

Table of contents

E.	Executive Summary	i
E.1	Introduction	i
E.2	Project Description	iii
E.3	Social Impact Assessment	vi
E.4	Indigenous and Non-Indigenous Cultural Heritage	vi
E.5	Economics	vii
E.6	Consultation	viii
E.7	Cumulative Impacts	viii
E.8	Draft Offset Strategy	ix
E.9	Matters of National Environmental Significance	x
E.10	Project Mine Studies	xvii
E.11	Project Rail Studies	xxiii
E.12	Conclusion and Recommendations	xxx
1.	Introduction	1-1
1.1	Project Proponent	1-1
1.2	The Project	1-1
1.3	Project Rationale	1-4
1.4	Relationship to Other Projects	1-6
1.5	Alternatives to the Project	1-12
1.6	Co-location Opportunities	1-16
1.7	Environmental Impact Assessment Process	1-17
1.8	Public Consultation Process	1-23
1.9	Relevant Legislation and Project Approvals	1-27
2.	Description of the Project	2-1
2.1	Overview	2-1
2.2	Project Exclusions	2-2
2.3	Project (Mine)	2-3
2.4	Project (Rail)	2-4
3	Social Impact Assessment	3-1
3.1	Introduction	3-1
3.2	Social Baseline	3-6
3.3	Potential Impacts and Proposed Mitigation Measures	3-13
3.4	Summary	3-27

4.	Draft Social Impact Management Plan	4-1
4.1	Introduction	4-1
4.2	Social Impact Management Plan Methodology	4-1
4.3	Stakeholder Engagement	4-2
4.4	Potential Social Impacts	4-3
4.5	Action Plans	4-7
4.6	SIMP Monitoring and Reporting	4-10
4.7	Summary of Potential Impacts and Mitigation Strategies	4-11
5.	Indigenous and Non-Indigenous Cultural Heritage	5-1
5.1	Indigenous Cultural Heritage	5-1
5.2	Native Title	5-10
5.3	Non-indigenous Cultural Heritage	5-11
5.4	Summary	5-14
6.	Economies	6-1
6.1	Introduction	6-1
6.2	Description of Affected Local and Regional Economies	6-1
6.3	Potential Impacts and Mitigation Measures	6-6
6.4	Summary	6-10
7.	Community Consultation	7-1
7.1	Introduction	7-1
7.2	Methodology	7-1
7.3	Results of Consultation to Date	7-4
7.4	Future Consultation Activities	7-6
7.5	Summary	7-6
8.	Cumulative Impacts	8-1
8.1	Introduction	8-1
8.2	Relevant Projects	8-4
8.3	Environmental Values	8-12
8.4	Project's Contribution to Potential Cumulative Impacts	8-34
8.5	Consequential Impacts	8-36
8.6	Summary	8-36
9.	Draft Offset Strategy	9-1
9.1	Introduction	9-1
9.2	Legislative Context	9-1



9.3	Project Impacts	9-6
9.4	Potential Offsets	9-10
9.5	Implementing Offset Requirements	9-10
9.6	Summary	9-12
10.	List of Proponent Commitments	10-1
11.	Matters of National Environmental Significance	11-1
11.1	Introduction	11-1
11.2	World Heritage Areas, National Heritage Places and the Great Barrier Reef Marine Park	11-12
11.3	Wetlands of International Importance	11-14
11.4	Impact on a Listed Threatened Species and Ecological Communities	11-17
11.5	Potential Impacts and Mitigation Measures	11-41
11.6	Impact on a Listed Migratory Species	11-69
11.7	Summary	11-80
11.8	Cumulative and Consequential Impacts	11-81
11.9	Proposed Offsets	11-81
11.10	Conclusions and Recommendations	11-82
12.	Conclusions and Recommendations	12-1
12.1	Conclusion	12-1
12.2	Recommendations	12-6
13.	References	13-1
13.1	Introduction	13-1
13.2	Social Impact Assessment	13-2
13.3	Economics	13-8
13.4	Community Consultation	13-9
13.5	Cumulative Impacts	13-9
13.6	Draft Offsets Strategy	13-10
13.7	Matters of National Environmental Significance Report	13-11

