

9 July 2020

Independent Planning Commission NSW Attention: John Hann, Panel Chair C/- Brad James, Senior Planning Officer Level 3, 201 Elizabeth Street Sydney NSW 2000

Via email: ipcn@ipcn.nsw.gov.au

Dear Mr Hann

RE: VICKERY EXTENSION PROJECT - PUBLIC HEARING

Thank you for the opportunity for Whitehaven to present to the NSW Independent Planning Commission (IPC) during the Public Hearing for the Vickery Extension Project (the Project) held 2 to 3 July 2020.

As the Applicant for the Project, we reiterate our request that in the interests of procedural fairness, should there be any particular questions or issues that arise for the IPC in the remainder of the determination process that may be material to its determination of the SSD application, Whitehaven be made aware of these questions or issues and be given the opportunity to respond.

We also reiterate our request that if the IPC is contemplating that any of the draft conditions of SSD consent provided by the Department of Planning, Infrastructure & Environment be amended, that for the reasons of procedural fairness, Whitehaven be afforded the opportunity to be advised of any such contemplated changes and be given the opportunity to express its view.

In addition, as the IPC will accept submissions up to 5.00 pm on 10 July 2020, we reserve the right to provide responses to all submissions (if required) after the closure of the submission period.

While we consider the Project has been comprehensively assessed during the assessment process to date, we note stakeholders may still have concerns in regard to the Project. To assist the IPC, a reconciliation of where assessment of key matters raised during the Public Hearing can be found is provided as Enclosure 1.

Enclosure 2 provides a minor clarification to the discussion in the Department of Planning, Infrastructure and Environment's Assessment Report regarding groundwater drawdown at mine-owned bores.

Please do not hesitate to contact the undersigned should you have any gueries.

