

ATTACHMENT 1C - SUMMARY OF COMMISSION'S REVIEW REPORT RECOMMENDATIONS

Recommendation	Comment	Relevant Condition
<p>1. That the Applicant demonstrate how its operational procedures will incorporate continual improvement to further reduce the generation and dispersion of particulate matter.</p>	<p>Bloomfield has committed to continually revise and update its air quality mitigation and management measures to reflect operational changes and advancements in technology, and to document these improvements in its Air Quality and Greenhouse Gas Management Plan (AQGGMP).</p> <p>The Department supports an adaptive approach to air quality management, recognising that best practice environmental management changes over time, particularly over a 21-year mine life.</p> <p>The Department template conditions require that all management plans include a program to investigate and implement ways to improve the environmental performance of the mine over time.</p>	<p>Condition B25 (a) (iii), (c) and (e) – Air Quality Operating Conditions</p> <p><i>(a) (iii) take all reasonable steps to improve energy efficiency and reduce greenhouse gas emissions of the development;</i></p> <p><i>(c) operate a comprehensive air quality management system that the implementation of both proactive and reactive air quality mitigation measures to ensure compliance</i>;</p> <p><i>(e) minimise air quality impacts of the development on air quality-affected land as the land remains privately-owned (i.e. until it is acquired);</i></p> <p>Condition B26 (d) – Air Quality and Greenhouse Gas Management Plan</p> <p><i>(d)(ii) describe the measures to be implemented to ensure best practice management is being employed (including in respect of minimisation of greenhouse gas emissions.....);</i></p> <p>Condition E4 (e), (f) and (g) – Management Plan Requirements</p> <p><i>(e) a program to monitor and report on the effectiveness of the management measures set out...</i></p> <p><i>(f) contingency plan to manage any unpredicted impacts.....</i></p> <p><i>(g) a program to investigate and implement ways to improve the environmental performance of the development...</i></p>
<p>2. That the Applicant develop a protocol to assist those stakeholders concerned about air quality impact to better:</p> <ul style="list-style-type: none"> • access the data from the Upper Hunter Air Quality Network; and • provide instruction on how to use the Environment Line provided by the NSW Government. 	<p>There are a number of channels to obtain information on air quality in the Upper Hunter. Stakeholders can contact Bloomfield or Government regulators to make an enquiry, lodge a complaint, review monitoring data or learn more about air pollution.</p> <p>To assist concerned or interested stakeholders in finding this information, Bloomfield recently updated its company website with links to the Upper Hunter Air</p>	<p>n/a</p>

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	<p>Quality Network and the Government's Environment Line (131 555 or submit an online request via www.epa.nsw.gov.au/about-us/contact-us/environmentline).</p> <p>The Department considers that, between the company and Government agencies, there is sufficient information/data available, either online or over the phone, to enable all interested or concerned stakeholders to make an informed judgement and/or a complaint over air quality.</p>	
<p>3. That the Applicant provide further evidence of the policies and protocols in place to manage mine-owned residences, including clarification as to whether termination rights are only triggered in relation to dust exceedances, or whether termination at any time is a general at will right of occupancy of a mine owned residence.</p>	<p>Bloomfield leases a number of its unused residential properties and manages these via negotiated tenancy agreements and informal consultation. Bloomfield also clarified in its Response Report that tenants can terminate these agreements at any time without penalty due to air quality concerns.</p> <p>The Department supports mining companies leasing out their mine-owned properties, so long as the tenants are made aware of the potential health risks and are able to terminate their tenancy agreement without penalty at any time.</p> <p>The Department's template conditions require applicants to:</p> <ul style="list-style-type: none"> • notify landowners and/or tenants of the possible health and amenity impacts of dust emissions; • allow tenants of mine-owned properties to terminate their tenancy agreements without penalty at any time, for any reason, subject to reasonable notice; and • undertake regular air quality monitoring and inform landowners and/or tenants of the likely dust levels at their residence. 	<p>Condition B24 – Mine owned land <i>Particulate matter emissions generated by the development must not exceed the criteria on mine-owned land unless:</i></p> <p>(a) <i>the tenant and landowner have been notified of any health risks associated with such exceedances....;</i></p> <p>(b) <i>the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving 14 days' notice;</i></p> <p>(c) <i>air quality monitoring is regularly undertaken to inform the tenant and landowner of the likely particulate matter emissions at the residence; and</i></p> <p>(d) <i>data from this monitoring is presented to the tenant and landowner in an appropriate format for a medical practitioner to assist the tenant and landowner in making informed decisions on the health risks associated with occupying the property.</i></p>

