

Compliance of document with Environmental Scoping Document Requirements

Environmental Scoping Document Requirement Number	Environmental Scoping Document Requirement	Section Reference
Flora and Vegetation		
1	Identify and characterise flora and vegetation in accordance with the requirements of Guidance Statement No. 51. The survey should take into account areas that are likely to be directly or indirectly impacted as a result of the proposal	Section 11.1 Appendix 4
2	Undertake baseline mapping of weed affected areas in any area likely to be directly or indirectly impacted by the proposal	Section 11.1.3.4 Appendix 4
3	Provide an analysis of the vegetation and conservation significant flora species present and likely to be present within the development envelope and indirect disturbance areas outside of the development envelope. Include an assessment of the relevance of any vegetation and conservation significant flora species in a local and regional context.	Section 11.1.3.2 Section 11.1.3.3 Section 11.1.4.3 Appendix 4
4	Provide a clear set of data that shows the clearing undertaken for the existing approved project to date against the currently approved clearing and proposed clearing for the expanded proposal	Section 2.2 Section 2.5.3 Section 2.5.4.1 Section 11.1.3.5
5	Provide information on the current status and outcomes of the current groundwater and dewatering activities to ensure minimal adverse impacts on groundwater dependent ecology at Weeli Wolli Spring and Coondewanna Flats required by Ministerial Statement 491 Condition 5-1 – Groundwater and groundwater dependent ecology	Section 11.1.4.3.3 Section 11.1.4.3.4 Section 11.4.3 Section 11.4.4 Section 11.4.6 Appendix 7
6	Provide an analysis of any additional potential impacts from the proposal to the Weeli Wolli Spring and Coondewanna Flats PECs	Section 11.1.4.3.3 Section 11.1.4.3.4
7	Provide a detailed description of the cumulative impacts associated with the proposal and nearby proposals (Mining Area C – Northern Flank and Hope Downs), including direct impacts from clearing, and indirect impacts such as groundwater drawdown, altered drainage, changes in water quality, spread of weeds, fragmentation of vegetation, altered fire regime and dust	Section 11.1.4.1 Section 11.1.4.2 Section 11.1.4.3
8	Provide figures of the proposed clearing and predicted indirect impact to vegetation and conservation significant flora species, including but not limited to threatened and/or priority ecological communities, declared rare flora, priority flora and new flora species	Section 11.1.4.2 Appendix 4

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9	Discuss, and determine significance of, potential direct/indirect (including downstream) and cumulative impacts to flora and vegetation as a result of the proposal at a local and regional level	Section 11.1.4.1 Section 11.1.4.3 Appendix 4
10	Demonstrate that all practicable measures have been taken to reduce both the area of the proposed disturbance footprint and the Development Envelope based on progress in the proposal design and understanding of the environmental impacts.	Section 2.4 Section 11.1.5 Section 11.8.3
11	Discuss proposed management, monitoring and mitigation methods to be implemented demonstrating that the design of the proposal has addressed the mitigation hierarchy in relation to impacts on flora and vegetation	Section 11.1.6
12	Discuss management measures, outcomes/objectives sought to ensure residual impacts (direct and indirect) are not greater than predicted	Section 11.1.6
13	Demonstrate and document in the PER how the EPA's objective for this factor can be met.	Section 11.1 Section 11.1.7
14	Complete the EPA Checklist for documents submitted for EIS on terrestrial biodiversity.	Appendix 3
Terrestrial Fauna		
15	<p>Provide a desktop review and analysis of all surveys of the proposal area undertaken in accordance with Guidance Statements 56 and 20. The review should include:</p> <ul style="list-style-type: none"> • A justification of how those surveys are relevant and representative of the development envelope and if they were carried out using methods consistent with the EPA Guidance. • A comprehensive listing of vertebrate fauna and short range endemic (SRE) invertebrate fauna known or likely to occur in the habitats present, and identification of conservation significant fauna species likely to occur in the area. 	Appendix 5 Section 11.2.3
16	Conduct Level 2 terrestrial fauna and SRE invertebrate surveys in areas not previously surveyed that are likely to be directly or indirectly impacted as a result of the proposal. Surveys are to be undertaken in accordance with Guidance Statements 20 and 56 and, where available, species-specific survey guidelines for relevant species listed under the under the <i>Wildlife Conservation Act 1950</i> . The surveys should include mapping of important, rare or unusual habitat types within areas to be impacted. The surveys should also consider other areas outside the proposed impact footprint to determine whether the most suitable areas have been chosen for location of infrastructure	Appendix 5 Section 11.2.3

