



24 August 2018

Independent Planning Commission Statement of Reasons Mount Pleasant Coal Mine Project DA 92/97 MOD 3

1. INTRODUCTION

The Independent Planning Commission

1. The Independent Planning Commission of New South Wales (the **Commission**) is a New South Wales Government agency, established under section 2.7 of the *Environmental Planning and Assessment Act 1979 (EP&A Act)*. The Commission is not subject to the direction or control of the Minister for Planning (the **Minister**), except in relation to the procedure of the Commission and any directions authorised to be given to the Commission under the EP&A Act.
2. The members of the Commission are appointed by the Minister. Each member of the Commission has expertise in at least one area of planning, architecture, heritage, the environment, urban design, land economics, soil or agricultural science, hydro-geology, mining or petroleum development, traffic and transport, law, engineering, tourism or government and public administration. One member of the Commission is appointed as the chairperson. At present, the chairperson of the Commission is Prof. Mary O’Kane AC.
3. The functions of the Commission are set out in section 2.9 of the EP&A Act. These functions include to:
 - determine State significant development applications where there is significant opposition from the community;
 - conduct public hearings for development applications and other planning and development matters where requested to do so by the Minister or the Greater Sydney Commission; and
 - provide independent expert advice on any planning and development matter, when requested by the Minister or Secretary of the Department of Planning and Environment (the **Department**).

Reason for determination by the Commission

4. Mach Energy Australia Pty Ltd (the **proponent**), has lodged a modification application (the **application**) which proposes to amend an existing development consent under section 75W of the **EP&A Act**.
5. The ability to modify transitional Part 3A projects under section 75W of the EP&A Act is being discontinued, however as the request for this modification was made before 1 March 2018, the provisions of Schedule 2 continue to apply.
6. The Commission is the consent authority in respect of the proponent’s modification application in accordance with the Minister delegation of September 2011. This is because:
 - the Project constitutes a development of a kind that is declared by an environmental planning instrument as development for which a public authority (other than a council) is the consent authority; and
 - the Department received:
 - a. more than 25 submissions from the public objecting to the application.

7. Prof. O’Kane, as chairperson of the Commission, nominated Mr Alan Coutts (Chair), Dr Peter Williams and Prof. Zada Lipman to constitute the Commission to determine the application.

1.1. Site and Locality

8. According to the Department and the proponent, the Mount Pleasant Project (the **development**) *“is located within the Muswellbrook Local Government Area (LGA) in an area of the Sydney Basin dominated by mining and a wide range of existing operational coal mines.”* The development is surrounded by the Bengalla and Mount Arthur coal mines immediately to the south, and the Dartbrook underground coal mine to the north. The development also sits between the Hunter River and associated alluvial farmlands to the east, and land generally dominated by agricultural grazing to the west of the mine. At its nearest point, the development is approximately 2km to the north-west of the town of Muswellbrook.
9. The New England Highway is located 3km to the east, passing through the town of Muswellbrook, and a number of regional roads surround and dissect the site, including Wybong, Kayuga and Castlerock Roads. The Muswellbrook to Ulan railway line is located south of the site.
10. The development is regulated by a Ministerial development consent, DA 92/97, for the extraction of up to 10.5 million tonnes per annum (**mtpa**) of run-of-mine (**ROM**) coal a year, for a period of 21 years using open cut mining methods. The approved mine includes a rail loop, loadout facility and conveyor, connecting the mine to the Muswellbrook to Ulan rail line for transport of coal to the Port of Newcastle.
11. The development is located on land zoned RU1 Primary Production and E3 Environmental Management under the Muswellbrook Local Environmental Plan 2009 (**MLEP**). Mining is permissible within the RU1 Primary Production Zone with development consent, but prohibited under the E3 Environmental Management Zone.
12. Notwithstanding the above, clause 7 of the State Environmental Planning Policy – Mining, Petroleum Production and Extractive Industries 2007 (**Mining SEPP**) states that mining is permissible with development consent on *“... land where development for the purposes for agriculture or industry may be carried out (with or without development consent)”*. Development for the purposes of agriculture may be carried out in the E3 Environmental Management Zone under MLEP [

1.2. Background of the Modification Application

13. The Department’s Environmental Assessment Report provides the following background of the development.
14. The project was first approved on 22 December 1999 under Part 4 of the EP&A Act, by the then NSW Minister for Urban Affairs and Planning, following a Commission of Inquiry. The project was allowed to extract up to 10.5 Mtpa of ROM coal for a period of 21 years (21 December 2020) using open cut mining methods and the construction of a rail loop.
15. Coal and Allied Operations Pty Ltd (**Coal and Allied**), owned Mount Pleasant and the neighboring Bengalla Coal Mine. These mines had entered into a Master Co-operation Agreement (**MCA**) where Mount Pleasant could build and operate a conveyor facility within Bengalla’s mining lease. The MCA also allowed for Bengalla to construct water diversion infrastructure within the Mount Pleasant mining lease.
16. On 3 March 2015 the Minister for planning approved the Bengalla Continuation Project – SSD 5170 that allowed for mining to progress westward through Mount Pleasant’s approved future conveyor/rail infrastructure area. Later in 2015 Coal and Allied sold the Bengalla Coal Mine to the New Hope Group. In August 2016 Coal and Allied sold Mount Pleasant Operations to MACH Energy.

17. MACH Energy obtained approval of Modification 2 in March 2017, to relocate the South Pit Haul Road.
18. Anticipating the present modification application (referred to as “**Modification 3**”), Bengalla operations sought an order in the Land and Environment Court (LEC) to restrain the proponent from carrying out further development at Mount Pleasant, as the rail infrastructure would impact Bengalla’s operations and would require its removal. Both mines reached an agreed position in April 2018 through out-of-court negotiations. In terms of the agreement, Bengalla undertook to withdraw its objection to Modification 3 and Mach requested an amendment of the relevant condition of consent as part of Modification 3 and the inclusion of a new Statement of Commitment in DA 92/97 requiring the removal of the rail infrastructure corridor by 31 October 2022.
19. Modification 4 of Mount Pleasant is under assessment with the Department and seeks approval for the proposed relocation of the rail infrastructure. Modification 4 does not form part of the consideration or determination of the present application.
20. The proponent states that although some construction took place between 2003 and 2004 under the previous owner, mining operations had not fully commenced. The proponent purchased the site in August 2016, beginning operations in November 2016.

Summary of Modification Application

21. The modification application before the Commission for determination proposes the following:
 - modify Condition 5, Schedule 2 to extend the mine operations life for an additional six years to permit for open cut mining operations until 22 December 2026;
 - make minor changes to the approved mining methods that would remove dragline operations and maintain truck and shovel;
 - extend the Eastern Out of Pit Emplacement (**OEA**), by 67 hectares (**ha**) and relinquish 65ha of the northern portion of the South West OEA;
 - remove the Mount Pleasant rail loop and associated infrastructure;
 - revise the final landform that would remain should mining operations cease at the end of 2026; and
 - increase the peak construction workforce from 250 to 350 people to expedite the construction phase of operations.
22. Figures 1 and 2 below show the original and proposed operations lay out and site’s total disturbance footprint, if approved.

Figure 1: Approved (2021) layout and the site’s total disturbance footprint

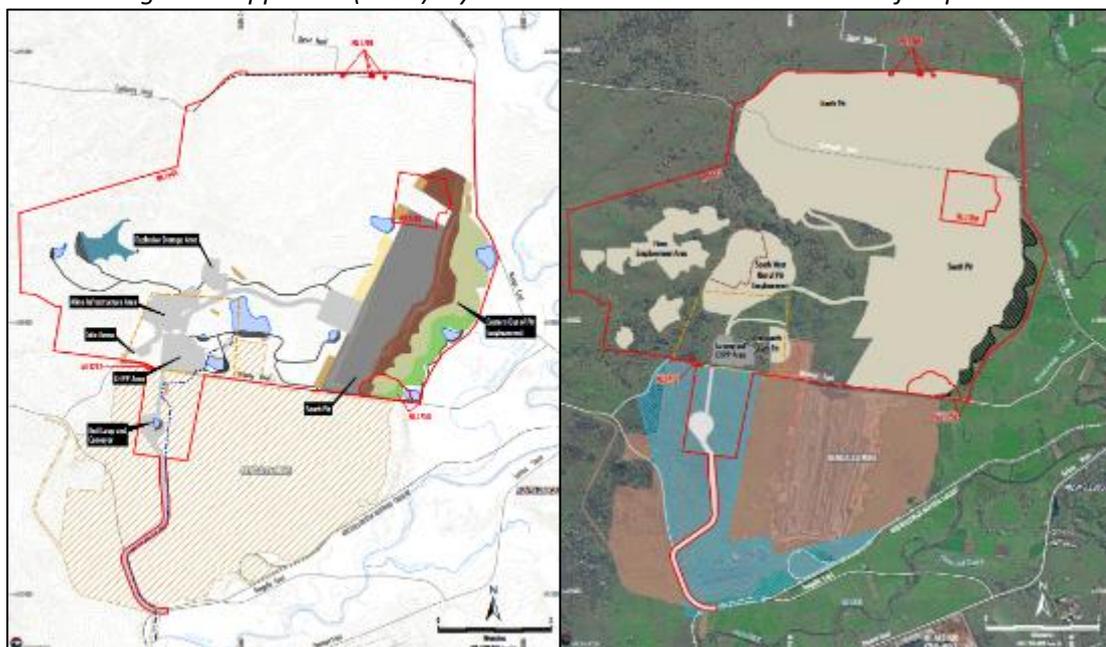
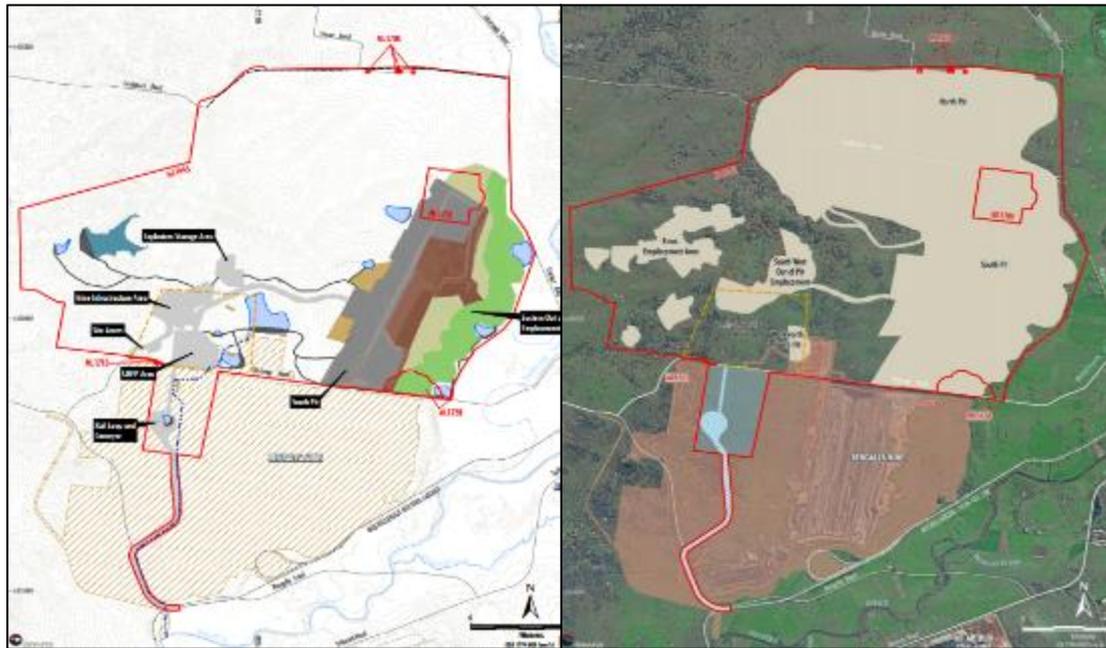