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4.	That the Applicant make available on a timely basis information relating to how it is managing noise impacts, including its adaptive management practices and how it proposes to use such practices to manage the Project's noise impacts to conform to the ANC. Such information should include the Noise Management Plan, which should be made available to the public on the Applicant's website or in hard copy where requested. The Noise Management Plan (NMP) published by the Applicant should outline the process to be undertaken by the Applicant in modifying operations where noise exceedances occur, and include a 24/7 contact number for the Applicant and details of the Environment Line provided by the NSW Government.	<p>The Department considers that Bloomfield's proposed proactive and reactive noise management measures would enable Bloomfield to achieve compliance with the ANC.</p> <p>The Department recommended these measures are further described in the Noise Management Plan (NMP), and include a protocol for identifying and responding to noise exceedances.</p> <p>Bloomfield's company website includes a copy of its approved NMP, a 24/7 company contact number and contact details for the Government's Environment Line.</p> <p>The Department has also recommended conditions requiring Bloomfield to:</p> <ul style="list-style-type: none"> • monitor and record all major equipment use and make this data readily available at the request of the Department or the EPA; • record the daily adaptive management measures implemented on the site, including how operations were modified or stopped to comply with the ANC, and make these records readily available at the request of the Department or the EPA; and • regularly publish, on its website, a comprehensive summary of monitoring results and other information of the mine's operation to ensure that stakeholders can stay appropriately informed. 	<p>Condition B4 (c), (d) and (e) – Noise Operating Conditions</p> <p><i>The Applicant must:</i></p> <p><i>(c) monitor and record all major equipment use and make this data readily available at the request of the Department or the EPA;</i></p> <p><i>(d) operate a comprehensive noise management system.....</i></p> <p><i>(e) record the daily adaptive management measures implemented on the site, including how operations were modified or stopped to comply with the noise criteria in Table 1.....</i></p> <p>Condition B5 (d)(i), (g) and (h) – Noise Management Plan</p> <p><i>(d) (i) describe the measures to be implemented to ensure compliance with the noise criteria and operating conditions.....</i></p> <p><i>(g) describe the fleet attenuation program;</i></p> <p><i>(h) include a monitoring program that includes a protocol for identifying any noise-related exceedance.....</i></p> <p>Condition E4 (h) and (i) – Management Plan Requirements</p> <p><i>(h) a protocol for managing and reporting any incident, non-compliance...</i></p> <p><i>(i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development.</i></p> <p>Condition E14 – Access to Information</p> <p><i>(a) make the following information and documents.....publicly available on its website</i></p>
5.	That the Applicant provides a full and detailed list of all equipment to be used at the mine, including a schedule for noise attenuation, where it is planned.	In its Response to the Commission's Review Report, Bloomfield provided a current list of plant and equipment including details of installed and proposed sound attenuation.	<p>Condition B4 (b) – Noise Operating Conditions</p> <p><i>(b) implement reasonable and feasible noise attenuation measures....</i></p>
6.	That the Applicant commits to completing the cladding of the Coal Handling and Preparation Plant prior to the extraction of any coal under the Project consent, if approved.	Bloomfield recently completed cladding the CHPP and has committed to progressively updating its equipment so that its mining fleet is fully attenuated by Year 6 of the Project.	<p>Condition B5 (g) – Noise Management Plan</p> <p><i>(g) describe the fleet attenuation program;</i></p>

Recommendation		Comment	Relevant Condition
		The Department has recommended conditions to ensure that the remaining fleet attenuation program is further detailed in the Noise Management Plan.	
