluation report states that these measures provide a satisfactory response to local and regional workforce issues.¹⁰⁷⁷ It states that the conditions set by the Coordinator-General require specific reporting that will document the Proponent's actions, outcomes and adaptable management strategies to enhance local and regional employment, training and development opportunities.¹⁰⁷⁸

¹⁰⁷⁷ EIS evaluation report page 62.

¹⁰⁷⁸ EIS evaluation report page 63.

11. MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

11.1 The issues

11.1.1 Matters of national environmental significance as ‘controlled actions’ under the *EPBC Act*

751. Part 3 of the *EPBC Act* contains requirements relating to matters of national environmental significance. Relevantly:

- (a) section 18 of the *EPBC Act* prohibits, in the absence of an approval under Part 9, actions that are likely to have a significant impact on a listed threatened species included in the vulnerable category;
- (b) section 18A of the *EPBC Act* prohibits, in the absence of an approval under Part 9, actions that are likely to have a significant impact on a listed threatened ecological community included in the endangered category; and
- (c) sections 24D and 24E of the *EPBC Act* prohibit, in the absence of an approval under Part 9, actions that involve large coal mining development where the actions are likely to have a significant impact on a water resource.

752. Pursuant to section 67 of the *EPBC Act*, these actions are defined as ‘controlled actions’.

753. Under section 68 of the *EPBC Act*, a person proposing to take an action that the person thinks may be or is a controlled action must refer the proposal to the Commonwealth Minister for the Environment for the Minister’s decision whether or not the action is a controlled action.

754. Section 75 of the *EPBC Act* provides that the Commonwealth Minister for the Environment must decide:

- (a) whether the action that is the subject of a proposal referred to the Minister is a controlled action; and
- (b) which provisions of Part 3 (if any) are controlling provisions for the action.

755. Having identified a proposal as involving a controlled action, under section 87 of the *EPBC Act*, the Commonwealth Minister for the Environment must choose one of the following ways of assessing the relevant impacts of the controlled action under Part 8 of the *EPBC Act*:

- (a) an accredited assessment process;
- (b) an assessment on referral information;
- (c) an assessment on preliminary documentation;
- (d) a public environment report;
- (e) an environmental impact statement; or
- (f) a public inquiry.

756. Despite this, under section 47 of the *EPBC Act*, a bilateral agreement may declare that action assessed in a specified manner need not be assessed under Part 8 of the *EPBC Act*.

757. Pursuant to a bilateral agreement between the Queensland and Australian governments:

- (a) the environmental impact assessment process under Part 4 of the *SDPWO Act* is an accredited assessment for the purpose of Part 8 of the *EPBC Act*; and
- (b) the Commonwealth Minister for the Environment must be provided with a copy of the Coordinator-General's report under Part 4 of the *SDPWO Act*, with such report to include enough information about the relevant impacts of the action to let the Commonwealth Minister for the Environment make an informed decision about whether or not to approve the taking of the controlled action under Part 9 of the *EPBC Act*.

11.1.2 The Project as a 'controlled action' under the *EPBC Act*

758. On 24 May 2007, the Project was deemed a 'controlled action' under section 75 of the *EPBC Act* by the Commonwealth Minister for the Environment and Water

Resources due to its potential to have a significant impact on a matter of national environmental significance, namely listed threatened species and communities.¹⁰⁷⁹

759. On 9 November 2012, the Commonwealth Department of Sustainability, Environment, Water, Population and Communities wrote to the Coordinator-General and noted that it had, on 26 October 2012, received a request from the Proponent for a variation to the Project. The request for variation of the proposal was accepted under section 156B of the *EPBC Act*.¹⁰⁸⁰
760. Around October 2013, the Commonwealth Minister for the Environment notified the Proponent that the revised Project also required assessment and approval under the *EPBC Act* as an action that is likely to have a significant effect on water resources (and, as such, it was a controlled action under sections 24D and 24E of the *EPBC Act*).¹⁰⁸¹

11.1.3 Assessment of matters of national environmental significance

761. Chapter 8 of the EIS evaluation report contains the Coordinator-General's assessment of matters of national environmental significance.
762. The EIS evaluation report records that the assessment is undertaken pursuant to the bilateral agreement between the Australian and Queensland governments.¹⁰⁸²
763. Following provision of the EIS evaluation Report, the Commonwealth Minister for the Environment will use the information in the EIS evaluation Report to make a decision with respect to the '*controlled actions*' under section 133 of the *EPBC Act*.¹⁰⁸³
764. The issues assessed in Chapter 8 were considered under the following headings:
- (a) Listed threatened species and ecological communities;
 - (b) Water resources;

¹⁰⁷⁹ Letter from Commonwealth Department of the Environment and Water Resources to Coordinator-General dated 28 May 2007. See sections 18 and 18A of the EPBC Act. Doc 1-0014.

¹⁰⁸⁰ Doc 6-0050.

¹⁰⁸¹ AEIS page 22.

¹⁰⁸² EIS evaluation report page 63.

¹⁰⁸³ EIS evaluation report page 64.

- (c) Monitoring and modelling of water resources;
- (d) Potential impacts to water resources;
- (e) Management of water resources;
- (f) IESC;
- (g) Ecologically sustainable development;
- (h) Social and economic impacts; and
- (i) Coordinator-General's overall conclusions.

765. Each of these topics is addressed below.

11.2 Listed threatened species and ecological communities

11.2.1 What was the evidence or other material held by the Coordinator-General on listed threatened species and ecological communities?

766. The evidence and other material held by the Coordinator-General on listed threatened species and ecological communities, including evidence in the EIS, AEIS and submissions, is outlined in detail in Section 8.6 (Ecology) of this review.

767. In addition to the evidence outlined in Section 8.6 of this review, it ought be noted that Appendix H of the EIS contains the *EPBC Act* Assessment. However, as the information in that Appendix reflects information contained elsewhere in the EIS and already referred to in Section 8.6 above, it is unnecessary to canvass that evidence again here.

768. Importantly, as is mentioned in Section 8.6 of this review, the submission from the Commonwealth Department of Environment noted that, during the process of drafting the EIS, it consulted with the Proponent and the majority of the Department's concerns have been addressed in the finalised EIS.¹⁰⁸⁴ The Department also noted that finger panic grass and lobed bluegrass have been delisted by the Commonwealth.

¹⁰⁸⁴ Submission 443.

11.2.2 Summary of the process of evaluation of the Project regarding listed threatened species and ecological communities as described in the report evaluating the EIS

Site context

769. The EIS evaluation report states that the Project site has been subject to long-term vegetation clearing to enable grazing and cropping.¹⁰⁸⁵ It states that there is a high degree of habitat fragmentation and isolation, and weeds and vertebrate pests are evident.¹⁰⁸⁶ It states some remnants of original vegetation remain, particularly in riparian areas and near farm houses.¹⁰⁸⁷

Threatened species and communities not addressed as matters of national environmental significance

770. The EIS evaluation report identifies flora, fauna and ecological communities not addressed as matters of national environmental significance, namely:¹⁰⁸⁸

- (a) finger panic grass and lobed bluegrass;¹⁰⁸⁹
- (b) koalas;¹⁰⁹⁰ and
- (c) Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions.¹⁰⁹¹

Assessment methodology

771. The EIS evaluation report states the EIS confirms that during 2000 to 2013 a range of desktop assessments and field surveys were undertaken to investigate the site's ecology.¹⁰⁹² It states information obtained during the stage 2 site surveys was used to inform studies that occurred from 2007 to 2013 to understand the ecological values and impacts related to the stage 3 Project.¹⁰⁹³

¹⁰⁸⁵ EIS evaluation report page 65.

¹⁰⁸⁶ EIS evaluation report page 65.

¹⁰⁸⁷ EIS evaluation report page 65.

¹⁰⁸⁸ EIS evaluation report page 66.

¹⁰⁸⁹ These are no longer classified under the *EPBC Act*.

¹⁰⁹⁰ Koalas were not listed by the Commonwealth until after the Project was deemed to be a controlled action in 2007. Koalas are considered in section 5.6 of the EIS evaluation report.

¹⁰⁹¹ These were not listed until 2011, which was after the Project's declaration as a controlled action in 2007.

¹⁰⁹² EIS evaluation report page 66.

¹⁰⁹³ EIS evaluation report page 66.

772. The EIS evaluation report states that a list of threatened species and suitable habitat that may be present on site was compiled using sources such as:¹⁰⁹⁴
- (a) the *EPBC Act* Protected Matters Search Report;
 - (b) the *EPBC Act* Species Profile and Threats Database;
 - (c) Regional Ecosystem Mapping (Queensland Herbarium); and
 - (d) the Queensland State Government Wildlife Online database.
773. The EIS evaluation report states that survey efforts were scoped to target searches for threatened flora species listed under the *Nature Conservation Act 1992* (Qld) and the *EPBC Act*, threatened regional ecosystems listed under the State's *Vegetation Management Act 1994* (Qld) and threatened ecological communities listed under the *EPBC Act*.¹⁰⁹⁵
774. The EIS evaluation report states that the Project's survey methodologies were informed by advice including Cropper SC (1993) *Management of Endangered Plants* (CSIRO Publications, Melbourne, Australia) and vegetation survey methods published by the Department of Environment and Heritage Protection.¹⁰⁹⁶
775. The EIS evaluation report states that on-site searches for endangered, vulnerable and rare flora species were undertaken using a general traverse, '*random meander*' method.¹⁰⁹⁷
776. The EIS evaluation report states flora surveys that occurred in February to March 2007 concentrated primarily on the site's:¹⁰⁹⁸
- (a) remaining remnant treed areas;
 - (b) native grasslands; and
 - (c) road easements;

¹⁰⁹⁴ EIS evaluation report page 66.

¹⁰⁹⁵ EIS evaluation report page 67.

¹⁰⁹⁶ EIS evaluation report page 67.

¹⁰⁹⁷ EIS evaluation report page 67.

¹⁰⁹⁸ EIS evaluation report page 67.

with the purpose of understanding the species type, floristics, structure and condition of areas.

777. The EIS evaluation report states that the absence or presence of weeds and pests, and evidence of modification, was also investigated.¹⁰⁹⁹ It states plots and transect areas were delineated across patches of vegetation to map species diversity and structure, with site data recorded for each quadrant. It states that a global positioning system was used to record locations of threatened flora.¹¹⁰⁰
778. The EIS evaluation report states that condition surveys were undertaken over different periods both pre and post-drought during 2007, 2011 and 2013 to verify the state of threatened ecological communities.¹¹⁰¹ It states that these surveys informed the development of mitigation measures and, where the Proponent deemed impacts to be unavoidable, to calculate proposed offsets.¹¹⁰²
779. The EIS evaluation report condition surveys were informed by the following publications:¹¹⁰³
- (a) BioCondition: A Terrestrial Vegetation Condition Assessment Tool for Biodiversity in Queensland (Eyre et al) (2008) Environment Protection Agency Queensland;
 - (b) Method for the Establishment and Survey of Reference Sites for BioCondition (Eyre et al 2011) Department of Environment and Resource Management, Queensland; and
 - (c) Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Neldner, VJ et al) Queensland Herbarium (2012).
780. The EIS evaluation report states that survey efforts were also informed by threatened ecological community listing advices published by the Commonwealth.¹¹⁰⁴

¹⁰⁹⁹ EIS evaluation report page 67.

¹¹⁰⁰ EIS evaluation report page 67.

¹¹⁰¹ EIS evaluation report page 67.

¹¹⁰² EIS evaluation report page 67.

¹¹⁰³ EIS evaluation report page 67.

¹¹⁰⁴ EIS evaluation report page 67.

781. The EIS evaluation report states that on-site fauna surveys for stage 2 were undertaken in 1998, 1999 and 2007.¹¹⁰⁵ It states that fauna surveys occurred for the stage 3 Project from 26 February to 2 March 2007, 20 November 2008, and during October-November 2013.¹¹⁰⁶
782. The EIS evaluation report states that primary areas for fauna surveys were those that represented suitable habitat for threatened species, such as vegetated and riparian areas, farm dams and road sidings.¹¹⁰⁷
783. The EIS evaluation report states that survey techniques for reptiles included use of Elliott traps, pitfall traps, spotlighting, camera traps, searches for scats and tracks, and ground searches including in leaf litter, under and around stones and fallen timber.¹¹⁰⁸
784. The EIS evaluation report states that surveys for frogs and other amphibians included ground searches, spotlighting and dip netting.¹¹⁰⁹
785. The EIS evaluation report states that surveys for birds included morning and dusk counts and observations, call playback and spotlighting for nocturnal birds, camera traps, call identification, flushing and inspection of areas that included flowering nectar plants and searches for nests.¹¹¹⁰ It states that surveys targeted threatened species such as the Australian painted snipe, black-breasted button quail, red goshawk and the regent honeyeater.¹¹¹¹
786. The EIS evaluation report states that for bats Anabat II ultrasonic call recording was used.¹¹¹² It states active and passive detection was used, being that either an attendant recorded bat sounds in the field, or a detector was left in place continuously for a period of time.¹¹¹³ It states that where possible calls were identified to the genus or species level using frequency analysis software.¹¹¹⁴ It

¹¹⁰⁵ EIS evaluation report page 70.

¹¹⁰⁶ EIS evaluation report page 70.

¹¹⁰⁷ EIS evaluation report page 70.

¹¹⁰⁸ EIS evaluation report page 70.

¹¹⁰⁹ EIS evaluation report page 70.

¹¹¹⁰ EIS evaluation report page 70.

¹¹¹¹ EIS evaluation report page 70.

¹¹¹² EIS evaluation report page 70.

¹¹¹³ EIS evaluation report page 70.

¹¹¹⁴ EIS evaluation report page 70.

states spotlighting and harp traps were also used to understand the presence of bats.¹¹¹⁵

787. The EIS evaluation report states that searches for ground dwelling mammals included habitat searches, looking in tree hollows, logs, burrows (including with use of endoscope for inaccessible areas), abandoned buildings and in dense vegetation.¹¹¹⁶
788. The EIS evaluation report states methods such as Elliott and pitfall traps, spotlighting, camera traps, and searches for, and investigation of, scats and tracks were also used.¹¹¹⁷ It states that incidental sightings of both flora and fauna survey events were also recorded.¹¹¹⁸
789. The EIS evaluation report states that the Coordinator-General is satisfied with the survey effort that occurred over a number of years and seasons.¹¹¹⁹ It states that the survey effort was iteratively informed by advice provided by the Department of Environment and Heritage Protection and the Commonwealth Department of Environment on required approaches to verify ecological values at the site and suitable mitigation and offsets approaches, and was sufficient to understand the Project's likely effects on matters of national environmental significance flora, fauna and ecological communities.¹¹²⁰

Threatened ecological communities and threatened species

790. The EIS evaluation report states that four *EPBC Act* listed threatened ecological communities and 33 *EPBC Act* listed threatened species are potentially occurring in the action area based on the desktop assessment, which included the Commonwealth Department of Environment's protected matters search tool.¹¹²¹ It states that the following threatened ecological communities and threatened species were found to occur during flora and fauna surveys conducted on-site:¹¹²²

- (a) Threatened ecological communities:

¹¹¹⁵ EIS evaluation report page 70.

¹¹¹⁶ EIS evaluation report page 70.

¹¹¹⁷ EIS evaluation report page 70.

¹¹¹⁸ EIS evaluation report page 70.

¹¹¹⁹ EIS evaluation report page 72.

¹¹²⁰ EIS evaluation report page 72.

¹¹²¹ EIS evaluation report page 72.

¹¹²² EIS evaluation report page 72.

- (i) Bluegrass dominant grasslands of the Brigalow Belt Bioregions – endangered;
 - (ii) Brigalow – endangered;
 - (iii) semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions – endangered;
- (b) Species:
- (i) Belson’s panic – vulnerable;
 - (ii) Grey-headed Flying-fox – vulnerable.

791. The EIS evaluation report states that the following species were regarded as possibly occurring due to the presence of suitable habitat (although they were not located during field surveys):¹¹²³

- (a) king blue grass – endangered;
- (b) austral cornflower, native thistle;
- (c) hawkweed – vulnerable;
- (d) austral toadflax, toadflax – vulnerable.

792. The EIS evaluation report states that the following threatened ecological communities and species were not found on site and suitable habitat for them was not present:¹¹²⁴

- (a) Threatened ecological communities:
 - (i) White box-yellow box-Blakely’s red gum grassy woodland and derived native grassland - critically endangered;
- (b) Species:
 - (i) swift parrot – endangered;

¹¹²³ EIS evaluation report page 72.

¹¹²⁴ EIS evaluation report pages 72 to 73.

- (ii) star finch (eastern), star finch (southern) - endangered;
- (iii) black-throated finch (southern) – endangered;
- (iv) regent honeyeater – endangered;
- (v) red goshawk – vulnerable;
- (vi) squatter pigeon – vulnerable;
- (vii) Australian painted snipe/painted snipe – vulnerable;
- (viii) Murray cod – vulnerable;
- (ix) northern quoll – endangered;
- (x) large-eared pied bat, large pied bat – vulnerable;
- (xi) south-eastern long-eared bat – vulnerable;
- (xii) brush-tailed rock-wallaby – vulnerable;
- (xiii) long-nosed potoroo (SE mainland) – vulnerable;
- (xiv) grassland earless dragon – endangered;
- (xv) five-clawed worm-skink, long-legged wormskink – vulnerable;
- (xvi) collared delma – vulnerable;
- (xvii) yakka skink – vulnerable;
- (xviii) Dunmall's snake – vulnerable;
- (xix) Brigalow scaly-foot – vulnerable;
- (xx) wandering pepper-creep – endangered;
- (xxi) Siah's backbone, isaac wood – endangered;
- (xxii) ooline – vulnerable;
- (xxiii) stream clematis – vulnerable;

- (xxiv) tall velvet sea-berry – vulnerable;
- (xxv) hawkweed – vulnerable;
- (xxvi) blotched sarchochlius, weinthals sarcanth – vulnerable; and
- (xxvii) austral toadflax, toadflax – vulnerable.

Confirmed MNES threatened ecological community - Bluegrass dominant grasslands

793. The EIS evaluation report states that patches of Bluegrass dominant grasslands within the Project site were assessed in early 2007 in the New Acland Stage 3 – Baseline Environmental Study (SKM 2007).¹¹²⁵ It states they were reassessed on 9 and 10 February 2011 following above-average summer rains; and again in August 2013.¹¹²⁶ It states for the 2011 survey, Bluegrass dominant grasslands patches were investigated to understand floristics, density and condition.¹¹²⁷
794. The EIS evaluation report states that in August 2013 surveys confirmed the amount of Bluegrass dominant grasslands had decreased since 2007.¹¹²⁸ It states that some areas now feature woody vegetation regrowth occurring throughout the community.¹¹²⁹ It states that the regrowth is consistent in height (around two metres) and age, and is of a density that dominates the location, shading the understorey grasses.¹¹³⁰
795. The EIS evaluation report states that the grass that dominated was *Dichanthium sericeum*, while other grasses, herbs and forbs that may be found in Bluegrass dominant grasslands were not present.¹¹³¹ The EIS evaluation report found that this change is usual in an area that was obviously vegetated but has been cleared for pasture, following which grazing pressures have been removed, resulting in woody vegetation re-establishing.¹¹³² It states the reduction reflects the community

¹¹²⁵ EIS evaluation report page 78.

¹¹²⁶ EIS evaluation report page 78.

¹¹²⁷ EIS evaluation report page 78.

¹¹²⁸ EIS evaluation report page 78.

¹¹²⁹ EIS evaluation report page 78.

¹¹³⁰ EIS evaluation report page 78.

¹¹³¹ EIS evaluation report page 78.

¹¹³² EIS evaluation report page 79.

moving from grassland community to regenerating Brigalow and Poplar Box areas.¹¹³³

796. The EIS evaluation report states that no listed fauna and only one listed flora species that is usually associated with the community was located during surveys, being 12 patches of Belson's panic.¹¹³⁴
797. The EIS evaluation report states that the Bluegrass dominated grasslands community located within the Willaroo pit impact area was found to be of low quality, with low diversity of grassland species, dominance of *Dichanthium sericeum* and a moderate level of weed infestation.¹¹³⁵
798. The EIS evaluation report states that the quality of the community in the Mnnaing Vale West pit impact area was found to be of higher quality, with a greater diversity of grassland species.¹¹³⁶
799. The EIS evaluation report states that five separate patches of Bluegrass dominant grasslands were confirmed on site, with an additional one occurring in the now abandoned section of MLA50232.¹¹³⁷ It states that no mining will occur in this latter area.¹¹³⁸ It states that two patches are located in proximity on opposite sides of Acland Sabine Road.¹¹³⁹
800. The EIS evaluation report states that impacts associated with the proposed Project activities include loss of patches of the threatened ecological community due to land clearance associated with construction and operation activities over a 13 year period.¹¹⁴⁰ It states possible impacts include:¹¹⁴¹
- (a) over-grazing, trampling from Acland Pastoral Company activities; and
 - (b) indirect effects including pest and weed invasion, bushfire management, altered hydrogeological conditions, dust, noise, edge effects, artificial

¹¹³³ EIS evaluation report page 79.

¹¹³⁴ EIS evaluation report page 79.

¹¹³⁵ EIS evaluation report page 79.

¹¹³⁶ EIS evaluation report page 79.

¹¹³⁷ EIS evaluation report page 79.

¹¹³⁸ EIS evaluation report page 79.

¹¹³⁹ EIS evaluation report page 79.

¹¹⁴⁰ EIS evaluation report page 79.

¹¹⁴¹ EIS evaluation report page 79.

lighting, altered final landform, water quality and availability, waste and contamination.

801. The EIS evaluation report states that a residual impact on 40.1 hectares of Bluegrass dominant grasslands is estimated.¹¹⁴² It states three Bluegrass dominant grasslands locations will be impacted.¹¹⁴³
802. The EIS evaluation report references Draft Recovery plan for the ‘*Bluegrass (Dichanthium spp.) dominant grasslands of the Brigalow Belt Bioregions (north and south)*’.¹¹⁴⁴ It states that the draft recovery plan identified the following key threats to the threatened ecological community:¹¹⁴⁵
- (a) expansion of exotic pastures and tree crops;
 - (b) expansion of mining activities;
 - (c) expansion of cropping cultivation;
 - (d) persistent heavy grazing;
 - (e) invasive species;
 - (f) construction of roads and other infrastructure; and
 - (g) knowledge gaps.
803. The EIS evaluation report states that the draft recovery plan recommended the following actions:¹¹⁴⁶
- (a) promote landholder awareness of sustainable management of bluegrass;
 - (b) encouraging landholders to enter into conservation agreements over bluegrass areas;
 - (c) conduct research into use of bluegrass grassland species in pasture renovation and land rehabilitation activities;

¹¹⁴² EIS evaluation report page 79.

¹¹⁴³ EIS evaluation report page 79.

¹¹⁴⁴ EIS evaluation report page 80.

¹¹⁴⁵ EIS evaluation report page 80.

¹¹⁴⁶ EIS evaluation report page 80.