Figure 2: Proposed (2025) modification layout and the site's total disturbance footprint



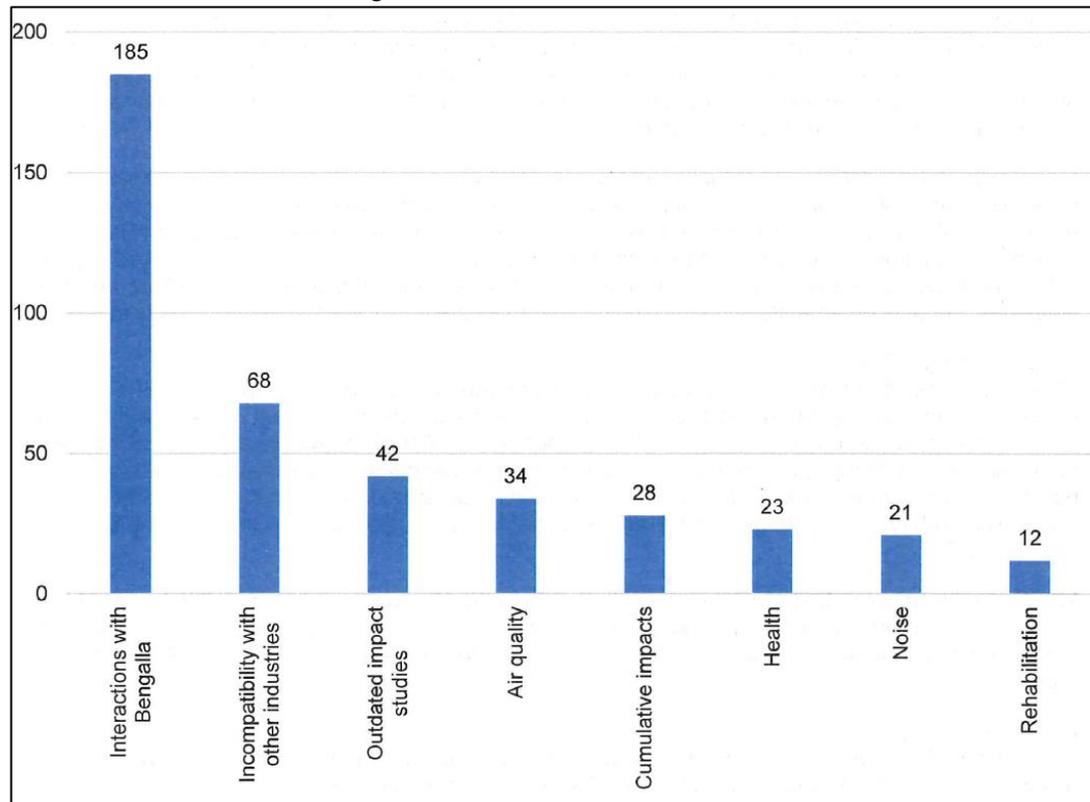
Need for the Modification

23. The proponent states in its Environmental Assessment (**EA**), that the previous owner, Coal & Allied, did not commence mining operations at the site prior to the sale of the development to MACH Energy in August 2016. In November 2016, construction of the development under MACH Energy ownership re-commenced with mining operations currently underway.
24. As the original development is approved until 2020, the proponent has identified changes that would need to occur to allow feasibility of the development, described in the section above, resulting in an extension of the mine life until 2026. The proponent has also identified a number of improvements to the Eastern Out of Pit Emplacement and Mount Pleasant Operation final landform, to facilitate a final landform that is more consistent with the natural topography when viewed from Muswellbrook.

2. THE DEPARTMENT'S CONSIDERATION OF THE MODIFICATION APPLICATION

25. The Department received a modification application on 31 May 2017 accompanied by the proponent's EA containing contemporised studies of the potential impacts associated with the modification as compared to those assessed in the original development application. This followed notification from the Department in June 2016 of the environmental assessment required to be carried out in relation to the proposed modification application.
26. Following the proponent's lodgment, the Department accepted the application and publicly exhibited the EA from 16 June to 17 July 2017. The Department received a total of 355 submissions during the exhibition period, including 250 submissions in the form of objections. These objections included objections from the general public and special interest groups. Muswellbrook Shire Council and other Government agencies did not object to the proposed modification but provided comments on certain aspects that required further information.
27. A breakdown of the matters raised and the number of submissions attributed to these matters is provided in *Figure 3*.

Figure 3 – Issues raised in submissions



28. In response to these submissions, the proponent provided a Response to Submissions (**RtS**) report seeking to address issues and concerns raised during the exhibition period. The report was made publicly available on the Department’s website, and was provided to key government agencies for comment.
29. The Department received further submissions from government agencies seeking for the proponent to provide additional information on matters raised. On 12 December 2017, the Department formally requested the proponent to provide information to address agency comments.
30. On 15 February 2018, the Department received the proponent’s response seeking to address agencies comments. The Department proceeded to prepare an Environmental Assessment Report (the **Assessment Report**) in respect of the proposed modification.

The Departments’ Assessment Report

31. The Assessment Report, dated June 2018, identified key issues associated with this proposal to be impacts on:
 - noise;
 - air quality;
 - surface water;
 - the proposed rehabilitation and final landform; and
 - the potential socio-economic impacts and benefits.
32. In terms of the key issues, the Assessment Report stated that:
 - *“The proposed modification would not materially change the impacts of either construction or operational noise and would not remove any existing entitlement for any receiver who currently has acquisition and/or mitigation rights;”*
 - *“The proposed design and operational measures associated with the water storage facilities would provide sufficient control to prevent uncontrolled discharges under all but the largest storm events. Even then, residual options remain to proactively pump stored water to the mine’s operational pit and/or to discharge it via DW1 to the Hunter River”* subject to licensing and available Hunter River Salinity Trading Scheme (**HRSTS**) credits;

- *“The proposed final landform would result in a landform with improved structural stability and visual amenity;”* and that the improved final landform *“would positively address concerns over cumulative impacts on visual amenity in the Upper Hunter region;”*
- in relation to air quality impacts and the entitlements afforded to a number of receivers *“The proposed modification would have no effect on these existing entitlements;”* and
- *“The proposal would provide significant socio-economic benefits to the local region and the wider community of the State through the continued employment of staff and generation of coal royalties over the extended six-year period;”* and also *“is unlikely to significantly impact on surrounding industries, above and beyond what is already approved.”*

33. In summary, the Department recommended:

- *“...minor modification to the existing conditions of consent”* to reflect simplified Noise Assessment Groups (**NAG**);
- *“...update table listing all current noise receivers and applicable noise criteria;”*
- *“...conditions are updated to afford Receiver 136 with acquisition rights and Receiver 84a with mitigation rights;”*
- *“...a condition of consent be included to ensure that noise monitoring is undertaken in a manner which accounts for any noise enhancing meteorological conditions;”*
- *“that the air quality criteria in the conditions of consent are updated to reflect contemporary standards, including air quality criteria in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (2016);”*
- that the Air Quality and Greenhouse Gas Management Plan (**AQGGMP**) *“be updated to incorporate changes, such as updated air quality criteria and receiver locations, since its last revision;”*
- *“...that receivers 20, 21 and 43 be granted acquisition and mitigation rights for air quality;”*
- *“...that MACH revise its Water Management Plan (**WMP**) to reflect the operational and design measures proposed for the revised surface water management system;”* and
- *“...that the relevant management plans are revised, following determination of Modification 3, to reflect the proposed improvements to the final landform design and rehabilitation.”*

34. The Department recommended that the application should be approved for the following reasons:

- *“the proposed modification, particularly the six-year extension, would generate socio-economic benefits through continued employment of site workers and through the payment of coal royalties;*
- *The Department considers these benefits outweigh the potential adverse social and environmental impacts of the proposed extension to an existing approved mine’s life;”* and
- *“The Department considers that the modification is approvable, subject to the proposed amended conditions of consent.”*

35. Overall, the Assessment Report concluded that *“The proposed modification is approvable.”* It also concluded that *“extending the life of the consent would prolong the period of approved impacts.”*

3. THE COMMISSION’S MEETINGS AND SITE VISIT

36. As part of its assessment, the Commission met with the Department, the proponent and Muswellbrook Shire Council, inspected the site and conducted a public meeting. Meeting and site inspection notes are available on the Commission’s website.