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17	Conduct additional targeted surveys for conservation significant fauna that are known to or likely to occupy habitats in the project area if demonstrated to be required based on the results of the terrestrial fauna and SRE invertebrate surveys	Appendix 5 Section 11.2.3.1
18	Investigate and provide a description of any potential bat populations and habitat in the proposal area, and potential impacts from the revised proposal	Appendix 5 Section 11.2.3 Section 11.2.4.1.2 Section 11.2.4.2 Section 11.2.4.3
19	Provide a review of bat populations and habitat in the local and regional area including the existing Mining Area C – Northern Flank	Appendix 5 Section 11.2.3 Section 11.2.4.1.2
20	<p>For each relevant conservation significant species, including bat species and short-range endemics within the proposal area, provide:</p> <ul style="list-style-type: none"> • baseline information on their abundance (including known occurrences), distribution, ecology, and habitat preferences at both the site and regional levels • information on the conservation value of each habitat type from a local and regional perspective, including the percentage representation of each habitat type on site in relation to its local and regional extent; • if a population of a conservation significant species is present on the site, its size and the importance of that population from a local and regional perspective and potential percentage loss of the conservation significant species locally due to loss of habitat; and • maps illustrating the known recorded locations of conservation significant species and short-range endemic invertebrates in relation to the proposed disturbance and areas to be impacted 	Appendix 5 Section 11.2.4.1.2 Section 11.2.4.3.2
21	Consider habitat types that provide important ecological function within the proposal area e.g. riparian vegetation, protected area buffer zones, refugia, important habitat corridors, wetlands, areas of conservation significance or geological features which may support unique ecosystems	Appendix 5 Section 11.2.4
22	Assess the extent of direct and indirect disturbance, including percentages of habitat types to be disturbed or otherwise impacted, to assist in determination of significance of impacts. Information, including maps, must also differentiate habitat on the basis of use e.g. breeding habitat, migration pathways, feeding habitat. Consider whether the remaining habitat has adequate carrying capacity.	Section 11.2.4

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23	Discuss known existing threats to the species, whether or not attributable to the proposed action, with reference to relevant impacts from the proposed action (including taking into consideration any relevant guidelines, policies, plans and statutory provisions).	Section 11.2.4
24	Provide a detailed description of the potential direct, indirect (including downstream) and cumulative impacts to conservation significant and other species within the proposal area and on a regional scale	Section 11.2.4
25	For all conservation significant species that are not likely to be impacted by the proposed action, but for which suitable habitat is present and could be impacted by the proposed action, include detailed information to demonstrate that an impact on the species will not or is unlikely to occur.	Section 11.2.4.1.2 Section 11.2.4.3.2
26	Provide figures clearly showing the predicted impacts to conservation significant and other species, including number of individuals, population(s) and amount of habitat	Section 11.2.4.1.2
27	Discuss proposed management, monitoring and mitigation methods to be implemented including an assessment of the effectiveness of the methods, any statutory or policy basis for the methods and demonstrating that the design of the proposal has addressed the mitigation hierarchy in relation to impacts on fauna	Section 11.2.5 Section 11.2.6
28	Discuss management measures, outcomes/objectives sought to ensure residual impacts (direct and indirect) are not greater than predicted.	Section 11.2.6
29	Demonstrate and document in the PER how the EPA's objective for this factor can be met.	Section 11.2 Section 11.2.7
30	Complete the EPA Checklist for documents submitted for EIS on terrestrial biodiversity	Appendix 3
Subterranean Fauna		
31	Conduct surveys within areas to be impacted and in surrounding areas in accordance with Environmental Assessment Guideline 12 and Guidance Statement 54a.	Section 11.3.3 Appendix 6
32	Present the results of the subterranean fauna surveys and discuss the potential for direct and indirect impacts to subterranean fauna including consideration of altered water regimes and water quality (e.g. nutrient flows) as a result of the proposal	Section 11.3.3 Section 11.3.4 Appendix 6
33	Assess any impacts to subterranean fauna in accordance with EAG 12. For species which are likely to be impacted, provide information, including maps on habitat continuity and an appropriate explanation of the likely distribution of species within those habitats.	Section 11.3.4 Appendix 2 <i>Habitat mapping not provided as part of public package as it contains commercially sensitive</i>