- (d) assist graziers to fence bluegrass grasslands out from other land types and to subdivide bluegrass grasslands to facilitate sound grazing management, including rest from grazing during critical periods in the summer growing season;
- (e) increase the area of bluegrass grassland in the conservation estate; and
- (f) conduct research into the basic ecology.

804. The EIS evaluation report states that the Proponent committed to the following mitigation measures:¹¹⁴⁷

- (a) all remnant vegetation that does not require clearing will be protected from further clearing (commitment 198);
- (b) all vegetation clearance will be restricted to that necessary for the safe operation of mining activities (commitment 497);
- (c) Lagoon Creek will not be diverted, minimising hydrogeological changes on site;
- (d) a nature conservation zone of 50 metres either side of Lagoon Creek will be implemented, with mining excluded within 150 metres and riparian values in the conservation zone enhanced (commitments 118, 120, 185, 190, 209) - this has been conditioned as a requirement;
- (e) areas to be cleared will have boundaries clearly marked that conform within the limits of design drawings and will comply with the mine's existing clearance procedures: particular attention will be paid to defining the boundaries of clearing where matters of national environmental significance, endangered ecological communities or listed species are present (commitment 496);
- (f) implementing the Pest and Weed Management Plan and the Pest and Domestic Animal Management Plan (commitment 212);

¹¹⁴⁷ EIS evaluation report pages 80 to 82.

- (g) final landforms, including voids, to be located outside of the probable maximum flood area;
- (h) surface water management measures including flood levees, diversion drains, sediment control structures, storage dams have been conditioned to avoid and minimise environmental harm;
- (i) contour banks will be constructed after profiling of the final landform to control run off, minimising hydrological disturbance;
- (j) extensive dust control measures;
- (k) bushfire prevention and management measures;
- (l) machinery brought on to site will be required to be weed-free, with advice to be sought on local weeds from the Department of Agriculture, Fisheries and Forestry (commitment 565) and Toowoomba Regional Council;
- (m) delivery of an Erosion and Sediment Management Plan (commitment 232);
- (n) the Environmental Management Plan (AEIS) states light sources will be fitted with shield devices to reduce and remove light pollution: where possible lighting required for the Project will be oriented inwards, focusing on areas requiring illumination and screened from outside;
- (o) extensive dust management strategies as conditioned by the Coordinator-General;
- (p) continued use of existing mine structures to avoid new land disturbance;
- (q) in-pit tailings disposal and management to avoid new structures and additional land disturbance;
- (r) conditioned requirement to not pollute ground and surface water resources;
- (s) waste management plan to avoid combination and ineffective disposal and handling of toxicants;
- (t) hazard and risk management plan;

- (u) recommended condition requiring pre-clearing surveys for listed species; and
- (v) vegetation clearing to be during the day and one-directional, to allow fauna to escape.

805. The EIS evaluation report states that, to the extent that impacts can be mitigated, the Coordinator-General considers the measures proposed along with the Coordinator-General's conditions will be sufficient.¹¹⁴⁸ It states, however, that as mitigation alone is not sufficient to reduce the likely residual impact to Bluegrass dominant grasslands, an offset is required.¹¹⁴⁹
806. The EIS evaluation report states that the 40.1 hectares of Bluegrass dominant grasslands to be cleared will constitute a significant residual impact that will require offsetting.¹¹⁵⁰ It states the Proponent has calculated the offsets requirement in consideration of the *EPBC Act* Environmental Offsets Policy (2012) and supporting documents.¹¹⁵¹ It states historical condition thresholds have informed the amount of offsets required.¹¹⁵²
807. The EIS evaluation report states that the Proponent has assessed the quality of impacted areas to average five out of a possible score of ten.¹¹⁵³ It states that three *Dichanthium sericeum*-dominated grassland offsets areas are proposed on land owned by the Proponent's associated Acland Pastoral Company south of the mine, with surveys confirming an area of 247 hectares is suitable for this use.¹¹⁵⁴ It states that, of this area, 90 hectares will constitute Bluegrass dominant grasslands communities as a direct, land-based offset.¹¹⁵⁵ It states that the offset sites will be protected and secured using a legally binding mechanism on land title, such as a covenant under the *Land Title Act 1994* (Qld) or *Land Act 1994* (Qld) or gazettal as a protected area under the *Nature Conservation Act 1992* (Qld).¹¹⁵⁶

¹¹⁴⁸ EIS evaluation report page 82.

¹¹⁴⁹ EIS evaluation report page 82.

¹¹⁵⁰ EIS evaluation report page 82.

¹¹⁵¹ EIS evaluation report page 82.

¹¹⁵² EIS evaluation report page 82.

¹¹⁵³ EIS evaluation report page 82.

¹¹⁵⁴ EIS evaluation report page 82.

¹¹⁵⁵ EIS evaluation report page 82.

¹¹⁵⁶ EIS evaluation report page 82.

808. The EIS evaluation report states that a Bluegrass Offset Management Plan has been developed by the Proponent.¹¹⁵⁷ It states the Bluegrass Offset Management Plan confirms the offset commitment and describes how *Dichanthium sericeum* dominated grassland communities are proposed to be managed, monitored and maintained.¹¹⁵⁸
809. The EIS evaluation report states that the Bluegrass Offset Management Plan states surveys have found that the three offset sites have existing bluegrass ecological communities and *Dichanthium sericeum* regeneration potential.¹¹⁵⁹ It states the sites are located adjacent to a State significant biodiversity area as mapped by the State Government's Biodiversity Planning Assessment.¹¹⁶⁰ It states the sites were surveyed to determine their condition as compared to historical condition thresholds for the listing advice for the Bluegrass dominant grasslands.¹¹⁶¹ It states the surveys also included considerations such as if the sites featured specified regional ecosystems.¹¹⁶²
810. The EIS evaluation report states the results of the surveys were used to categorise zones within the sites into three key management zones:¹¹⁶³
- (a) translocation areas;
 - (b) assisted natural regeneration areas; and
 - (c) bluegrass rehabilitation areas.
811. The EIS evaluation report states that a specialised management plan will be developed for each type of site, with the overall objective for each being to improve the site's condition to the values of a bluegrass ecological community.¹¹⁶⁴
812. The EIS evaluation report states that for translocation sites, while focussing on translocation of lobed blue-grass, Belson's panic and finger panic grass,

¹¹⁵⁷ EIS evaluation report page 82.

¹¹⁵⁸ EIS evaluation report page 82.

¹¹⁵⁹ EIS evaluation report page 82.

¹¹⁶⁰ EIS evaluation report page 83.

¹¹⁶¹ EIS evaluation report page 83.

¹¹⁶² EIS evaluation report page 83.

¹¹⁶³ EIS evaluation report page 83.

¹¹⁶⁴ EIS evaluation report page 83.

translocation of herb and forb species associated with the bluegrass threatened ecological community will also be undertaken.¹¹⁶⁵

813. The EIS evaluation report states that weed management will be a particular focus of assisted natural regeneration areas given such areas are those found to have significant areas of bare earth and which have been subject to continuous grazing or have been historically cropped.¹¹⁶⁶
814. The EIS evaluation report states that bluegrass rehabilitation areas contain non-native species, which species will be reduced through heavy cattle grazing, ploughing and, if necessary, herbicide.¹¹⁶⁷
815. The EIS evaluation report states that planting in the offset areas will prioritise use of seeds harvested from Bluegrass dominant grasslands communities, with a preference for local seeds.¹¹⁶⁸ It states that each sites action plan will address and document requirements for weed control, spelling, site preparation for planting, monitoring and ongoing management.¹¹⁶⁹ It states that monitoring and condition evaluation will be included in the plans.¹¹⁷⁰
816. The EIS evaluation report states that the Acland Pastoral Company will be responsible for management of the offset areas.¹¹⁷¹ It states that the Bluegrass Offset Management Plan includes possible management actions developed in line with the Bluegrass dominant grasslands' draft recovery plan that may be undertaken.¹¹⁷²

The Coordinator- General's conclusion regarding bluegrass

817. The EIS evaluation report states the Coordinator-General is satisfied that the proposed offsets, should it be found the offset areas can be improved and are self-sustaining, sufficiently addresses the Project's impact on this threatened ecological community.¹¹⁷³ It states that the rehabilitation and ongoing maintenance of land

¹¹⁶⁵ EIS evaluation report page 83.

¹¹⁶⁶ EIS evaluation report page 83.

¹¹⁶⁷ EIS evaluation report page 83.

¹¹⁶⁸ EIS evaluation report page 83.

¹¹⁶⁹ EIS evaluation report page 83.

¹¹⁷⁰ EIS evaluation report page 83.

¹¹⁷¹ EIS evaluation report page 83.

¹¹⁷² EIS evaluation report page 83.

¹¹⁷³ EIS evaluation report page 84.

described in the Bluegrass Offset Management Plan supports the target of no net loss of a threatened grassland ecological community.¹¹⁷⁴ It states that the Coordinator-General has recommended conditions of approval to the Commonwealth Environment Minister including:¹¹⁷⁵

- (a) maximum disturbance limit of 40.1 hectares;
- (b) the Bluegrass dominant grasslands threatened ecological community is to be included in the MNES Management Plan which should:
 - (i) consider how Bluegrass dominant grasslands present on Project areas outside of the Project footprint will be protected and enhanced; and
 - (ii) include strategies considering the relevant threat abatement plans and advice from the draft recovery plan;
- (c) the MNES Management Plan is to cite various mechanisms, such as the Bluegrass Offset Management Plan, that will account for management of Bluegrass dominant grasslands; and
- (d) the Proponent provide offsets for authorised unavoidable impacts to 40.1 hectares of Bluegrass dominant grasslands in accordance with the *EPBC Act* Environmental Offsets policy (October 2012).

818. The EIS evaluation report states that the Coordinator-General has recommended a further condition requiring the Proponent to include offsets provision and management strategies for the Bluegrass dominant grasslands threatened ecological community in the Project's Offset Areas Management Plan.¹¹⁷⁶

819. The EIS evaluation report states that the Coordinator-General is satisfied the proposed action will not have will not have an unacceptable impact on Bluegrass dominant grasslands threatened ecological community should the relevant mitigation measures, offsets requirements and environmental conditions be met.¹¹⁷⁷

¹¹⁷⁴ EIS evaluation report page 84.

¹¹⁷⁵ EIS evaluation report page 84.

¹¹⁷⁶ EIS evaluation report page 84.

¹¹⁷⁷ EIS evaluation report page 84.

Confirmed MNES threatened ecological community - Brigalow

820. The EIS evaluation report states that surveys found brigalow threatened ecological community areas impacted by clearing, weed invasion and grazing.¹¹⁷⁸ It states community patches were scattered and fragmented, with very limited connectivity to vegetation.¹¹⁷⁹ It states no fauna usually associated with the community were located during surveys.¹¹⁸⁰ One listed flora species, Belson's panic, was confirmed.¹¹⁸¹
821. The EIS evaluation report states that there are small isolated patches of the threatened ecological community across the southern part of the Project site outside of mine footprint.¹¹⁸² It states that seven small isolated patches occur at the site, totalling 40 hectares, of which 24.6 hectares occur in the Project footprint.¹¹⁸³
822. The EIS evaluation identifies the following possible impacts on the threatened ecological community:¹¹⁸⁴
- (a) over-grazing and trampling from Acland Pastoral Company activities; and
 - (b) indirect effects including pest and weed invasion, bushfire management, altered hydrogeological conditions, edge effects, dust, noise, artificial lighting, altered final landform, water quality and availability, waste and contamination.
823. The EIS evaluation report states that surveys estimate residual impact will total 24.6 hectares.¹¹⁸⁵ It states the Brigalow threatened ecological community that will be impacted by the Project is within the Project footprint of the three mine pits.¹¹⁸⁶ It states construction of mine infrastructure, including the rail spur, will not result in clearing of the threatened ecological community.¹¹⁸⁷

¹¹⁷⁸ EIS evaluation report page 86.

¹¹⁷⁹ EIS evaluation report page 86.

¹¹⁸⁰ EIS evaluation report page 86.

¹¹⁸¹ EIS evaluation report page 86.

¹¹⁸² EIS evaluation report page 86.

¹¹⁸³ EIS evaluation report page 86.

¹¹⁸⁴ EIS evaluation report page 86.

¹¹⁸⁵ EIS evaluation report page 86.

¹¹⁸⁶ EIS evaluation report page 86.

¹¹⁸⁷ EIS evaluation report page 86.

824. The EIS evaluation report states that the estimated total residual impact equates to a significant impact as per the *Commonwealth Significant Impact Guidelines 1.1* (2013) due to considerations including the possibility of the action interfering with the recovery of the species, and reducing the area of the population.¹¹⁸⁸
825. The EIS evaluation report states that the primary threat for the threatened ecological community is continued clearing for agriculture and other purposes including mining.¹¹⁸⁹ It states that the approved conservation advice for the threatened ecological community confirms other threats include inappropriate grazing and fire regimes, competition with weeds, and use of habitat by pest animals, particularly pigs.¹¹⁹⁰ It states that other pests such as goats, cane toads, cats, foxes, and noisy miner birds can significantly degrade the threatened ecological community's environmental values and diminish associated fauna species.¹¹⁹¹
826. The EIS evaluation report states that threat reduction and control measures identified in the Commonwealth conservation advice for the threatened ecological community include:¹¹⁹²
- (a) rehabilitating remaining remnant areas;
 - (b) progressing research priorities, including how to assist regrowth to attain remnant brigalow characteristics;
 - (c) developing fire management strategies for the threatened ecological community; and
 - (d) developing targeted pest and weed management plans, with a focus on pigs and high biomass exotic grasses.
827. The EIS evaluation report states that the clearing of the affected brigalow threatened ecological community is unavoidable due to the location of the coal resource.¹¹⁹³ It states that the rail spur has been positioned to avoid impacting 4.33

¹¹⁸⁸ EIS evaluation report page 86.

¹¹⁸⁹ EIS evaluation report page 87.

¹¹⁹⁰ EIS evaluation report page 87.

¹¹⁹¹ EIS evaluation report page 87.

¹¹⁹² EIS evaluation report page 87.

¹¹⁹³ EIS evaluation report page 87.

hectares of Brigalow threatened ecological community.¹¹⁹⁴ It states a total of 2.71 hectares of scattered patches is located along Lagoon Creek, which will benefit from the proponent's commitment to preserve and enhance habitat in the creek conservation areas and exclude mining areas 150 metres each side of the riparian area.¹¹⁹⁵ It states that the Proponent has committed to the following mitigation measures:¹¹⁹⁶

- (a) all remnant vegetation that does not require clearing will be protected from further disturbance (commitment 198);
- (b) all vegetation clearance will be restricted to that necessary for the safe operation of mining activities (commitment 497);
- (c) Lagoon Creek will not be diverted, minimising hydrogeological changes on site;
- (d) a nature conservation zone of 50 metres either side of Lagoon Creek will be implemented, with mining excluded within 150 metres and riparian values in the conservation zone enhanced (commitments 118, 120, 185, 190, 209) - this has been conditioned as a requirement;
- (e) areas to be cleared will have boundaries clearly marked that conform within the limits of design drawings and will comply with the mine's existing clearance procedures; particular attention will be paid to defining the boundaries of clearing where matters of national environmental significance, endangered ecological communities or listed species are present (commitment 496);
- (f) implementing the Pest and Weed Management Plan and the Pest and Domestic Animal Management Plan (commitment 212);
- (g) final landforms, including voids, to be located outside of the probable maximum flood area;

¹¹⁹⁴ EIS evaluation report page 87.

¹¹⁹⁵ EIS evaluation report page 87.

¹¹⁹⁶ EIS evaluation report pages 87 to 88.

- (h) contour banks will be constructed after profiling of the final landform to control run off, minimising hydrological disturbance;
- (i) continuous, staged, rehabilitation behind mining operations to minimise disturbance;
- (j) continued use of existing mine structures to avoid new land disturbance;
- (k) in-pit tailings disposal and management to avoid new structures and additional land disturbance;
- (l) conditioned requirement to not pollute ground and surface water resources;
- (m) waste management plan to avoid combination and ineffective disposal and handling of toxicants;
- (n) hazard and risk management plan;
- (o) recommended condition requiring pre-clearing surveys for listed species;
- (p) vegetation clearing to be during the day and one-directional, to allow faunas to escape;
- (q) surface water management measures including clean water diversion, flood levees, diversion drains, sediment control structures, storage dams have been committed to and conditioned to avoid and minimise environmental harm;
- (r) extensive dust control measures conditioned;
- (s) bushfire prevention and management measures; fire management plan;
- (t) machinery brought on site will be required to be weed-free, with advice to be sought on local weeds from the Department of Agriculture, Fisheries and Forestry (commitment 565) and Toowoomba Regional Council;
- (u) delivery of an Erosion and Sediment Management Plan; and
- (v) the Environmental Management Plan states light sources will be fitted with shield devices to reduce and remove light pollution; where possible lighting

required for the Project will be oriented inwards, focusing on areas requiring illumination and screened from outside.

828. The EIS evaluation report states that the proposed measures, along with the Coordinator-General's conditions, will be sufficient.¹¹⁹⁷ It states, however, as mitigation alone is not sufficient to reduce the likely residual impact on the Brigalow threatened ecological community, an offset is required.
829. The EIS evaluation report states that the Proponent has proposed an offset area of 60 hectares.¹¹⁹⁸ It states that the offset is to be secured in perpetuity to protect the area.¹¹⁹⁹ It states that negotiations between the Proponent and a third party landholder to seek agreement for brigalow threatened ecological community to be established on their property.¹²⁰⁰ It states that as these negotiations are not yet complete, the offset has not been considered in detail.¹²⁰¹ It states that other options are also being considered in order to secure a suitable offset within the bioregion.¹²⁰²

The Coordinator- General's conclusion regarding bluegrass

830. The EIS evaluation report concludes:¹²⁰³
- (a) the Proponent has committed to a range of mitigation and management measures which will work to reduce the impact on remaining brigalow threatened ecological communities at site;
 - (b) the Coordinator-General supports the Proponent's commitment to secure 60 hectares of offset area to address the residual impact by the Project on 24.6 hectares of brigalow threatened ecological community;

¹¹⁹⁷ EIS evaluation report page 88.

¹¹⁹⁸ EIS evaluation report page 89.

¹¹⁹⁹ EIS evaluation report page 89.

¹²⁰⁰ EIS evaluation report page 89.

¹²⁰¹ EIS evaluation report page 89.

¹²⁰² EIS evaluation report page 89.

¹²⁰³ EIS evaluation report page 89.

- (c) the Coordinator-General recommends the following conditions of the approval of the Commonwealth Environment Minister:
- (i) the Proponent is conditioned to a maximum disturbance limit of 24.6 hectares to limit impacts on brigalow threatened ecological community;
 - (ii) the MNES Management Plan is to include appropriate avoidance and management measures to protect and enhance the remaining brigalow threatened ecological community at the Project site;
 - (iii) the MNES Management Plan is to consider strategies and advice provided in the threatened ecological communities conservation advice;
 - (iv) the Proponent provide offsets for authorised unavoidable impacts to 24.6 hectares of brigalow in accordance with the *EPBC Act* Environmental Offsets policy (October 2012);
 - (v) the Proponent is to address offsets provision and management strategies for the brigalow threatened ecological community in the Project's Offset Area Management Plan; and
- (d) the Coordinator-General is of the view that, given the above measures and controls, the proposed action will not have an unacceptable impact on the brigalow threatened ecological community.

Confirmed MNES threatened ecological community - Semi-evergreen vine thickets

831. The EIS evaluation report states that there are no specific survey guidelines for semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions.¹²⁰⁴ It states the survey effort was informed by the *Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland* (Neldner et al 2012), as well as the threatened ecological community listing advice.¹²⁰⁵

¹²⁰⁴ EIS evaluation report page 90.

¹²⁰⁵ EIS evaluation report page 90.

832. The EIS evaluation report states that two separate areas of semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions were confirmed in the Project area.¹²⁰⁶ It states that one is located outside the mining lease application to the south-east of Acland, on land owned by the Proponent.¹²⁰⁷ It states the other, a single small patch of less than two hectares in size, was located on the Project site in the north-western section of the mining lease application.¹²⁰⁸ It states that this second area is a thick patch located on a hilltop and is estimated to be less than 250 metres wide.
833. The EIS evaluation report states that a 2013 survey confirmed the on-site community is located outside the disturbance footprint of the Project, at around 100 metres west of the Manning Vale mine pit.¹²⁰⁹ It states surveys confirmed that the canopy is generally 10-12 metres high with 5-10 per cent cover.¹²¹⁰ The report states that the dominant species is *belah*.¹²¹¹ It states other softwood scrub species are evident, including scrub cherry, *Flindersia sp.*, and *Capparis sp.*¹²¹²
834. The EIS evaluation report states that the fragment of semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions threatened ecological community constitutes less than 0.1 per cent of the vegetation of the study area, with its condition indicated as poor.¹²¹³ It states the 2013 survey results indicated the shrub layer is heavily modified and often includes the noxious weed, african boxhorn, as a dominant species and currant bush, with both species both found in sporadic, dense clumps.¹²¹⁴ It states that the ground layer is bare, with some areas of sparsely grassed cover.¹²¹⁵
835. The EIS evaluation report states that the community has been affected by grazing, selective logging, moderate weed infestation and pests, such as foxes and pigs.¹²¹⁶

¹²⁰⁶ EIS evaluation report page 90.

¹²⁰⁷ EIS evaluation report page 90.

¹²⁰⁸ EIS evaluation report page 90.

¹²⁰⁹ EIS evaluation report page 90.

¹²¹⁰ EIS evaluation report page 90.

¹²¹¹ EIS evaluation report page 90.

¹²¹² EIS evaluation report page 90.

¹²¹³ EIS evaluation report page 90.

¹²¹⁴ EIS evaluation report page 90.

¹²¹⁵ EIS evaluation report page 90.

¹²¹⁶ EIS evaluation report page 91.

It states that no listed fauna species were recorded in the threatened ecological community patch.¹²¹⁷

836. The EIS evaluation report states that there will be no direct Project impacts on the semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions threatened ecological community.¹²¹⁸ It states, however, that over-grazing and trampling from Acland Pastoral Company activities could occur.¹²¹⁹
837. The EIS evaluation report states that indirect effects may arise due to pest and weed invasion, bushfire management, altered hydrogeological conditions, edge effects, dust, noise, artificial lighting, water quality and availability, waste and contamination.¹²²⁰
838. The EIS evaluation report states that modelling indicates groundwater drawdown in the vicinity of the threatened ecological community will occur during and post-mining.¹²²¹
839. The EIS evaluation report states that there is no approved conservation advice or threat abatement plan for the semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions threatened ecological community.¹²²² It references *National recovery plan for the Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions ecological community* (McDonald, WJF 2010).¹²²³
840. The EIS evaluation report states that the recovery advice confirms that key threats to the threatened ecological community include clearing, fire, weeds, grazing and vertebrate pests.¹²²⁴ It states that the overall recovery objective is to conserve and maintain the semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions' environmental values by minimising further loss and

¹²¹⁷ EIS evaluation report page 91.