3.1. Meeting with the Department

37. On 26 June 2018, the Department met with the Commission and discussed amongst other items the background of the project, the proposed modification, nature of submissions and key issues addressed in the Assessment Report.

3.2. Meeting with the proponent

38. On 26 June 2018, the proponent met with the Commission on the proposed modification and discussed amongst other items updates to the environmental studies, public submissions, and final landform.

3.3. Site inspection

39. On 3 July 2018 the Commission met the proponent with its consultants and inspected the site. The Commission separately inspected the surrounding locality, to understand the physical attributes of the site and locality. The Commission invited a representative from five local community groups to attend and observe the site inspection. These groups and representatives were:

- Ms Kathryn Ludeke – Upper Hunter Water Keepers
- Ms Bev Smiles – Hunter Community Network
- Ms Jan Davis – Hunter Environmental Lobby
- Mr Trevor Parkinson – Mount Pleasant Community Consultative Committee
- Mr David Sorensen and Mr David Matthews – Muswellbrook Men’s Shed Inc

3.4. Meeting with Muswellbrook Shire Council

40. On 3 July 2018, the Commission met with Muswellbrook Shire Council to discuss the proposed modification.

3.5. Public Meeting

41. To hear the community’s views on the proposal, the Commission held a public meeting at the Muswellbrook Conservatorium of Music at 80 Bridge St in Muswellbrook on 4 July 2018. The Commission received requests to speak from 22 people, with 21 of the 22 registered speakers electing to speak at the meeting. A list of speakers and the transcript from the public meeting are available on the Commission’s website. Written comments from speakers who presented at the public meeting are available on the Commission’s website. A summary of the matters raised at the public meeting is available on the Commission’s website.

3.6. Public Comments

42. The Commission provided the public with seven days after the public meeting to submit written comments. The Commission received a total of 179 written comments, and these are available on the Commission’s website. One late comment was received by the Commission from the public after the seven-day period.

4. ADDITIONAL INFORMATION

43. On 9 July 2018 the Commission received additional information from the Department responding to issues raised by the public in relation to the proposed modification. In this document, the Department summarised the considerations, findings and conclusion arrived in its Assessment Report, and communicated its engagement with the EPA and NSW Health to obtain final positions on the proposed modification.
44. On 13 July 2018, the Commission received from the Department, NSW Health’s position dated 11 July 2018 and subsequently EPA’s final position dated 13 July 2018. These documents were provided to the Commission and are further discussed in **section 5** of this Statement of Reasons.
45. On 18 July 2018, the Commission received further information from the proponent seeking to address EPA and NSW Health comments on their final position.

46. On 20 July 2018, the Commission received comments from the Hunter Thoroughbred Breeders (HTBA) Association which attached a number of specialist studies that had not been presented to the Department and the Commission.
47. On 03 August 2018, the Commission received further information from the proponent seeking to address HTBA comments.
48. On 10 August 2018, the Commission received further information from the Department seeking to address HTBA comments.
49. On 13 August 2018, the Commission received further information from the Department which attached the Mount Pleasant Coal Mine Modification 2 – Assessment Pathway and Requirements.

5. THE COMMISSION'S CONSIDERATIONS

Material Considered by the Commission

50. In determining this section 75W application, the Commission has carefully considered the following material (the **Material**):
 - the modification application
 - the environmental assessment requirements (the **requirements**) issued by the Department, dated June 2016;
 - the EA and its appendices prepared by Resource Strategies Pty Ltd, dated May 2017, including updates of:
 - Noise and Blasting Assessment
 - Air Quality and Greenhouse Gas Assessment
 - Road Transport Assessment
 - Biodiversity Assessment; and
 - Site Water Balance Review;
 - all submissions made to the Department in respect of the proposed modification during the public exhibition of the EA;
 - the RtS on the EA and appendices;
 - the Response to Submissions on the EA and appendices (Government Authority Submissions):
 - Muswellbrook Shire Council Submission on RtS, dated October 2017;
 - DPI Submission on RtS, dated 26 October 2017;
 - NSW Health – Hunter New England Local Health District Submission on Rts, dated 26 October 2017;
 - EPA Submission on RtS, dated 6 November 2017;
 - OEH – Heritage Council Submission on RtS, dated 23 October 2017;
 - OEH Submission on RtS, dated 24 October 2017;
 - the Proponent's response to the Department's additional information request, dated 22 December 2017, and 7 June 2018;
 - the Department of Planning and Environment's Assessment Report, dated 8 June 2018;
 - the visual observations made at the site and locality inspection on 3 July 2018;
 - information provided to the Commission at its meeting with the proponent on 26 June 2018;
 - oral comments from speakers at the public meeting and written comments received after the public meeting including:
 - Muswellbrook Shire Council comments dated 11 July 2018;
 - Proponent's additional comments dated 10 July 2018; and
 - Hunter Thoroughbred Breeders Alliance comments dated 20 July 2018;
 - the Department's correspondences, dated 9 July 2018, 13 July 2018, 24 July 2018, 10 August 2018, and 13 August 2018;
 - correspondence from the Department of Health to the Department of Planning and Environment, dated 11 July 2018,

- correspondence from the EPA to the Department of Planning and Environment, dated 13 July 2018,
- the proponent's responses, dated 18 July 2018; 03 August 2018;
- the public interest; and
- matters for consideration specified by the EP&A Act, including Section 75W.

5.1. Requirements and scope of the modification within section 75W of the EP&A Act

Public and Council comments

51. The Commission heard concerns from Muswellbrook Shire Council and speakers at the public meeting and received written comments regarding the proposed modification. These concerns included:
- the inadequacy of section 75W of the EP&A Act for assessing the proposed modification;
 - the modification was not within the scope of section 75W and could not be determined as such; and
 - the proposed modification is a major change from its original development and should be assessed as a new development application rather than a modification.

Proponent's consideration

52. The proponent provided an EA in accordance with the Department's requirements for the modification application. The EA included contemporised studies and assessment of impacts that would result from the modification if approved.
53. The proponent's EA stated that extensions of the Eastern Out of Pit Emplacement is to *"better align with the underlying topography and facilitate development of a final landform that is more consistent with the characteristics of the local topography."*... *"In addition, the Modification also involves some revisions to the final landform that would remain should mining operations cease at the end of 2026 (at the end of the Modification period) ..."*
54. The proponent's *Table 1 – Overview of the Approved Mount Pleasant Operation and the Modification*, provided in page 7 of their EA, and in page 3 of the RtS to the EA, details the approved operations of the project, the proposed changes of this modification and what would remain unchanged. A summary of the changes includes:
- 67-hectare (ha) extension of the Eastern Out of Pit Emplacement, with relinquishment of a 65-ha portion of the South West Out of Pit Emplacement;
 - amendment of the mining method for open cut mining comprising truck and shovel for the modification period and removing the dragline operation;
 - reduce water demand from the Hunter River and to source excess mine water from the Bengalla and Dartbrook Mines;
 - time extension of six years, to 22 December 2026; and
 - increase construction workforce to peak at approximately 350 people.
55. The proponent's EA stated that the remaining aspects of the project such as ROM Coal Production, coal processing or waste rock production remain unchanged and the site's total disturbance footprint would be slightly reduced.

Department's consideration

56. The Department issued the environmental assessment requirements in June 2016 which required *"the preparation of contemporary air quality, greenhouse gas, noise, blasting, landscape, rehabilitation and road transport assessments that reflect the proposed extension to the life of mining operations, as these are likely to be the key considerations related to the modification. The Department also requires MACH Energy to address all other impacts, such as visual amenity, water heritage and biodiversity to the extent necessary."*

57. In its Assessment Report, the Department advised that the project is a *“transitional Part 3A project under Schedule 2 of the Environmental Planning and Assessment (Savings, Transitional and Other Provision) Regulation 2017.”* The Department also confirmed that its assessment report was prepared in accordance with the requirements of Part 3A and the regulation and the approval authority may approve or disapprove the carrying out of the project under section 75W of the EP&A Act.
58. The Assessment Report stated that the Department *“is satisfied the core components of the development, such as ROM coal production, coal processing or waste rock production, wouldn’t change;”* and that the *“proposed modification represents a six-year life extension to the current 21-year mine life.”*
59. The Assessment Report also stated that the *“proposed emplacement extension is located wholly within existing mining leases ... is a minor component of the site’s total disturbance footprint and would result in a smaller disturbance area in comparison with the approved surface disturbance area.”*
60. The Assessment Report concluded that the proposal can be characterised as a modification and that it was *“satisfied that the modification application is within the scope of section 75W.”*

Commission’s consideration

61. The Commission has considered the proponent’s EA against the requirements issued by the Department in June 2016 and is satisfied that those requirements have been met because the proponent has provided contemporised assessments and studies in its EA for the modification application, as discussed in paragraph 50 and 52.
62. The Commission accepts the Department’s and proponent’s considerations that ROM coal production and waste production are the development’s core components, as discussed in paragraph 58; and that these are not proposed to change for this modification, as discussed in paragraphs 54, 55. The Commission also accepts that the site’s total disturbance footprint would result in a smaller disturbance area in comparison with the approved surface disturbance area, as discussed in paragraph 59.
63. The Commission is satisfied with the Department’s consideration and assessment of the application of section 75W to the modification, and accepts the Department’s conclusions outlined in paragraphs 56-60 above, because the proposed modification does not change the core components of the development.
64. Based on the Material, the Commission finds that the proposed changes do not represent a new development application, and is suitable to be considered as a section 75W modification application because:
 - it is within the scope of section 75W of the EP&A Act, as discussed in paragraphs 57;
 - core components of the original development, such as annual ROM coal production, coal processing or waste rock production remain unchanged as discussed in paragraph 58; and
 - removal of the northern portion of the South West OEA with the proposed emplacement extension would result in a smaller disturbance area, as discussed in paragraph 59.

