



Chapter 31

Project commitments

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Chapter 31 Project commitments

The proponent commits to implementing the measures outlined in Table 31-1 upon a final investment decision being made to proceed with the project. The commitments listed in this table include the development of the plans outlined in Chapter 30 (the first commitment), and the additional mitigation measures recommended by the individual impact assessment chapters in Part C.

All project commitments relate to impacts associated with project activities during construction, operation and decommissioning of the project. In the event that further exploration and appraisal is proposed to be carried out prior to a final investment decision being made to proceed with the project, the proponent commits to implementing the measures outlined in Table 31-1 in accordance with the relevant laws, regulations and Codes of Practice.

Table 31-1 Project commitments

Number	Mitigation/management
1.1	Infrastructure will be sited in accordance with the Field Development Protocol to avoid or minimise potential impacts.
1.2	<p>A project wide environmental management strategy, comprising a number of sub-plans to be used throughout the planning and design, construction, operation and decommissioning and rehabilitation stages of the project are described in Chapter 30. The sub-plans are:</p> <ul style="list-style-type: none"> • Erosion and sediment control • Soil Management Plan • Air Quality Management Plan • Noise and Vibration Management Plan • Cultural Heritage Management Plan • Biodiversity Management Plan • Pest, Plant and Animal Control Plan • Historic Heritage Management Plan • Traffic Management Plan • Waste Management Plan • Bushfire Management Plan • Produced Water Management Plan • Water Monitoring Plan • Decommissioning Management Plan • Rehabilitation Strategy and Plans.
1.3	A complaints management procedure will be implemented. This procedure will include investigation, reporting and reducing impacts as required.
Groundwater and geology	
2.1	Drilling, completion and rehabilitation of wells in compliance with the <i>NSW Code of Practice for Coal Seam Gas - Well Integrity</i> .
2.2	Extraction (take) of groundwater in compliance with the <i>NSW Water Management Act 2000</i> , specifically the procurement of sufficient Water Access Licence (WAL) allocations.
2.3	The Water Monitoring Plan (Appendix G3) will be implemented.
2.4	Groundwater monitoring bores will be installed in accordance with the <i>Minimum Construction Requirements for Water Bores in Australia</i> .

Number	Mitigation/management
2.5	Implementation of make good protocols in accordance with the requirements of the NSW <i>Aquifer Interference Policy</i> .
2.6	Compliance with NSW and / or Commonwealth policies relating to drilling fluids.
2.7	Lined pits will be utilised during drilling. Drilling fluids and drill cuttings that are not appropriate for beneficial reuse will be removed after the completion of drilling.
Surface water quality	
3.1	Irrigation of treated water during production will be undertaken in accordance with an irrigation framework, included under the Produced Water Management Plan.
3.2	Only treated, amended or bore water will be used for dust suppression and rehabilitation.
3.3	Treated water will be released to Bohena Creek at the managed release point only during periods when the flow in Bohena Creek is equal to, or greater than, 100 ML/day as measured at the Newell Highway gauging station.
3.4	The managed release to Bohena Creek will utilise a diffuser designed to promote mixing of water at the release point.
3.5	The managed release activity will be undertaken in a manner that minimises erosion of the bed and banks at the release point and the build-up of sediment at that location.
3.6	The Water Monitoring Plan (Appendix G3) will be implemented.
Hydrology and geomorphology	
4.1	Crossings within the one in 100-year flood zone will be designed for negligible modification of flood flows.
4.2	Infrastructure within the one in 100 year flood zone in the vicinity of residential dwellings will be designed for negligible modification of flood flows.
4.3	Selection of watercourse crossing points will, where practical: <ul style="list-style-type: none"> • use existing vehicular crossings • be located on straight sections of channel • maximise avoidance of steep, unstable banks, permanent pools and waterholes.
4.4	Erosion and sediment control measures will be implemented during construction of watercourse crossings.
4.5	Construction of watercourse crossings would occur during periods of no flow in the watercourse.
4.6	Vehicular crossings will be designed and constructed to include appropriate stabilisation.
4.7	The managed release activity will be undertaken in a manner that minimises erosion of the bed and banks at the release point and the build-up of sediment at that location.
4.8	The Water Monitoring Plan (Appendix G3) will be implemented.
Soils and land contamination	
5.1	Erosion and sediment controls for the project will be implemented based on <i>Managing Urban Stormwater – Soils and Construction Vol. 1</i> (Blue Book – Landcom 2004).
5.2	If previously unidentified land contamination or sources of potential land contamination are encountered the landholder will be notified and the contamination will be avoided as far as practicable.
5.3	Chemicals will be stored and handled in accordance with relevant Australian Standards, including AS 1940-2004 <i>The storage and handling of flammable and combustible liquids</i> .
5.4	Refuelling will occur with suitable containment when volumes greater than 50 litres are involved and not within 40 metres of a watercourse.