¹²¹⁸ EIS evaluation report page 91.

¹²¹⁹ EIS evaluation report page 91.

¹²²⁰ EIS evaluation report page 91.

¹²²¹ EIS evaluation report page 91.

¹²²² EIS evaluation report page 91.

¹²²³ EIS evaluation report page 91.

¹²²⁴ EIS evaluation report page 91.

improving the condition and management of remaining communities.¹²²⁵ It states recovery actions include:¹²²⁶

- (a) research and develop use of semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions species for rehabilitation;
- (b) develop and implement a pest and weed management program;
- (c) grazing management and control; and
- (d) minimise fire damage.

841. The EIS evaluation report states that the Proponent committed to the following mitigation measures:¹²²⁷

- (a) all remnant vegetation that does not require clearing will be protected from further clearing (commitment 198);
- (b) all vegetation clearance will be restricted to that necessary for the safe operation of mining activities (commitment 497);
- (c) the Proponent has confirmed pit boundaries are designed with buffer zones to ensure sensitive areas, including threatened vegetation to be retained, are not impacted;
- (d) pit boundaries are surveyed and pegged and boundaries regularly checked against disturbance coordinates;
- (e) mine machinery has global positioning system equipment which sounds a warning if the equipment approaches a 'no go zone';
- (f) the semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions threatened ecological community area would be defined as a 'no go zone', including within site management plans and the plan of operations;

¹²²⁵ EIS evaluation report page 91.

¹²²⁶ EIS evaluation report page 91.

¹²²⁷ EIS evaluation report pages 91 to 93.

- (g) Lagoon Creek will not be diverted, minimising hydrogeological changes on site;
- (h) a nature conservation zone of 50 metres either side of Lagoon Creek will be implemented, with mining excluded within 150 metres and riparian values in the conservation zone enhanced (commitments 118, 120, 185, 190, 209) - this has been conditioned as a requirement;
- (i) areas to be cleared will have boundaries clearly marked that conform within the limits of design drawings and will comply with the mine's existing clearance procedures; particular attention will be paid to defining the boundaries of clearing where matters of national environmental significance, endangered ecological communities or listed species are present (commitment 496);
- (j) implementing the Pest and Weed Management Plan and the Pest and Domestic Animal Management Plan (commitment 212);
- (k) final landforms, including voids, to be located outside of the probable maximum flood area;
- (l) surface water management measures including flood levees, diversion drains, sediment control structures, storage dams have been conditioned to avoid and minimise environmental harm;
- (m) contour banks will be constructed after profiling of the final landform to control run off, minimising hydrological disturbance;
- (n) continued use of existing mine structures to avoid new land disturbance;
- (o) in-pit tailings disposal and management to avoid new structures and additional land disturbance;
- (p) conditioned requirement to not pollute ground and surface water resources;
- (q) waste management plan to avoid combination and ineffective disposal and handling of toxicants;
- (r) hazard and risk management plan;

- (s) recommended condition requiring pre-clearing surveys for listed species;
- (t) vegetation clearing to be during the day and one-directional, to allow faunas to escape;
- (u) the main post-mine land use at the Project will be grazing based on a self-sustaining vegetation community using appropriate pasture grasses and scattered plantings of native tree and shrub species;
- (v) extensive dust control measures;
- (w) bushfire prevention and management measures;
- (x) continuous, staged rehabilitation behind mining operations to minimise disturbance;
- (y) machinery brought on to site will be required to be weed-free, with advice to be sought on local weeds from the State Department of Agriculture, Fisheries and Forestry (commitment 565) and Toowoomba Regional Council;
- (z) delivery of an Erosion and Sediment Management Plan (commitment 232);
- (aa) the Environmental Management Plan states light sources will be fitted with shield devices to reduce and remove light pollution; where possible lighting required for the Project will be oriented inwards, focusing on areas requiring illumination and screened from outside; and
- (bb) extensive dust management strategies as conditioned by the Coordinator-General.

842. The EIS evaluation report states that no offsets are required for semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions threatened ecological community.¹²²⁸

¹²²⁸ EIS evaluation report page 93.

The Coordinator- General's conclusion regarding semi-evergreen vine thickets

843. The EIS evaluation report concludes, in respect of semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions threatened ecological community, that:¹²²⁹
- (a) the Coordinator-General notes that the area of semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions on the Project site is a small and isolated fragment of the threatened ecological community with poor environmental values;
 - (b) the Coordinator-General acknowledges that the area will not be directly disturbed by the Project activities;
 - (c) in line with the recovery plan for semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions threatened ecological community, the Coordinator-General concurs that all remaining semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions threatened ecological communities should be retained and protected where possible;
 - (d) the Coordinator-General recommends a condition of approval of the Commonwealth Minister for the Environment that the Proponent develop, as a component of its MNES Management Plan, a Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions Action Plan to ensure that no net loss to this community on the Project site;
 - (e) the Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions Action Plan is to:
 - (i) address how the area will be enhance and protected from mine activities;
 - (ii) address the potential for impact, including for clearing and extraction works occurring in the vicinity of the site; and

¹²²⁹ EIS evaluation report pages 93 to 94.

- (iii) propose management strategies in accordance with the Commonwealth's approved recovery plan for the community;
- (f) given the proximity of the community to a mine pit and that it will often be downstream of prevailing winds, the Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions Action Plan is to consider dust controls;
- (g) the Proponent should also consider ensuring grazing activities of the Acland Pastoral Company are excluded from the vicinity of the semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions threatened ecological community;
- (h) in light of the threatened ecological community being in the groundwater drawdown impact area, the MNES Management Plan is to detail the process for verifying if the semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions is groundwater dependent and, should this be confirmed, the Proponent is required to develop a long-term monitoring program to ascertain if groundwater impacts will affect the semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions stand;¹²³⁰ and
- (i) the Coordinator-General is of the view that the proposed action will not have an unacceptable impact on semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nadewar Bioregions threatened ecological community provided the mitigation measures are carried out and the recommended conditions are satisfied.

Confirmed MNES species - Belson's panic (Homopholis Belsonii)

844. The EIS evaluation report states that there are no specific guidelines for Belson's panic survey requirements.¹²³¹ It states that surveys were informed by the Commonwealth listing advice for the species.¹²³²

¹²³⁰ It states reporting on findings to the Commonwealth Minister is required and will inform a future decision on whether any offset is required.

¹²³¹ EIS evaluation report page 94.

¹²³² EIS evaluation report page 94.

845. The EIS evaluation report states that Belson's panic was recorded in remnant and non-remnant habitats associated with *Eucalyptus orgadophilia*, *E populnea* and *Acacia harpophylla* dominated forest and woodlands with a mid-tree stratum dominated by wilga on basalt hills and alluvium.¹²³³
846. The EIS evaluation report states that where Belson's panic was confirmed, it was growing in shaded areas under trees and fallen logs.¹²³⁴ It states that the species was also found in the Bluegrass dominant grasslands community in the Manning Vale West and Willaroo pits,¹²³⁵ and in the shelter of trees in brigalow and poplar box communities.¹²³⁶
847. The EIS evaluation report states that surveys of the impacted species determined the quality of the vegetation (as defined by instruments supporting the Commonwealth Offsets Policy (2012)) equated to five out of ten.¹²³⁷ It states that this assessment is supported by the view that sites were found to be impacted by clearing, weeds, and grazing.¹²³⁸ It states that patches of the species are scattered, with limited connectivity to other vegetation.¹²³⁹ It states that the species prevalence at sites was average.¹²⁴⁰
848. The EIS evaluation report states that Belson's panic was found at numerous locations throughout the Project area.¹²⁴¹ It states that no occurrences were recorded along the rail spur.¹²⁴²
849. The EIS evaluation report states that impacts associated with the proposed Project activities include species loss due to land clearance associated with construction and operation activities over a 13-year period.¹²⁴³ It lists possible impacts as:¹²⁴⁴
- (a) over-grazing, trampling from Acland Pastoral Company activities; and

¹²³³ EIS evaluation report page 94.

¹²³⁴ EIS evaluation report page 94.

¹²³⁵ EIS evaluation report page 94.

¹²³⁶ EIS evaluation report page 94.

¹²³⁷ EIS evaluation report page 95.

¹²³⁸ EIS evaluation report page 95.

¹²³⁹ EIS evaluation report page 95.

¹²⁴⁰ EIS evaluation report page 95.

¹²⁴¹ EIS evaluation report page 95.

¹²⁴² EIS evaluation report page 95.

¹²⁴³ EIS evaluation report page 95.

¹²⁴⁴ EIS evaluation report page 95.

- (b) indirect effects including pest and weed invasion, bushfire management, altered hydrogeological conditions, dust, edge effects, noise, artificial lighting, water quality and availability, waste and contamination.

850. As to residual impacts, the EIS evaluation report states:¹²⁴⁵

- (a) twelve patches of Belson's panic will be cleared due to the Project works for the Manning Vale West and the Willaroo pits;
- (b) these patches are associated with the bluegrass grassland community, and equate to an estimated residual impact of 70.8 hectares;
- (c) this equates to a significant impact as per the *Commonwealth Significant Guidelines 1.1 (2013)* due to considerations including the possibility of the action interfering substantially with the recovery of the species and reducing the area of an important population.

851. The EIS evaluation report references the Commonwealth Approved Conservation Advice for Belson's panic (Threatened Species Scientific Committee (2008)).¹²⁴⁶ It states that the Commonwealth has decided a Recovery Plan for the species is not required. It states there is no threat abatement plan in place for the species.¹²⁴⁷

852. The EIS evaluation report states that the approved conservation advice for Belson's panic confirms that key threats to the species include clearing for habitat for agriculture and mining, overgrazing, and competition with weeds.¹²⁴⁸

853. The EIS evaluation report notes the following mitigation measures advised by the Commonwealth conservation advice:¹²⁴⁹

- (a) control public access to sites where the species is confirmed;
- (b) minimise adverse impacts from land use at known sites;
- (c) develop and implement appropriate grazing regimes for grazing areas;

¹²⁴⁵ EIS evaluation report page 95.

¹²⁴⁶ EIS evaluation report page 95.

¹²⁴⁷ EIS evaluation report page 95.

¹²⁴⁸ EIS evaluation report page 95.

¹²⁴⁹ EIS evaluation report page 95.

- (d) develop fire management strategies for the threatened ecological community;
- (e) develop targeted weed management plans, with a focus on weeds that could become a threat to the species, and preventing the introduction of invasive weeds.

854. The EIS evaluation report states that the Proponent committed to the following mitigation measures:¹²⁵⁰

- (a) all remnant vegetation that does not require clearing will be protected from further clearing (commitment 198);
- (b) all vegetation clearance will be restricted to that necessary for the safe operation of mining activities (commitment 497);
- (c) Lagoon Creek will not be diverted, minimising hydrogeological changes on site;
- (d) a nature conservation zone of 50 metres either side of Lagoon Creek will be implemented, with mining excluded within 150 metres and riparian values in the conservation zone enhanced (commitments 118, 120, 185, 190, 209) (this has been conditioned as a requirement);
- (e) areas to be cleared will have boundaries clearly marked that conform within the limits of design drawings and will comply with the mine's existing clearance procedures; particular attention will be paid to defining the boundaries of clearing where matters of national environmental significance, endangered ecological communities or listed species are present (commitment 496);
- (f) implementing the Pest and Weed Management Plan and the Pest and Domestic Animal Management Plan (commitment 212);
- (g) final landforms, including voids, to be located outside of the probable maximum flood area;

¹²⁵⁰ EIS evaluation report pages 91 to 93.

- (h) surface water management measures including flood levees, diversion drains, sediment control structures, storage dams have been conditioned to avoid and minimise environmental harm;
- (i) contour banks will be constructed after profiling of the final landform to control run off, minimising hydrological disturbance;
- (j) extensive dust control measures;
- (k) bushfire prevention and management measures;
- (l) machinery brought on to site will be required to be weed-free, with advice to be sought on local weeds from the State Department of Agriculture, Fisheries and Forestry (commitment 565) and Toowoomba Regional Council;
- (m) delivery of an Erosion and Sediment Management Plan (commitment 232);
- (n) the Environmental Management Plan states light sources will be fitted with shield devices to reduce and remove light pollution; where possible lighting required for the Project will be oriented inwards, focusing on areas requiring illumination and screened from outside;
- (o) extensive dust management strategies as conditioned by the Coordinator-General;
- (p) continued use of existing mine structures to avoid new land disturbance;
- (q) in-pit tailings disposal and management to avoid new structures and additional land disturbance;
- (r) conditioned requirement to not pollute ground and surface water resources;
- (s) waste management plan to avoid combination and ineffective disposal and handling of toxicants;
- (t) hazard and risk management plan;

- (u) recommended condition requiring pre-clearing surveys for listed species; and
 - (v) vegetation clearing to be during the day and one-directional, to allow faunas to escape.
855. The EIS evaluation report states that the Coordinator-General has determined that the 70.8 hectares of Belson's panic to be cleared will constitute a significant residual impact and require offsetting.¹²⁵¹
856. The EIS evaluation report states that the Proponent has stated an offset of 90 hectares will be provided for the species.¹²⁵² It states the offset will be located within the 247 hectare area available for offset sites on land owned by the Proponent to the south of the Project.¹²⁵³ It states that the Proponent's aim is to ensure the translocated species is assessable as a future quality of 8 out of 10.¹²⁵⁴
857. The EIS evaluation report states that the Proponent has prepared a Threatened Species Translocation Plan, which provides the proposed methodology for removing and relocating species.¹²⁵⁵ It states the Threatened Species Translocation Plan includes targeted methods to successfully translocate plants, by ensuring new locations are prepared and tended to minimise plant stress and remove competition with weeds.¹²⁵⁶ It states that firebreaks will also be installed.¹²⁵⁷
858. The EIS evaluation report states that regular watering will take into account the soil type to avoid under or over-watering.¹²⁵⁸ It states that translocation sites will be demarcated into separate zones, tagged via global positioning system, that are inspected multiple times during a week in the early stages, and then weekly until the plants are established, for a minimum of one year.¹²⁵⁹ It states that corrective and maintenance actions will be undertaken during inspections.¹²⁶⁰ It states that

¹²⁵¹ EIS evaluation report page 97.

¹²⁵² EIS evaluation report page 97.

¹²⁵³ EIS evaluation report page 97.

¹²⁵⁴ EIS evaluation report page 97.

¹²⁵⁵ EIS evaluation report page 97.

¹²⁵⁶ EIS evaluation report page 97.

¹²⁵⁷ EIS evaluation report page 97.

¹²⁵⁸ EIS evaluation report page 97.

¹²⁵⁹ EIS evaluation report page 97.

¹²⁶⁰ EIS evaluation report page 97.

during the establishment period, a qualified ecologist will monitor each site, including:¹²⁶¹

- (a) assessment of soil to determine watering requirements;
- (b) weekly assessment of ecological health;
- (c) bi-monthly ecological condition assessment using state government advices; and
- (d) bi-monthly weed and exotic plant abundance assessment.

859. The EIS evaluation report states that when the plants are established, monitoring will occur every six months for five years.¹²⁶²

860. The EIS evaluation report states that the proponent proposes to provide a bi-annual report to the Department of Environment providing the monitoring results and corrective and maintenance actions that occurred in the preceding period, until successful establishment of the relocated plants is able to be scientifically confirmed.¹²⁶³

861. The EIS evaluation report states that, while unlikely given the area's weather conditions, the Proponent is open to extending the above monitoring and reporting period should a low rainfall period not occur, as understanding the success of the relocated species during such an event will be important to understanding the sustainability of the Threatened Species Translocation Plan.¹²⁶⁴

The Coordinator- General's conclusion regarding Belson's panic

862. The EIS evaluation report concludes:¹²⁶⁵

- (a) the Coordinator-General is satisfied that the proposed Threatened Species Translocation Plan provides a considered and informed program of works to ensure the successful relocation of a vulnerable native species, with

¹²⁶¹ EIS evaluation report page 98.

¹²⁶² EIS evaluation report page 98.

¹²⁶³ EIS evaluation report page 98.

¹²⁶⁴ EIS evaluation report page 98.

¹²⁶⁵ EIS evaluation report page 98.

regular and extended monitoring and reporting to demonstrate that the desired outcome of the plan is achieved;

- (b) the Threatened Species Translocation Plan is informed by the successful translocation of Belson's panic undertaken by the Proponent for the mine's Wetalla Water Pipeline Project in 2008;¹²⁶⁶
- (c) for the protection of this species, the Coordinator-General recommends a condition that places a maximum disturbance limit of 70.8 hectares of Belson's panic;
- (d) the Coordinator-General also recommends a condition of approval to the Commonwealth Environment Minister that the species be included in the Project's MNES Management Plan, citing the Threatened Species Translocation Plan as the key mechanism for management of affected species;
- (e) the MNES Management Plan is also to describe how populations for the Project site not affected by project works will be protected and enhanced;
- (f) in addition, any occurrences of the species found during pre-clearing surveys are to be managed as described in the MNES Management Plan;
- (g) the Coordinator-General recommends a condition that the Proponent provide offsets for authorised unavoidable impacts to 70.6 hectares of Belson's panic in accordance with the *EPBC Act* Environmental Offsets policy (October 2012);
- (h) the Coordinator-General recommends a condition of approval that the Project include Belson's panic in the Project's Offsets Area Management Plan; and
- (i) given the above controls, the Coordinator-General is satisfied the proposed action will not have an unacceptable impact on Belson's panic grass.

¹²⁶⁶ All 18 translocated plants survived relocation, and most specimens produced stolons that developed into new tussocks.

Confirmed MNES - Grey-headed flying-fox (Pteropus poliocephalus)

863. The EIS evaluation report states that in 2010 the Commonwealth Government published survey guidelines for the Grey-headed Flying-fox.¹²⁶⁷ It states that a number of Queensland and New South Wales state government publications provide advice and policy about the species.¹²⁶⁸
864. The EIS evaluation report states that fauna surveys occurred for stage 2 in 1998, 199 and 2005.¹²⁶⁹ It states that fauna surveys for stage 3 occurred from 26 February to 2 March 2007, 20 November 2008 and during October to November 2013.¹²⁷⁰
865. The EIS evaluation report states that one Grey-headed Flying-fox was spotted on site in 1999.¹²⁷¹ However, its location was not recorded.¹²⁷² The following possible project-related impacts are listed:¹²⁷³
- (a) clearance of foraging and breeding habitat; and
 - (b) indirect effects on habitat including pest and weed invasion, bushfire management, altered hydrogeological conditions, dust, noise, edge effects, artificial lighting, altered final landform, water quality and availability, waste and contamination.
866. As to residual impact, the EIS evaluation report states:¹²⁷⁴
- (a) Grey-headed Flying-fox camps are known in the vicinity of Toowoomba, which is around 35 kilometres to the east of the Project site;
 - (b) the Proponent has advised that no camps for the species are present in the Project area;

¹²⁶⁷ EIS evaluation report page 99.

¹²⁶⁸ EIS evaluation report page 99.

¹²⁶⁹ EIS evaluation report page 99.

¹²⁷⁰ EIS evaluation report page 99.

¹²⁷¹ EIS evaluation report page 99.

¹²⁷² EIS evaluation report page 99.

¹²⁷³ EIS evaluation report page 99.

¹²⁷⁴ EIS evaluation report page 100.

- (c) 280 hectares of suitable foraging habitat is available on the Project site, including communities of poplar box, mountain coolabah and gum-topped box woodlands;
- (d) the area of suitable Grey-headed Flying-fox foraging habitat that will be cleared by project works is estimated to be around 76 hectares;
- (e) a total of 204 hectares of potential foraging habitat for the Grey-headed Flying-fox will remain on site following Project clearing;
- (f) the Proponent has calculated that with the species able to travel up to 50 kilometres from a camp to forage, for the Toowoomba camps, an area of 785,700 hectares is available for the species to find food;¹²⁷⁵
- (g) it is noted that overall, habitat in the Project for native species is of poor quality due to significant historical clearing and modification; and
- (h) remaining vegetation is mostly limited to the ephemeral creek and other scattered patches.

867. The EIS evaluation report states that no conservation advice has been produced for Grey-headed Flying-fox.¹²⁷⁶ It states that in 2009, the Commonwealth confirmed a recovery plan for the Grey-headed Flying-fox was required.¹²⁷⁷ It states that a draft national recovery plan for the species was issued in July 2009.¹²⁷⁸ It states that the draft recovery plan confirms key known threats are habitat loss, deliberate destruction associated with their impact on commercial horticulture, negative public attitudes and human conflict, powerline electrocution and entanglement in nets and barbed wire.¹²⁷⁹

868. As to mitigation measures, the EIS evaluation report:¹²⁸⁰

- (a) states general mitigation measures the Proponent will implement that have been previously discussed, including restricting vegetation clearing,

¹²⁷⁵ Within this area, better quality foraging habitat is available closer to camps, including in the Bunya Mountains National Park, Crows Nest National Park and in nature reserves.

¹²⁷⁶ EIS evaluation report page 100.

¹²⁷⁷ EIS evaluation report page 100.

¹²⁷⁸ EIS evaluation report page 100.

¹²⁷⁹ EIS evaluation report page 100.

¹²⁸⁰ EIS evaluation report page 100.

protecting remaining threatened vegetation from disturbance, restoring riparian areas, and implementing pest and weed management plans;

- (b) states that the commitment to implement a nature conservation zone at the extent of Lagoon Creek across the Project site, and to enhance the riparian values, will also work to preserve existing habitat and encourage future foraging trees for the Grey-headed Flying-fox;
- (c) states that to the extent that impacts can be mitigated, the Coordinator-General considers the measures proposed along with the recommended conditions will be such that no offsets are required; and
- (d) notes that offsets for regional ecosystems affected by project clearing such as poplarbox and gum-topped box will be required by the State government, which will provide habitat of use to Grey-headed Flying-fox.

The Coordinator-General's conclusion regarding Grey-headed Flying-fox

869. The EIS evaluation report concludes:¹²⁸¹

- (a) that over the course of 14 years of surveys, only one individual of the species was confirmed in 1999;
- (b) however, the existence on site of suitable feeding habitat for the Grey-headed Flying-fox is also acknowledged;
- (c) no conditions relating to this matter of national environmental significance are necessary as the Coordinator-General is satisfied that the proposed action will not have an unacceptable impact on the Grey-headed Flying-fox for the following reasons:
 - (i) the general condition of the site is of low ecological value largely due to historical clearing for agriculture;
 - (ii) 204 hectares of potential foraging vegetation will not be subject to clearing;

¹²⁸¹ EIS evaluation report page 101.

- (iii) the species has an extensive foraging range, with better quality habitat available closer to known camps; and
- (iv) while 76 hectares of potential foraging habitat will be impacted, the requirement for mitigation measures, including those either conditioned by the Coordinator-General or committed to by the Proponent for maintaining and enhancing environmental conditions on site in general, are adequate.