Kind regards,

WHITEHAVEN COAL LIMITED

Mark Stevens

EGM - Project Delivery

Enclosure 1: Reconciliation of Assessment of Key Matters

Enclosure 2: Clarification of Predicted Groundwater Drawdown at Mine-owned Bores



ENCLOSURE 1 RECONCILIATION OF ASSESSMENT OF KEY MATTERS

Key Issue	Relevant Legislation / Policy / Guideline	Relevant Specialist Assessment	Where Addressed in the Project EIS	Where Addressed in the Submissions Report	Where Addressed in DPIE's Assessment Report	Applicant Correspondence to the IPC	Relevant Conditions in Draft SSD 7480
Public Interest			, , , , , , , , , , , , , , , , , , , ,	ļ varantas ar para para para para para para para	,		200,000
Climate Change (GHG Emissions) and Coal Demand	 NSW Climate Change Policy Framework (OEH, 2016) NSW Net Zero Plan Stage 1: 2020–2030 (NSW Government, 2020) National Greenhouse and Energy Reporting Scheme The Paris Agreement NSW Environmental Planning and Assessment Act, 1979 State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 Strategic Statement on Coal Exploration and Mining in NSW (NSW Government, 2020) 	 Ramboll (quantification of GHG emissions) Todoroski Air Sciences (review of GHG emission calculations) CRU Consulting (coal demand forecasts) Ashurst (Climate Change Policy and GHG Emissions) AnalytEcon (costing of GHG emissions) 	Section 4.10 (GHG emissions summary) Section 6.1.3, Page 6-2 (consideration of climate change projections) Section 6.5.2, Page 6-24 (NGER Act) Appendix E – Air Quality and Greenhouse Gas Assessment Section 9 (Page 48) (GHG assessment)	Section 6.15.3(2), Page 201 (GHG emissions calculations, policy analysis, coal demand)	 Section 6.10.1, Page 121 (GHG emissions, minimisation, policy considerations) Section 6.10.2, Page 124 (coal demand) 	- Ashurst and CRU submission regarding GHG emissions, climate change and coal market substitution (correspondence dated 15 June 2020)	 Condition B35(a)(ii) (Air Quality Operating Conditions, minimissation of GHG emissions) Condition B36(d)(ii) (Air Quality and Greenhouse Gas Management Plan)
Ecologically Sustainable Development (ESD) and Inter/intragenerational Equity	– NSW Environmental Planning and Assessment Act, 1979		Section 6.1.4, Page 6-3 (consideration of ESD) Section 6.1.5, Page 6-8 (consideration against objectives of EP&A Act)	Section 6.15.3, Page 197 (consideration against objectives of EP&A Act)	Appendix J, Section J.6, Page 148 (EPBC Act considerations) Appendix K, Section K.2, Page 151 (consideration of ESD)	n/a	n/a
Groundwater							
Potential Drawdown and Availability (AIP)	- NSW Aquifer Interference Policy (NSW Government, 2012) - Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2019	 Dr Noel Merrick of HydroSimulations (groundwater modelling) Dr Frans Kalf (EIS peer review) Mr Hugh Middlemis (DPIE peer review) 	Section 4.4, Page 4-16 (groundwater assessment summary) Appendix A - Groundwater Assessment	 Section 6.2.3(1a, b, c), Page 19 (groundwater drawdown) Section 6.2.3(3), Page 28 (Project borefield) 	 Section 6.2.6, Page 49 (groundwater quality and connectivity) 	n/a	Condition B51, Table 8, 'Alluvial Aquifers' (Water Management Performance Measures) Condition B53(d)(ii) (Water Management Plan Monitoring) Condition B53(g)(v) (Groundwater Management Plan)
Groundwater Dependent Ecosystems (GDE)	 Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW, 2012) NSW Aquifer Interference Policy (NSW Government, 2012) Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2019 Water Sharing Plan for the NSW Murray Darling Basin Porous Rock Water Sources 2011 		- Section 4.4.1, Page 4-23 (GDE mapping) - Section 4.4.2, Page 4-27 (GDE impact assessment) - Appendix A – Groundwater Assessment Sections 2.8 (Page 14) and 6.2.2 (Page 52) (effects on GDEs)	- Section 6.2.3(1f), Page 21 (GDE mapping)	 Section 6.2.6, Page 53 (GDE mapping) Section 6.4.4, Page 81 (GDEs and vegetation) 	n/a	