5.2. Environmental, Social and Economic Impacts

5.2.1. Air quality and Greenhouse gas emissions

65. The Commission has taken into account the Material insofar as it relates to the impacts of the project on air quality and greenhouse gas emissions.

Public and Council comments

66. The Commission heard concerns from Muswellbrook Shire Council, speakers at the public meeting, and received written comments regarding the impacts of the project on air quality, more specifically the impacts of PM₁₀ and PM_{2.5} dust particles. These concerns included:
- cumulative air quality impacts and increased concentration of PM₁₀ and PM_{2.5} dust particles have not been properly considered;
 - the adequacy of the proponent's Air Quality and Greenhouse Gas Assessment (**AQIA**) is out of date and reliant on information from the original EIS;
 - the proponent's and the Department's failure to address EPA and NSW Health concerns on the exceedance of the current PM₁₀ annual average criterion of 25µg/m³ on receivers;
 - wood fires in winter are the primary contributor to air quality issues in Muswellbrook; and
 - the Department's recommendation for approval of the modification without appropriately responding to EPA and NSW Health concerns.

Proponent's consideration

67. The proponent undertook an update of its AQIA, which was conducted by Todoroski Air Sciences Pty Ltd, which included the Approved Methods 2016 as part of the considerations to establish the expected air quality impacts and greenhouse gas emissions, of the modification application.
68. The proponent's AQIA modelled dust concentrations to predict the potential impacts from emissions under three timing scenarios, which are described in the AQIA as:
- Scenario 1 - approximately Year 2018 with the approved Mount Pleasant Operation incorporating the Modification;
 - Scenario 2 - approximately Year 2021 when the activity reaches its peak for the Modification;
 - Scenario 3 - and when activity is at a peak level and the active pit has reached its full extent within the Modification period approximately Year 2025.

The proponent's AQIA also estimated the predicted emissions of greenhouse gases to the atmosphere that incorporated the modification and provided the direct emissions at the state and national level.

69. The AQIA concluded that "*Cumulative annual average PM10 levels are not predicted to exceed the Development Consent DA 92/97 criterion of 30µg/m³, except at three privately-owned receivers already subject to acquisition upon request for air quality impacts from Bengalla Mine and Mt Arthur Coal Mine. It is noted that in each case, the criterion is exceeded with or without the Mount Pleasant Operation active.*" The AQIA also concluded that "*The new (2017) NSW EPA impact assessment criteria of 25µg/m³ may also be exceeded at a small number of privately-owned receptors, primarily due to existing elevated dust levels.*" ... and that the "*Cumulative 24-hour average PM2.5 and PM10 levels exceeding the NSW EPA impact assessment criteria were predicted to occur in the surrounding environment in the absence of the implementation of reactive measures.*"
70. Notwithstanding, the AQIA concluded that with the implementation of the proponent's reactive dust mitigation strategy and incorporation of real-time/predicted management systems, short-term cumulative PM_{2.5} and PM₁₀ dust would be adequately managed. These real-time monitoring management systems were explained in the proponent's EA which consists of a combination of dust deposition gauges, high-volume samples and continued real-time Palas Fidas monitors.

71. The AQIA also concluded that *“Predicted levels for the other assessed dust metrics would be below the relevant criterion at the privately-owned receptor locations’ and that “There are no likely air quality impacts associated with rail transport, blast fumes or diesel emissions identified for the Mount Pleasant Operation incorporating the Modification.”*
72. The proponent’s RtS included a section from the EPA’s submission stating that Mount Pleasant holds Environmental Protection Licence (EPL) 20850 issued by EPA, which includes a reactive management strategy requiring cessation of dust-generating activities under adverse conditions when elevated concentrations of PM₁₀ and wind blowing from the north-west sector are recorded.
73. The proponent’s RtS responded to EPA and NSW Health concerns that the PM₁₀ annual average criterion of 25µg/m³, introduced in 2016, would be exceeded by cumulative emissions at nine private receivers (4, 6, 20, 21, 43, 487a, 487b, 488a and 488b). The proponent’s RtS noted that their operation’s contribution to the exceedance of the PM₁₀ annual average criterion of 25µg/m³ was marginal and that the identified receivers were closer to Bengalla and Mt Arthur mining operations than to Mount Pleasant. Nevertheless, the proponent explained should exceedances occur at any private property locations outside the acquisition upon request zone, it would review its on-site air management control measures and consult further with the EPA.
74. In relation to greenhouse gas emissions, the proponent’s AQIA stated that *“The Mount Pleasant Operation will aim to utilise various mitigation measures to minimise the overall generation of greenhouse gas emissions. Some examples of greenhouse gas mitigation and management practices that may be applied for the Modification include:*
- *Investigating ways to reduce energy consumption during project planning phases and reviewing energy efficient alternatives;*
 - *Regular maintenance of equipment and plant;*
 - *Monitoring the consumption of fuel and regularly maintaining diesel powered equipment to ensure operational efficiency; and*
 - *Monitoring the total site electricity consumption and investigating avenues to minimise the requirement. “*
75. The proponent’s AQIA concluded that:
- *“The Modification does not involve any changes to the approved Mount Pleasant Operation that would materially change the greenhouse gas emissions of the Mount Pleasant Operation, except for the change in mining methodology (dragline no longer proposed during the Modification period);”*
 - *“the estimated annual average greenhouse emission is 0.22Mt CO₂-e material (Scope 1 and 2), which is calculated to be approximately 0.04% of the Australian greenhouse emissions and approximately 0.17% of the NSW greenhouse emissions for the 2014 period;”*
 - *“Overall, relative to the approved Mount Pleasant Operation, the potential air quality impacts associated with the Mount Pleasant Operation incorporating the Modification are significantly lower, as would be expected with the reduced total emissions.”*

Department’s consideration

76. The Department confirmed in its Assessment Report that the AQIA was prepared in accordance with the EPA’s *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales 2005 (2005 quality criteria)* and the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales 2016 (Approved Methods 2016)*. The Assessment Report also confirmed that the AQIA had included a full assessment of the air quality impacts associated with the proposed modification and other nearby mines, including cumulative air quality impacts.

77. The Department stated in its Assessment Report that *“MACH is not proposing any major changes to the approved construction, mining methods or any other major dust generating activities that would materially increase air quality impacts. In fact, as the modification would not be using the original drag line it would be expected to reduce dust emissions.”* The Assessment Report states that the proponent’s real-time monitoring system *“allows MACH to undertake proactive and reactive dust management when condition that are conducive to dust generation are detected.”*
78. The Assessment Report also stated that *“The existing conditions of consent address requirements in relation to air quality criteria, greenhouse gas emission, operating conditions, meteorological monitoring and require the preparation and updates of an Air Quality and Greenhouse Gas Management Plan (AQGGMP).”*
79. In relation to greenhouse gases, the Assessment Report concluded that *“the existing conditions of consent address requirements in relation to ... greenhouse gas emissions ...”*
80. The EPA’s submission stated that *“the proposed modification does not require change to these license conditions”*. However, it identified and raised concern to the potential exceedances on nine receivers (4, 6, 20, 21, 43, 487a, 487b, 488a and 488b).
81. In response to the EPA, the Assessment Report noted that:
- *... “three properties representing five receivers (4, 487a, 487b, 488a and 488b), are located south of Mount Pleasant, between Mt Arthur and Bengalla, and already have voluntary acquisition rights under either the Mount Pleasant, Mt Arthur approval or Bengalla consent;*
 - *... Receiver 6 (the Muswellbrook Race Club) is not a private residence, and therefore acquisition and mitigation rights are no available for this receiver;*
 - *... Receiver 43 already has acquisition rights under the existing Mount Pleasant consent.”*
82. The Assessment Report also noted that the remaining two receivers (20 and 21) are predicted to experience an exceedance of the PM₁₀ criterion of 25µg/m³ and stated that *“While Mount Pleasant is a minor source of overall impacts at these receivers, it would be responsible for elevating particulate matter levels above the recommended level of 25µg/m³. The Department recommends that, in accordance with the current VLAMP, voluntary acquisition rights for air quality be extended to receiver 20 and 21.”*
83. Further correspondence from the Department, dated 9 July 2018, also confirmed that the Voluntary Land Acquisition and Mitigation Policy (VLAMP) does not yet formally apply to the Approved Methods 2016 in determining whether acquisition or mitigation rights are given, however, in this instance the criteria has been used to extend mitigation and acquisition rights to receivers which is a more conservative and contemporary standard.
84. NSW Health comments dated 11 July 2018, stated that due to the development’s proximity to the town of Muswellbrook *“nine privately-owned receivers are predicted to experience exceedances of the current annual average PM₁₀ impact assessment criterion of 25µg/m³ ... air quality for the development should be consistent with current impact assessment standards and not former development approvals.”* NSW Health also stated, *“We note and value that the proposed amendments to the condition of consent use the current standard for particulate matter that came into effect in 2016.”*
85. To address NSW Health concerns, the Department recommended in the proposed conditions of consent that the air quality criteria is updated to reflect contemporary standards, in accordance with the Approved Methods 2016, and for the AQGGMP to be updated to incorporate the criteria changes and receiver’s locations.
86. Further correspondence from the EPA to the Department, dated 13 July 2018, stated that *“EPA’s concerns have been addressed”*.