Number	Mitigation/management
5.5	Rehabilitation of impacted areas will occur in accordance with the Rehabilitation Strategy (refer to Appendix V).
5.6	Irrigation of treated water will be undertaken in accordance with an irrigation framework, included under the Produced Water Management Plan.
5.7	Only treated, amended or bore water will be used for dust suppression and rehabilitation.
Terrestrial Ecology	
6.1	A Biodiversity Management Plan will be implemented and will include a Significant Species Management Plan.
6.2	Vegetation clearance and threatened flora removal would be recorded to ensure it is within the approved limits.
6.3	Vegetation will be cleared in accordance with the clearing procedure provided in Appendix H of Appendix J1 to minimise impacts to fauna during vegetation removal.
6.4	The removal of hollow-bearing trees with a hollow of greater than 300 mm in diameter will be offset by a 1:1 replacement.
6.5	Open trenches will be inspected each morning and where fauna is found it will be removed by a suitably qualified fauna handler. Data would be collected on the species captured, the number of individuals captured and capture locations.
6.6	The disturbance limit for direct impact on native vegetation is 988.8 ha. To minimise clearing during sensitive periods, less than 50 per cent (494 ha.) of the disturbance will be outside the most preferred period from March to June, and less than 20 per cent (197 ha.) of this disturbance will be during the least preferred period from September to January.
6.7	Rehabilitation of impacted areas will occur in accordance with the Rehabilitation Strategy (refer to Appendix V).
6.8	Driving from dusk through to dawn will be minimised, due to high faunal activity.
6.9	'Fauna friendly' exclusion fencing (without barbed wire) will be installed around well sites during operation unless determined otherwise under a land access agreement.
6.10	Lighting will be designed to meet Australian Standard AS 4282-1997 <i>Control of the obtrusive effects of outdoor lighting</i> and the Australian / New Zealand Standard AS/NZS 1158-2010 <i>Lighting for roads and public spaces for roadways and plant</i> , as applicable. The design and operation of night lighting would also consider the good lighting design principles documented in <i>Dark Sky Planning Guideline: Protecting the observing conditions at Siding Spring</i> (NSW Department of Planning and Environment 2016).
6.11	Prior to earthworks, weeds listed as noxious under the NSW <i>Noxious Weeds Act 1993</i> that are present on the site will be removed or treated with herbicide to prevent or reduce their spread.
6.12	Feral animals will be managed in accordance with a Pest, Plant and Animal Control Plan.
6.13	A biodiversity offset strategy will be finalised and implemented.
Aquatic Ecology	
7.1	Treated water will be released to Bohena Creek at the managed release point only during periods when the flow in Bohena Creek is equal to, or greater than, 100 ML/day as measured at the Newell Highway gauging station.
7.2	The Water Monitoring Plan (Appendix G3) will be implemented.
Property and land use	
8.1	Land Access Agreements and Farm Management Plans will be developed in consultation with affected landholders.
8.2	The Forestry Corporation of NSW will be consulted in accordance with the agreed Occupation Permit.

Number	Mitigation/management
8.3	Unless a written agreement is in place with the relevant landholder, no project infrastructure will be located within 200 m of an occupied residence on that property.
Air quality	
9.1	All reasonable and feasible measures will be implemented to ensure that air emissions from the activity will be within the relevant air quality criteria at occupied residences on privately owned land.
9.2	Plant and equipment will be operated in accordance with relevant NSW emission standards.
9.3	An Air Quality Management Plan will be implemented.
Noise and vibration	
10.1	Noise from the activity will meet the relevant noise criteria at occupied residences unless a written agreement is in place with the landholder.
10.2	A Noise Management Plan will be implemented.
10.3	If vibration-generating activities are to be undertaken in the vicinity of occupied residences or buildings, a Vibration Management Plan will be developed and implemented.
10.4	If blasting is required, the <i>Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration</i> (ANZECC 1990) will be implemented.
Aboriginal heritage	
11.1	Complete pre-clearance surveys with the involvement of the Aboriginal community in accordance with the Cultural Heritage Management Plan prior to land disturbance occurring in that area.
11.2	All currently known sites and the most sensitive site types (as detailed in the Cultural Heritage Management Plan) will be completely avoided by the project.
11.3	The Cultural Heritage Management Plan will be reviewed every five years.
11.4	Project employees and contractors will be made aware of their statutory obligations to protect Aboriginal cultural heritage objects under the NPW Act.
11.5	All currently known Aboriginal cultural sites within the project area will be validated within 12 months of project sanction.
11.6	A research program targeting places and values of particular traditional, anthropological, historical and contemporary significance to Aboriginal people will be developed and completed within 12 months of project sanction.
11.7	Integration of Aboriginal cultural heritage into the project's offset strategy.
Historic heritage	
12.1	A Historic Heritage Management Plan will be implemented.