Water Licensing / Security	NSW Water Management Act, 2000 Relevant Water Sharing Plans	 Advisian (Site water balance modelling) Dr Noel Merrick of HydroSimulations (extraction from borefield) 	- Section 4.4.3, Page 4-28 (Groundwater licensing) - Section 4.5.3, Page 4-41 (Surface Water licensing) - Attachment 6, Section A6.1.2, Page A6-3 (AIP considerations)	- Section 6.5.3(2), Page 72 (water licensing)	Section 6.2.3, page 32 (water demand and supply) Appendix G6-5 (Applicant response to Dol Water submission)	Additional Information in Response to IPC Queries (correspondence dated 29 June 2020), including Advisian report attachment (water security analysis)	- Conditions B39 and B40 (Water Supply)
Surface Water Management	- Managing Urban Stormwater: Soils & Construction (Landcom, 2004) - ANZECC Water Quality Trigger Values - SW Water Management Act, 2000 - NSW Protection of the Environment Operations Act, 1997	Advisian (site water balance modelling) Professor Tom McMahon (EIS peer review) Mr Martin Giles of BMT (DPIE peer review)	Section 2.10, Page 2-24 (water management) Section 4.5 (surface water assessment summary) Appendix B - Surface Water Assessment	Section 6.3.3, Page 42 (surface water modelling)	- Section 6.2.4, Page 40	- Additional Information in Response to IPC Queries (correspondence dated 29 June 2020), including Advisian report attachment (surface water management and site water balance)	- Condition B51, Table 8 (Water Management Performance Measures)
Western Emplacement on Alluvium	- NSW Aquifer Interference Policy (NSW Government, 2012) - ANZECC Water Quality Trigger Values	 Dr Noel Merrick of HydroSimulations (groundwater modelling) Mr Hugh Middlemis (DPIE peer review) 	 Section 4.4.2, Page 4-27 (potential seepage) Appendix A - Groundwater Assessment Sections 5.5.3 (Page 43) and 6.1.4 (Page 49) (seepage analysis) 	Section 6.2.3(1e), Page 21 (surrounding groundwater quality)	Section 6.2.6, Page 59 (consideration of Western Emplacement) Appendix G6-13 (Applicant response to additional Dol Water queries)	Additional Information in Response to IPC Queries (correspondence dated 29 June 2020)	Condition B51, Table 8, 'Overburden emplacements' (Water Management Performance Measures)
Impacts to Flooding Regime	– Floodplain Management Plan for the Upper Namoi Valley Floodplain 2019	 WRM (flood modelling) RoyalHaskoning (EIS peer review) Ms Erin Askew of WMA Water (DPIE peer review) 	 Section 2.4.3, Page 2-14 (rail spur design) Section 4.6, Page 4-42 (flood behaviour) Appendix C - Flood Assessment 	- Section 6.4.3(2), Page 58 (flood modelling)	- Section 6.2.5, Page 43 (flooding assessment)	n/a	Conditions B48 and B49 (Flooding) Condition B51, Table 8, 'Flood protection works' and 'Construction and operation of linear infrastructure' (Water Management Performance Measures)
Final Void	NSW Aquifer Interference Policy (NSW Government, 2012) (minimal impact considerations for change in water quality for alternate final landforms)	 Dr Noel Merrick of HydroSimulations (groundwater modelling) Dr Hugh Middlemis (DPIE peer review) AnalytEcon (Mine closure costs) 	Section 4.5.2, Page 4-39 (final void groundwater considerations) Section 5 (Rehabilitation Strategy) Section 6.1.10, Page 6-14 (final void analysis)	- Section 6.2.3(4), Page 30 (final void justification)	 Section 6.2.6, Page 61 (final void groundwater sink and water level) Section 6.5.2, Page 96 (final void justification) Appendix G6-4 (HydroSimulations advice on groundwater sink) 	- Additional Information in Response to IPC Queries (correspondence dated 29 June 2020)	- Condition B101, Table 12, 'Final void' (Rehabilitation Objectives)