Commission's Considerations

87. The Commission accepts Muswellbrook Shire Council's comments that the air quality in Muswellbrook is impacted by a variety of different sources, including mining operations, and acknowledges Council's statement that wood fires are the primary contributors to air quality impacts in winter, as discussed in paragraph 66.
88. The Commission accepts the Department's assessment of the proponent's updated AQIA as it reflects the changes from the proposed modification while being assessed against the Approved Methods 2016, which are a more conservative and contemporary standard, as discussed in paragraphs 67 and 83. Should air quality levels be exceeded from the development, actions required under the proponent's EPL will be undertaken, as stated in paragraph 72; and the Department's recommendations that mitigation and acquisition rights are extended to the affected private residence receivers surrounding its operations, in accordance with the VLAMP, as discussed in paragraphs 73 and 82-83.
89. The Commission accepts that the proponent has addressed EPA and NSW Health concerns as discussed in paragraphs 69-73. The Commission also accepts that the Department has addressed EPA and NSW Health concerns as discussed in paragraphs 76-86.
90. The Commission accepts the Department's recommendation to update the air quality criteria in the conditions of consent to reflect the Approved Methods 2016, as discussed in paragraph 85; and the proponent to update its AQGGMP to incorporate changes including air quality criteria and receiver locations as discussed in paragraphs 78-82.
91. The Commission is satisfied with the Department's assessment of the air quality impacts of the proposed modification, and accepts the Department's conclusion outlined in paragraphs 76-86, that air quality impacts would be managed, and would not lead to unacceptable additional exceedances beyond those already approved.
92. Although the Commission notes that the Assessment Report does not assess greenhouse gasses in depth, as discussed in paragraph 79, it concurs with the Department's conclusion because the proposed modification will remove the original drag line as discussed in paragraphs 21, 54, 75 and 77.
93. Based on the Material, the Commission finds that air quality impacts and greenhouse gas emissions resulting from the proposed modification are acceptable because:
 - the AQIA was updated and undertaken in accordance with the Approved Methods 2016, as discussed in paragraphs 67 and 76;
 - the project is expected to have reduced air quality impacts resulting from the removal of the original dragline, as discussed in paragraphs 21, 54 75 and 77;
 - EPL's requirement to manage dust emissions with reactive and proactive dust suppression strategies, as discussed in paragraph 72, are included in the proponent's AQGGMP;
 - existing conditions of consent require the preparation and updates of an Air Quality and Greenhouse Gas Management Plan, as discussed in paragraph 78; and the Department has additionally recommended updates to the air quality criteria in the conditions of consent to reflect the Approved Methods 2016 and receiver locations, as discussed in paragraph 85;
 - in accordance with the VLAMP, voluntary acquisition rights for air quality have been extended to receivers 21 and 22, as discussed in paragraph 82; and
 - EPA and NSW Health were satisfied with how their concerns were addressed, as discussed in paragraphs 84-86.

5.2.2. Impacts on water

94. The Commission has taken into account the Material insofar as it relates to the impacts of the project on water.

Public and Council comments

95. The Commission heard concerns from Muswellbrook Shire Council, speakers at the public meeting, and received written comments regarding the potential impacts of the project on water quality, more specifically surface and groundwater. These concerns included:
- the adequacy of the proponent's water assessment Site Water Balance (**SWB**), which is out of date and reliant on information from the original EIS;
 - Department's report fails to fully address concerns, including the risk of water quality impacts should mitigation measures fail, the supply and quality of potable water, and water discharges to receiving waters;
 - the proponent must be required to hold sufficient credits and licences for discharging water in the Upper Hunter River; and
 - there has not been sufficient information provided for groundwater impacts, including an adequate updated groundwater assessment and modelling.

NSW Health initially raised similar concerns and focused on the discharges of surplus water into the Hunter River via the HRSTS, and the potential impacts on the Muswellbrook drinking water supply.

Proponent's consideration

96. The proponent undertook a review of the original SWB, which was conducted by Hydro Engineering & Consulting Pty Ltd ('Hydro Engineering Report') to contemporise the site water balance modelling and water management system design incorporating the proposed modification.
97. The proponent's SWB reviewed the modelled future site water balance behaviour including water supply reliability, spill risk and pit water inventory using historical climatic data for the period of the simulation, groundwater inflows, and key outputs including:
- predicted water supply security for make-up supply to the proposed coal handling and preparation plant (CHPP) and for haul road dust suppression use;
 - risk of (unlicensed) external spill occurring from site mine water storages; and
 - risk of accumulation of excess water in the Open Cut pit during the life of the Modification.
98. The SWB review concluded that *"The Modification would not include any significant changes to the approved water management system at the site;"* and that in relation to the Eastern Out of Pit Emplacement *"is not anticipated to result in an increase to the total maximum excised catchment associated with the Mount Pleasant Operation (at any one time), due to the delay to the commencement of the approved North Pit. Therefore any potential incremental impacts from the Modification on the Hunter River catchment would be negligible."*
99. The SWB review also concluded that *"The outcomes of this modelling are not materially different to the approved outcomes of the water management system modelling presented in the Mount Pleasant Mine Environmental Impact Statement (ERM Mitchell McCotter, 1997), the only exception being less water is predicted to be drawn from the Hunter River for the Modification."*
100. In terms of groundwater, the SWB review found that *"Given groundwater is a relatively small proportion of the total inflows to the system (contributing only 13ML or less than 1% of inflows on average as shown in Figure 10 [of the Hydro Engineering Report]), the sensitivity of model results to this value was negligible."*

101. The proponent's RtS clarified that *"No changes to Hunter River discharges are proposed as part of the Modification. Notwithstanding, MACH Energy notes that any discharges to the Hunter River would be undertaken in accordance with:*
- *the Hunter River Salinity Trading Scheme; and*
 - *an Environment Protection Licence issued under the Protection of the Environment Operations Act, 1997. "*

102. The proponent's RtS also clarified that *"the proposed modification does not seek to alter the supply or storage of potable water onsite"* and that *"potable water would be treated to the appropriate standard or supplied by a contractor, in accordance with the Public Health Act 2010."*

Department's consideration

103. The Assessment Report stated that *"the proposed modification would not significantly alter the currently approved mine design with respect to surface water management"*. However, it identified potential surface interactions between Mount Pleasant and Bengalla.

104. The Assessment Report stated that as Bengalla has progressed its pit activity towards the west since its approval, *"Bengalla's active operational areas are now located immediately downstream of Mount Pleasant's dams,"* referring to Mount Pleasant's Mine Water Dam (MWD) and Environment Dam 3 (ED3), *"thus permitting potential surface interaction between the two mines."* For this, the Department accepted the proponent's design and operational features to mitigate potential risk, which include that:

- *MWD has been designed to provide sufficient freeboard for a 1% Annual Exceedance Probability (AEP) storm event (ie 1 in 100-year Average Recurrence Interval (ARI)). The design capacity of MWD is approximately 2,000 megaliters (ML), which is more than double the capacity of CW1 (approximately 900 ML) which is immediately downstream;*
- *ED3 has also been designed with a capacity of approximately 300 ML and constructed for a 1% AEP storm event. A pump and pipeline from ED3 to MWD would allow transfer of water to the larger dam in the event of a larger storm event. ED3 is a prescribed dam under the NSW Dams Safety Act 1978 and is therefore constructed and operated in accordance with the requirements of the Dams Safety Committee (DS), including appropriate monitoring and surveillance; and*
- *All pumping of water to MWD, with the exception of pumping from ED3, would cease once the 1,300 ML level is reached, thus preserving approximately 700 ML of capacity to manage potential stormwater runoff and rainfall events.*

105. The Assessment Report stated that in the event that these measures were insufficient, the proponent would manage residual risks as follows:

- *If MWD reaches a more critical water level (in excess of 1,300 ML), Mount Pleasant would commence dewatering MWD to alternative water storages, including the Mount Pleasant pit if required; and*
- *In the unlikely event that dewatering of MWD is insufficient and MWD were to spill water to CW1 (due to a pump or other operational failure), Mount Pleasant would consider transferring water back to MWD from CW1 once circumstances permit.*

106. The Assessment Report identified that construction of the Mount Pleasant Discharge Dam (DW1) within Bengalla's mining lease, *"introduces another interaction between the two mines which has bearing on future water discharges from Mount Pleasant."*

107. The Assessment Report stated that *“water discharge would not be required until mining at Mount Pleasant is well progressed and the resulting catchment area much larger.”* ... once constructed, this water discharge system would *“provide Mount Pleasant with a new discharge route toward the south;”* ... and *“serve as an additional surface water management option in the event of a major storm event.”*
108. The Assessment Report confirmed that the proponent *“must comply with the provisions of the Protection of the Environment Operations Act 1997 and Protection of the Environment Operation (Hunter River Salinity Trading Scheme) Regulation 2002, including any necessary Environment Protection Licence (EPL) and Hunter River Salinity Trading Scheme (HRSTS) credits; and for these credits and licence “to be in place prior to operation of the water discharge system.”*
109. The Assessment Report stated that the Department accepts the proponent’s SWB review conclusions and recommended that *“MACH revises its Water Management Plan to reflect the operational and design measures proposed for the revised surface water management system. If the modification application is approved, a condition of consent would be triggered which requires MACH to review, and submit for approval, a revised Water Management Plan.”*
110. Overall, the Assessment Report concluded that *“the proposed design and operational measure associated with the water storage facilities would provide sufficient control to prevent uncontrolled discharges under all but the largest storm events. Even then, residual options remain to proactively pump stored water to the mine’s operational pit and/or to discharge it via DW1 to the Hunter River (subject to licensing and available HRSTS credits).”*
111. The RtS stated *“The Environmental Assessment considered the potential impacts of the Modification on water resources and concluded that the Modification would not result in a material change to the groundwater and surface water impacts of the approved Mount Pleasant Operation, given the Modification would not:*
- *significantly alter the approved general arrangement of the Mount Pleasant Operation;*
 - *significantly increase the development area of the mine;*
 - *increase the approved annual maximum ROM coal and waste rock production rates; or*
 - *include any significant changes to the approved water management system at the site.*
112. Furthermore, a submission to the Department from the Department of Industry (**Dol**), dated 26 October 2017, stated that *“The Department has reviewed the RTS and advises that the proponent has adequately addressed matters of regulatory interest to Crown Lands and Water and Department of Primary Industries”*. The submission recommended to include in the conditions of consent that *“the proponent should develop and/or update the following in consultation with Crown Lands and Water (water.referrals@dpi.nsw.gov.au). Plans should be finalised prior to commencement of works to which the respective plans apply:*
- *Water Management Plan*
 - *Groundwater monitoring Program*
 - *Rehabilitation Management Plan*
 - *Waste Management Plan.”*
113. The Department has amended the conditions to reflect in the proposed conditions of consent to reflect Dol’s recommendation.