7.	That the Applicant update its Blast Impact Assessment (BIA) to provide additional monitoring and management measures specifically related to the preservation of the Coke Ovens.	The Department has recommended conditions specifically relating to monitoring and management of the Coke Ovens, within the Blast Management Plan.	Condition B19 (i) – Blast Management Plan <i>(i) include a strategy to monitor, mitigate and manage the effects of blasting on the Coke Ovens, including.....</i>
8.	That in order to address the principles of <i>Strategic Framework for Mine Closure</i> , the Applicant implement the recommendations of the Unger Report requiring the Applicant to prepare a stakeholder engagement strategy that ensures that stakeholders' specific issues of rehabilitation and closure are addressed appropriately in the Rehabilitation Strategy.	The Department has recommended that the Rehabilitation Strategy include a stakeholder engagement plan to guide rehabilitation and mine closure planning processes and outcomes.	Condition B72 (n) – Rehabilitation Strategy <i>(n) include a stakeholder engagement plan to guide the rehabilitation and mine closure planning processes and outcomes;</i>
9.	That the Applicant records all targeted consultation on mine rehabilitation and closure planning within the Rehabilitation Strategy and demonstrate where issues raised in community consultation have been considered in the development of the Rehabilitation Strategy.	<p>The Department has recommended that the Rehabilitation Strategy is prepared in consultation with the Resources Regulator and Council and that the strategy includes stakeholder engagement plan to guide rehabilitation and mine closure planning processes and outcomes.</p> <p>The Department's standard administrative conditions include a requirement for all management plans or strategies to include evidence of any required consultation.</p>	Condition B72 (b), (m) and (n) – Rehabilitation Strategy <i>(b) be prepared in consultation with the Resources Regulator and Council;</i> <i>(m) include a post-mining land use strategy to investigate post-mining beneficial land uses</i> <i>(n) include a stakeholder engagement plan to guide the rehabilitation and mine closure planning processes and outcomes;</i> Condition A20 – Evidence of Consultation <i>Refer to entire condition</i>
10.	That the Applicant collates and includes all relevant rehabilitation objectives and practices identified within the MOP and other EIS documents into the Rehabilitation Strategy so that it is a consolidated reference for the rehabilitation and closure of the mine.	Since 2014, the Department has required, by way of conditions of consent, large open-cut coal mines to prepare a comprehensive Rehabilitation Strategy, post-determination. This Strategy is intended to provide the overarching standard for rehabilitation of the site and provide a strategic framework for life-of-mine rehabilitation.	Condition B72 – Rehabilitation Strategy <i>Refer to entire condition</i> Condition B74 – Rehabilitation Management Plan <i>Refer to entire condition</i>

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	<p>This Strategy would build on the EIS's rehabilitation strategy, satisfy specific requirements of conditions and be routinely refined and adapted over the course of the development.</p> <p>This Strategy is additional to the Rehabilitation Management Plan which details specific rehabilitation measures to be undertaken on the site over a shorter-term period. This separate Rehabilitation Management Plan is used by the Resources Regulator for regulatory purposes.</p>	
<p>11. In order to address the principles of <i>Strategic Framework for Mine Closure</i>, the Commission recommends that the Rehabilitation Strategy:</p> <ul style="list-style-type: none"> a) identify all mine closure domains; b) label and describe all domains including the proposed post-mining land use; c) ensure that rehabilitation and closure objectives, performance standards and completion criteria exist for all domains; d) consider sudden unplanned closure and temporary closure (care and maintenance); e) include a detailed commitment register; f) identify and consult with stakeholders to explore closure risks and opportunities further; and g) include a plan to ensure that the Rehabilitation Strategy is updated and refined regularly to reflect changes in mine development and operational planning, and environmental conditions. 	<p>The Department has incorporated most of these recommendations into the requirements of the Rehabilitation Strategy, including identification of rehabilitation domains and completion criteria, unplanned and temporary closure, stakeholder consultation and regular updates (see adjacent column for condition references).