Key Issue	Relevant Legislation / Policy / Guideline	Relevant Specialist Assessment	Where Addressed in the Project EIS	Where Addressed in the Submissions Report	Where Addressed in DPIE's Assessment Report	Applicant Correspondence to the IPC	Relevant Conditions in Draft SSD 7480
Final Landform	State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007	 RungePincockMinarco Limited (mine scheduling, sequencing and design) 	Section 2.5.8, Page 2-19 (landform profiling and rehabilitation) Section 5 (Rehabilitation Strategy)	 Section 6.10.3(2), Page 151 (final landform design) 	 Section 6.5.3, Page 96 (final landform justification) 	n/a	Condition B101, Table 12, 'Final landform' (Rehabilitation objectives)
Rehabilitation	– State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007	 RungePincockMinarco Limited (mine scheduling and final landform design) Resource Strategies (revegetation and rehabilitation as a component of the Biodiversity Offset Strategy) 	Section 2.5.8, Page 2-19 (landform profiling and rehabilitation) Section 5 (Rehabilitation Strategy) Appendix F – Biodiversity Assessment Report and Biodiversity Offset Strategy (revegetation and ecological rehabilitation)	 Section 6.9.3(3b), Page 130 (proposed ecological rehabilitation) Section 6.10.3, Page 151 (soil resources) 	 Section 6.5.1, Page 92 (proposed rehabilitation) 	n/a	 Condition B101, Table 12 (Rehabilitation objectives) Condition B103 (Progressive Rehabilitation) Condition B104 (Rehabilitation Strategy) Condition B106 (Rehabilitation Management Plan)
Kurrumbede Homestead	- NSW Heritage Act, 1977 - The Burra Charter	 Extent Heritage (Statement of Heritage Significance) 	Section 4.8, Page 4-58 (blasting criteria) Section 4.16, Page 4-131 (historic heritage assessment summary) Appendix K – Historic Heritage Assessment	Section 6.6.3(1i), Page 95 (blasting criteria) Section 6.11.3, Page 163 (potential impacts and proposed mitigation/management)	 Section 6.3.2, Page 71 (blasting and vibration) Section 6.6.3, Page 101 (historic heritage assessment) 	n/a	Condition B72 (Structural Inspection) Condition B73 (Historic Heritage Management Plan)
Biodiversity Offsets	- NSW Biodiversity Conservation Act, 2016	 Resource Strategies (Biodiversity Offset Strategy) 	Section 4.11.4, Page 4-92 (biodiversity offset strategy) Appendix F - Biodiversity Assessment Report and Biodiversity Offset Strategy	 Section 6.9.3(3), Page 129 (biodiversity offset strategy) 	 Section 6.4.7, Page 82 (biodiversity offset strategy) 	n/a	 Conditions B56 and B57 (Approved Mine Offset Strategy) Conditions B58, B59, B60, B61 and B62 (Extension Offset Requirement) Condition B63 (Biodiversity Management Plan)
Koala Habitat	 State Environmental Planning Policy No 44 – Koala Habitat Protection (Repealed) NSW Biodiversity Conservation Act, 2016 	 Resource Strategies (Biodiversity Offset Strategy) AMBS Ecology (Koala Plan of Management) 	Section 4.11, Page 4-73 (koala habitat and offset requirement) Appendix F - Biodiversity Assessment Report and Biodiversity Offset Strategy	- Section 6.9.3(1a), Page 119 (justification of species polygon)	 Section 6.4.3, Page 80 (Koala habitat) Appendix G6-12 (draft Koala Plan of Management) Appendix G6-15 (Koala SEPP) 	Additional Information in Response to IPC Queries (correspondence dated 29 June 2020)	Condition B65 (Koala Plan of Management) Condition B59 (Ecosystem and Species Credit Requirements)
Economic Benefits	 Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals (NSW Government, 2015) 	 Dr Stephen Beare of AnalytEcon (economic modelling) Dr Brian Fisher of BAEconomics (EIS peer review) Mr Gavan Dwyer of Marsden Jacobs Associates (DPIE peer review) 	Section 4.17, Page 4-135 (economic effects) Appendix J - Economic Assessment	- Section 6.12.3(8), Page 172 (indirect economic benefits)	- Section 6.8.2, Page 115 (economic evaluation)	n/a	– Condition B107 (Social Impact Management Plan)
Social Impacts & Benefits	Social Impact Assessment Guideline for State Significant Development (DPE, 2017)	 Elliot Whiteing (Social Impact Assessment) 	Section 4.18, Page 4-137 (social and community infrastructure) Appendix R - Social Impact Assessment	Section 6.12.3, Page 169 (social impact assessment and mitigation/ management)	 Section 6.8.1, Page 109 (social impact assessment, planning agreements and recommended conditions) 	n/a	
Amenity Impacts for Adjacent Landholders (noise and air quality)	 Noise Policy for Industry (NSW EPA, 2017) Interim Construction Noise Guideline (DECC, 2009) Rail Infrastructure Noise Guideline (NSW EPA, 2013) Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (EPA, 2016) National Environment Protection (Ambient Air Quality) Measure (National Environment Protection Council, 1998; 2015) Voluntary Land Acquisition and Mitigation Policy (NSW Government, 2018) 	 Ramboll (air quality modelling) Todoroski Air Sciences (EIS air quality and GHG peer review) Wilkinson Murray (noise and blast modelling) SLR (EIS noise and blasting peer review) 	 Section 4.7, Page 4-48 (operational and construction noise) Section 4.9, Page 4-60 (air quality) Section 4.13, Page 4-104 (road and rail transport noise) Appendix D - Noise and Blasting Assessment Appendix E - Air Quality and Greenhouse Gas Assessment 	Section 6.6.3(5), Page 98 (predicted noise levels) Section 6.7.3, Page 101 (air quality predictions)	 Section 6.3.2, Page 66 (Noise and blasting) Section 6.3.3, Page 74 (Air quality) 	- Additional Information in Response to IPC Queries (correspondence dated 29 June 2020)	 Conditions B1 to B10 (Noise Criteria) Condition B14 (Noise Operating Conditions) Condition B15 (Noise Management Plan) Condition B32 (Air Quality Criteria) Condition B35 (Air Quality Operating Conditions) Condition B36 (Air Quality and Greenhouse Management Plan) Conditions D1 and D11 to D18 (Acquisition) Conditions D2 and D3 (Mitigation)
Loss of Agricultural Land	- Strategic Regional Land Use Policy – Guideline for Agricultural Impact Statements (NSW Government, 2012)	 SESL Australia (soil resource assessment. McKenzie Soil Management (agricultural resource assessment) 	Section 5.4.5, Page 5-24 (re-establishment of agricultural land) Appendix H - Agricultural Impact Statement	- Section 6.10.3(3), Page 154 (final land use considerations)	Section 6.5.1, Page 92 (proposed rehabilitation and final land use)	n/a	Condition B101, Table 12, 'Areas proposed for agricultural land' (Rehabilitation objectives)
Lighting Impacts	- Dark Sky Planning Guideline (DPE, 2016)	 Light Naturally (Night lighting modelling) 	Section 4.14, Page 4-121 (night lighting) Appendix L - Visual Assessment Sections 4.1.6, 5.6 and 6.3 (assessment of night lighting)	- Section 6.13.3(3), Page 189 (potential impact on Siding Springs Observatory)	 Section 6.9.2, Page 119 (consideration of Dark Sky Region) Appendix G6-16 and G6-17 (Light Impact Assessment) 	n/a	- Condition B90 (Visual Amenity and Lighting)
Reconciliation of Responses to Key Issues Raised by IPC in Issues Report	n/a	n/a	n/a	Attachment 3, Page A3-1 (IPC Considerations - Table of Commitments)	n/a	n/a	n/a