Commission’s consideration

114. The Commission accepts that the proponent has contemporised its SWB with the inclusion of the proposed modification, including the interactions resulting from the progression of Bengalla’s mining operations, as discussed in paragraphs 96-102; and that the Department is satisfied with the conclusions drawn by the proponent as stated in paragraphs 109-110.

115. The Commission notes that the Assessment Report is silent on concerns raised by the public, on groundwater impacts. However, the Commission accepts the conclusions of groundwater in the SWB review, discussed in paragraph 100 and that DoI was satisfied with the information provided, as discussed in paragraph 112.
116. The Commission accepts the Department's recommendation to amend the conditions of consent, as discussed in paragraph 112, to reflect DoI's recommendation for the proponent to develop and/or update its Water Management Plan and Groundwater Monitoring Program in consultation with DPI Water.
117. Based on the Material, the Commission finds that the proposed modification would not result in materially different surface water or groundwater impacts in comparison to those impacts which have already been approved, and that these have been adequately addressed by the proponent and the Department because:
- the SWB was reviewed and concluded overall any potential incremental impacts from the Modification on the Hunter River catchment would be negligible, as discussed in paragraphs 98-102;
 - the identified interaction between the proposed modification and Bengalla would be managed through the proponent's design and operational features, as discussed in paragraph 104, and if insufficient, additional measures in paragraph 105 would manage the risks;
 - the conditions require the proponent to comply with relevant legislation including the *Protection of the Environment Operations Act 1997 (POEO Act)* and to hold the required EPLs and HRSTS credits prior to discharges, as discussed in paragraph 108;
 - recommended water management conditions require updates to the proponent's water management plan to reflect the operational and design measures proposed for the revised surface water management system, as discussed in paragraph 109;
 - DoI is satisfied with how its concerns have been addressed, as discussed in paragraph 112; and
 - the Department was satisfied that the proposed design and operational measures would provide sufficient control to prevent uncontrolled discharges, as discussed in paragraph 110; and that it has reflected DoI's recommendation into the conditions of consent, as discussed in paragraph 113.

5.2.3. Noise

118. The Commission has taken into account the Material insofar as it relates to the noise impacts of the project.

Public and Council comments

119. The Commission heard concerns from Muswellbrook Shire Council, speakers at the public meeting, and received written comments regarding the impacts of the project on noise, more specifically that noise impacts would increase as a result of the modification. These concerns included:

- cumulative noise and health impacts have not been properly considered;
- the adequacy of the proponent's noise assessment is out of date and reliant on information from the original EIS;
- the proponent's and the Department's failure to address the EPA's concerns on the monitoring of noise levels; and
- as the development moves closer to Muswellbrook, noise impacts would increase.

Proponent's consideration

120. The proponent undertook an update of the original Noise and Blasting Assessment (**NBA**), which was conducted by Wilkinson Murray, that applied the *NSW Industrial Noise Policy 2000 (INP)* to examine the potential noise and blasting impact as well as the cumulative noise generated by the proposed modification, if approved, and other nearby mines (Mt Arthur Coal Mine, Bengalla Mine and Dartbrook Mine) on the surrounding community.

121. The proponent's NBA modelled noise levels and cumulative noise impacts using an Environmental Noise Model (**ENM**) to predict the potential exceedances under three scenarios, namely Years 2018, 2021 and 2025, based on:

- the planned mine sequence of the Mount Pleasant Operation incorporating the Modification,
- the geographic spread of operations in consideration of the proximity to nearby noise sensitive receivers, and
- maximum operational material movements in the modification's production schedule,

122. The NBA identified that receiver 84 of NAG7 ('Noise Assessment Group 7') would experience an exceedance of 3dB(A) of the evening noise creation of 37dB(A). It also identified that the consideration of receiver 136 "*appear[s] to be erroneous, as the results for all nearby receivers are in the order of 10 dB higher;*" and found that "*receiver 136, is predicted to exceed the criteria in Development Consent DA 92/97 (i.e. the default criteria for NAG 3 of 35 dBA for day, evening and night).*"

123. The NBA concluded that "*While the Modification does not result in any exceedances of the criteria in Development Consent DA 92/97 (excluding receiver 136), the detailed review of previous assessments and contemporary dwelling verification investigation has highlighted the need for some updates to the noise criteria and land subject to acquisition or mitigation upon request in Tables 1, 2 and 3 of Development Consent DA 92/97.*"

124. The NBA found that cumulative noise exceedances between 1 and 2 dB at night, would be experienced at two receivers 488a and 488b (two dwellings on the same property) and that "*Those exceedances are predicted to occur from the combined noise generated by the Mt Arthur Coal Mine and the Bengalla Mine, irrespective of whether the Mount Pleasant Operation is active.*"

125. The NBA concluded that *“Day, evening and night cumulative noise levels would comply with the cumulative noise criteria at all modelled privately-owned receivers with the pro-active and reactive mitigation measures in place; ... Noise generated by the Mount Pleasant Operation incorporating the Modification was found not to materially contribute to the cumulative noise levels at receivers 488a and 488b ... All cumulative noise predictions comply with the cumulative noise acquisition criteria in Development Consent DA 92/97 at modelled privately-owned receivers.”*
126. Overall, the NBA concluded that *“with the implementation of the proposed management measures the Modification would not materially change the noise and blasting impacts of the approved Mount Pleasant Operation”* for operational noise, vacant land, cumulative noise, sleep disturbance, road and rail transport noise, and blasting.

Department’s consideration

127. The Department confirmed in the noise section of its Assessment Report that the NBA was prepared in accordance with the *NSW Industrial Noise Policy 2000*, as stated by the proponent in paragraph 120. The Assessment Report also confirmed that the proponent had reviewed *“all current receivers located in the vicinity of Mount Pleasant, including the consideration of specific noise criteria already applying to individual receivers and whether rights for additional noise mitigation or voluntary acquisition had already been applied under condition of consent. The review also included receivers which were newly identified or had been omitted in error from the Modification 1 EA.”*
128. The Department’s Assessment Report accepted the proponent’s updates and conclusions of the review and stated that *“the EA identifies that the modification would not be seeking to increase the currently approved noise limits for NAGs in Muswellbrook township; ... The Department notes that MACH is required to undertake real-time noise monitoring toward the western boundary of the NAGs located east of the mine, to demonstrate its compliance with these existing criteria within these NAGs.”*
129. In relation to receiver 136, discussed in paragraphs 123-124, the Department’s confirmed in its Assessment Report that the proponent supported that receiver 136 is afforded voluntary acquisition rights, *“even though the modification would not (in itself) result in additional noise at that location.”* The Department therefore recommended in its Assessment Report that conditions of consent are updated *“to reflect acquisition rights for receiver 136 and mitigation rights for receiver 84a.”*
130. The Department recommended *“minor modifications to the existing noise conditions of consent to reflect simplified NAGs, updated tables listing all current noise receivers and applicable noise criteria, additional acquisition rights for receiver 136 and additional mitigation rights for receiver 84a;”* and that these amendments *“would correct, simplify and clarify existing noise criteria for all affected private receivers.”*
131. The EPA raised concerns in its submission dated 24 July 2017, in relation to the need for further consideration of exceptional meteorological conditions as part of any monitoring program. The Department’s Assessment Report addresses EPA concerns and recommended that *“the conditions of consent are updated to require that monitoring account for the possibility of noise enhancing conditions, eg noise being deflected over the eastern site boundary due to wind or temperature inversions.”*
132. Further correspondence from the EPA to the Department, dated 13 July 2018, stated that *“EPA’s concerns have been addressed”*. For this, the Department recommended that *“a condition of consent is included to ensure that noise monitoring is undertaken in a manner which accounts for any noise enhancing meteorological conditions;”* and that *“with these minor amendments, existing conditions of consent would continue to suitably manage the development’s noise impacts.”*

133. The Assessment Report concluded that the proposed modification “*would not materially change the impacts of either construction or operational noise and would not remove any existing entitlement for any receiver who currently has acquisition and/or mitigation rights.*”

Commission’s consideration

134. The Commission accepts that the proponent has contemporised its NBA, in accordance with the INP, as discussed by the Department in paragraph 120. The Commission also accepts that the Department’s conclusions and that the NBA had included the identification of errors and omissions in the consideration of noise impacts on certain receivers, as stated in paragraph 127-128.
135. The Commission accepts that noise exceedances would be experienced moderately above the approved levels at two receivers (136 and 84a), as discussed in paragraph 129-130, and that the proponent and Department have agreed in providing these receivers with the respective mitigation/acquisition rights.
136. Although the EPA had initial concerns on operational noise and the respective proposed consent conditions, the Commission accepts that the proponent and the Department have addressed EPA concerns as discussed in paragraph 131-133, as well as that cumulative noise impacts had been considered, as discussed in paragraphs 120, 124-126, and 132.
137. The Commission accepts the Department’s conclusion in paragraph 133 because the modification application does not propose to change the core components of the development, as discussed in paragraphs 58, 62 and 63; and affected receivers that would experience noise impact beyond the original mine life, have been updated in the proposed conditions and afforded rights in accordance with the VLAMP, as discussed in paragraphs 129-130.
138. The Commission accepts the Department’s recommendation to address EPA’s concern, as discussed in paragraph 131; and also accepts the Department’s amendment to the proposed conditions to reflect EPA’s latest correspondence, dated 13 July 2018, as discussed in paragraph 132.
139. Based on the Material information, the Commission finds that concerns raised on noise impacts have been adequately addressed by the proponent and the Department because:
- the proposed modification does not change the core components of the development as discussed in paragraphs 58, 62 and 63;
 - the NBA was updated and undertaken in accordance with the INP, as discussed in paragraph 120 and 127;
 - noise conditions have been modified to reflect simplified NAGs, updated tables listing all current noise receivers and applicable noise criteria, as well requiring that monitoring account for the possibility of noise enhancing conditions, e.g. noise being deflected over the eastern site boundary due to wind or temperature inversions, as discussed in paragraph 130 and 131;
 - affected receivers have been updated in the proposed conditions and afforded mitigation or voluntary acquisition rights in accordance with the VLAMP, as discussed in paragraphs 129-130; and
 - EPA was satisfied with how its concerns were addressed, as discussed in paragraph 132.