Number	Mitigation/management
12.2	<p>To preserve the assessed heritage significance of the Pilliga East Logging Cultural Landscape the following sites are surface development exclusion areas:</p> <ul style="list-style-type: none"> • Cowallah Parish Plan Sawmill; • Logging Camp 7; • Cowallah Sites Complex; and • Hardy's Hut. <p>Due to the similarities of the timber extraction areas and logging ramps across the project area, if impacts are unavoidable at a site listed below, another site of the same type may be substituted as a surface development exclusion area without impacting the heritage significance:</p> <ul style="list-style-type: none"> • Timber extraction areas 1, 2, 3, 4, 6, 10, 12, 18, 19 and 21; and • Timber loading ramp 1, 5, 6, 9 and ramp associated with timber extraction area 19. <p>The following sites will also will be surface development exclusion areas based on their heritage significance:</p> <ul style="list-style-type: none"> • Pilliga 1 Oil Well; and • Two SUGAR pits – one located at the Leewood site and one located on the intersection of Plumb Road and No Name Road.
Traffic and transport	
13.1	A Traffic Management Plan will be implemented.
13.2	Driving from dusk through to dawn will be minimised, due to high faunal activity.
13.3	The intersections of Old Mill Road and X-Line Road with the Newell Highway will be upgraded.
Landscape and visual	
14.1	Land Access Agreements and Farm Management Plans will be developed in consultation with affected landholders.
14.2	Existing roads, tracks and disturbance corridors for construction and operational access and the placement of linear infrastructure, will be utilised where practicable.
14.3	Lighting will be designed to meet Australian Standard <i>AS 4282-1997 Control of the obtrusive effects of outdoor lighting</i> and the Australian / New Zealand Standard <i>AS/NZS 1158-2010 Lighting for roads and public spaces for roadways and plant</i> , as applicable. The design and operation of night lighting will consider the good lighting design principles documented in <i>Dark Sky Planning Guideline: Protecting the observing conditions at Siding Spring</i> (NSW Department of Planning and Environment 2016).
14.4	Lighting will be focused on work sites during construction and on project infrastructure during operation to minimise light spill into adjoining areas.
14.5	Reasonable and feasible measures will be adopted to minimise light impacts from flaring.
14.6	A Rehabilitation Plan and a Decommissioning Plan which build on the Rehabilitation Strategy (Appendix V) and Decommissioning Strategy (Appendix W) will be developed and implemented over the life of the project.
Greenhouse gas	
15.1	The design of infrastructure and selection of plant, vehicles, equipment and fuels will be reviewed for energy efficiency.
15.2	Measurement systems will be incorporated into the design to comply with National Greenhouse and Energy Reporting Act 2007 requirements.
15.3	Transport logistics will be planned to minimise energy use, and the most fuel-efficient vehicles and equipment will be used where economically viable.
15.4	Energy use will be considered when procuring plant, vehicles and equipment.

Number	Mitigation/management
15.5	Plant, vehicles and equipment will be maintained in good operating condition to maintain fuel use efficiency.
15.6	Energy efficiency opportunities will be monitored and periodically reviewed.
15.7	Greenhouse gas emissions will be reported and independently assured on an annual basis in accordance with the <i>National Greenhouse and Energy Reporting Act 2007</i> .
15.8	A leak detection and repair program approved by the NSW Environment Protection Authority will be implemented to identify and minimise fugitive emissions.

Hazard and risk

16.1	A Bushfire Management Plan will be implemented.
16.2	Signage will be installed in accordance with Australian standards to alert of underground infrastructure.
16.3	All facilities will be designed and operated under the applicable Australian safety standards and protocols.
16.4	Dangerous goods will be stored and transported in accordance with the <i>Australian Dangerous Goods Code</i> .
16.5	Chemicals will be stored and handled in accordance with relevant Australian Standards, including AS 1940-2004 <i>The storage and handling of flammable and combustible liquids</i> .
16.6	Refuelling will occur with suitable containment when volumes greater than 50 litres are involved and not within 40 metres of a watercourse.
16.7	Class 3 Packing Group III Flammable Liquids will be stored appropriate distances from site boundaries.

Social and health

17.1	A procurement and logistics strategy will be implemented.
17.2	An Aboriginal engagement strategy will be implemented to maximise Aboriginal employment including for contractors.
17.3	A complaints and dispute resolution process will be implemented.
17.4	Land Access Agreements and Farm Management Plans will be developed in consultation with affected landholders.
17.5	Construction workforce housing and accommodation strategies will be implemented.
17.6	The proponent will contribute to a Gas Community Benefit Fund in accordance with the NSW Gas Plan.
17.7	Surface infrastructure will be excluded from Yarrie Lake and a buffer of at least 200 m around Yarrie Lake.

Economics

18.1	A procurement and logistics strategy will be implemented.
18.2	The proponent will contribute to a Gas Community Benefit Fund in accordance with the NSW Gas Plan.

Waste management

19.1	A Waste Management Plan will be implemented.
19.2	Solid salt product will be disposed of at an appropriately licensed facility in accordance with regulatory requirements.