</p> <p>The Department considers that a 'commitments register' would be better placed in the Rehabilitation Management Plan, as this plan would detail the specific measures to improve the rehabilitation knowledge base over a 3-year planning cycle.</p>	<p>Condition - B72 – Rehabilitation Strategy:</p> <p><i>(h) identify and describe rehabilitation domains and define completion criteria</i></p> <p><i>(g) describe how rehabilitation will be integrated with the mine planning process, including a plan to address premature mine closure;</i></p> <p><i>(l) include a risks and opportunities assessment and risk register</i></p> <p><i>(n) include a stakeholder engagement plan to guide the rehabilitation and mine closure planning processes and outcomes;</i></p> <p><i>(p) include a program to review and refine the final landform and final void outcomes every five years....</i></p> <p>Condition B74 (f) and (i) – Rehabilitation Management Plan</p> <p><i>(f) describe the measures to be implemented on site to achieve the Rehabilitation Objectives....</i></p> <p><i>(i) include a program to monitor, independently audit on progress against the criteria....</i></p>
<p>12. That the Applicant carry out an evaluation of the socio-economic impacts of mine closure during the preparation of, and in the regular updates to, a Detailed Mine Closure Plan.</p>	<p>The Department has recommended that the Rehabilitation Strategy incorporates measures to address socio-economic impacts of mine closure. A separate condition has also been drafted requiring Bloomfield prepare and implement a Social Impact</p>	<p>Condition B72 (o) – Rehabilitation Strategy</p> <p><i>(o) investigate ways to minimise adverse socio-economic effects associated with rehabilitation and mine closure</i></p> <p>Condition B75 – Social Impact Management Plan</p>

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	Management Plan to manage and mitigate social impacts over the life of the Project.	<i>Refer to entire condition</i>	
13.	<p>That the Applicant include a section within the Rehabilitation Strategy outlining the knowledge base around past rehabilitation performance. This is intended to demonstrate that the site is able to achieve the proposed post-mining land use. This knowledge base should be a summary of all existing baseline aspects as they relate to mine closure and demonstrate the outcomes from past rehabilitation showing where any lessons learnt have been incorporated into the rehabilitation and mine closure planning for the site. The inclusion of this information in the Rehabilitation Strategy could further improve the provision of information to the community on progressive rehabilitation performance and site knowledge which would support the proposed post-mining land uses.</p>	<p>The Rehabilitation Strategy should detail the overall long-term rehabilitation objectives and outcomes for the site. However, a separate and detailed Rehabilitation Management Plan, containing short-term objectives, is still required by the Department and Resources Regulator for regulatory purposes.</p> <p>As part of each Annual review, Bloomfield would be required to report on its rehabilitation performance and consider ways to improve its performance moving forward. Additionally, the Rehabilitation Management Plan requires a program to monitor and report on the effectiveness of rehabilitation measures implemented on site.</p> <p>Specific rehabilitation measures would be detailed in the Rehabilitation Management Plan. These measures would be carefully reviewed by the Department and the Resources Regulator to ensure that best practice techniques are being implemented on the site.</p>	<p>Condition B74 (f) and (i) – Rehabilitation Management Plan</p> <p><i>(f) describe the measures to be implemented on site to achieve the Rehabilitation Objectives....</i></p> <p><i>(j) include a program to monitor, independently audit on progress against the criteria....</i></p> <p>E9 (a), (e), (f) and (h) – Annual Review</p> <p><i>(a) describe the development (including any rehabilitation) that was carried out....</i></p> <p><i>(e) evaluate and report on...compliance with performance measures....</i></p> <p><i>(f) identify any trends in the monitoring data...</i></p> <p><i>(h) describe what measures will be implemented over the next calendar year to improve the environmental performance of the development..</i></p>