5.3. Other Impacts

140. The Commission has taken into account the Material insofar as it relates to the 'Other Impacts' as discussed in **section 5.6** of the Assessment Report and other issues raised by the public and Muswellbrook Shire Council.

Public and Council comments

141. The Commission heard concerns from Muswellbrook Shire Council, speakers at the public meeting, and received written comments regarding the impacts of the project's cumulative impacts in the area, more specifically that cumulative impacts had not been properly assessed and considered for the proposed modification. These concerns included:

- proposed modification would affect biodiversity in nearby creeks and rivers;
- cumulative visual and transport impacts have not been properly considered as the mine moves closer to Muswellbrook and Aberdeen;
- that there has been no assessment of the cumulative impacts to cultural and Aboriginal heritage and that the proponent has destroyed most of the heritage items that have been found within the mining boundaries; and
- that conditions should reflect a similar standard of rehabilitation objectives as required for other mines in the area.

Proponent's consideration

142. In relation to biodiversity, the proponent provided a contemporised Biodiversity Assessment (**BA**) that considered the South Western Out of Pit Emplacement and the Eastern Out of Pit Emplacement, aspects of the proposed modification.

143. The BA concluded that the 65-ha area to be relinquished has *"More abundant and complex fauna habitat, primarily due to 17 ha of native woodland vegetation;"* in comparison to the 61-ha disturbance within the 67-ha extension being *"exotic pasture, grassland areas and rehabilitation approximately 15 years old."* Pages 9 and 10 of the BA provide a clear comparison of these areas.

144. In relation to traffic and transport, the proponent provided a Road Transport Assessment (**RTA**) in their environmental assessment that contemporised traffic and transport of the development's EIS which examined *"the potential impact of the proposed Modification on the local road transport network;"* and considered *"the potential cumulative road transport impacts of the Mount Pleasant Operation in the context of other mining developments and background traffic growth in the modified operational period to 2026."*

145. The RTA concluded that *"The Modification would not result in an increase to the approved workforce or traffic generated by the Mount Pleasant Operation;"* and that *"Comparison of previous and recent traffic survey data indicates a reduction in traffic on a number of roads relevant to the Mount Pleasant Operation. Of particular note is a significant reduction in the level of traffic using Thomas Mitchell Drive, with daily traffic volumes in 2016 reducing by over 40% compared to those in 2013."*

146. In terms of cumulative visual impacts, the RtS indicates that *"the visual impacts of the Mount Pleasant Operation incorporating the Modification would be largely unchanged in Muswellbrook. However, the landform improvements have been specifically targeted at improving views of the final landform from Muswellbrook and other local vantage points (post-mining). As a result, the proposed landform improvements would further reduce the visual impacts following rehabilitation, by improving visual integration of the final landform with surrounding landscape topography and vegetation patterns and textures."*

147. On Aboriginal and Historic Heritage, the RtS referenced OEH's submission that indicated *"OEH reviewed the EA for impacts to Aboriginal cultural heritage ... All Aboriginal heritage sites within the emplacement extension footprint are appropriately managed under existing permits and management plans. ... Therefore, OEH has no concerns with the proposal."*
148. The Proponent's RtS responded to other concerns on cumulative impacts affecting local economy and industries, such as viticulture, equine and tourism, indicating that *"MACH Energy notes that the Mount Pleasant Operation was approved in 1999, and therefore has been part of the approved cumulative impacts of industry in the Hunter Valley since that time. The Mount Pleasant Operation is currently being constructed and will be operated in accordance with Development Consent DA 92/97."*

Department's consideration

149. In relation to biodiversity, the Assessment Report noted that OEH advised that the proposed modification *"would not require any variation to the site's existing offset requirements."*
150. The Assessment report stated that the increase in the disturbance area by 61 ha in the Eastern OEA would result in an *"overall smaller disturbance footprint"* in relation to the 65-ha relinquishment of the northern portion of the South West OEA as the northern portion is of *"higher biodiversity value, including a number of threatened ecological communities listed under the Biodiversity Conservation Act, 2016;"* and that *"the remaining impacts could continue to be satisfactorily managed under existing conditions of consent and the Biodiversity Management Plan;"* which is required to be updated to reflect the proposed changes.
151. In relation to Aboriginal and Historic Heritage, the Assessment Report stated that no *"high archaeological or cultural value"* sites were identified of the known Aboriginal heritage sites in the Eastern OEA extension and that *"OEH advised that all Aboriginal cultural heritage sites within the Eastern OEA extension area could be appropriately managed under existing permits and management plans."* The Assessment Report also stated that the proponent *"is required under existing conditions of consent to revise the relevant Strategies, Plans and Programs to reflect the proposed changes, should Modification 3 be approved."*
152. In terms of traffic and transport, the Department's Assessment Report concluded that the proposed modification *"would not lead to any significant additional impacts on roads or traffic;"* and recommended a condition of consent to *"require contribution toward the upgrade and maintenance of Thomas Mitchell Drive ... in similar terms to conditions in other consents that require proportionate contribution from other mines."*
153. In relation to the Thomas Mitchell Drive contribution, the Department advised in further correspondence dated 24 July 2018, that an update of the Thomas Mitchell Drive Contribution Study was commissioned in June 2018 to *"remove contributions allocated to Drayton Mine (to reflect the refusal of the Drayton South Coal Project) and include the traffic impacts associated with the proposed Mount Pleasant Modification 3."* The Department also advised that *"it would support amending condition 41A to reflect the most recent publication date."*
154. On the cumulative visual impacts and final landform, the Assessment Report stated that the proposed amended final landform design and rehabilitation strategy *"would improve the mitigation of impacts on visual amenity in comparison with the existing approved landform."* Further correspondence from the Department, dated 10 August 2018, which sought to address HTBA comments, stated *"The Department recognised that the amended final landform design and rehabilitation strategy would in fact lead to a reduction in impacts on visual amenity, in comparison with the existing approved landform. It also noted that the existing conditions of consent require implementation of all reasonable and feasible measures to minimise visual and off-site lighting impacts and provision of additional visual mitigation at the request of nearby landowners."*

155. The Assessment Report concluded that *“impacts on visual amenity would continue to be satisfactorily managed under existing conditions of consent;”* and recommended *“that Mach update its Landscape and Rehabilitation Management Plan, should Modification 3 be approved; ...further, “it is recommended that an updated final landform figure is included in the consent.”*
156. In relation to the rehabilitation objectives, the Commission received further correspondence from the Department dated 24 July 2018, providing an amendment to the rehabilitation objectives to reflect *“contemporary requirements that are consistent with conditions recently imposed on other mining operations in the Hunter Valley and NSW;”* and that the requirements to include both a Rehabilitation Strategy and Rehabilitation Management Plan, provides for the *“effective management and control of rehabilitation activities undertaken during the operational phases of mining.”*

Commission’s consideration

157. The Commission has taken into account the Material insofar as it relates to ‘Other Impacts’ as discussed in **section 5.6** of the Assessment Report, and accepts that these have been adequately addressed by the proponent and the Department particularly having regard to the following:
- the proposed modification *“would not require any variation to the site’s existing offset requirements,”* as per OEH’s advice in paragraph 149; and that the Biodiversity Management Plan is required to be updated to reflect the proposed changes, as discussed in paragraph 150;
 - the increase in the disturbance area by 61 ha in the Eastern OEA would result in an *“overall smaller disturbance footprint;”* and that *“The remaining impacts could continue to be satisfactorily managed under existing conditions of consent and the Biodiversity Management Plan;”* as recommended by the Department and discussed in paragraph 150;
 - Sites of high archaeological or cultural value were not identified and that the Strategies, Plans and Programs are required to be updated should Modification 3 be approved, as discussed in paragraph 151;
 - the proposed final landform *“would improve the mitigation of impacts on visual amenity in comparison with the existing approved landform;”* as stated by the Department in paragraphs 154 and 155, and an updated final landform figure is required to be included in the consent;
 - the proposed modification *“would not lead to any significant additional impacts on roads or traffic;”* and the proponent is required through a recommended condition of consent to contribute towards the upgrade and maintenance of Thomas Mitchell Drive, as discussed in paragraph 152-153; and
 - the recommended conditions of consent have been amended to reflect contemporised requirements, consistent with requirements on other mining operations in the state as discussed in paragraph 156 above.

5.4. Public Interest

158. In determining the public interest merits of the proposed modification, the Commission has had regard to the objects of the EP&A Act.