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34	Discuss proposed management, monitoring and mitigation methods to be implemented	Section 11.3.5 Section 11.3.6
35	Discuss management measures, outcomes/objectives sought to ensure residual impacts (direct and indirect) are not greater than predicted.	Section 11.3.5 Section 11.3.6
36	Demonstrate and document in the PER how the EPA's objective for this factor can be met	Section 11.3.6
37	Complete the EPA Checklist for documents submitted for EIS on terrestrial biodiversity	Appendix 3
Hydrological Processes		
38	Characterise the baseline hydrological and hydrogeological regimes and water quality, both in a local and regional context, including, but not limited to, water levels, water chemistry, stream flows, flood patterns, and water quantity and quality. This is to include a detailed description of the geological framework within the zone to be impacted by groundwater abstraction and any interdependence between surface and groundwater features/bodies	Section 11.4.3
39	Provide a detailed description of the design and location of the revised proposal with the potential to impact surface water or groundwater	Section 11.4.3 Section 11.4.4
40	Provide a comparison of the potential impacts associated with this proposal relative to the actual and predicted impacts for the currently approved project	Section 11.4.5
41	Provide an update of the conceptual model of the surface and groundwater systems incorporating the results of monitoring conducted subsequent to the initial approval, including the extent of connectivity between surface and ground water systems	Section 11.4.3 Section 11.4.4
42	Provide a conceptual mine water balance over the life of the proposal to discuss the capacity to reuse surplus mine dewater	Section 11.4.4.1
43	Discuss the potential environmental impacts and benefits of identified surplus water management options (i.e. discharge of excess mine dewater, reuse on site, local water supply, aquifer recharge etc.) and discuss the most appropriate water management strategy for the proposal	Section 11.4.7
44	Model the impact of different flooding scenarios during operations and post-closure on infrastructure and final landforms	Section 11.4.4.2
45	Investigate groundwater drawdown due to groundwater abstraction associated with the proposal	Section 11.4.4. Section 11.4.5 Section 11.4.6

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46	Analyse, discuss and assess surface water and groundwater impacts. The analysis should include: <ul style="list-style-type: none"> • changes in groundwater levels and changes to surface water flows associated with the proposal; • the nature extent and duration of impacts; and • cumulative impacts with other projects and referred proposals, for which relevant information is publicly available. • Impacts on the environmental values of significant receptors but not limited to Weeli Wolli Spring, Ben's Oasis and Coondewanna Flats 	Section 11.4.5 Section 11.4.6 Section 11.4.7 Section 11.4.8
47	Identify any mine waste water discharges in the site water circuit (balance) and establish possible impacts these may have on the environment	Section 11.4.3 Section 11.4.5 Section 11.5.4
48	Discuss the proposed management, monitoring (including on adjacent tenure) and mitigation to prevent groundwater and surface water impacts, at local and catchment scale, as a result of implementing the proposal	Section 11.4.9 Section 11.4.10
49	Demonstrate and document in the PER how the EPA's objective for this factor can be met	Section 11.4
Inland Waters Environmental Quality		
50	Characterise the hydrological processes within the Development Envelope and determine what effect the proposal will have on surface water and groundwater quantity and quality	Section 11.4.3 Section 11.5.3
51	Provide a detailed description of the design and location of the revised proposal with the potential to impact surface water or groundwater quality	Section 11.4.3 Section 11.5.3 Section 11.4.5 Section 11.5.4
52	Provide a comparison of the potential impacts associated with this proposal relative to the actual and predicted impacts for the currently approved project and discuss the potential cumulative impacts on a regional scale	Section 11.5.4
53	Provide an update of the conceptual model of the surface and groundwater systems incorporating the results of monitoring conducted subsequent to the initial approval, including the extent of connectivity between surface and ground water systems	Section 11.4.4
54	Analyse, discuss and assess potential surface water and groundwater quality impacts, including changes in groundwater levels and changes to surface water flows associated with the proposal together with cumulative impacts with other projects and referred proposals, for which relevant information is publicly available	Section 11.5.4