ENCLOSURE 2

CLARIFICATION OF PREDICTED GROUNDWATER DRAWDOWN AT MINE-OWNED BORES



In their Assessment Report for the Vickery Extension Project, the Department of Planning, Infrastructure and Environment stated (paragraph 265):

Four mine-owned bores are predicted to experience drawdown greater than 2 m, all of which are to the south of Driggle Draggle Creek and all but one within the Maules Creek Formation, including the bore to experience the greatest drawdown.

The predicted drawdown at these four mine-owned bores (Bore Census IDs BG3, SK1, WL1 and WG1) is provided in Appendix F of the Project EIS Groundwater Assessment (HydroSimulations, 2018) (reproduced as Table 1 below).

To clarify the Department's statement, all four of these mine-owned bores have been modelled as being within the less productive Maules Creek Formation (i.e. none of these four bores are modelling as being within the alluvium).

If ongoing water supply is required from these bores, and they are affected by the Project, Whitehaven could make-good the water supply by deepening the bores or constructing alternative bores of equivalent water supply. If water supply from these bores is not required, Whitehaven could elect to decommission these water supply works. Accordingly there is no long-term risk associated with predicted drawdown at these mine-owned bores in the less productive Maules Creek Formation.

Table 1: Predicted Drawdown at Whitehaven-owned Bores

Bore Census ID	Predicted Maximum Ground-water Drawdown (m)
BM1	<0.2
BM2	<0.2
BM3	<0.2
BM4	<0.2
BM5	<0.2
BK1	<0.2
BK2	0.98
BG1	<0.2
BG2	<0.2
BG3	2.88
SK1	2.62
WL1	15.62
CD1	<0.2
CD2	<0.2
CD3	<0.2
CD4	<0.2
WG1	4.06
BW1	<0.2
BW2	<0.2

Note: Highlighted bores are mine-owned bores with greater than 2 m predicted drawdown. All four of these highlighted bores are modelled as being screened in the less productive Maules Creek Formation.

Source: After Appendix F of the Groundwater Assessment (Appendix A of Environmental Impact Statement)