14.	<p>That the Rehabilitation Strategy be revised to demonstrate a risk based approach to rehabilitation and closure. This would include the preparation of a register outlining the risks and opportunities relating to the closure of the mine. This should include not only the risks and opportunities relating to the physical closure and rehabilitation works, but also give regard to any existing legacy or residual (future) risks in accordance with the Principles of the <i>Strategic Framework for Mine Closure</i></p>	<p>The Department has recommended that the Rehabilitation Strategy:</p> <ul style="list-style-type: none"> • address the principles of <i>the Strategic Framework for Mine Closure</i>; • include a plan to address premature mine closure; and • include a risks and opportunities register to enable the early identification of rehabilitation risks and improvement opportunities. 	<p>Condition B72(e), (g) and (l) – Rehabilitation Strategy</p> <p><i>(e) align with strategic rehabilitation and mine closure objectives and address the principles of the Strategic Framework for Mine Closure....</i></p> <p><i>(g) describe how rehabilitation will be integrated with the mine planning process, including a plan to address premature mine closure;</i></p> <p><i>(l) include a risks and opportunities assessment and risk register</i></p>
15.	<p>That the Rehabilitation Strategy be revised to include additional detailed information around the final void water levels and water quality, including</p>	<p>In its Response Report and the updated rehabilitation strategy in Appendix E of that report, Bloomfield committed to investigating design alternatives for the final void and investigating opportunities to re-use the</p>	<p>Condition B72(k), (m) and (p) – Rehabilitation Strategy</p>

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	an assessment of any potential beneficial uses for the water that could be considered following closure of the mine.	<p>void water. As part of these investigations, Bloomfield would undertake further hydrological and geochemical assessments to more accurately predict long-term final void water levels and water quality.</p> <p>The Department maintains that post-mining land uses should be adaptive to ensure they cater to the needs of the community in 2040 and beyond.</p> <p>The Department has recommended a condition requiring Bloomfield to investigate opportunities to refine and improve the final landform and final void outcomes over time and to improve the post-mining beneficial land uses for the site (including the final void).</p>	<p><i>(k) investigate opportunities to refine and improve the final landform and final void outcomes over time</i></p> <p><i>(m) include a post-mining land use strategy....</i></p> <p><i>(p) include a program to review and refine the final landform and final void outcomes every five years....</i></p>
16.	That the Applicant prepare a trade-off study assessing the benefits of removing the western overburden emplacement area against the potential environmental impacts associated with increasing the heights of the existing North Pit Dump and South Pit Dump. Any outcomes of the trade-off study, including an assessment of any environmental impacts, would need to be submitted and considered as part of the of final assessment of the Project.	The Department notes that the Applicant prepared a trade-off study in its response to the Commission's Review Report. On balance, the Department supports Bloomfield's decision to nominate Option 2 as the preferred option and considers that the revised landform would continue to facilitate sustainable post-mining land use outcomes.	The conditions of consent recommended by the Department have been drafted to reflect Option 2. The Department is however able to confirm what updates would need to be made to these conditions to facilitate the approval of Option 1.
17.	That the Applicant explore opportunities to undertake an assessment of void water re-use. Where opportunities are identified, these should be included in the Rehabilitation Strategy.	Refer to recommendation 15 above.	Refer to recommendation 15 above.
18.	That the Applicant investigate water impacts related to any interaction with the backfilled North Pit Void consistent with those undertaken for the South Pit Void.	<p>As part of its response to the Commissions Review Report, Bloomfield provided an additional groundwater study to demonstrate that the North Pit Void would have negligible impact on the regional groundwater system (see Appendix I of that report). The Department accepts this finding and maintains that using the North Pit Void as a fresh water dam would be an acceptable outcome for the post-mining landform.</p> <p>The Department has recommended a range of comprehensive Water Management Plan conditions,</p>	<p>Condition B39 – Water Management Performance Measures</p> <p><i>Refer to entire condition</i></p> <p>Condition B41 – Water Management Plan and sub-plans including;</p> <p>(i) site water balance, (ii) salt balance, (iii) erosion and sediment control plan, (iv) surface water management plan and (v) groundwater management plan</p>

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		including water management performance measures and a water management plan (WMP). The WMP would include a site water balance, salt balance, erosion and sediment control plan, surface water management sub-plan and groundwater management sub-plan.	