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55	Analyse, discuss and assess impacts on the environmental values of significant receptors but not limited to Weeli Wolli Spring, Ben's Oasis and Coondewanna Flats	Section 11.5.4 Section 11.1.4.3.3 Section 11.1.4.3.4
56	Discuss the proposed management, monitoring and mitigation to ensure impacts on inland water quality are not greater than predicted as a result of implementing the proposal	Section 11.5.6 Section 11.5.6
57	Demonstrate and document in the PER how the EPA's objective for this factor can be met	Section 11.5.7
Heritage		
58	Characterise the heritage and cultural values of proposed disturbance areas and any other areas that may be indirectly impacted to identify sites of significance and their relevance within a wider regional context	Section 11.6.3
59	Conduct Aboriginal heritage surveys to identify Aboriginal sites of significance and identify concerns in regard to impacts from proposed mining operations	Section 11.6.3
60	Provide a description of the heritage values within the Development Envelope and provide a figure(s) of the heritage locations and proposed disturbance	Section 11.6.3
61	Assess the impacts of the proposal on heritage sites and/or cultural associations as a result of implementation of the proposal, including those arising from changes to the environment which may impact on ethnographic and archaeological heritage	Section 11.6.4 Section 11.6.5
62	Predict the residual impacts on heritage, for direct, indirect and cumulative impacts after considering avoidance and minimisation measures	Section 11.6.5
63	Outline the outcomes/objectives, management, monitoring, trigger and contingency actions to ensure impacts to heritage (direct and indirect) are not greater than predicted	Section 11.6.6
64	Demonstrate and document in the PER how the EPA's objective for this factor can be met	Section 11.6.7

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Rehabilitation and Decommissioning		
65	Provide an assessment on the physical and chemical characteristics of waste rock material and in-pit material	Section 11.7.4.1
66	Assess potential impacts to groundwater, surface water and soil quality from AMD.	Section 11.7.4
67	Undertake a pit lakes assessment to determine the potential impact to hydrological processes, surface and groundwater quality and fauna	Section 11.7.4.4
68	Update current approved <i>Mining Area C Mine Closure Plan</i> (BHP Billiton Iron Ore, 2015) to include additional areas consistent with DMP and EPA <i>Guidelines for Preparing Mine Closure Plans</i> (2015). The plan is required to develop appropriate completion criteria	Section 11.7. Appendix 12
69	Describe the proposed rehabilitation methodology, including but not limited to: <ul style="list-style-type: none"> • Topsoil management. • Retention or reuse of cleared vegetation material. • Return of species and communities (where feasible) consistent with the pre-existing composition of the affected area • Timeframes for rehabilitation, including sequencing or mining, backfilling and progressive rehabilitation 	Section 11.7.6 Appendix 12
70	Demonstrate and document in the PER how the EPA's objective for this factor can be met	Section 11.7.7
Offsets		
71	Describe the residual impacts for the proposal and analyse these impacts to identify and detail any that are significant	Section 11.8.3
72	Create offsets position following application of the 'mitigation hierarchy	Section 11.8 Appendix 13