Proponent's considerations

159. The proponent states in its EA that *"the Mount Pleasant Operation will provide important employment and business opportunities for the industry. These employment and business opportunities in the Muswellbrook LGA and the wider Hunter Valley region would be extended by approximately six years, should the Modification be approved."*

160. The proponent states also in its EA that *"The Modification is considered to be generally consistent with the objects of the EP&A Act, because it is a Modification which:*

- *incorporates:*
 - *development of the State's mineral resources (i.e. coal resources) in a manner that minimises environmental impacts through the implementation of the Mount Pleasant Operation Environmental Management Strategy (Section 2.13) and other measures (Sections 4 and 5);*
 - *measures to minimise potential amenity impacts associated with noise, blasting, air quality and visual impacts on surrounding land uses (Sections 4.2 to 4.4 and 4.9);*
 - *continued employment and other socio-economic benefits to the community (Section 4.10.4);*
- *promotes the orderly economic use and development of land as the Modification mine life extension remains within the originally approved 21 year operational life of the Mount Pleasant Operation;*
- *would support the ongoing provision of community services and facilities through contributions to State royalties, State taxes, Commonwealth tax revenue and MACH Energy's voluntary contributions to community initiatives (Sections 2.14 and 4.10.4);*
- *remains largely consistent with the development area of the approved mine, and the range of measures for the protection of the environment, including the protection of native plants and animals, threatened species and their habitats;*
- *incorporates relevant ecologically sustainable development considerations through:*
 - *implementation of an adaptive management approach by implementing real-time noise and air quality controls;*
 - *adoption of high standards for environmental and occupational health and safety performance;*
 - *assessment of potential greenhouse gas emissions associated with the Mount Pleasant Operation, incorporating the Modification;*
- *is an application under section 75W of the EP&A Act that would be determined by the Minister for Planning and Environment, however consultation with the MSC and a range of stakeholders has been undertaken and issues raised have been considered and addressed where relevant (Section 1.3); and*
- *involves public involvement and participation through the public exhibition of this EA document and DPE assessment of the Modification in accordance with the requirements of the EP&A Act."*

Department's consideration

161. The Assessment Report states that the Department had considered the proposed modification against the objects of the EP&A Act. The Department states *"The Department is satisfied that the proposed modification encourages the proper management and development of resources (Object 1.3(a)) and the promotion of the orderly and economic use of land (Object 1.3(c)), since the:*

- *modification involves a permissible use of land on the subject land;*
- *targeted coal resource has been determined to be significant from a State and regional perspective;*

- *targeted coal resource is located within existing mining lease areas, in a region that is dominated by coal mining operations;*
 - *modification can be largely carried out in conformity with the existing mine design; and*
 - *modification would provide ongoing socio-economic benefits to the community of NSW."*
162. In relation to the principles of ecologically sustainable development (**ESD**), the Assessment Report stated that *"The Department has considered the principles of ecologically sustainable development (ESD, Object 1.3(b)) in its assessment of the proposed modification. The Department has also noted MACH's consideration of these matters (see Section 6.1.1 of the EA), and considers that the proposed modification is able to be carried out in a manner that is consistent with the principles of ESD."*
163. In relation to the protection of the environment and heritage, the Assessment Report stated that *"Consideration of the protection of the environment and heritage (Objects 1.3(e) and (f)) is provided in **Section 5** of this report. The Department believes that the proposed modification has been designed to minimise potential environmental and heritage impacts where practicable, including on threatened biodiversity and Aboriginal cultural heritage items."*
164. In relation to Objects 1.3(i) and (j), the Assessment Report stated that *"The Department exhibited the modification application and made the accompanying EA publicly available (Object 1.3(j)). A number of submissions were received from public or special interest group (SIG) and Government agencies. The Department considered, in **Sections 3.5** and **5**, potential impacts of the proposed modification on the Commonwealth approval under the Environmental Protection and Biodiversity Conservation Act 1999 (EPCB Act) and consulted, as noted in **Section 4.1**, with the Muswellbrook Shire Council (Object 1.3(i))."*
165. The Department concluded in its Assessment Report that the proposed modification is consistent with the objects of the EP&A Act.
166. The Department stated in its Assessment Report that *"MACH estimated that the extended six-year period would account for approximately 46Mt of the 63 Mt of product coal to be produced by 2026, with coal royalties over this extended 6-year period exceeding \$350 million. The additional six years would also provide continued employment for up to 350 construction workers."*
167. The Department confirmed the proponent's consideration explained above and was satisfied that *"the modification would provide significant socio-economic benefits to the local region and the wider community of the State through the continued employment of staff and generation of coal royalties over the extended six-year period."*
168. The Department also concluded in its Assessment Report that it, *"considers that the proposed modification is approvable. Further, the Deed of Agreement signed by MACH and BMC would ensure that Mount Pleasant's operations do not impact on the viability of the neighboring Bengalla mine. The proposed modification, particularly the six-year extension, would generate socio-economic benefits through continued employment of site workers and through the payment of coal royalties. The Department considers these benefits outweigh the potential adverse social and environmental impacts of the proposed extension to an existing approved mine's life."*
169. Further correspondence from the Department, dated 10 August 2018, states, *"The Department's assessment recognises that aspects of the regional context have changed since the project was initially approved in 1999. These changes include the progress of the Mount Arthur and Bengalla mines away from Muswellbrook township, as well as the establishment of new government policies." It also stated that "The Department is satisfied that the updated studies are sufficient to inform the consideration of the modified aspects of the development and that the 1997 studies remain relevant for those aspects that would be unchanged, in so far as it was these studies that led to the 1999 approval, which remains current."*

Commission's consideration

170. Under section 1.3 of the EP&A Act, the relevant objects applicable to the project are:
- a) *to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,*
 - b) *to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,*
 - c) *to promote the orderly and economic use and development of land,*
 - e) *to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,*
 - i) *to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State, and*
 - j) *to provide increased opportunity for community participation in environmental planning and assessment.*
171. A relevant object of the EP&A Act to the development application, as outlined in paragraph 170(b), is the facilitation of ESD. The Commission notes that section 6(2) of the POEO Act states that ESD requires the effective integration of social, economic and environmental considerations in its decision-making, and that ESD can be achieved through the implementation of:
- (a) the precautionary principle;
 - (b) inter-generational equity;
 - (c) conservation of biological diversity and ecological integrity; and
 - (d) improved valuation, pricing and incentive mechanisms.
172. The Commission finds that the modification, if approved, is generally consistent with the ESD principles because it provides:
- a development with an extension of its operational life without changing its core components, as discussed in paragraphs 58, 62 and 63,
 - no increase in its overall disturbance footprint and relinquishment of an area of *"higher biodiversity value, including a number of threatened ecological communities listed under the Biodiversity Conservation Act, 2016"* as discussed in paragraph 150;
 - an improved final landform as discussed in paragraphs 154 and 155 ; and
 - social economic benefits to the local community, as discussed in paragraphs 166-168.
173. The Commission is satisfied with the Department's considerations that the modification is consistent with the objects of the EP&A Act, as discussed in paragraphs 162-164 above.
174. The Commission has taken into account the Material and accepts the proponent's evidence and the Department's conclusion that the proposed modification would provide continued employment of staff and generation of coal royalties over the extended six-year period, discussed in paragraphs 159, 166-168.
175. In its assessment and determination of the merits of the modification the Commission has considered the impacts discussed in this Statement of Reasons. Notably, the Commission finds that receivers that would be affected by this modification have been acquired by the proponent and/or given mitigation or acquisition rights under the VLAMP, as discussed in paragraphs 32, 82, 83, 88, 129, 130.
176. As already noted in **section 5** of this Statement of Reasons, the Commission acknowledges that a contemporised EA from 2017 was provided with this modification and accepts the Department's findings that the core components of the development remain unchanged. Therefore, impacts from the proposed modification are within those originally approved, as discussed in sections 5.2, 5.3 and 5.4 of this Statement of Reasons.

177. In addition to the above, the Commission accepts that this modification provides socio-economic benefits to the local region, including the continuation of employment during operations; and wider state benefits from coal royalties over an extended six-year period, in exchange for:
- a smaller disturbance of native vegetation resulting from the relinquishment of the norther portion of the South West OEA, as discussed in paragraph 143;
 - a smaller site total disturbance footprint resulting from the removal of the development's original drag line, as discussed in paragraphs 21, 54, and 77; and
 - a final landform that would improve the mitigation of impacts on visual amenity in comparison with the existing approved landform, as stated by the Department in paragraph 154.
178. On balance, the Commission finds that the modification, if approved, is in the public interest particularly having regard to the following:
- it would provide employment or royalties to the wider state, as discussed in paragraph 159, 166-167; in exchange for a development with:
 - a smaller disturbance of native vegetation as discussed in paragraph 143;
 - a smaller site total disturbance footprint, as discussed in paragraphs 21, 54, and 77; and
 - a final landform that would improve the mitigation of impacts on visual amenity in comparison with the existing approved landform, as stated by the Department in paragraph 154;
 - it demonstrates consistency with the objects of the EP&A Act, as discussed in paragraphs 161-165, 171 and 172; and
 - the updated studies have considered the changing aspects of the regional context since the 1997 approval, as discussed in paragraph 169.

6. THE COMMISSION'S FINDINGS AND DETERMINATION

179. The Commission has carefully considered the Material before it.

180. Based on the Material, the Commission finds that the proposed modification to the development is within the broad scope of section 75W, and therefore the request to modify can be considered under section 75W. The development, if modified, would retain the core elements, including annual ROM coal production, coal processing or waste rock production, and would have a smaller site total disturbance footprint.

181. In addition, the Commission finds that:

- the proponent's contemporised studies of the original EIS have considered cumulative impacts based on data representing the current surrounding environment, and updated its results, in accordance with relevant legislation;
- the proposed conditions of consent are adequate to manage environmental and cumulative impacts resulting from the proposed modification;
- the conditions of consent require the proponent to update its management plans and programs regularly;
- it is satisfied that the project is consistent with the objects of the EP&A Act; and
- the project is in the public interest.

182. For the reasons outlined above, the Commission determines to approve the proposed modification application.

183. The reasons for the Decision are given in this Statement of Reasons for Decision dated 24 August 2018.

Alan Coutts
Member of the Commission (Chair)

Prof. Zada Lipman
Member of the Commission

Dr Peter Williams
Member of the Commission