Confirmed MNES: indirect impacts

870. The EIS evaluation report notes modelling that indicates dust from mining, blasting, conveyors, and stockpiles could impact matters of national environmental significance species and ecological communities.¹²⁸² It notes other potential indirect effects, such as noise, illumination, water, waste, weeds, pests and hydrogeological changes.¹²⁸³ It states that the Coordinator-General has applied extensive conditions to control these matters and minimise environmental harm.¹²⁸⁴ It states the Coordinator-General is therefore satisfied that indirect effects on matters of national environmental significance are manageable and do not present unacceptable impacts on species.¹²⁸⁵

Matters of national environmental significance species possibly located on site

871. The EIS evaluation report states that the following species, while not located during field surveys, were regarded as possibly occurring due to the presence of suitable habitat:¹²⁸⁶

- (a) king blue-grass
- (b) hawkweed;
- (c) austral toadflax, toadflax;
- (d) austral cornflower, native thistle.

¹²⁸² EIS evaluation report page 101.

¹²⁸³ EIS evaluation report page 101.

¹²⁸⁴ EIS evaluation report page 101.

¹²⁸⁵ EIS evaluation report page 101.

¹²⁸⁶ EIS evaluation report page 102.

872. The EIS evaluation report states that while suitable habitat was found for king blue-grass, hawkweed, and austral toadflax, no site surveys located the species.¹²⁸⁷ It states that austral cornflower was found adjacent to the Project site.¹²⁸⁸
873. The EIS evaluation report states that in 2009 the Commonwealth deemed that a recovery plan for austral cornflower was not required.¹²⁸⁹ It states, however, that the approved conservation advice contains information and actions intended to aid its recovery.¹²⁹⁰ It states that the recommended actions are directed at managing issues including habitat loss, disturbance, weeds, and grazing pressure.¹²⁹¹
874. The EIS evaluation report states that key threats to the austral cornflower include broad-scale vegetation clearing, road works, trampling and grazing pressures and competition with exotic weeds, including rhodes grass.¹²⁹² It states that the species is considered to be a poor competitor and prefers habitat where grass competition has been reduced.¹²⁹³
875. The EIS evaluation report states that austral cornflower was located at three sites near the proposed rail spur.¹²⁹⁴ The EIS evaluation report states that the Proponent has confirmed three sites where the species were located are within the road reserve of the Jondaryan-Muldu Road.¹²⁹⁵ It states the proposed rail spur is located in an adjacent property outside the road reserve, with the location not affected by the spur.¹²⁹⁶
876. The EIS evaluation report states that austral cornflower was not confirmed at any location in the Project area.¹²⁹⁷ It states, however, the species may occur in suitable habitat that is to be cleared for the Project, including isolated fragments of forest red gum, poplar box, mountain coolabah, and affected areas of Queensland bluegrass.¹²⁹⁸

¹²⁸⁷ EIS evaluation report page 103.

¹²⁸⁸ EIS evaluation report page 103.

¹²⁸⁹ EIS evaluation report page 103.

¹²⁹⁰ EIS evaluation report page 103.

¹²⁹¹ EIS evaluation report page 103.

¹²⁹² EIS evaluation report page 103.

¹²⁹³ EIS evaluation report page 103.

¹²⁹⁴ EIS evaluation report page 104.

¹²⁹⁵ EIS evaluation report page 104.

¹²⁹⁶ EIS evaluation report page 104.

¹²⁹⁷ EIS evaluation report page 104.

¹²⁹⁸ EIS evaluation report page 104.

877. The EIS evaluation report states possible impacts on austral cornflower include pest and weed invasion, water quality and bushfire management.¹²⁹⁹ It states that, due to the proximity to the rail spur, indirect impacts may occur due to the infrastructure's potential effects on hydrogeological conditions, dust and noise.¹³⁰⁰ It states that no significant residual impact on the species is likely to occur.¹³⁰¹
878. The EIS evaluation report states that threats to austral cornflower include:¹³⁰²
- (a) land clearing;
 - (b) habitat fragmentation
 - (c) grazing pressures;
 - (d) competition with weeds; and
 - (e) road works and maintenance in road or rail corridors where the species may be found.
879. The EIS evaluation report states that threat abatement actions for austral cornflower advised by the conservation advice include:¹³⁰³
- (a) minimise grazing;
 - (b) monitor known species to manage threats;
 - (c) control access to routes to exclude the public;
 - (d) ensure road widening does not impact on the species.
880. The EIS evaluation report states that the Project is not likely to directly impact on the austral cornflower.¹³⁰⁴ It states mitigation measures previously described for listed species confirmed at the Project site are relevant to indirect impacts,

¹²⁹⁹ EIS evaluation report page 104.

¹³⁰⁰ EIS evaluation report page 104.

¹³⁰¹ EIS evaluation report page 104.

¹³⁰² EIS evaluation report page 104.

¹³⁰³ EIS evaluation report page 104.

¹³⁰⁴ EIS evaluation report page 105.

including management of dust, land impacts, soil and erosion, water, waste, contaminants.¹³⁰⁵

881. The EIS evaluation report concludes:¹³⁰⁶

- (a) while suitable habitat for king blue-grass exists at site, it is acknowledged the species was not located during site surveys, including in areas that would be favourable to the species, such as Project-affected areas of brigalow and bluegrass threatened ecological communities;
- (b) the Proponent has confirmed that austral cornflower was not located on the Project site during site surveys;
- (c) given austral cornflower was located in three areas adjacent to the proposed rail spur, and suitable habitat for the species is located in the Project area, it is considered that the species may be found on site and possibly in areas to be cleared or disturbed for project works;
- (d) if accepted by the Minister, the MNES Management Plan is to address the potential impact on the austral cornflower and propose management strategies in accordance with the Commonwealth's approved conservation advice for the species;
- (e) as part of the MNES Management Plan relating to austral cornflower, the Proponent may consider measures such as introducing species into suitable areas on site, with particular attention focussed on areas that are to be managed to reduce recognised threats to the species, such as weeds and grazing;
- (f) the MNES Management Plan is to address how austral cornflower may be impacted by road works to be undertaken by the Project and how impacts are to be avoided to ensure no net loss due to Project works;
- (g) the Coordinator-General recommends a further condition to the Minister for the Environment that, although the species have not been identified on site, the MNES Management Plan include management and mitigation measures

¹³⁰⁵ EIS evaluation report page 105.

¹³⁰⁶ EIS evaluation report page 105.

to address potential impacts to king blue-grass, hawkweed and austral toadflax; and

- (h) to the extent that impacts can be mitigated, the Coordinator-General considers that the measures proposed to protect austral cornflower, king blue-grass and austral toadflax, along with the Coordinator-General's recommended conditions will be such that there is not likely to be a significant residual impact to those species.

Species unlikely to be present on site

882. The EIS evaluation report outlines the process for assessing that flora and fauna matters of national environmental significance species are not likely to be present on-site.¹³⁰⁷ It states that the Proponent considered habitat preferences, known distribution, previous records from the region, occurrence of habitat in the study area, characteristics of the remaining vegetation in the area, presence of predators, and field observations.¹³⁰⁸
883. The EIS evaluation report states that the surveys were informed by various Commonwealth survey guidelines for threatened birds, brigalow belt reptiles, fish, mammals, reptiles and threatened species listing advices.¹³⁰⁹
884. The EIS evaluation report states that the Coordinator-General notes that the brush-tailed rock-wallaby and Murray cod were not surveyed due to the lack of suitable habitat.¹³¹⁰
885. The EIS evaluation report states survey efforts undertaken for the existing operation provided an understanding of site conditions and a collection of data to inform surveys undertaken for the proposed stage 3, and add weight to the conclusion that the species are unlikely to be present on site or depend on the site for habitat.¹³¹¹
886. The EIS evaluation report states that the Coordinator-General notes that surveys undertaken for the Project occurred over a range of seasons and conditions, and

¹³⁰⁷ EIS evaluation report page 119.

¹³⁰⁸ EIS evaluation report page 119.

¹³⁰⁹ EIS evaluation report page 130.

¹³¹⁰ EIS evaluation report page 130.

¹³¹¹ EIS evaluation report page 130.

that particular threatened species were targeted.¹³¹² It notes that surveys also targeted different search approaches for birds, including flushing within grasses, searching for nests and targeted surveys of flowering nectar resources, including eucalypts.¹³¹³ It notes that opportunistic sightings for flora species were also allowed for in the scope of the 2013 fauna surveys.¹³¹⁴

887. The EIS evaluation report states that the Coordinator-General is of the view that the species identified in this section of the report are unlikely to occur on site.¹³¹⁵

11.3 Potential impacts to water resources

11.3.1 What was the evidence or other material held by the Coordinator-General on potential impacts to water resources?

TOR

888. With respect to the issue of water resources, the TOR required the Proponent to:¹³¹⁶
- (a) describe the environmental values by providing details of the existing water resources in the vicinity of the Project area, including surface water and groundwater;
 - (b) assess the Project's potential impacts on water resource environmental values;
 - (c) define and describe the objectives and practical measures for protecting or enhancing water resource environmental values and how the achievement of objectives will be monitored, audited and managed;
 - (d) assess the hydrological impacts of the proposal on surface water and water courses, including with respect to erosion and flooding;
 - (e) describe the techniques to be employed in wastewater treatment and the containment of contaminated water;

¹³¹² EIS evaluation report page 130.

¹³¹³ EIS evaluation report page 130.

¹³¹⁴ EIS evaluation report page 130.

¹³¹⁵ EIS evaluation report page 130.

¹³¹⁶ TOR Section 5.4 pages 37 to 42.

- (f) discuss the anticipated flows of water to and from the proposal area, in relation to water supply and usage, and wastewater disposal;
- (g) discuss the mitigation options and effectiveness of mitigation measures, with particular reference to sediment, acidity, salinity and other emissions of a hazardous or toxic nature to human health, flora or fauna;
- (h) assess the potential environmental impact caused by the Project to local groundwater resources and describe avoidance and mitigation measures; and
- (i) provide a stand-alone document to the Coordinator-General that includes details of the Project's potential impact on water resources for provision to the Independent Expert Scientific Committee.

EIS

889. Appendix E to the EIS indicates that these issues are predominantly addressed in EIS Chapter 5 – Surface Water Resources and Chapter 6 – Groundwater Resources. In addition, Appendix H of the EIS contains the *EPBC Act* Assessment and, more particularly, Appendix H.2 is the Independent Expert Scientific Committee Submission. The information in the Appendix reflects that contained in Chapters 5 and 6 of the EIS.
890. EIS Chapter 5 *'describes the existing environment for surface water resources that may be affected by the revised Project. This Chapter identifies the potential impacts the revised Project may have on the existing environment and the measures required for the mitigation of potential impacts'*.
891. The assessment of surface water in Chapter 5 involves consideration of:
- (a) the regional context;¹³¹⁷
 - (b) the regulatory framework;¹³¹⁸

¹³¹⁷ EIS Section 5.2 pages 5-1 to 5-2.

¹³¹⁸ EIS Section 5.3 pages 5-3 to 5-5.

- (c) the existing surface water users – there are 15 surface water extraction licences within Lagoon, Oakey and Doctors Creek downstream of the revised Project site;¹³¹⁹
- (d) environmental values and water quality objectives;¹³²⁰
- (e) the water quality in Lagoon Creek, including by reference to physicochemistry, nutrients and major ions, dissolved metals and toxicants and environmental considerations;¹³²¹
- (f) the geomorphology of the Lagoon Creek catchment within which the Project site is located;¹³²²
- (g) potential impacts on water quality and geomorphology;¹³²³
- (h) regional climate and streamflow records;¹³²⁴
- (i) existing catchment flood hydrology;¹³²⁵
- (j) existing flood characteristics;¹³²⁶
- (k) developed flooding characteristics;¹³²⁷
- (l) final landform flood protection;¹³²⁸
- (m) site water management;¹³²⁹ and
- (n) potential impacts and mitigation measures.¹³³⁰

¹³¹⁹ EIS Section 5.4 pages 5-5 to 5-8.

¹³²⁰ EIS Section 5.5 pages 5-9 to 5-12.

¹³²¹ EIS Section 5.6 pages 5-13 to 5-19.

¹³²² EIS Section 5.7 pages 5-19 to 5-27.

¹³²³ EIS Section 5.7.1 page 5-27.

¹³²⁴ EIS Section 5.8 pages 5-28 to 5-32.

¹³²⁵ EIS Section 5.9 pages 5-33 to 5-35.

¹³²⁶ EIS Section 5.10 pages 5-35 to 5-46.

¹³²⁷ EIS Section 5.11 pages 5-47 to 5-61.

¹³²⁸ EIS Section 5.12 page 5-62.

¹³²⁹ EIS Section 5.13 pages 5-62 to 5-82.

¹³³⁰ EIS Section 5.14 pages 5-83 to 5-86.

892. The EIS records that:

- (a) the revised Project includes an operational separate distance of approximately 150 metres from the banks of Lagoon Creek to the edge of the mining pits, which includes a 50 metre buffer adjacent the creek for conservation purposes;¹³³¹
- (b) as Lagoon Creek is an ephemeral Creek, infiltration of Lagoon Creek flood flows into the pit is unlikely;¹³³²
- (c) there are no near surface aquifers in the vicinity of Lagoon Creek;¹³³³
- (d) the offset has the potential to improve water quality within Lagoon Creek by preserving the creek and its riparian zone from agricultural activities;¹³³⁴
- (e) potential impacts of the revised Project on water quality may result from:
 - (i) increased sediment load or chemical spillage during construction; and
 - (ii) a reduction in water quality through controlled or uncontrolled releases from the mine water management system;¹³³⁵
- (f) flood protection for the revised Project's resources area will be provided by flood levees along the Manning Vale East and Willeroo pits, with levee banks designed to provide flood immunity for the probable maximum flood;¹³³⁶
- (g) minor increases in flood levels are predicted at the flood levee in the 1 in 1,000 average exceedance probability, however all of the increases are contained within the revised Project's mining lease area;¹³³⁷
- (h) only minor changes are predicted to occur to flow velocity in the mine area as a result of the flood levees encroaching on the floodplain;¹³³⁸

¹³³¹ EIS Section 5.7.1 page 5-27.

¹³³² EIS Section 5.7.1 page 5-27.

¹³³³ EIS Section 5.7.1 page 5-27.

¹³³⁴ EIS Section 5.7.1 page 5-27.

¹³³⁵ EIS Section 5.7.1 page 5-27.

¹³³⁶ EIS Section 5.11.1 page 5-47.

¹³³⁷ EIS Section 5.11.3 page 5-49.

- (i) the revised Project's railway crossing of Lagoon Creek results in an increase in flood levels immediately upstream of the railway crossing of up to 1.2 metres, but reduce to zero within 500 metres of the railway crossing, with most impacted land owned by Acland Pastoral Company;¹³³⁹
- (j) there is no increase in the extent of inundation or water surface levels on any properties not owned by the Proponent;¹³⁴⁰
- (k) in events greater than a 1 in 100 average exceedance probability flood event the railway line will be overtopped by flood waters;¹³⁴¹
- (l) there is a minor increase (less than 300 millimetres) in flood levels on an adjacent property upstream of the proposed railway line, which is contained to an area of agricultural land in the order of 0.5 hectares;¹³⁴²
- (m) there will be no flooding impacts at Jondaryan, Oakey or Acland.¹³⁴³

893. The Proponent has committed to design the revised Project's final landform so that any depressions and/or hills are located outside the probable maximum flood extent. Consequently, there is no flood impact predicted for the revised Project's final landform.¹³⁴⁴

894. The EIS also contains a site water management strategy that is intended to provide adequate water to the revised Project site to operate successfully while minimising environmental impacts by collecting and managing dirty runoff water. It is based on the following key principles:¹³⁴⁵

- (a) where possible, stormwater runoff from undisturbed areas will be diverted away from disturbed areas and released directly into adjacent waterways;
- (b) disturbed area runoff will be captured in sediment dams and used for dust suppression or as process water in the Coal Handling Preparation Plant;

¹³³⁸ EIS Section 5.11.3 page 5-49.

¹³³⁹ EIS Section 5.11.3 page 5-49.

¹³⁴⁰ EIS Section 5.11.3 page 5-49.

¹³⁴¹ EIS Section 5.11.3 page 5-49.

¹³⁴² EIS Section 5.11.3 page 5-50.

¹³⁴³ EIS Section 5.11.3 page 5-50.

¹³⁴⁴ EIS Section 5.12 page 5-62.

¹³⁴⁵ EIS Section 5.13 page 5-62.

- (c) water will be recycled from the in-pit tailings storage facility to supplement the water for coal washing;
- (d) mine-affected water will be treated to allow as required discharges off-site;
- (e) recycled water from the Toowoomba Regional Council's Wetalla Wastewater Reclamation Facility is pumped to the site as the main operational water supply;
- (f) shallow groundwater bores will be treated to supply potable water for human use;
- (g) infrastructure and mining areas will be protected from flooding using flood levees;
- (h) all significant quantities of hydrocarbon and chemical products stored on site will be stored in temporary or permanent bunding;
- (i) spill capture and retention devices will be used for refuelling and similar areas;
- (j) oily water areas will be captured and treated; and
- (k) progressive rehabilitation will be employed to revegetate disturbed areas no longer required for operational use.

895. The mitigation measures proposed by the Proponent to prevent or minimise water quality impacts during construction and operational phases are outlined in Section 5.14.2 and in the Environmental Management Plan in Chapter 21 of the EIS.¹³⁴⁶

896. EIS Chapter 6 '*describes the groundwater resources that may be affected by the revised Project, how they might be affected, and the measures required for the mitigation of potential negative effects*'.¹³⁴⁷

897. The assessment of groundwater in Chapter 6 involves consideration of:

- (a) the regulatory framework;¹³⁴⁸

¹³⁴⁶ EIS Section 5.14.2 pages 5-83 to 5-86.

¹³⁴⁷ EIS Chapter 6 page 6-1.

- (b) the existing location, including:¹³⁴⁹
- (i) the project location;¹³⁵⁰
 - (ii) hydrology and landforms;¹³⁵¹
 - (iii) geology;¹³⁵²
 - (iv) hydrogeology;¹³⁵³
 - (v) groundwater use – there are a total of 939 registered groundwater bores within an eight kilometre radius of the revised Project site;¹³⁵⁴
 - (vi) existing mine groundwater monitoring;¹³⁵⁵
 - (vii) revised Project baseline groundwater monitoring;¹³⁵⁶
 - (viii) groundwater levels;¹³⁵⁷
 - (ix) groundwater movement;¹³⁵⁸
 - (x) inter-aquifer connectivity;¹³⁵⁹
 - (xi) surface water and groundwater interaction;¹³⁶⁰
 - (xii) groundwater quality;¹³⁶¹
 - (xiii) a comparison of the groundwater quality data to the environmental values in the *Environmental Protection (Water) Policy 2009*;¹³⁶² and

¹³⁴⁸ EIS Section 6.1 pages 6-1 to 6-4.

¹³⁴⁹ EIS Section 6.2 pages 6-4 to 6-53.

¹³⁵⁰ EIS Section 6.2.1 page 6-4.

¹³⁵¹ EIS Section 6.2.2 page 6-4.

¹³⁵² EIS Section 6.2.3 page 6-4 to 6-11.

¹³⁵³ EIS Section 6.2.4 pages 6-11 to 6-16.

¹³⁵⁴ EIS Section 6.2.5 pages 6-16 to 6-25.

¹³⁵⁵ EIS Section 6.2.6 pages 6-25 to 6-27.

¹³⁵⁶ EIS Section 6.2.7 pages 6-27 to 6-31.

¹³⁵⁷ EIS Section 6.2.8 pages 6-31 to 6-35.

¹³⁵⁸ EIS Section 6.2.9 pages 6-35 to 6-37.

¹³⁵⁹ EIS Section 6.2.10 pages 6-38 to 6-39.

¹³⁶⁰ EIS Section 6.2.11 page 6-39.

¹³⁶¹ EIS Section 6.2.12 pages 6-39 to 6-47.

¹³⁶² EIS Section 6.2.13 pages 6-47 to 6-48.

- (xiv) a conceptual hydrogeological model describing the aquifers present within the revised Project site, how they interact with each other and surface waters, and their attributes such as groundwater depth, thickness, transmissivity, storativity and hydraulic conductivity;¹³⁶³
- (c) an impact assessment,¹³⁶⁴ including analysis of:
 - (i) effects on groundwater levels;¹³⁶⁵
 - (ii) effects on groundwater quality;¹³⁶⁶
 - (iii) effects on groundwater users;¹³⁶⁷
 - (iv) effects on groundwater dependent ecosystems;¹³⁶⁸ and
- (d) mitigation measures proposed to mitigate the potential effects.

898. The EIS records that:

- (a) groundwater discharge into the revised Project mine pits will lead to a localised depression or drawdown of the groundwater levels in the Walloon Coal Measures aquifer within the vicinity of the revised Project site;¹³⁶⁹
- (b) the drawdown on the Walloon Coal Measures aquifer may, in turn, cause drawdown in adjacent aquifers;¹³⁷⁰
- (c) groundwater drawdowns of greater than five metres are not expected to extend more than around three kilometres from the boundary of the revised Project site;¹³⁷¹
- (d) the greatest drawdown is expected to occur at the end of mining (2030) in associate with the Manning Vale West Pit reaching its greatest depth;¹³⁷²

¹³⁶³ EIS Section 6.2.14 pages 6-49 to 6-53.

¹³⁶⁴ EIS Section 6.3 pages 6-53 to 6-77.

¹³⁶⁵ EIS Section 6.3.1 pages 6-55 to 6-72.

¹³⁶⁶ EIS Section 6.3.2 pages 6-72 to 6-75.

¹³⁶⁷ EIS Section 6.3.3 pages 6-75 to 6-76.

¹³⁶⁸ EIS Section 6.3.4 page 6-77.

¹³⁶⁹ EIS Section 6.3.1 page 6-61.

¹³⁷⁰ EIS Section 6.3.1 page 6-61.

¹³⁷¹ EIS Section 6.3.1 page 6-62.

¹³⁷² EIS Section 6.3.1 page 6-62.

- (e) a small change in flow is predicted to occur in the Oakey and Myall Creeks;¹³⁷³
- (f) no change is expected in Lagoon Creek, which is disconnected from the regional groundwater system;¹³⁷⁴
- (g) after cessation of mining, groundwater levels are predicted to gradually recover so that, for the most part, there is less than five metres residual drawdown outside the revised Project's boundary;¹³⁷⁵
- (h) the revised Project is not expected to have a detrimental effect on groundwater quality during mining¹³⁷⁶ or post mining;¹³⁷⁷
- (i) the predicted groundwater drawdown in the Walloon Coal Measures and Tertiary Basalt at the end of the mine life extends to approximately seven kilometres west and northwest of the Project's boundary and approximately two kilometres to the east and south;¹³⁷⁸
- (j) properties within three kilometres of the western boundary of the revised Project site are predicted to encounter the greatest effects, with drawdown in the Walloon Coal Measures of between five metres and 20 metres;¹³⁷⁹
- (k) there is not expected to be long term negative effect on groundwater users outside the revised Project site;¹³⁸⁰ and
- (l) there are likely to be no groundwater dependent ecosystems within the revised Project site.¹³⁸¹

899. The measures proposed by the Proponent to mitigate the potential effects on groundwater are outlined in Section 6.4 of the EIS.¹³⁸² They involve:

¹³⁷³ EIS Section 6.3.1 page 6-62.

