MACHEnergy

Mount Pleasant Operation

A JOINT VENTURE WITH JCDA Japan Coal Development Australia

Attachment 1

Comparison of the Mount Pleasant Operation Incorporating the Modification with Originally Approved and Modification 4 Comparators

Modification 8

Resource Strategies

Table A1-1
Overview of the Originally Approved Mount Pleasant Operation, the MOD 4 Development and the Proposed Modification

Component	Development for which Consent was Originally Granted	Development as Approved by Modification 4 (Last Modification under s 75W)	Development Incorporating the Modification
Site Subject to the Consent	The original development consent boundary is depicted in Figure 3.1 in the *Mount Pleasant Project Modification Environmental Assessment Volume 1* (EMGA Mitchell McLennan, 2010) (see "Existing development consent boundary", "Mount Pleasant rail loadout conveyor" and "Rail line and rail loop").	The land currently listed in Appendix 1 to the Consent, excluding four additional lots included as part of Modification 5.	Minor updates and additions to reflect the current status of land parcels within the Development Application Area (refer Attachment 2).
Use of the Site Subject to the Consent	Development for the purpose of open cut coal mining.	Unchanged.	Unchanged.
Mining Operations Period	The original 1997 Environmental Impact Statement (EIS) contemplated 21 years or more of mining, and the original Consent allowed for up to 21 years of mining operations.	Until 22 December 2026, which allows for 9 years of mining operations from commencement of mining operations in 2017.	Until 31 December 2032 (i.e. 6 year extension), which would allow for 15 years of mining operations from commencement of mining operations in 2017.
Maximum Coal Extraction Rate	10.5 million tonnes (Mt) of run-of-mine (ROM) coal per calendar year.	Unchanged.	12.5 Mt of ROM coal per calendar year.
Total ROM Coal Extraction	Approximately 197 Mt ROM coal.	Approximately 85.4 Mt ROM coal extracted prior to 22 December 2026, based on the indicative mine schedule used for MOD 3.	Approximately 148.13 Mt ROM coal extracted prior to 31 December 2032.
Mining Method	Open cut mining, including truck and shovel and dragline operations.	Unchanged.	Open cut mining with truck and shovel operations only.
Mining Areas	Open cut mining operations in four pits over 21 years: • South; • North; • Warkworth South; and • Piercefield.	Open cut mining operations in South Pit (incorporating the Piercefield Pit) until 22 December 2026.	Open cut mining operations in South Pit (incorporating the Piercefield Pit) and North Pit until 31 December 2032.

Table A1-1 (Continued)
Overview of the Originally Approved Mount Pleasant Operation, the MOD 4 Development and the Proposed Modification

Component	Development for which Consent was Originally Granted	Development as Approved by Modification 4 (Last Modification under s 75W)	Development Incorporating the Modification
Extent of Approved Surface Disturbance Area	The approximate extent of surface disturbance can be identified from the following 1997 EIS figures: • Figure 2 (Site and Surrounds); • Figure 12 (Mine Plan – Year 20); • Figure 65 (Proposed Road Network); and • relevant figures in the Water Management Study.	Figure 3 of Appendix 2 in the MOD 4 Notice of Modification.	As per Figure 3 of Appendix 2 in the MOD 4 Notice of Modification, with minor changes as a result of ongoing mine planning and with all extension areas already lawfully cleared of vegetation (such that the Modification does not involve or seek approval for disturbance of any extension areas that are outside of the surface disturbance area depicted and described in Figure 3 of Appendix 2 in the MOD 4 Notice of Modification).
Coal Beneficiation	Beneficiation of ROM coal in an on-site Coal Handling and Preparation Plant (CHPP).	Unchanged.	Unchanged.
Coal Transport	By rail via the "Stage 1" rail loop and spur, to the Muswellbrook-Ulan Rail Line and Main Northern Railway, and to the Port of Newcastle. Average of three and a maximum of nine laden trains per day.	By rail via the “Stage 2” rail loop and spur, to the Muswellbrook Rail Line and Main Northern Railway to the Port of Newcastle - decommissioning of the “Stage 1” infrastructure. Average of three and a maximum of nine laden trains per day.	Continued use of the existing “Stage 2” rail loop and spur. Average of up to four and a maximum of nine laden trains per day.
Waste Rock Production Rate	Up to approximately 53 million bank cubic metres per year (see Figure 7 in the 1997 EIS).	Up to approximately 31.5 million bank cubic metres per year (see Table 2 of MOD 3 Environmental Assessment).	Up to approximately 46.8 million bank cubic metres per year.
Waste Rock Management	Waste rock emplaced in-pit and within three out-of-pit waste emplacements: • Eastern Out-of-Pit Emplacement; • South West Out-of-Pit Emplacement; and • North West Out-of-Pit Emplacement.	Waste rock emplaced in the Eastern Out-of-Pit Emplacement area and in-pit.	Waste rock emplaced in the Eastern Out-of-Pit Emplacement area and in-pit.
Coal Rejects	Coarse rejects placed in waste emplacements and used to build the walls of the Fines Emplacement Area. Fine rejects stored in the Fines Emplacement Area.	Coarse rejects placed in the Eastern Out-of-Pit Emplacement or in-pit and used to build the walls of the Fines Emplacement Area. Fine rejects stored in the Fines Emplacement Area.	Coarse rejects placed in the Eastern Out-of-Pit Emplacement or in-pit. Fine rejects stored in the Fines Emplacement Area.