Table index

Table 1-1	Coal Production and Operational Capital Expenditure of the Project (Mine)	1-15
Table 1-2	Carmichael Coal Mine and Rail Project EIS Structure Volumes 1 to 3	1-19
Table 3-1	Schedule of SIA and EIS Community Consultations	3-4
Table 3-2:	Key Baseline Community Characteristics for DSA	3-6
Table 3-3:	DSA - Population by Locality	3-9
Table 3-4	Assessment of Likelihood and Consequence of Identified Social Impacts	3-14
Table 3-5	Impacts on Economic growth and regional development	3-18
Table 3-6	Impacts on Housing and Accommodation	3-20
Table 3-7	Impacts on Roads, Traffic and Safety	3-21
Table 3-8	Impacts on Landholders and Amenity	3-23
Table 3-9	Impacts on Social Services and Infrastructure	3-26
Table 3-10	Impacts on Community Values and Change	3-27
Table 4-1	Assessment of Likelihood and Consequence of Identified Social Impacts	4-3
Table 4-2	Summary of Potential Mitigated Social Impacts	4-4
Table 4-3	Summary of Potential Impacts and Mitigation Strategies	4-11
Table 5-1	Results of Queensland Heritage Register Search	5-14
Table 6-1	Existing Government Strategies	6-8
Table 7-1	EIS Consultation Stages and Timeframes	7-2
Table 7-2	Summary of Principal EIS Consultation Events	7-4
Table 8-1	Cumulative Impact Assessment Matrix	8-3
Table 8-2	Cumulative Impact Significance Criteria	8-3
Table 8-3	Summary of Relevant Projects	8-10
Table 8-4	Threatened Ecological Communities	8-13
Table 8-5	Regional Ecosystems within the Project Study Area	8-16
Table 8-6	Greenhouse Gas Emissions	8-27
Table 8-7	Indigenous Parties and Native Title Claims for Cumulative Assessment Projects	8-31
Table 8-8	Expenditure and Job Generation	8-33
Table 8-9	Significance Assessment	8-35
Table 11-1	Summary of Desktop Sources	11-5



Table 11-2	Impact to EPBC Act Listed Threatened Matters from Rail Construction	11-45
Table 11-3	Impact to EPBC Act Listed Threatened Matters from Mine Construction	11-49
Table 11-4	Overview of Operation Phase Management Framework	11-55
Table 11-5	Approximate Areas of Impact for Threatened Ecological Community REs	11-58
Table 11-6	Threatened Ecological Communities and Expected Clearing Impacts	11-69
Table 11-7	Impact to EPBC Act Listed Migratory Species - Rail	11-78
Table 11-8	Impact to EPBC Act Listed Migratory Species - Mine	11-79

Figure index

Figure E-1	Project Location	ii
Figure 1-1	Project Location	1-3
Figure 1-2	Relationship to other Projects	1-8
Figure 1-3	Overview of Environmental Impact Assessment Process	1-18
Figure 1-4	EIS Consultation Activities and Communication Tools	1-24
Figure 1-5	EIS Consultation Stages and Timeframes	1-25
Figure 1-6	Links between EIS and SIA Consultation	1-26
Figure 3-1	SIA Methodology	3-2
Figure 3-2:	Population Pyramid for the DSA, 2010	3-10
Figure 4-1	Overview of the SIMP Methodology	4-2
Figure 5-1	Aboriginal Party Interest Areas for the Project	5-3
Figure 6-1	Number of Employees per Sector	6-4
Figure 8-1	Cumulative Impact Assessment Projects	8-6
Figure 11-1	Conservation Significant Areas	11-18
Figure 11-2	Potential Squatter Pigeon (southern) Habitat Beyond the Mine Study Area	11-23
Figure 11-3	Black-throated Finch (southern) Records at Study Area	11-26
Figure 11-4	Potential Black-throated Finch (southern) Habitat at the Rail Study Area and the Surrounding Landscape	11-27
Figure 11-5	Potential Black-throated Finch (Southern) Habitat at the Mine Study Area	11-28



Figure 11-6	Potential Black-throated Finch (southern) Habitat Beyond the Mine Study Area	11-30
Figure 11-7	Black-throated Finch (southern) Important Areas	11-31
Figure 11-8	Koala Records and Potential Habitat at the Project Area	11-34
Figure 11-9	Potential Koala Habitat Beyond the Project Area	11-35
Figure 11-10	Brigalow TEC at Mine Study Area	11-41
Figure 11-11	Potential Threatened Ecological Communities within the Rail Study Area and Surrounding Landscape	11-42
Figure 11-12	Indicative Mine Plan – Areas of Impact	11-53
Figure 11-13	Vegetation Communities and Fauna Habitat Types: Project (Mine)	11-73
Figure 11-14	Vegetation Communities and Fauna Habitat Types: Project Rail	11-74