¹³⁷⁴ EIS Section 6.3.1 page 6-68.

¹³⁷⁵ EIS Section 6.3.1 page 6-69.

¹³⁷⁶ EIS Section 6.3.2 page 6-72.

¹³⁷⁷ EIS Section 6.3.2 page 6-75.

¹³⁷⁸ EIS Section 6.3.2 page 6-75.

¹³⁷⁹ EIS Section 6.3.2 page 6-75.

¹³⁸⁰ EIS Section 6.3.2 page 6-75.

¹³⁸¹ EIS Section 6.3.4 page 6-77.

¹³⁸² EIS Section 6.4 pages 6-77 to 6-84.

- (a) a groundwater monitoring program;¹³⁸³
- (b) groundwater monitoring, including monitoring of groundwater levels and quality, at selected landholder bores;¹³⁸⁴
- (c) use of groundwater data collected through the monitoring program to update and refine the groundwater model and its predictions to reflect the actual activities undertaken on site;¹³⁸⁵ and
- (d) a program of works to ‘make good’ the groundwater effects on impacted groundwater users.¹³⁸⁶

900. The Proponent has developed a Groundwater Monitoring and Impact Management Plan, a copy of which is provided in Appendix J.5 of the EIS.¹³⁸⁷

Submissions on the EIS

901. A briefing note was provided to the Coordinator-General attaching a disc containing a copy of all of the submission on the EIS. The briefing note also attached a summary of the submissions. The summary records that the local, State and Commonwealth agencies had raised the following key issues in their submissions, relevant to water resources:¹³⁸⁸

Department of Natural Resources and Mines (DNRM)

- *Make good provisions and identification of boreholders by aquifer required*
- *Impacts of faults in Marburg aquifer on drawdown*
- *Salinization of voids may affect proposed final land use of grazing*

Department of Environment and Heritage Protection (DEHP)

- *Water quality analysis needs work – e.g. downstream points have been used to characterise background water quality*
- *Mine discharge points: detail where uncontrolled releases would occur*

Commonwealth Department of the Environment (DOTE)

- *Aquifer faults and groundwater flow*
- *Water quality information for each aquifer*

¹³⁸³ EIS Section 6.4.1 pages 6-77 to 6-83.

¹³⁸⁴ EIS Section 6.4.2 page 6-83.

¹³⁸⁵ EIS Section 6.4.3 page 6-83.

¹³⁸⁶ EIS Section 6.4.4 page 6-84.

¹³⁸⁷ EIS Section 6.4.4 page 6-84.

¹³⁸⁸ Doc 10-0010.

- *Justification of groundwater no-flow zones*
- *Uncertainty analysis on groundwater modelling*
- *Secondary porosity of intervening sandstones*
- *Describe hydraulic conductivity, not just transmissivity*
- *Peer review of numerical model*
- *Peer review of flooding assessment*
- *Water quality of final voids' impacts on aquifers*

902. The document also notes that there were a number of key themes that emerged from the individual submissions:¹³⁸⁹

Groundwater, Surface Water and Flooding

Some issues raised by landholders included:

- *Range of concerns about the accuracy and level of information provide in regard to groundwater issues both specific locational issues and general concerns.*
- *Need more understanding of the closeness of the mine to Lagoon Creek in relation to surface water impacts.*
- *Better understanding of creek flows to assist in understanding impacts of the project.*
- *Better understanding of groundwater impacts on Lagoon Creek.*
- *Better understanding of flood issues associated with the rail line.*

Bores

Some issues raised by landholders included:

- *Undertake baseline study of impacts on water bores and provide a make good process which will be equal and ensure fair negotiation with impacted bore owners.*
- *More information and assessment of the impact on bores.*
- *Worried about local aquifers.*
- *Shallow fragile aquifer bore, concerned about losing this supply.*
- *Concerns about the bores, have experienced previous bore failure. Insufficient assessment of bores in Stage 3 pits.*
- *Unclear about what mitigation the proponent will offer.*
- *Concerned with the bore testing undertaken.*
- *Concerned about the failure of the bores. What monitoring will be undertaken and what mitigation measures will be provided if this arises.*

¹³⁸⁹ Doc 10-0010.

903. Finally, the document also notes that there were a number of key themes that emerged from the submissions about which the departmental officers did not recommend a request for additional information, namely:¹³⁹⁰

Flooding impacts of the existing West Moreton Rail line on Oakey

Concerns were raised by a number of submitters about the influence of the existing West Moreton rail line on flood flows to Oakey.

Further information on flooding impacts due to project-specific infrastructure (e.g. the rail spur) on Jondaryan and Oakey has been requested, however with regard to the existing rail line, OCG will convey concerns raised to the rail owner/operator Aurizon and QR.

904. A review of the submissions shows that the summary provided to the Coordinator-General is a reasonable one.¹³⁹¹

905. The following additional observations can be made with respect to the submissions.

906. In its submission, the Department of Environment and Heritage Protection¹³⁹² sought further and more detailed information, including with respect to:

- (a) background water quality and aquatic biota surveys to characterise the natural variability of Lagoon Creek;
- (b) the proposed water quality of mine-affected water, and details of proposed releases;
- (c) the proposed intent of flood levees post mining;
- (d) the fact that final landforms would not be affected by the probable maximum flood event; and
- (e) the offset zone for Lagoon Creek.

907. The Department of Health expressed concern about the risk to human health from the contamination of groundwater and suggested the Proponent be required to commit to more regular monitoring of ground water quality.¹³⁹³

¹³⁹⁰ Doc 10-0010.

¹³⁹¹ See, for example, Submission 433 (Commonwealth Department of Environment), Submission 444 (Department of Natural Resources and Mines), Submission 5, Submission 139, Submission 238, Submission 284, Submission 285, Submission 292, Submission 296 pages 29 to 31 and 34, Submission 318, Submission 464, Submission 487.1, Submission 520, Submission 521.

¹³⁹² Submission 332.

908. In its submission, Toowoomba Regional Council sought further clarification with respect to surface water management and treatment and groundwater modelling and treatment.¹³⁹⁴
909. There were also a number of submissions raising concerns about the adequacy of the flood assessment and the prospect of release of contaminated water.¹³⁹⁵

Advice from the Independent Expert Scientific Committee

910. On 11 April 2014, the Independent Expert Scientific Committee provided the office of the Coordinator-General with an advice dated 10 April 2014 with respect to water resources.¹³⁹⁶
911. The Independent Expert Scientific Committee advice expresses numerous reservations about the adequacy of the assessment of water resources. It notes:
- (a) relevant data and information that the Independent Expert Scientific Committee considered necessary for potential impacts from the proposed Project to be fully assessed;
 - (b) confidence in the predicative capacity of the numerical groundwater model was low due to the concerns with respect to methodology; and
 - (c) justification and/or further information is needed to support a number of aspects of the Proponent's approach and conclusions.
912. The Independent Expert Scientific Committee recommended that the Proponent develop any further Project assessment documentation in line with its Information Guidelines.

AEIS

913. On 17 April 2014, the Coordinator-General wrote to the Proponent indicating that he had concluded his review on the submissions received on the EIS and, in accordance with section 35(2) of the *SDPWO Act*, required additional information

¹³⁹³ Submission 410.

¹³⁹⁴ Submission 466 pages 8 to 9.

¹³⁹⁵ See, for example, Submission 139, Submission 228, Submission 238, Submission 296 pages 31 to 33, Submission 331, Submission 368, Submission 473, Submission 503 page 10, Submission 511, Submission 514, Submission 521, Submission 538, Submission 568.

¹³⁹⁶ Doc 10-0045.

to complete the evaluation of the Project.¹³⁹⁷ Information required in response to issues raised in submissions, with respect to water resources, included:¹³⁹⁸

- (a) in relation to flooding:
 - (i) information that demonstrates likely impacts on Jondaryan and Oakey;
 - (ii) information about how the proximity of mine structures to the creek, levees, the rail spur design and discharges may affect flows;
 - (iii) acknowledgment that submitters are concerned about the influence of the existing West Moreton rail line on flood flows;
 - (iv) an update to the commitments register with mitigation measures to minimise the Project's impact on hydrodynamics and flow;
- (b) in relation to bore impacts:
 - (i) additional level of consultation, engagement and negotiation to clarify potential impacts on bores, the assessment to be undertaken, how the results will be communicated to landholders, the frequency and timing of information and clarification on mitigation and management strategies in place for impacted landholders;
 - (ii) for each submitter who has raised concerns with drawdown impacts on their bore supplies, confirmation of likely impacts for each bore and confirmation of mitigation measures;
- (c) in relation to groundwater:
 - (i) information provided to the Independent Expert Scientific Committee on groundwater impacts and management measures; and
 - (ii) update the commitments register and Environmental Management Plan as required.

¹³⁹⁷ Doc 10-0002.

¹³⁹⁸ Doc 10-0004.

914. In response to the Coordinator-General's letter of 17 April 2014, in relation to surface water (including flooding), the AEIS:¹³⁹⁹

- (a) explains that Section 5.11 of the EIS addresses the flooding assessment undertaken for Lagoon Creek and covers the flooding changes due to the development of mine structures, levees and the rail spur;
- (b) re-iterates the modelling results;
- (c) notes that the revised Project does not seek to change the existing West Moreton rail line or its potential impact on flood flows; and
- (d) explains that Lagoon Creek and Doctors Creek are independent in their flooding regimes and, as such, a model for Doctors Creek was unnecessary.

915. In response to the Coordinator-General's letter of 17 April 2014, in relation to groundwater, the AEIS:

- (a) provides an updated groundwater assessment¹⁴⁰⁰ that includes:
 - (i) additional groundwater monitoring data and bore logs;
 - (ii) additional baseline study results and specialist studies such as landholder bore baseline surveys and in-pit review of faults and their effects on groundwater flow;
 - (iii) light detection and ranging survey data;
 - (iv) final Office of Groundwater Impact Assessment groundwater modelling report; and
 - (v) updated Department of Natural Resources and Mines' bore database;¹⁴⁰¹
- (b) provides the results of the revised modelling in Appendix F to the AEIS, which results replace the earlier results and include an analysis of model predictive uncertainty;¹⁴⁰²

¹³⁹⁹ AEIS Section 5.1.5.1 pages 28 to 29.

¹⁴⁰⁰ AEIS Section 5.1.5.3 pages 28 to 53.

¹⁴⁰¹ AEIS Section 5.1.5.3 page 30 to 31.

- (c) notes that the new modelling predicts:
- (i) for the Tertiary Basalt aquifer, groundwater drawdown exceeding five metres is mostly limited to the area immediately northwest of the revised Project site;
 - (ii) drawdowns of between one metre and less than five metres extend westwards from the boundary of the revised Project site, with the one metre drawdown contour reaching a maximum extent of around eight kilometres west of the revised Project site;
 - (iii) groundwater drawdowns in the Walloon Coal Measures of greater than ten metres are not expected to extend more than around 3.5 kilometres from the boundary of the revised Project site, with the one kilometre drawdown contour extending up to nine kilometres west of the revised Project site;
 - (iv) a broader overall extent of drawdown in the Walloon Coal Measures (with the one metre contour extending a further one to two kilometres) and a maximum drawdown of an additional 17 metres (i.e. a total drawdown of 47 metres rather than 30 metres) within the revised Project site as compared to that predicted in the EIS;¹⁴⁰³
- (d) provides predictions of bore impacts at individual bores;¹⁴⁰⁴
- (e) confirms that the Proponent remains committed to undertaking baseline groundwater bore assessments and monitoring appropriate private bores;¹⁴⁰⁵
- (f) provides, in Appendix G to the AEIS, landholder bore surveys that have already been undertaken since those provided in the EIS;¹⁴⁰⁶
- (g) provides a Revised Groundwater Monitoring and Impact Management Plan in Appendix H to the AEIS;¹⁴⁰⁷ and

¹⁴⁰² AEIS Section 5.1.5.3 pages 31 to 32.

¹⁴⁰³ AEIS Section 5.1.5.3 page 32.

¹⁴⁰⁴ AEIS Section 5.1.5.3 pages 44 to 48.

¹⁴⁰⁵ AEIS Section 5.1.5.3 page 48.

¹⁴⁰⁶ AEIS Section 5.1.5.3 page 48.

¹⁴⁰⁷ AEIS Section 5.1.5.3 pages 48 to 49.

- (h) documents a more detailed proposed consultation and engagement program.¹⁴⁰⁸

916. In addition, the AEIS:

- (a) responds to the submission from the Department of Environment and Heritage Protection by:¹⁴⁰⁹
 - (i) referring to information provided in the EIS;
 - (ii) committing to develop and implement a Receiving Environment Monitoring Program;
 - (iii) noting that the flood levees will be removed at the end of operations;
 - (iv) committing to conduct more detailed sampling of aquatic environmental values, including water quality, prior to construction works commencing;
 - (v) providing proposed release conditions for mine-affected water in Appendix C of the AEIS; and
 - (vi) committing to monthly monitoring of basic water quality parameters within the proposed sedimentation and environment dams and annual pre wet season monitoring for storages with proposed release conditions to test for a broader range of water quality parameters including metals and metalloids, nutrients and hydrocarbons; and
- (b) responds to the requests for additional information made by the Commonwealth Department of Environment, the Department of Natural Resources and Mines and Toowoomba Regional Council by providing further modelling in Appendix F of the AEIS,¹⁴¹⁰

¹⁴⁰⁸ AEIS Section 5.1.5.4 pages 51 to 53.

¹⁴⁰⁹ AEIS Sections 5.1.4.23 to 5.1.4.64 to pages 41 to 62.

¹⁴¹⁰ AEIS Sections 5.2.8.4 to 5.2.8.15 page 69 to 74, Section 5.2.9.1 pages 74 to 76, Section 5.2.9.13 pages 85 to 86, Section 5.2.9.21 to 5.2.9.24 pages 87 to 101, Section 5.2.9.27 page 101, Section 5.2.9.34 page 102, Section 5.2.10.9 page 105, Section 5.2.10.22 pages 107 to 108, Sections 5.2.10.26 to 5.2.10.31 pages 109 to 110.

- (c) responds to the general concerns of the Department of Health and individual submitters about the adequacy of groundwater controls and impacts on bores;¹⁴¹¹ and
- (d) responds to concerns raised in the submissions about surface water issues (including flooding).¹⁴¹²

917. Appendix N to the AEIS provides a response to each of the points raised by the Independent Expert Scientific Committee in its advice on the Project.

918. The overall commitments by the Proponent with respect to water resources are collected in AEIS Appendix D.

Further submissions received after the AEIS

919. The Department of Natural Resources and Mines provided a further submission (after the AEIS).¹⁴¹³ In that submission, the Department:

- (a) raised an outstanding concern regarding the groundwater model; and
- (b) attached suggested conditions with respect to groundwater management and monitoring, which condition addresses the Department's concern by requiring the additional model data concerning the Department to be included in a review of the model.¹⁴¹⁴

¹⁴¹¹ See, for example, AEIS Section 5.2.5.1 page 62, Section 5.3.1.1 page 136, Sections 5.3.10.6 to 5.3.10.8 pages 159 to 160, Section 5.3.19.17 pages 195 to 197, Section 5.3.20.4 pages 201 to 203, Sections 5.3.22.4 to 5.3.22.5 pages 215 to 216, Section 5.3.22.29 page 229, Sections 5.3.24.12 to 5.3.24.14 pages 241 to 243, Section 5.3.24.17 pages 244 to 245, Section 5.3.25.2 pages 263 to 264, Section 5.3.32.2 page 278, Section 5.3.41.1 pages 294 to 295, Section 5.3.52.1 page 345, Section 5.3.60.1 pages 350 to 351.

¹⁴¹² See, for example, AEIS Section 5.3.7.11 page 150, Sections 5.3.12.2 to 5.3.12.3 pages 162 to 163, Sections 5.3.13.1 to 5.3.13.2 pages 171 to 172, Sections 5.3.24.14 to 5.3.24.15 pages 243 to 244, Section 5.3.24.19 page 245, Section 5.3.26.1 pages 266 to 267, Section 5.3.27.1 pages 267 to 268, Section 5.3.33.1 page 282, Section 5.3.44.9 page 303, Section 5.3.48.4 pages 320 to 321, Sections 5.3.51.1 to 5.3.51.2 pages 328 to 329, Sections 5.3.51.13 to 5.3.51.14 pages 332 to 334, Section 5.3.51.24 pages 338 to 339, Section 5.3.51.27 pages 339 to 340, Section 5.3.51.33 page 341, Section 5.3.51.35 pages 343 to 344, Section 5.3.60.2 page 351 to 353, Section 5.3.64.1 page 354.

¹⁴¹³ Further submission 81.

¹⁴¹⁴ Conditions 10, 11 and 12 in Appendix 1 of the EIS evaluation report, pages 164 to 165, reflect three of the conditions recommended by the Department of Natural Resources and Mines.

920. The Department of Environment and Heritage Protection also provided a submission after the AEIS.¹⁴¹⁵ In its submission, the Department of Environment and Heritage Protection:

- (a) raised a concern about the complexity and lack of practicality of the Proponent's proposed conditions regarding mine-affected water releases and recommended that the Proponent be required to provide additional information;¹⁴¹⁶ and
- (b) attached suggested conditions.

Information clarification to the AEIS

921. Further information was also provided by way of clarification to the AEIS in December 2014. It includes:

- (a) confirmation of the number of private landholder bores potentially impacted by groundwater drawdown associated with the revised project (which information is said to be a repeat of that in the AEIS);¹⁴¹⁷
- (b) clarification of the extent of use of water from the Wetalla Wastewater Reclamation Facility and reliance on groundwater;¹⁴¹⁸ and
- (c) details about the Proponent's approved use of brine water from Toowoomba Regional Council's Reverse Osmosis Plant.¹⁴¹⁹

Briefing notes to the Coordinator-General

922. Each of the documents referred to above was provided to the Coordinator-General as attachments to briefing notes, other than the Advice from the Independent Expert Scientific Committee (which was emailed to the Coordinator-General on 15 May 2015¹⁴²⁰) and the further submissions received after the AEIS. There are no documents indicating that the Coordinator-General was provided a copy of the

¹⁴¹⁵ Further submission 231.

¹⁴¹⁶ Further submission 231 pages 1 to 3.

¹⁴¹⁷ Information Clarification to the AEIS dated December 2014 pages 20 to 23.

¹⁴¹⁸ Information Clarification to the AEIS dated December 2014 pages 23 to 24.

¹⁴¹⁹ Information Clarification to the AEIS dated December 2014 page 25.

¹⁴²⁰ Doc 10-0045.

submissions to the AEIS, although the EIS evaluation report records that they were considered.

11.3.2 Summary of the process of evaluation of the Project regarding potential impacts to water resources as described in the report evaluating the EIS

Surface water

Flooding

923. The EIS evaluation report states that potential impacts to flow, depth and velocity largely come from the creation of structures on-site and discharges.¹⁴²¹ It states that newly proposed structures such as flood levees parallel to the Manning Vale East pit and the Willeroo pit to Lagoon Creek, and the train load-out facility and associated rail spur were assessed to understand what impacts to flow depths and velocities may occur.¹⁴²²
924. The EIS evaluation report states that other structures will be extensions of existing facilities not located on the floodplain, or new structures such as environmental dams, that will be built outside the floodplain.¹⁴²³
925. The EIS evaluation report states that mine pit flood levees will be built so that they have no impact during low flow events.¹⁴²⁴ It states that the Proponent has committed to build these structures to withstand a probable maximum flood event to ensure overtopping of floodwaters into the pits does not occur.¹⁴²⁵ It states that the levees will each be 3.5 metres high and between 1.5 to 2 kilometres wide.¹⁴²⁶
926. The EIS evaluation report states that the flood levees will reduce pre-mine flow conditions within three kilometres of the mine lease boundary.¹⁴²⁷ It states that only minimal changes outside of the Project site are anticipated from the development of the flood levees.¹⁴²⁸

¹⁴²¹ EIS evaluation report page 130.

¹⁴²² EIS evaluation report page 130.

¹⁴²³ EIS evaluation report page 130.

¹⁴²⁴ EIS evaluation report page 130.

¹⁴²⁵ EIS evaluation report page 130.

¹⁴²⁶ EIS evaluation report page 130.

¹⁴²⁷ EIS evaluation report page 131.

¹⁴²⁸ EIS evaluation report page 131.

927. The EIS evaluation report states that the change in location of the train load-out facility is an improvement as it will remove it from the flood area for all modelled scenarios.¹⁴²⁹
928. The EIS evaluation report states that the rail spur will be built on the floodplain and, in line with Aurizon standards, its construction will be built to a 1-in-100 annual exceedance probability, with overtopping to occur in heavier events.¹⁴³⁰ It states for the 1-in-10 annual exceedance probability scenario, the spur would result in increases of up to 0.3 metres in depth upstream of the railway line, with the increase reducing to pre-development conditions within the mining lease application boundary.¹⁴³¹
929. The EIS evaluation report states that modelling for the 1-in-100 annual exceedance probability indicated the point where the rail spur crosses the Lagoon creek would cause an increase in flow depth of around 1.2 metres.¹⁴³² However, it states that this reduced to zero increase within 500 metres.¹⁴³³ The EIS evaluation report states that the increase would result in an increase depth of around 150 millimetres on about 0.5 hectares of a private landholder's paddock, which would not have previously been inundated.¹⁴³⁴ It states that this impact is estimated increase to 300 millimetres in a 1-in-1000 annual exceedance probability.¹⁴³⁵
930. The EIS evaluation report states that downstream of a railway line a decrease in flood levels of around 20 millimetres is modelled due to attenuation from the spur.¹⁴³⁶ It states that this would be accompanied by an increase in peak velocity to 1.5 metres per second, although this would be contained on land owned by the Proponent.¹⁴³⁷
931. The EIS evaluation report states that there would be a very slight change, in the order of minutes, as to when a flood would reach Jondaryan.¹⁴³⁸ It states that the

¹⁴²⁹ EIS evaluation report page 131.

¹⁴³⁰ EIS evaluation report page 131.

¹⁴³¹ EIS evaluation report page 131.

¹⁴³² EIS evaluation report page 131.

¹⁴³³ EIS evaluation report page 131.

¹⁴³⁴ EIS evaluation report page 131.

¹⁴³⁵ EIS evaluation report page 131.

¹⁴³⁶ EIS evaluation report page 131.

¹⁴³⁷ EIS evaluation report page 131.

¹⁴³⁸ EIS evaluation report page 131.