Table A1-1 (Continued)
Overview of the Originally Approved Mount Pleasant Operation, the MOD 4 Development and the Proposed Modification

Component	Development for which Consent was Originally Granted	Development as Approved by Modification 4 (Last Modification under s 75W)	Development Incorporating the Modification
Final Landform and Rehabilitation	A final landform generally consistent with Figure 13 in the 1997 EIS.	In the absence of an extension of mining operations beyond 22 December 2026, a final landform generally consistent with the conceptual landform depicted in Figure 4 in the Consent. Site rehabilitated generally consistent with the rehabilitation objectives in Table 11 in the Consent.	In the absence of an extension of mining operations beyond 31 December 2032, a final landform generally consistent with the conceptual landform depicted in Figures 11 and 12 of this Modification Report. Site rehabilitated generally consistent with the rehabilitation objectives in Table 11 in Development Consent DA 92/97.
Final Voids	A North Pit final void, South Pit final void and a smaller final void located in a low-lying area between the two larger final voids (see Figure 13 in the 1997 EIS).	In the absence of an extension of mining operations beyond 22 December 2026, a South Pit final void only (see Figure 4 in the Consent).	Two interconnected/integrated voids, one in South Pit and one in North Pit (see Figure 11 of this Modification Report).
Water Supply Sources	Water requirements for the mine and CHPP met from pit groundwater inflows, catchment runoff and make-up water from the Hunter River.	Water requirements for the mine and CHPP met from pit groundwater inflows, catchment runoff, recovered water and make-up water from the Hunter River (and potentially the Bengalla or Dartbrook Mines).	Unchanged compared to the MOD 4 development. Water requirements for the Mount Pleasant Operation and CHPP met by additional source/s (i.e. recovered water and potentially water from the Bengalla or Dartbrook Mines) when compared with the originally approved development.
Water Management System	An extensive range of water management structures that developed as open cut mining advanced (see the Water Management Study in the 1997 EIS). The 1997 EIS contemplated the discharge of surplus water from the main storage dam to the natural watercourse and into the Hunter River.	Comprised of a number of dams, the open cut, the Fines Emplacement Area, a system of pumped transfers and drains and a controlled water release system to the Hunter River.	Unchanged water management system when compared to the MOD 4 development, however, includes additional water management dams and other structures associated with mining occurring in North Pit.
Operational Workforce	An average of 332 over the life of the mine and a peak of 380 (see Figure 22 in the 1997 EIS).	Average operational workforce throughout the life of the mine of approximately 330 full-time equivalent (FTE) employees, and an estimated peak of 380 FTE employees (currently approximately 700 FTE employees[1]).	Continuation of employment for existing MACH employees and contractors. Minor increase in the current operational workforce to a maximum of approximately 575 personnel.
Hours of Operation	24 hours per day, 7 days per week.	Unchanged.	Unchanged.

[1] Inclusive of additional personnel associated with the Mount Pleasant Optimisation Project.