19.	That the Applicant detail and commit to an offsetting approach for consideration by the consent authority, which includes, if necessary, details of how its approach will be staged, the timing, offset value and how it could be successfully undertaken.	<p>Bloomfield provided additional information on offsetting in its response of 4 February 2019, including a staging proposal prepared by its biodiversity consultants, EMM. Bloomfield confirmed that its offsetting strategy would involve a combination of pursuing land-based offsets, credit purchasing and/or payment into the BCF. The Department recommended conditions specific to the proposed staged offset strategy.</p> <p>The recommended Biodiversity Management Plan also requires detailed description of how the offset strategy will be undertaken.</p>	<p>Condition B43 – Biodiversity Credits Required</p> <p><i>The Applicant must retire the biodiversity credits specified in Condition B43 to offset the biodiversity impacts of the development. The retirement of credits must be carried out in consultation with BCD and in accordance with the Biodiversity Offsets Scheme of the BC Act, to the satisfaction of the BCT.</i></p> <p>Conditions B44 to B49 – Stage Retirement <i>Refer to entire conditions</i></p> <p>Condition 50 – Biodiversity Management Plan <i>(f) (i) describes how the biodiversity credits in Table 5 will be identified, secured and retired.</i></p>
20.	That the Applicant provide further information in relation to how it has determined its “base case” financial parameters, including the assumptions relating to commodity price and exchange rate forecasts, and references to other available commodity price and exchange rate forecasts.	Bloomfield provided an addendum report to the 2018 Economic Assessment (EA), prepared by KPMG (see Appendix J of Bloomfield’s Response Report). The Department remains of the view that the Project would generate significant economic benefits to the NSW community and would contribute to employment and expenditure in both the local and regional economies.	n/a
21.	That the Applicant provide a more detailed discussion of the likelihood and range of feasible alternatives to the “base case” referred to above, including, but not limited to its selection of the downside coal price scenario of 25% and the World Bank commodity price scenario.	These outcomes are not directly relevant to the drafting of conditions.	

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22.	That the Applicant provide further information (including relevant risk minimisation strategies) in relation to how it has considered severe downside scenarios (including, but not limited to, the World Bank commodity price scenario), in accordance with the Guideline for the Use of Cost Benefit Analysis in Mining and Coal Seam Gas Proposals 2012 and accompanying Technical Notes.		
23.	That the Applicant prepare a HHMP to provide the Applicant with further opportunities to minimise impacts on the Coke Ovens.	Bloomfield has committed to preparing a HHMP for the Coke Ovens and to address each of the IPC's recommendations in this plan. The Department accepts this approach and has prepared strict blast and heritage management conditions, in consultation with the Heritage Branch, to ensure that the Coke Ovens are managed and protected over the life of the development.	Condition B59 – Historic Heritage Management Plan <i>Refer to entire condition</i> Condition B19 – Blast Management Plan <i>(i) include a strategy to monitor, mitigate and manage the effects of blasting on the Coke Ovens, including ...</i>
24.	That the Applicant's HHMP include an evaluation of the options available to minimise the impact of any tree roots on the integrity of the Coke Ovens.		
25.	That the HHMP identify what additional research should be undertaken regarding the Coke Ovens to determine whether salvage and recording is necessary and/or possible.		
26.	That the Applicant's HHMP and Rehabilitation Strategy detail how the Coke Ovens will be better accessed by the public given the historical significance of the site and provide options on how the site can be managed throughout the life of the Project and beyond mine closure.		