Project's structures will not cause adverse impacts to Acland, which sits above the floodplain, or Jondaryan, which is located in the floodplain.¹⁴³⁹ The EIS evaluation report states that the AEIS states that the Project will have no impact on floodwaters experienced by the town of Oakey.¹⁴⁴⁰

Water availability

932. The EIS evaluation report states that the Project's surface water capture would reduce the 200 square kilometre catchment area by 8.7 square kilometres.¹⁴⁴¹ It states that this is a maximum reduction in catchment area of 4.3 per cent with an average reduction for the life of the mine of three per cent.¹⁴⁴²

Mine water releases

933. The EIS evaluation report states that to keep on-site mine water storages balanced the Project proposes to release mine-affected water to Lagoon Creek under controlled conditions from three new environmental dams.¹⁴⁴³ It states that, to date, releases have been rare, with one controlled release in the past ten years.¹⁴⁴⁴ It states that new controlled releases of a maximum of up to 50 mega litres in a 1-in-100 annual exceedance probability event are proposed.¹⁴⁴⁵ It states that this will be rare because acceptable flow conditions for a release are infrequent.¹⁴⁴⁶ It states that the EIS finds that by ensuring water management structures are safely engineered and located away from floodplain areas, the risk of uncontrolled releases is considered low.¹⁴⁴⁷

Residual voids: surface water impacts

934. The EIS evaluation report states that mine pit water could present a risk to water quality should overflow of pit water occur during rainfall events after mining ceases.¹⁴⁴⁸ The report states that the Proponent has committed to rehabilitate the

¹⁴³⁹ EIS evaluation report page 131.

¹⁴⁴⁰ EIS evaluation report page 131.

¹⁴⁴¹ EIS evaluation report page 132.

¹⁴⁴² EIS evaluation report page 132.

¹⁴⁴³ EIS evaluation report page 132.

¹⁴⁴⁴ EIS evaluation report page 132.

¹⁴⁴⁵ EIS evaluation report page 132.

¹⁴⁴⁶ EIS evaluation report page 132.

¹⁴⁴⁷ EIS evaluation report page 133.

¹⁴⁴⁸ EIS evaluation report page 133.

final landform so that any depressions or hills will be located outside the existing probable maximum flood extent (commitment 105).¹⁴⁴⁹

935. The EIS evaluation report states that contour banks will be constructed after profiling of the final landform to control runoff, minimising hydrological disturbance.¹⁴⁵⁰ It states that contour banks will be designed to control the run off from a 1 in 20 year event (commitment 72).¹⁴⁵¹

Water tanks

936. The EIS evaluation report states that dust from mining operations, such as removal and relocation of overburden, coal stockpiling and transportation, has the potential to infiltrate nearby residential water tanks with sediment and metals.¹⁴⁵² It states that sampling of five water tanks in 2007 indicated water quality was within limits set in the *Australian Water Quality Guidelines* for metals.¹⁴⁵³ It states all tanks exceeded guidelines health limits for E.coli, likely due to the influence of bird/fauna droppings.¹⁴⁵⁴ It states one tank to the south of the mine exceeded guideline limits for colour, which is a limit set in consideration of aesthetic value rather than being health related.¹⁴⁵⁵

Waste, sediment and erosion

937. The EIS evaluation report states that the handling, storage and disposal of on-site waste (including chemicals and effluent) carries high risks of possible pollution of surface water during rainfall or flow events, or through discharge into waterways.¹⁴⁵⁶ It states that similarly sediment and erosion controls are integral to avoiding contamination of surface water or watercourse flows with water that has come into contact with exposed soils, coal or industrial areas.¹⁴⁵⁷ It states scouring can also occur due to improper release of waters or channelling of excess flows.¹⁴⁵⁸

¹⁴⁴⁹ EIS evaluation report page 133.

¹⁴⁵⁰ EIS evaluation report page 133.

¹⁴⁵¹ EIS evaluation report page 133.

¹⁴⁵² EIS evaluation report page 133.

¹⁴⁵³ EIS evaluation report page 133.

¹⁴⁵⁴ EIS evaluation report page 133.

¹⁴⁵⁵ EIS evaluation report page 133.

¹⁴⁵⁶ EIS evaluation report page 133.

¹⁴⁵⁷ EIS evaluation report page 133.

¹⁴⁵⁸ EIS evaluation report page 133.

Groundwater

Impacts to quality

938. The EIS evaluation report states that the three mine pits are expected to form pit lakes post mining.¹⁴⁵⁹ It states that the EIS finds it unlikely that water captured in the lakes would become acidic from the oxidisation of pyrites due to the neutralising effect of the largely alkaline sediments.¹⁴⁶⁰ It states that the Proponent states the existing mine has had no occurrences of acid rock drainage.¹⁴⁶¹
939. The EIS evaluation report states that pooled water in the mine pits are not expected to exchange back into the Walloon Coal Measures and affect water quality.¹⁴⁶² It states, however, that in large rainfall events occasional recharge from the lakes may occur.¹⁴⁶³ It states that the AEIS states that analytical salt balance modelling found that the depressed landform lakes are not expected to become salinised within the 300 year modelling period.¹⁴⁶⁴ It states that overall groundwater flow will continue to be towards the voids in the long-term, and therefore the AEIS finds no impact on groundwater quality in aquifers is expected from the Project post-mining.¹⁴⁶⁵

Waste

940. The EIS evaluation report states that in-pit wastes present risks to water quality if not properly managed and that, similarly, in-pit tailings cells will need to be appropriately engineered and decommissioned to ensure no impacts to groundwater quality occur.¹⁴⁶⁶

Groundwater supply allocation

941. The EIS evaluation report states the Project is not seeking additional water allocation for mine use as its main operational source of water is from fine tailings process water, supplemented by supply from the Project's Wetalla Wastewater

¹⁴⁵⁹ EIS evaluation report page 134.

¹⁴⁶⁰ EIS evaluation report page 134.

¹⁴⁶¹ EIS evaluation report page 134.

¹⁴⁶² EIS evaluation report page 134.

¹⁴⁶³ EIS evaluation report page 134.

¹⁴⁶⁴ EIS evaluation report page 134.

¹⁴⁶⁵ EIS evaluation report page 134.

¹⁴⁶⁶ EIS evaluation report page 145.

Pipeline.¹⁴⁶⁷ In addition, brine water from the Oakey water treatment plans is used on occasion.¹⁴⁶⁸

Groundwater drawdown by aquifer: end of mining

942. The EIS evaluation report identifies the following estimated aquifer drawdown impacts post-mining:¹⁴⁶⁹
- (a) Alluvial aquifer: four locations may experience drawdown. Of these, two zones are located in the vicinity of the Manning Vale West pit; one zone is located under Lagoon Creek with a maximum drawdown of around two metres predicted. The one metre drawdown contour maximum width extends to around three kilometres in two locations.
 - (b) Tertiary Basalt aquifer: predicted drawdown is estimated to occur at nine locations, with four locations experiencing maximum drawdown impacts ranging from one to two metres. Four areas in the Tertiary Basalt aquifer outside of the Project site indicate maximum drawdown of up to five metres. The largest drawdown zone at the one metre contour is approximately nine metres wide. At this location, a maximum drawdown of two metres is predicted. The maximum estimated drawdown for the Tertiary Basalt is predicted to be up to 12 metres.
 - (c) Walloon Coal Measures aquifer: maximum drawdown of 47 metres is estimated to occur near the pits. The one metre drawdown contour is estimated to extend over an area of around 21 kilometres in diameter. While the deepest drawdown areas are largely within the Project site, drawdowns of up to ten metres are estimated to extend around three kilometres offsite to the west of the Project site.
 - (d) Marburg Sandstone aquifer: a drawdown maximum of 12 metres is predicted, extending across a cone around seven kilometres wide. The impact is largely contained within the mining area. The drawdown contour is estimated to extend across an area of around 23 kilometres in diameter.

¹⁴⁶⁷ EIS evaluation report pages 134 to 135.

¹⁴⁶⁸ EIS evaluation report page 135.

¹⁴⁶⁹ EIS evaluation report pages 135 to 136.

Residual impacts

943. The EIS evaluation report states that recovery in groundwater levels is predicted to be relatively rapid during the first few years post mining and stabilise to residual drawdown levels of between two and six metres.¹⁴⁷⁰ It states that the following modelled long term drawdown impacts for each aquifer are estimated to be:¹⁴⁷¹
- (a) Alluvial aquifer: no long term impact is expected.
 - (b) Tertiary Basalt aquifer: five impact areas. Four locations are expected to have maximum drawdown not exceeding one metre. The largest zone, at a width of two kilometres at its one metre contour may experience a maximum drawdown of around two metres. The AEIS finds that the pit lake water levels are not predicted to rise above the base elevation of the basalt aquifer and so the pits are not expected to recharge into the basalt system.
 - (c) Walloon Coal Measures: three drawdown zones in the vicinity of each pit are predicted to remain post mining. A drawdown maximum of around ten metres extending across an approximately five kilometre diameter contour near the Manning Vale West pit is predicted. Most of the maximum drawdown zone is located on the Project site. Smaller impact zones are predicted for the other two voids, with drawdown from one to two metres estimated across contours of around three to four metres wide. The one metre drawdown extent is expected to prevail around six kilometres from the Project boundary at its greatest extent.
 - (d) Marburg Sandstone aquifer: the predicted extent of the drawdown for the Marburg aquifer is not expected to exceed one metre from an oval contour of around three to four kilometres in diameter, located near the Manning Vale West pit.

¹⁴⁷⁰ EIS evaluation report page 136.

¹⁴⁷¹ EIS evaluation report pages 136 to 137.

Affected landholders: bores

944. The EIS evaluation report states there are 857 registered bores within an eight kilometre radius of the Project site.¹⁴⁷² It states that the affected bores equate to:¹⁴⁷³
- (a) 77 bores located across 42 private properties and registered with the Department of Natural Resources and Mines with a known source aquifer, namely:
 - (i) Tertiary Basalt: 17 (comprised of 12 with an estimated likely impact of greater than two metres; five with an estimated possible impact of one to two metres);
 - (ii) Walloon Coal Measures: 41 (19 likely greater than two metres; 22 possible impact of one to two metres);
 - (iii) Marburg Sandstone: 19 (nine likely greater than two metres; ten possible impact of one to two metres);
 - (b) 109 bores registered with the Department of Natural Resources and Mines that do not have an identified source aquifer, located on 27 properties;
 - (c) 12 bores registered with the Department of Natural Resources and Mines where the aquifer and property is not confirmed; and
 - (d) 159 bores owned by New Hope Group (the Proponent or Acland Pastoral Company).
945. The EIS evaluation report states that in total 257 registered bores are either likely or possibly to be affected, with 198 of these owned by private landholders (69 of these landholders have been confirmed; the number of owners of 12 bores remains unconfirmed), with the balance of 159 owned by the Proponent.¹⁴⁷⁴ It states that, in addition, there is likely to be numerous unregistered bores that will be within the groundwater drawdown zone of mining operations.¹⁴⁷⁵

¹⁴⁷² EIS evaluation report page 137.

¹⁴⁷³ EIS evaluation report pages 137 to 138.

¹⁴⁷⁴ EIS evaluation report page 138.

¹⁴⁷⁵ EIS evaluation report page 138.

Groundwater-dependent ecosystems

946. The EIS evaluation report states that the AEIS confirms the location of potential groundwater-dependent ecosystems and wetlands in accordance with State Government's WetlandInfo database, overlaid with drawdown horizons for the basalt aquifer.¹⁴⁷⁶
947. The EIS evaluation report states that there are several mapped terrestrial groundwater-dependent ecosystems to the west and south of the Project but that it is likely that the water table is below the rooting depth of trees.¹⁴⁷⁷
948. The EIS evaluation report states that the AEIS found that it is not expected that the Project will impact on any groundwater-dependent ecosystems associated with the springs and waterholes on Spring Creek and Oakey Creek.¹⁴⁷⁸

11.3.3 Observations

949. While there is no briefing note or other document indicating that the Coordinator-General was provided with a copy of the submissions with respect to the AEIS:
- (a) the outstanding concern expressed by the Department of Natural Resources and Mines about the adequacy of the groundwater model in its submission to the AEIS is noted in the EIS evaluation report;¹⁴⁷⁹
 - (b) conditions 10 to 12 in Appendix 1 and conditions 1 and 2 in Appendix 3 Schedule 3 of the EIS evaluation report¹⁴⁸⁰ reflect conditions requested by the Department of Natural Resources and Mines in its submission to the AEIS; and
 - (c) most (but not all) of the conditions recommended by the Department of Environment and Heritage Protection, in its submission to the AEIS, are conditions stated by the Coordinator-General in Appendix 2 of the EIS evaluation report.¹⁴⁸¹

¹⁴⁷⁶ EIS evaluation report page 138.

¹⁴⁷⁷ EIS evaluation report page 138.

¹⁴⁷⁸ EIS evaluation report page 138.

¹⁴⁷⁹ EIS evaluation report page 151.

¹⁴⁸⁰ EIS evaluation report pages 164 to 165.

¹⁴⁸¹ Compare EIS evaluation report pages 170 to 204 with Further submission 231.

11.4 Management of water resources

11.4.1 What was the evidence or other material held by the Coordinator-General on management of water resources?

950. The evidence and other material held by the Coordinator-General on the management of water resources, including evidence in the EIS, AEIS and submissions, is outlined in detail in Section 11.3.1 (Potential impact on water resources) of this review. Accordingly, it is unnecessary to canvass that evidence again here.

11.4.2 Summary of the process of evaluation of the Project regarding management of water resources as described in the report evaluating the EIS

Surface water

951. The EIS evaluation report states that the Project's Water Resources Management Plan confirms the Project's key principles for water management are:¹⁴⁸²

- (a) divert clean water away from mine areas;
- (b) mine-affected water to be captured, treated, re-used and if required, discharged into Lagoon Creek when water quality and discharge conditions are able to be met;
- (c) on-site monitoring of water quality to occur; and
- (d) efficient transfer and use of water supplies around the site to ensure best use of water resources.

Water quality control: site contaminants and work in creeks

952. The EIS evaluation report states that procedures for effective protection of surface water quality include:¹⁴⁸³

- (a) surface run off from potentially contaminated infrastructure areas will receive additional treatment (for example, oil-water separator processing and bunding);¹⁴⁸⁴

¹⁴⁸² EIS evaluation report pages 138-139.

¹⁴⁸³ EIS evaluation report page 139.

¹⁴⁸⁴ Water captured in these areas will be reused on site, while captured oil will be recycled by a licensed contractor.

- (b) progressive rehabilitation will be undertaken to reduce the amount of disturbed areas, with reseeded to occur as soon as possible;
- (c) control strategies for the onsite sewage water treatment plant are included in the Environmental Management Plan;
- (d) fuel, dangerous goods and hazardous chemicals will be managed in line with regulatory standards, guidelines and in compliance with statutory requirements;
- (e) refuelling locations and handling of fuels will be undertaken away from all waterways, including creeks and drainage paths;
- (f) control strategies for erosion and sediment management to avoid and minimise water quality impacts and scouring are included in the Environmental Management Plan;
- (g) a conservation management zone will be established at the length of Lagoon Creek, with a 150 metre separation area each side from mine pits, and a 50 metre exclusion from all mine activities;
- (h) the riparian area will be restored, which will work to improve water quality;
- (i) commitments 116 and 201 state that specific environmental management conditions will be implemented to mitigate the impacts of the construction of the railway line crossing of Lagoon Creek;
- (j) workspaces will be located away from the creek banks, no construction will take place during wet periods, temporary barriers will be installed to minimise disturbance to creek flows and creek rehabilitation works are to be monitored; and
- (k) commitment 126 confirms the Proponent will undertake water quality sampling in rainwater tanks should air quality monitoring exceed the air quality objectives in the *Environmental Protection (Air) Policy 2008* or dust nuisance goals.

953. The EIS evaluation report concludes the Coordinator-General has stated conditions to ensure sufficient controls are in place for the protection of surface water quality values due to site contaminants and works in Lagoon Creek, including:¹⁴⁸⁵
- (a) hazardous leachates are to be prevented from being directly or indirectly released or at risk of being released to any watercourse;
 - (b) release to waters must not cause erosion of the bed and banks of the receiving waters or cause material build-up of sediment;
 - (c) temporary works in a watercourse must be undertaken in accordance with the Department of Natural Resources and Mines' Guideline – Activities in a Watercourse, Lake or Spring Associated with Mining Activities;
 - (d) contaminants that will, or have the potential to, cause environmental harm must not be released directly or indirectly to any waters;
 - (e) release to waters must be undertaken so as not to cause erosion of the bed and banks of the receiving waters or cause material build-up of sediment in such waters;
 - (f) an Erosion and Sediment Control Plan must be developed to minimise erosion and the release of sediment to receiving waters and contamination of stormwater;
 - (g) all effluent released from the treatment plant must be monitored at the frequency and for specified parameters for Sewage Effluent Quality Targets for Dust Suppression and Irrigation;
 - (h) sewage effluent used for dust suppression or irrigation must not cause spray drift or overspray to any sensitive place; and
 - (i) effluent from sewage treatment facilities must be reused or evaporated and must not be directly released from the sewage treatment plant to any waterway.

¹⁴⁸⁵ EIS evaluation report pages 139-140.

Quality control: release events

954. The EIS evaluation report states that procedures detailed in the Project's Water Resource Management Plan includes the following points:¹⁴⁸⁶

- (a) water quality will be measured upstream and downstream of the Project site, with monitoring to record salinity, acidity/alkalinity, oxygen, electrical conductivity and temperature monthly, or when water is present; and heavy metals, nutrients, anions and cations monitored twice a year;
- (b) sampling for metals, metalloids, nutrients and hydrocarbons will be conducted in dams that are part of the mine water management release system;
- (c) monitoring will be undertaken to inform a hazard assessment to determine if contaminants pose a risk to the receiving environment if discharged;
- (d) preferential use of water stored in environmental dams as a supplemental water source for coal washing, dust suppression and other activities to minimise the likelihood of off-site water discharges;
- (e) the potential for uncontrolled releases is unlikely given the location of the disturbance footprint in relation to the catchment topography; and
- (f) the on-site water storage capacity and Water Resource Management Plan has been designed to reduce the likelihood of uncontrolled discharges.

955. The EIS evaluation report concludes:¹⁴⁸⁷

- (a) the EIS states that controlled releases to Lagoon Creek and Spring Creek are a necessary aspect of the mine water balance to prevent good quality water increasing in salinity if retained on site;
- (b) the conditions stated by the Coordinator-General about mine-affected water releases are based on the Department of Environment and Heritage Protection's model mining conditions and are consistent with the conditions

¹⁴⁸⁶ EIS evaluation report page 140.

¹⁴⁸⁷ EIS evaluation report pages 140 to 142.

proposed by the Proponent in the updated Environmental Management Plan (AEIS);

- (c) some minor changes have been made by the Department of Environment and Heritage Protection to better align the recommended conditions with site specific matters relevant to the Project, such as specified electrical conductivity levels for receiving and discharge waters;
- (d) tables included in Appendix 2 of the report confirm where mine-affected water can be released, the release sources, and the properties of receiving waters that must be accorded with before a release can occur;
- (e) the Coordinator-General has conditioned that a stream flow gauge station be installed, operated and maintained to determine and record stream flows in Lagoon Creek upstream of the discharge sites;
- (f) the conditions note where, and how often, upstream monitoring of water conditions is to occur, as well as monitoring downstream of release points;
- (g) contaminated release limits, such as electrical conductivity and acidity/alkalinity are also conditioned to control the amount and quality of water released;
- (h) mine-affected water release limits are included which note that electrical conductivity limits are able to range from 700-3,500uS/cm;
- (i) for the higher level of electrical conductivity, flows in stream must be exceeding four mega litres a day;¹⁴⁸⁸
- (j) in a rare, high flow scenario with water flows exceeding 35 mega litres a day, no more than six mega litres a day of discharge with an electrical conductivity of 3,500uS/cm could be released;
- (k) for low flow events, conditions state that for a period of 28 days after a natural flow event that exceed four mega litres a day, an electrical

¹⁴⁸⁸ In that scenario, a maximum of 0.5 mega litres a day of water with an electrical conductivity of 3,500uS/cm is able to be released.

conductivity limit of 700uS/cm with a release no greater than 1.5 mega litres a day would apply;

- (l) for electrical conductivity, discharge limits have been set based on advice by the Department of Environment and Heritage Protection in light of data available about background conditions for electrical conductivity in the area's water resources, which, particularly in the case of groundwater and standing pools of water in Lagoon Creek, have been shown to be high. However, electrical conductivity levels are much lower during flow conditions;
- (m) draft environmental values and water quality objectives are currently under development by the State Government for the Project's catchment area;
- (n) when finalised the environmental values and water quality objectives are intended to be included in the *Environmental Protection (Water) Policy 2009*;
- (o) the environmental values and water quality objectives would apply to the Project if the area that the Project is located in is regulated, in which case, any conditioning applied in the Project's draft Environmental Authority about water quality limits would be reviewed by the Department of Environment and Heritage Protection to understand if there was alignment with the expectations of area-specific environmental values and water quality objectives;
- (p) the conditions note that Spring Creek receives discharge from the mine site, which is permitted through the current operation's authorisation for use of this gully for discharge;
- (q) the Project as proposed will not make any changes to the discharge for Spring Creek;
- (r) the daily quantity of mine-affected water released from each release point must be measured and recorded; and

- (s) the Department of Environment and Heritage Protection is to be notified no later than 24 hours after a release event that a release has occurred and the notification must confirm contaminant limits, natural flow conditions and discharge volumes were in accordance with set limits.

956. The EIS evaluation report states:¹⁴⁸⁹

- (a) the Coordinator-General has conditioned that the proponent must finalise and implement the Water Resource Management Plan proposed in the EIS;
- (b) the proponent's current water quality monitoring program should be expanded to incorporate the operational and decommissioning phases of the Project;
- (c) the program is to ensure the Water Resource Management Plan is effective, to demonstrate compliance with the mine's strict discharge limits, and to ensure the downstream water quality (physico-chemical parameters, at a minimum) is not being adversely impacted;
- (d) the Water Resource Management Plan is to include the following actions:
 - (i) water quality will be measured upstream and downstream of the Project site;
 - (ii) basic water quality indicators (i.e. salinity, acidity/alkalinity, dissolved oxygen, electrical conductivity, temperature) will continue to be monitored on a monthly basis, or when water is present; and heavy metals, nutrients, anions and cations will be monitored twice annually at sensitive sites;
 - (iii) during the discharge of mine affected water the salinity of Lagoon Creek at monitoring site DS1 should not exceed 1,000uS/cm;
 - (iv) the full set of upstream and downstream monitoring parameters included in the Water Resource Management Plan is to be approved by the Department of Environment and Heritage Protection within

¹⁴⁸⁹ EIS evaluation report page 142.

one year from finalising of the Coordinator-General's report for the Project; and

- (v) the proponent is to measure upstream at RP1 and downstream water quality at DS1 for the parameters included in the Water Resource Management Plan.

Quality control: design of structures

957. The EIS evaluation report states that the Environmental Management Plan (AEIS) confirms:¹⁴⁹⁰

- (a) design and construction of all water management structures will use practical hydraulic parameters based on an appropriate risk based consideration of rainfall event, catchment size, slopes, discharge design and soil types;
- (b) flood protection for resource areas will be provided through two flood levees designed to provide protection from a probable maximum flood event;
- (c) the Proponent has committed to ensuring the Project's final landform is outside the existing probable maximum flood extent and, as a result, there will be no flooding impacts on voids and elevated landforms;
- (d) commitment 233 is that culverts will be constructed for the rail spur in the area of Lagoon Creek flood plain to allow for overland flow of run-off;
- (e) rail design parameters confirm that design will be to a 1-in-100 annual exceedance probability and will incorporate culverts to ensure flows of surface water;
- (f) the spur will be raised to around two metres in the vicinity of Jondaryan to account for increased flood depth at this location; and
- (g) the rail spur will be designed in accordance with Aurizon standards.

¹⁴⁹⁰ EIS evaluation report pages 142 to 143.

958. The EIS evaluation report concludes:¹⁴⁹¹

- (a) the Coordinator-General acknowledges the hydrodynamics of the Lagoon Creek catchment have been modified over time, most notably by agricultural activities in the area where channel definition has been decreased due to ploughing over sections of the creek or sediment loads from soil erosion has in-filled sections of the creek;
- (b) such effects obviously make conditions experienced downstream worse in times of high flow events;
- (c) the Coordinator-General notes that local government has channelized the creek through the town of Jondaryan to alleviate the effects of high flows;
- (d) the Coordinator-General has conditioned release limits for the amount of water the mine can discharge during flow events on the rare occasion the mine will be able to discharge into the creek;
- (e) the Coordinator-General is of the view that restoration of Lagoon Creek across the mine site will improve the channel's values and function;
- (f) the Coordinator-General has conditioned controls to ensure on-site structures are built to minimise risks to people and the environment during high flow events, including:
 - (i) by the environmental authority holder within one week of any storm of intensity greater than 25 millimetres of rain within three hours; and
 - (ii) by a suitably qualified and experienced person at least once per year between the months of May and October inclusive (i.e. during the 'dry' season and before the onset of the 'wet' season);
- (g) any remedial works identified as needing to be undertaken to the structure must be commenced within 30 days;

¹⁴⁹¹ EIS evaluation report pages 143 to 144.

- (h) land disturbed by mining must be rehabilitated in accordance with extensive rehabilitation requirements as detailed in the conditions;
- (i) all regulated structures such as dams and levees must be designed by and constructed under the supervision of a suitable qualified and experienced person in accordance with the requirements of the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures;
- (j) all regulated structures are to be designed and constructed with due consideration given to ensuring that the design integrity would not be compromised on account of floodwaters from entering the regulated dam from any watercourse or drainage line and wall failure due to erosion by floodwaters arising from a watercourse;
- (k) there is required to be a current operational plan in place for the regulated structures;
- (l) the performance of each regulated dam must be assessed over a November to May period based on actual observations of the available storage in each regulated dam taken prior to 1 July of each year;
- (m) by 1 November of each year, storage capacity must be available in each regulated dam to meet the Design Storage Allowance volume of the dam;
- (n) the holder must, as soon as possible and within forty-eight hours of becoming aware that the regulated dam will not have the available storage to meet the Design Storage Allowance volume on 1 November of any year, notify the administering authority;
- (o) the holder must, immediately on becoming aware that a regulated dam will not have the available storage to meet the Design Storage Allowance volume on 1 November of any year, act to prevent the occurrence of any unauthorised discharge from the regulated dam;
- (p) a range of conditions regarding effective management of risk from tailings disposal are also stated in the conditions;

- (q) each regulated dam must be inspected each calendar year by a suitable qualified and experienced person;
- (r) at each inspection the condition and adequacy of all components of the regulated structure must be assessed and a suitable qualified and experienced person must prepare an annual inspection report containing details of the assessment and include recommended actions to ensure the integrity of the regulated structure;
- (s) the suitable qualified and experienced person who prepared the annual inspection report must certify the report in accordance with the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures; and
- (t) requirements for safe decommissioning and rehabilitation of structures are detailed in the conditions.

959. The EIS evaluation report states that because the rail spur and balloon loop is to be located on the floodplain and in the vicinity of private properties, the Coordinator-General has imposed a condition requiring the construction of the rail infrastructure to be of a standard that allows free flow of flood waters in such a way as to not cause, or increase, flood damage at a residential or commercial place.¹⁴⁹² It states that where this is unavoidable, compensation is to be negotiated with landowners.¹⁴⁹³

960. The EIS evaluation report states that landowners and asset owners likely to be impacted must be consulted prior to completion of the final rail spur design.¹⁴⁹⁴ It states that a suitably qualified person must document and certify that the design and construction of the rail component of the Project is in accordance with the above requirements and to align with the criteria as stated in the Department of Transport and Main Roads (March 2010) Road Drainage Manual 2nd Edition (or later version) and with Aurizon design standards.¹⁴⁹⁵

¹⁴⁹² EIS evaluation report page 144.

¹⁴⁹³ EIS evaluation report page 144.

¹⁴⁹⁴ EIS evaluation report page 144.

¹⁴⁹⁵ EIS evaluation report page 144.

Surface water availability

961. The EIS evaluation report states:¹⁴⁹⁶

- (a) the Coordinator-General considers that the effects of the mine's capture of three per cent of the catchment surface water for the life of the mine to be minimal;
- (b) the Coordinator-General is satisfied that the Project is not expected to have an impact on downstream watercourse or environmental values, including those located in the Murray Darling Basin area;
- (c) potential impacts on the sole licensed surface water user downstream of the mine where a reduction of around 0.5 per cent water allocation may be affected are small;¹⁴⁹⁷
- (d) the Project's mine water strategy to divert clean water flows away from the operations, along with any releases the Project will make into the Lagoon Creek system, will work to alleviate the Project's impact on surface water availability; and
- (e) the Proponent's intention to revegetate and improve the riparian values for the extent of Lagoon Creek along the Project site will improve the water quality values for the catchment by reducing sediment.

Groundwater***Groundwater quality***

962. The EIS evaluation report states:¹⁴⁹⁸

- (a) while the Project will present significant impacts on groundwater resources due to in pit flows when mining below the water table occurs, it is noted that the mine's bore use has reduced due to construction of a 45 kilometre pipeline and purchase of supply from the Wetalla Wastewater Treatment plant, with up to 5,500 mega litres a year able to be supplied;

¹⁴⁹⁶ EIS evaluation report pages 144 to 145.

¹⁴⁹⁷ It states that the particular allocation holder made no submission. However, it indicates that should the allocation holder find the affect material, the allocation holder should contact the Department of Natural Resources and Mines to discuss the entitlement.

¹⁴⁹⁸ EIS evaluation report page 145.

- (b) while the Project has a groundwater allocation of 1,412 mega litres a year across four aquifers, in 2012 only 41.20 mega litres was drawn from the bores;
- (c) the Project will undertake significant in-filling of voids post mining to reduce water impacts from these landforms;
- (d) voids will be benched and sloped to ensure amenity and safety;
- (e) conditions have been set by the Coordinator-General that require minimum rehabilitation requirements for all final landforms so that impacts are minimised;
- (f) the Coordinator-General is of the view that the EIS and AEIS provide comprehensive analysis of water issues requiring targeted management;
- (g) modelling and monitoring approaches provided in the AEIS were informed by advice provided by Independent Expert Scientific Community, the Commonwealth Department of the Environment, the Department of Environment and Heritage Protection and the Department of Natural Resources and Mines;
- (h) the remodelling undertaken in the AEIS provided an improved approach to understanding the Project's likely effects on water in the area; and
- (i) impacts have been identified and appropriate avoidance, mitigation and management processes and solutions have been stated in the Proponent's commitments, management plans, and through the stating of various controls by the Coordinator-General in conditions and recommended conditions.

963. The EIS evaluation report concludes:¹⁴⁹⁹

- (a) the Coordinator-General has stated controls on the management of groundwater in conditions;

¹⁴⁹⁹ EIS evaluation report pages 145 to 146.

- (b) key, with regard to water quality, is that the Project must not release contaminants to groundwater;
- (c) the Proponent will need to ensure that its site management of potential risks such as waste and in-pit rehabilitation are of a high standard, and in line with conditions stated by the Coordinator-General;
- (d) the Coordinator-General has conditioned that post mining, the land is to be rehabilitated to ensure no ongoing contamination to water, including groundwater;
- (e) rehabilitated land is to not allow for acid mine drainage and any contaminated land is to be remediated;
- (f) the updated Groundwater Monitoring and Impact Management Plan confirms the proposed monitoring groundwater monitoring locations for the Project;
- (g) in accordance with advice received from the Department of Natural Resources and Mines, additional bores in the Marburg Sandstone and Alluvial Aquifer have been included;
- (h) the Coordinator-General is satisfied that the Project's proposed monitoring locations achieve a balanced spatial distribution of bores across all aquifers and adequately represent current and predicted future modelled impacted areas and aquifers at site;
- (i) the Groundwater Monitoring and Impact Management Plan groundwater monitoring sites are conditioned as required to be implemented in Appendix 2;
- (j) groundwater levels at the bores must be measured monthly, and water quality is to be monitored twice a year;
- (k) the monitoring will ensure natural groundwater trends are identified and will work to provide certainty to affected bore holders of mine impacts on groundwater, as well as inform a wider understanding on the mine's effect on water resources;

- (l) the monitoring conditions set limits for contaminants for various analysts and conditions, including total dissolved solids, electrical conductivity, and acidity/alkalinity;
- (m) it is noted that for some bores, monitored levels already exceed limit requirements (e.g. electrical conductivity and total dissolved solids); and
- (n) all groundwater monitoring must be performed by a qualified person.

Groundwater user impacts

964. The EIS evaluation report concludes:¹⁵⁰⁰

- (a) in order to ensure impacts on authorised bore holders are quantifiable, baseline monitoring is to occur well in advance of operation;
- (b) the Coordinator-General has set a condition that states within two years following the issuing of the mining lease application for the Project the Proponent must provide a report to each potentially affected authorised water user and to the Department of Natural Resources and Mines;¹⁵⁰¹
- (c) the report must identify operational bores for each potentially affected authorised water user, and for each operational bore:
 - (i) identify natural groundwater levels and water quality;
 - (ii) identify the condition and supply capacity of the bore;
 - (iii) identify the operational requirements and current use of the bore;
 - (iv) clearly outline the predicted decrease in water level at the bore due to proposed mining operations;
 - (v) provide an initial assessment of the likely water supply impacts to the affected authorised water users, and timing of those impacts, during and following the Project activity;

¹⁵⁰⁰ EIS evaluation report pages 146 to 147.

¹⁵⁰¹ The report must include a summary of the collected baseline information and address potential impacts to the groundwater supplies of those users.

- (vi) outline the potential future actions which would ensure the potentially affected authorised water users will have access to a reasonable quantity and quality of water for the authorised use and purpose of the bores;
- (d) as stated in the EIS, possible mitigation measures that may be applied by the Proponent to make good on water impacts include:
- (i) the refurbishment of an existing groundwater bore;
 - (ii) installation of a new bore;
 - (iii) establishment of an alternative water supply arrangement; or
 - (iv) use of another mutually agreed form of mitigation;
- (e) the Coordinator-General has set conditions that state the Proponent must enter into agreement with all potentially unduly affected water users about make good measures, or, if not about make good measures, another negotiated arrangement must be agreed on;
- (f) while modelling of groundwater impacts in the EIS took the standard industry approach of using a minimum impact quantification of one metre, an impact below this amount is considered an impact that must be accounted for by the Proponent;
- (g) agreement must be entered into at least three years prior to the time an unduly affected water user is predicted to become affected due to dewatering operations;
- (h) the Coordinator-General has conditioned a process as described in the *Water Act 2000 (Qld)* that should agreement with the parties not be able to be reached, and in the opinion of the Chief Executive of the Department of Natural Resources and Mines all reasonable attempts have been made to achieve agreement, then the Department of Natural Resources and Mines may, in consultation with the licensee and the affected water user, determine the make good measures to be taken; and

- (i) preceding this would be mediation undertaken by the Department of Natural Resources and Mines officers between the affected landholder and the Proponent to understand the nature of the impediments to reaching agreement on make good arrangements.

Water resource impacts

965. The EIS evaluation report concludes:¹⁵⁰²

- (a) the Coordinator-General has set conditions requiring offsets to be provided by the Proponent for any ongoing depletion of groundwater systems caused by the Project;
- (b) to refine an understanding of the possible long term impacts on aquifers, the Coordinator-General has conditioned that groundwater modelling must be undertaken during the life of the mine;
- (c) the numerical model as detailed in the AEIS must be reviewed to incorporate groundwater modelling data and measured mine dewatering volumes from the groundwater management and monitoring program conditioned in the EIS evaluation report;
- (d) the review must be conducted within two years of commencement of mining associated with Stage 3 and at least every three years thereafter or at other intervals specified by the administering authority in writing, which will occur if the observed groundwater levels are not consistent with those predicted by the groundwater model;
- (e) the review must provide a revised numerical groundwater model that incorporates additional relevant data associated with the Oakey Creek alluvial aquifer, including:
 - (i) review of the hydrogeological conceptualisation used in the previous model;
 - (ii) an update of the predicted impacts;

¹⁵⁰² EIS evaluation report pages 147 to 148.

- (iii) revised water balance model;
 - (iv) review of assumptions used in the previous model;
 - (v) predictions of changes in groundwater levels for a range of scenarios;
 - (vi) information about any changes made since the previous model, including data changes;
- (f) a peer reviewed report outlining the justification for the refined model and the outputs of the refined model is required;
- (g) an evaluation of the accuracy of the predicted changes in groundwater levels and recommended actions to improve the accuracy of model predictions is to be provided;
- (h) a report outlining the findings and any recommendations from the review must be completed by an appropriately qualified person and submitted to the Department of Natural Resources and Mines for approval no later than three months after the commencement of the review; and
- (i) a copy of findings is to be provided to the Commonwealth Minister for the Environment for information and any comment.

Groundwater dependent ecosystems

966. The EIS evaluation report concludes:¹⁵⁰³

- (a) the Coordinator-General notes groundwater-dependent ecosystems are likely to be associated with the alluvial aquifers system and the Tertiary Basalt;
- (b) the Coordinator-General has therefore conditioned the requirement to offset water lost from these systems due to Project impacts;
- (c) such offsets are likely to benefit both community and environmental access to groundwater resources;

¹⁵⁰³ EIS evaluation report page 148.

- (d) the Project's MNES Management Plan, recommended to the Minister for the Environment as a condition of approval in considering impacts on flora and threatened ecological communities, will be required to consider potential groundwater effects on a small area of semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions threatened ecological community located close to the Manning Vale West pit;
- (e) should it be demonstrated that the above matters of national environmental significance would be affected by groundwater impacts, a decision will be required on management of the area;
- (f) as not high confidence groundwater-dependent ecosystems were located in the Project area, the Coordinator-General is satisfied that no further conditioning on this matter is required; and
- (g) the Coordinator-General is satisfied that the monitoring and modelling regime conditioned by the Coordinator-General will quantify the extent of impacts caused by the Project on water resources and offsets required will make water available for environmental use.

Oakey Creek alluvial aquifer

967. The EIS evaluation report concludes:¹⁵⁰⁴

- (a) given the importance of the alluvial systems particularly to communities and the environment, the Coordinator-General has stated conditions that require any impacts on the Oakey Creek alluvial aquifer system to be remediated;
- (b) the Coordinator-General has conditioned that after groundwater monitoring for the Project has commenced and data is being analysed, the Proponent is required to provide a report to the Department of Natural Resources and Mines on groundwater impacts due to mining from the Project;

¹⁵⁰⁴ EIS evaluation report pages 148 to 149.

- (c) this reporting requirement will commence when the second round of groundwater modelling has been provided to the Department of Natural Resources and Mines;
- (d) reporting is to be repeated for each subsequent round of modelling, so that confirmation of any actual impact can be understood and considered in the forward modelling regime;
- (e) the report is to be peer-reviewed by an independent contractor prior to being provided to the Department of Natural Resources and Mines and will be required to:
 - (i) establish any identified impact associated with mining activities, if any, on the Oakey Creek Alluvial aquifer;
 - (ii) include an assessment of natural and potential pumping based water level variation caused by non-mining authorised users, in the Oakey Creek Alluvial aquifer; and
 - (iii) outline any requirements for additional modelling or monitoring required;
- (f) if the investigation concludes that there is an identified impact on Oakey Creek Alluvial aquifer as a result of mining activities, the Proponent must determine the volumetric impact associated with the identified impact;
- (g) if the impact is determined to be the result of mining activities, the Proponent may be required to construct additional monitoring bores;
- (h) additional monitoring bores are to be incorporated in the Groundwater Monitoring and Management Plan; and
- (i) the Coordinator-General has conditioned that the Proponent must offset any long term Project related take of water from the Oakey Creek Alluvial aquifer as directed by the Department of Natural Resources and Mines.

Tertiary Basalt aquifer

968. The EIS evaluation report concludes:¹⁵⁰⁵

- (a) given the importance of the Main Range Volcanics aquifer system to communities, industries and the environment as confirmed in the Commonwealth Murray Darling Basin Plan (2012) which regulates the amount of groundwater take for the system, the Coordinator-General requires any project impacts on this resource to be offset;
- (b) the Coordinator-General has set conditions that the Project's long term volumetric impact on this aquifer is to be considered in the second review of the Project's numerical groundwater model and included in the impact report;
- (c) conditions align with the requirements for monitoring, modelling and reporting on actual impacts as described for the alluvial aquifer;
- (d) the proponent must offset any project-related take of water from the Tertiary Basalt as directed by the Department of Natural Resources and Mines;
- (e) the Department of Natural Resources and Mines is to consult with regulatory bodies in determining any offset requirements before decisions are made;
- (f) the form of any offset will need to account for the permanent reduction in available take from the aquifers equivalent to the determined long term take accounted for in the model;¹⁵⁰⁶ and
- (g) offsets may comprise a retirement of part of an existing entitlement or purchase and retirement of a new entitlement.

¹⁵⁰⁵ EIS evaluation report page 149.

¹⁵⁰⁶ This may be measurable up to the point that drawdown stabilises.

Walloon Coal Measures

969. The EIS evaluation report concludes:¹⁵⁰⁷
- (a) under recent changes to the *Water Act* the take of water from the Walloon Coal Measures is to be regulated as ‘*associated water*’ when the new legislation comes into effect in early 2015;
 - (b) the take of water will be authorised under the *Water Act* and as such there will be no requirement to offset this take;
 - (c) however, as described in the ‘*make good conditions*’ of the EIS evaluation report, project impacts to licensed users of the Walloon Coal Measures will be remedied.

Marburg Sandstone Aquifer

970. The EIS evaluation report concludes:¹⁵⁰⁸
- (a) the take of water from the Marburg Sandstone aquifer is regulated by the Water Resource Plan (Great Artesian Basin) 2006 and therefore an offset is not required; and
 - (b) the Coordinator-General has conditioned that copies of all reports about groundwater monitoring and modelling for the Project, along with decisions about offsetting requirements, are to be provided to the Commonwealth Minister for the Environment.

11.5 Summary of the process of evaluation of the Project regarding the Independent Expert Scientific Committee as described in the report evaluating the EIS

971. The EIS evaluation report states that the Project will involve taking of action involving a significant impact on a water resource.¹⁵⁰⁹ It states that advice was sought from the Independent Expert Scientific Committee on Coal Seam Gas and

¹⁵⁰⁷ EIS evaluation report page 149.

¹⁵⁰⁸ EIS evaluation report page 150.

¹⁵⁰⁹ EIS evaluation report page 150.

Large Coal Mining Development.¹⁵¹⁰ It states that the Independent Expert Scientific Committee advice was considered in the evaluation.¹⁵¹¹

972. The EIS evaluation report states that the Independent Expert Scientific Committee raised the following issues:¹⁵¹²

- (a) hydrogeological conceptualisation;
- (b) the numerical groundwater model, particularly the parameters and boundary conditions;
- (c) variations in predicted drawdown and pit inflows; and
- (d) existing surface water quality, flow and ecology data sets for Lagoon Creek, Myall Creek and Oakey Creek.

973. The EIS evaluation report states that:¹⁵¹³

- (a) the Proponent confirmed the EIS groundwater modelling was updated in response to advice received by Independent Expert Scientific Committee, the Department of Natural Resources and Mines and the Department of Environment and Heritage Protection on modelling methodologies, appropriate guidelines and inputs;
- (b) new data from monitoring bores and from observed mine pit inflows increased the model's calibration targets;
- (c) a sensitivity and uncertainty analysis was undertaken on the model to provide greater confidence in project impact predictions;
- (d) results of the modelling were peer reviewed by an independent expert; and
- (e) the peer review report was included in the AEIS.

974. The EIS evaluation report states that the Coordinator-General has conditioned the requirement for robust monitoring and iterative modelling during the life of the

¹⁵¹⁰ EIS evaluation report page 150.

¹⁵¹¹ EIS evaluation report page 150.

¹⁵¹² EIS evaluation report page 150.

¹⁵¹³ EIS evaluation report page 150. The EIS evaluation report states that this is based on Appendix N of the AEIS.

Project in order to quantify impacts on water resources.¹⁵¹⁴ It states that this will provide an empirical dataset based on actual impacts that will determine groundwater offset requirements the Proponent must supply to make good on long term impacts on water resources.¹⁵¹⁵

975. The EIS evaluation report states that the Department of Natural Resources and Mines considered one issue had not been addressed, namely the Independent Expert Scientific Committee advice that a qualitative comparison between observed and modelled potentiometric heads for each layer was suggested in order to better understand reliability of the modelling.¹⁵¹⁶ It states that the Proponent was of the view that future model updates will consider this requirement.¹⁵¹⁷ It states that the Proponent added that additional monitoring bores and data will assist in the definition of vertical gradients between geologic units where nested sites are proposed.¹⁵¹⁸ It states that the Coordinator-General is of the view that the conditioned enhanced and ongoing monitoring and modelling program will provide a better understanding about hydrogeological conditions.¹⁵¹⁹

11.6 Summary of the process of evaluation of the Project regarding ecologically sustainable development as described in the report evaluating the EIS

976. The EIS evaluation report states that the assessment of the project has taken into account the principles of ecologically sustainable development which are defined by section 3A of the *EPBC Act* as:¹⁵²⁰

- (a) **the integration principle:** decision-making should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
- (b) **the precautionary principle:** if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;

¹⁵¹⁴ EIS evaluation report page 151.

¹⁵¹⁵ EIS evaluation report page 151.

¹⁵¹⁶ EIS evaluation report page 151.

¹⁵¹⁷ EIS evaluation report page 151.

¹⁵¹⁸ EIS evaluation report page 151.

¹⁵¹⁹ EIS evaluation report page 151.

¹⁵²⁰ EIS evaluation report pages 151 to 152.

- (c) **the inter-generational principle:** the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- (d) **the biodiversity principle:** the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making; and
- (e) **the valuation principle:** improved valuation, pricing and incentive mechanisms should be promoted.

977. The EIS evaluation report states in relation to the integration principle:¹⁵²¹

- (a) the report is the culmination of a rigorous assessment addressing economic, environmental, social and equitable considerations;
- (b) all stages of the process has involved public consultation;
- (c) all long-term and short-term impacts will be managed through an Environmental Authority to be administered by the Department of Environment and Heritage Protection; and
- (d) the Coordinator-General considers compliance with his conditions will render the impacts of the Project acceptable.

978. The EIS evaluation report states in relation to the precautionary principle:¹⁵²²

- (a) the Coordinator-General is satisfied that there is sufficient scientific information to conclude there will be no unacceptable impacts of the project; and
- (b) where the Coordinator-General considers the Proponent has provided insufficient information to support its conclusions the Coordinator-General has taken a conservative approach to documenting impact estimates.

¹⁵²¹ EIS evaluation report page 152.

¹⁵²² EIS evaluation report pages 152-153.

979. The EIS evaluation report states in relation to the intergenerational principle:¹⁵²³
- (a) the Coordinator-General is satisfied that the intergenerational principle has been adequately applied throughout his evaluation of the project;
 - (b) the Coordinator-General considers that the EIS process has enabled submitters to raise concerns in a fair and equitable manner;
 - (c) the Coordinator-General has considered issues raised in his evaluation to ensure that the interests of all interested people were considered; and
 - (d) the Coordinator-General is also satisfied that the inter-generational principle has been adequately applied in his conditioning.
980. The EIS evaluation report states in relation to the biodiversity principle:¹⁵²⁴
- (a) the EIS terms of reference required consideration of biodiversity;
 - (b) the biodiversity principle has been carried throughout all stages of the process;
 - (c) the Coordinator-General is satisfied that the principle has been adequately incorporated into his conditions; and
 - (d) additionally, the Proponent's commitments and strategies in the Environmental Management Plan will mitigate or offset residual impacts to biodiversity and ecological communities.
981. The EIS evaluation report states in relation to the valuation principle:¹⁵²⁵
- (a) the Coordinator-General is satisfied that the Project's adverse impacts will be suitably compensated through biodiversity offsets; and
 - (b) the Coordinator-General considers that the cost of both direct and indirect offsets will be commensurate with the potential impacts on matters of national environmental significance and the environment generally.

¹⁵²³ EIS evaluation report page 153.

¹⁵²⁴ EIS evaluation report page 153.

¹⁵²⁵ EIS evaluation report page 154.

12. COORDINATOR-GENERAL'S CONCLUSIONS

12.1 Summary of the Coordinator-General's overall conclusions regarding matters of national environmental significance as described in the report evaluating the EIS

982. The EIS evaluation report states that the Coordinator-General has considered the EIS and the AEIS, submissions on the EIS and AEIS and additional documentation provided by the Proponent.¹⁵²⁶

983. Overall, the EIS evaluation report concludes:¹⁵²⁷

- (a) the Coordinator-General is satisfied that the Proponent has adequately assessed potential impacts;
- (b) the Proponent has provided information on mitigation measures, control strategies and monitoring programs;
- (c) the Coordinator-General is satisfied the project will not result in unacceptable impacts on matter of national environmental significance;
- (d) the Project has undergone a comprehensive environmental impact assessment; and
- (e) the Coordinator-General is satisfied the requirements of the *SDPWO Act* have been met and that sufficient information has been provided to enable the necessary evaluation of potential impacts and the development of mitigation strategies and conditions of approval;
- (f) the Proponent's mitigation measures, required by the conditions stated in the report, would result in acceptable overall outcomes and that the conditions provide comprehensive and targeted controls to further manage potential impacts;
- (g) the draft environmental approval is substantially complete and provides a set of measures sufficient to manage environmental matters for the project; and

¹⁵²⁶ EIS evaluation report page 156.

¹⁵²⁷ EIS evaluation report pages 155 to 156.

- (h) the Project will deliver significant economic benefits to both the local, regional and state economies.

984. It states that to proceed further the Proponent will be required to:¹⁵²⁸

- (a) undertake more detailed work in the detailed design phase of the Project;
- (b) obtain *EPBC Act* approval;
- (c) obtain a range of state and local government approvals for the Project;
- (d) finalise and implement a range of management plans;
- (e) finalise the environmental offset strategy.

12.2 Appendices

985. The Appendices to the EIS evaluation report sets out conditions and recommendations of the Coordinator-General.

986. The Coordinator-General has power to include in his report conditions and recommendations.¹⁵²⁹ Conditions may be made which have effect as conditions for any subsequent development approval,¹⁵³⁰ mining lease,¹⁵³¹ environmental authority,¹⁵³² or petroleum lease or license¹⁵³³ for the Project. Section 52 of the *SDWPO Act* empowers the Coordinator-General to recommend conditions to be attached to approvals under other legislation.

987. Various, the EIS evaluation report refers to commitments of the Proponent. The EIS evaluation report states that the Coordinator-General recommends that the Proponent be required to undertake the Project in line with the commitments set out in the commitments register of the AEIS.¹⁵³⁴

¹⁵²⁸ EIS evaluation report page 156.

¹⁵²⁹ Section 35(4) of the *SDPWO Act*.

¹⁵³⁰ Section 39 of the *SDPWO Act*.

¹⁵³¹ Section 45 of the *SDPWO Act*.

¹⁵³² Section 47B of the *SDPWO Act*.

¹⁵³³ Section 49B of the *SDPWO Act*.

¹⁵³⁴ EIS evaluation report page 213.

13. CONCLUSION

13.1 Did the evaluation comply with the requirements of Part 4?

988. The terms of reference (4(d)) seek an opinion about whether the evaluation of the project EIS with part 4 of the *SDWPO Act*, i.e. the Coordinator-General's evaluation.

989. Chapter 5 of this review sets out a number of relevant matters that the Coordinator-General must do pursuant to Part 4 of the *SDWPO Act*. These requirements are:

- (a) personal consideration by the Coordinator-General of:
 - (i) the EIS;
 - (ii) all properly made submissions about the EIS;
 - (iii) other submissions accepted by the Coordinator-General about the EIS;
 - (iv) any other material the Coordinator-General considers is relevant to the project; and
- (b) preparation by the Coordinator-General of a report evaluating the EIS.

990. Each of these matters is considered below.

991. This review can only consider these matters by examining the documents; primarily whether documents exist, or not, to support any assertion that the Coordinator-General has satisfied any of these requirements.

13.1.1 Did the Coordinator-General personally consider the EIS and properly made submissions about the EIS?

992. The history of the Project outlined above¹⁵³⁵ clearly indicates that a formal process was adopted for briefing the Coordinator-General whenever it was necessary for the Coordinator-General to make a decision.

¹⁵³⁵ See Chapter 3.

993. The process at each stage involved a formal briefing note that attached relevant material to inform the Coordinator-General for the purpose of the Coordinator-General making his decisions.¹⁵³⁶
994. The EIS evaluation report states that the Coordinator-General considered the EIS and the submissions about the EIS.¹⁵³⁷ This is not inconsistent with both documents having been provided to the Coordinator-General by way of briefing notes:
- (a) the EIS was provided to the Coordinator-General by briefing noted dated 24 December 2013;¹⁵³⁸ and
 - (b) the submissions about the EIS by briefing note dated 17 April 2014.¹⁵³⁹
995. The briefing note dated 17 April 2014 recommended that the Coordinator-General request additional information from the Proponent under section 35(2) of the *SDPWO Act*. Attached to this briefing note was a fairly detailed summary of the submissions about the EIS and a disc that contained all of the submissions on the EIS.¹⁵⁴⁰
996. It appears from that briefing note that the Coordinator-General approved that recommendation on 17 April 2014. It is noted that the Coordinator-General did not need to consider all of these submissions¹⁵⁴¹ on this day. Having been provided those submissions on that date, the Coordinator-General need to consider the submissions before approving the report. It is stated in the EIS evaluation report that he did consider those submissions;¹⁵⁴² he was certainly provided these documents to consider them. The documentary trail is not inconsistent with the assertions in the EIS evaluation report that he did consider them.
997. As detailed above, it is arguable that the Coordinator-General was required to consider the further submissions received after the AEIS. This means that, as a minimum, he was required to personally consider the facts, arguments and

¹⁵³⁶ The briefing note process is explained in more detail in Section 3.14 above.

¹⁵³⁷ EIS evaluation report page 7.

¹⁵³⁸ Doc 9-0107.

¹⁵³⁹ Doc 10-0007.

¹⁵⁴⁰ Doc 10-0001.

¹⁵⁴¹ 1379.

¹⁵⁴² EIS evaluation report page 7.

opinions contained in those further submissions and not merely rely on the assessment of others as to those submissions' worth.¹⁵⁴³

Documentary review

998. The EIS evaluation report states that the Coordinator-General considered '*comments and issues raised in submissions on the AEIS*'.¹⁵⁴⁴ Later it states that the Coordinator-General '*considered ... submissions on the EIS and AEIS*'.¹⁵⁴⁵ These assertions that the Coordinator-General did consider the further submissions received after the AEIS are consistent with his public invitations, referred to earlier, for such submissions.
999. The evaluation report itself contains a broad description of the topics covered in the submissions across the whole process¹⁵⁴⁶ and refers to a particular aspect of the further submission made by the Department of Natural Resources and Mines.¹⁵⁴⁷ As noted in the earlier chapters, some advisory agencies included proposed conditions in the further submissions; those proposed conditions are outlined and evaluated in the EIS evaluation report. The EIS evaluation report does not, however, contain a summary of all of the further submissions or of the facts, arguments and opinions contained in those submissions.
1000. There is no documentary evidence that the submissions, or any summaries of them, were ever actually provided to the Coordinator-General to consider.
1001. There is, for example, no briefing note provided to him attaching the further submissions received after the AEIS or any summaries of those submissions. Even if consideration by the Coordinator-General of summaries of those submissions was sufficient, there is no documentary evidence that summaries were provided to him.
1002. This is not consistent with the process that appears to have been otherwise adopted in which all material considered by the Coordinator-General was provided to him by way of briefing note.

¹⁵⁴³ *Meshlawn v State of Queensland* [2010] QSC 215 at [153].

¹⁵⁴⁴ EIS evaluation report page 7.

¹⁵⁴⁵ EIS evaluation report page 156.

¹⁵⁴⁶ EIS evaluation report page 8.

¹⁵⁴⁷ EIS evaluation report page 151.

1003. The only briefing note provided to the Coordinator-General after the further submissions were received was the briefing note recommending approval of the EIS evaluation report.¹⁵⁴⁸ That document noted the number of further submissions received and that various agencies had been consulted. It contains no summary of the submissions. It contains no description of the facts, arguments and opinions contained in those submissions.

Request for identification and response

1004. To ensure that no document had been missed on the issue, considering the sheer volume of documents, Crown Law wrote to the Coordinator-General's office in the following terms:¹⁵⁴⁹

... can you please send me a letter identifying all documents in relation to the Coordinator-General considering the AEIS submissions.

1005. The Coordinator-General responded by letter dated 5 June 2015:¹⁵⁵⁰

The AEIS submissions are material I consider as part of my evaluation of the EIS. You may appreciate that generally, EIS documents are large and complex and they quite often a large number of submissions. As a result, my evaluation of the EIS occurs over a long time and culminates in the preparation of a Coordinator-General's Report on the EIS.

During my time in office, I have held weekly meetings with project managers across the office of the Coordinator-General. At those meetings, the project managers update me on project progress. We discuss any issues arising and decide how to proceed. Throughout the EIS process for the New Acland Stage 3 project, specific updates were generally provided to me by the project manager from Coordinated Project Delivery (CPD).

The analysis of AEIS submissions occurred from late September 2014 to December 2014. During that time, the project manager provided updated to me about matters such as key submission themes and the consideration of submissions in the drafting of the project's Coordinator-General Report. The following identifies the particular documents provided to Crown Law.

- *CPD processed the 614 AEIS submissions into a database (record number 11-697, provided to Crown Law on 1 May 2015) (copy attached). CPD analysed each submissions and documented issues raised. Statistics were also produced on matters including topics raised and frequency of how often they were mentioned.*
- *Record 12-0027, previously provided to Crown Law on 1 May 2015 (copy attached), confirms a meeting was held on 3 December 2014 between me and officers from CPD to discuss the submissions received on the AEIS. To assist my consideration of the AEIS submissions, CPD provided me*

¹⁵⁴⁸ Doc 12-0668.

¹⁵⁴⁹ Annexure E.

¹⁵⁵⁰ Annexure F.

with statistical analysis of submissions by topic and frequency of mention (see record 12-0027).

- *Following analysis of the AEIS submissions, CPD's EIS project manager and social impacts project manager requested further information from the proponent about matters raised in AEIS submissions from members of the public and agencies. Examples of one such request from CPD is attached (record number 11-0745), provided to Crown Law on 15 May 2015.*
- *Responses to CPD's information requests made during October to December 2014 were compiled by the proponent into the document 'Information Clarification to the AEIS'. This document is available online at www.statedevelopment.qld.gov.au/newacland. It was provided to me as attachment 2 of the briefing note for the decision on the Coordinator-General's Report on the EIS for the New Acland Stage 3 project (copy provided to Crown Law on 1 May 2015 as record number 12-0670 (attachment 2) and 12-0668 (briefing note for decision). The document includes responses to AEIS submission questions.*

Commentary in the 5 June 2015 letter

1006. It is noted that the Coordinator-General's 5 June 2015 letter went beyond the Crown Law request. The Crown Law letter requested '*a letter identifying all documents in relation to the Coordinator-General considering the AEIS submissions*'. The Coordinator-General's response, however, included commentary outlining what he states he and his officers did during the EIS evaluation process.
1007. The terms of reference for this review expressly exclude from this review the capacity to take evidence. The review is confined to an examination of the documents. These statements made by the Coordinator-General cannot be tested or examined. In accordance with the terms of reference, which set the boundaries of this review, no weight can be placed on these statements.
1008. However, some general observations can be made.

The weekly meetings

1009. The 5 June 2015 letter states that the Coordinator-General held weekly meetings with project managers across his office. It states that during those meetings project managers update him on Project progress and any issues arising. It states that throughout the EIS process for the New Acland Stage 3 Project, specific updates were generally provided to him weekly by the project manager from CPD.

1010. The letter does not state the duration of the weekly meetings or the number of projects discussed at those meetings. It does not state that whether the facts, arguments and opinions contained in the further submissions for the New Acland Stage 3 Project were discussed.

Analysis of further submissions from September 2014 to December 2014

1011. The 5 June 2015 letter states that the analysis of the further submissions occurred from late September 2014 to December 2015.

1012. It does not state that any of this analysis was personally undertaken by the Coordinator-General.

1013. The letter states that the project manager provided updates about matters such as key submission themes in the drafting of the Project's EIS evaluation report. It does not state that the facts, arguments and opinions contained in the further submissions for the New Acland Stage 3 Project were discussed.

Document 11-0697

1014. Document 11-0697 was prepared by officers of the Coordinator-General's department. It is a register of the further submissions, which includes details of topics raised and statistics on those submissions. The document is referred to earlier in this review.

1015. There is no documentary evidence that the document was provided to the Coordinator-General.

1016. The 5 June 2015 letter does not state that the document was provided to the Coordinator-General. It is not evidence that the further submissions were considered by the Coordinator-General.

Document 12-0027

1017. The 5 June 2015 letter stated that document 12-0027 is a record of a meeting attended by the Coordinator-General at which the further submissions were discussed. The document contains a partially typed and partially handwritten description of some of the issues raised in the further submissions:

1. *Land impacts – 1,466 disturbance area*
 - *Within this: open-cut pits: 1,201 ha*
 - *final voids: 457ha*
 - *grazing land: temporary impacted: 54ha*
 - *cropping land: permanent impact: 1,185ha*

proposal: condition an equivalent make good requirement – uplifting land elsewhere/contributing money to agricultural initiatives. e.g. new infrastructure or assisting landholders change land uses to open up new markets

2. *Social impacts*
 - *requirement: demonstrate improved social licence, better engagement, consultation, survey, complaints, r'ment? Conditions*

proposal: condition regular reporting on engagement, particularly with landholders near mine and Jondaryan; online monthly reporting (air, noise, vibration)

3. *Jondaryan – decommissioning of rail-load out facility*
 - *many concerns raised regarding uncertainty of facility being moved*
 - *confusion about timeframes*

proposal: condition new rail load-out facility to be sole distribution point for the project

4. *Road closures*
 - *road diversions alter current access, resulting in additional times of up to 30km*
 - *associated emergency response time issues*

proposal – spray seal some currently unsealed local roads (approx.. 8m) CG: 'proper seal required unacceptable impact'

Other key sub issues: noise – noted lower EPP limits
noise/air – real time monitoring (reporting on) sought
noise – measured near SRs extra real-time monitoring

1018. This document goes some way to showing that the Coordinator-General gave some consideration to the further submissions, at least at a very high level.

1019. However, it does not indicate that he considered the facts, opinions and arguments contained in those submissions. For example, some of those submissions were close to or longer than one hundred pages, setting out detailed arguments.¹⁵⁵¹ Some were accompanied by pictures.¹⁵⁵²
1020. This record of a meeting, attended by the Coordinator-General, is not documentary evidence that supports personal consideration by the Coordinator-General of those further submissions.

Statistical analysis of the further submissions

1021. The 5 June 2015 letter states that attached to document 12-0027 was a statistical analysis of the further submissions. It states that the Coordinator-General was provided that attachment.
1022. The statistical analysis of the issues raised in the submissions, attached to document 12-0027, does not constitute personal consideration by the Coordinator-General of those submissions. The extent of that analysis was to outline the numbers of submissions addressing certain broadly identified topics, such as ‘*nature conservation*’ and ‘*land*’. That does not disclose the facts, arguments and opinions contained in the submissions.

Requests for further information by project managers

1023. The 5 June 2015 letter states that CPD project managers requested further information from the Proponent about matters raised in the further submissions. This did not constitute personal consideration by the Coordinator-General of the facts, arguments and opinions contained in those submissions.

The further information

1024. The 5 June 2015 letter states that responses to the information requests provided by the Proponent are set out in a document called ‘*Information Clarification to the AEIS*’. It states that document was provided to the Coordinator-General. That document contains no description of the facts, arguments and opinions contained in the further submissions. Consideration by the Coordinator-General of that document does not constitute personal consideration by him of those submissions.

¹⁵⁵¹ See for example further submission 388.

¹⁵⁵² See for example further submission 388.

Conclusion on whether the Coordinator-General considered the further submissions

1025. The only evidence that the Coordinator-General considered the further submissions, in the manner required by section 35(1) of the *SDWPO Act*, are his assertions in the EIS evaluation report that he considered those submissions. There is no documentary evidence that clearly supports those assertions. To some extent it is supported by:

- (a) the limited description of the further submissions in the EIS evaluation report;
- (b) the details and analysis of the conditions provided by some advisory agencies as their submissions and the fact that most (but not all) of the conditions recommended by the agencies are stated by the Coordinator-General in Appendix 2 of the EIS evaluation report;¹⁵⁵³
- (c) the notes of the meeting on 3 December 2014 in document 12-0027.

1026. However:

- (a) the EIS evaluation report does not contain a complete summary of the further submissions; the Coordinator-General cannot have ‘*considered*’ all of the further submissions merely by reviewing the EIS evaluation report;
- (b) prima facie, the notes of the meeting on 3 December 2014 contains only a very broad, high level summary of the further submissions; an oral briefing of the Coordinator-General in terms of the summary would not be sufficient to ensure that he ‘*considered*’ all of the further submissions;
- (c) there is no record of the further submissions themselves having been provided to the Coordinator-General; and
- (d) there is no record of a complete summary of the further submissions having been provided to the Coordinator-General (despite the fact that such a document was prepared¹⁵⁵⁴).

¹⁵⁵³ See the observations in Section 11.3.3.

¹⁵⁵⁴ Doc 11-0697.

13.1.2 Other material considered relevant by the Coordinator-General

1027. As detailed above, there is no direct evidence as to what the Coordinator-General considered relevant. It is inferred that anything considered by the Coordinator-General was considered relevant by him.

13.2 Did the Coordinator-General comply with the duty to prepare the EIS evaluation report?

1028. Earlier in this review it is noted that whilst the Coordinator-General may be assisted in the preparation of the EIS evaluation report, he must maintain substantial control over its preparation.¹⁵⁵⁵

1029. The Coordinator-General did maintain substantial control over the preparation of the EIS evaluation report. The report was provided to him by his officers for his approval prior to its publication. The briefing note to which the report was attached recommended that he approve and sign the report.¹⁵⁵⁶ The briefing note indicates that he approved that recommendation. It can only be assumed that he did so after reading the report in full and satisfying himself of its contents. It is also noted that there is evidence that drafts of the report were provided to the Coordinator-General and he provided comments in relation to those drafts.¹⁵⁵⁷

1030. This review has made various observations about matters that were included and were not included in the EIS evaluation report. Given the wide margin of discretion available to the Coordinator-General as to the contents of the report, the inclusion and non-inclusion of those matters was a matter for his discretion. Opinions as to how the Coordinator-General exercised that discretion go to the merits, which are excluded from the scope of this review.

13.3 Concluding remarks

1031. There is documentary evidence that supports that the Coordinator-General's evaluation of the Project EIS largely complied with Part 4 of the *SDWPO Act*; except for the requirement that the Coordinator-General personally consider the further submissions.

¹⁵⁵⁵ See paragraph 221.

¹⁵⁵⁶ Doc 12-0668.

¹⁵⁵⁷ See, for example, Doc 12-0615, 12-0617, 12-0619 and 12-0646.

1032. As noted earlier, if the Coordinator-General did not consider the further submissions, then it is arguable that he did not comply with the requirement in section 35(1) of the *SDWPO Act*.
1033. There is insufficient evidence, on this documentary review, to support the Coordinator-General's assertion that he did consider the further submissions.
1034. At this stage, only the Coordinator-General himself can provide the evidence as to whether he considered the further submissions to the requisite standard. Accordingly, further information may be required from the Coordinator-General to determine whether or not this requirement has been satisfied.

14. ACRONYMS

1035. The definitions associated with the acronyms used in this review are set out in the table below.

Acronym	Definition
AEIS	additional information to the EIS
EIS	Environmental Impact Statement
EIS evaluation report	Coordinator-General's Evaluation Report of the Environmental Impact Statement dated December 2014
<i>EPBC Act</i>	<i>Environmental Protection and Biodiversity Conservation Act 1999 (Cth)</i>
MNES	matters of national environmental significance
PM ₁₀	particulate matter with equivalent aerodynamic diameter less than 10µm
Project	New Acland Coal Mine Stage 3 Extension Project
Proponent	New Acland Coal Pty Ltd
<i>SDPWO Act</i>	<i>State Development and Public Works Organisation Act 1971 (Qld)</i>
TOR	Terms of Reference