
Resources Regulator

Department of Primary Industries and Regional
Development



APO0001712

Approval to undertake assessable prospecting operations

Wirlong Exploration Project

29 October 2024

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Application summary

Important note

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Project

Project details

Assessable prospecting activity APO0001712 relates to the Wirlong Exploration Project at Lot 1747/DP763817 and Lot 420/DP761250.

The project has the following approved characteristics.

Detail		Application
Reference	APO0001712	
Date of approval	29 October 2024	
Title	EL 8126 (1992)	
Applicant	PEEL (CSP) PTY LTD	
Project name	Wirlong Exploration Project	
Project location	Lot 1747/DP763817 and Lot 420/DP761250	
Activity type	Non-complying exploration activity	
Detail		Proposal
Activity description	<p>The objectives of the proposed project are to define the mineral resources in the deeper portions of the Wirlong Project and to providing drill core samples for metallurgic, geotechnical and associated test work. The program would involve the construction of the following.</p> <p>Box cut to a maximum depth of approximately 12 metres below ground level (mbgl).</p> <ul style="list-style-type: none"> • Exploration decline to a maximum depth of approximately 400mbgl. • Portal within the box cut, approximately 6m high and 5.5m wide. • A 5m x 5m adit for ventilation (i.e. ventilation rise). • Surface infrastructure including a: <ul style="list-style-type: none"> – Workshop and warehouse; – administration buildings and geology block; – ROM pad (for use as a core yard laydown area); – magazine; – potentially acid forming (PAF) waste rock stockpiling area; – non-acid-forming (NAF) waste rock stockpiling area; – water storage dams and settling ponds; – site access road and internal roads; and – other ancillary infrastructure (e.g. growth medium and vegetation stockpile areas). • Rehabilitation of the disturbance footprint within the REF Area in the event that future mining activities are not approved. <p>The construction phase of the Project would first involve establishing the Site Access Road and primary Water Storage Area and delineating the disturbance footprint with permanent markers. All required surface water infrastructure would then be established. Surface infrastructure would</p>	

Detail	Proposal
	<p>be constructed as vegetation is cleared progressively and development of the decline would commence.</p> <p>Ventilation would initially be provided using a ventilation fan installed within the box cut and ventilation duct from the portal. Once the decline has progressed sufficiently far, the initial ventilation rise would be established as an exhaust air rise before being converted to a fresh air intake later in the life of the exploration decline.</p> <p>Following the cessation of exploration activities the REF area would be rehabilitated.</p>
<p>Earthworks or vegetation clearing</p>	<p>The Project would result in a total disturbance footprint equivalent to 37.6ha, including approximately 33.4ha of native vegetation. Native vegetation to be cleared as a result of the proposal would include the following (AREA, 2024a).</p> <ul style="list-style-type: none"> • 8.2ha of PCT 103 - Poplar Box - Gum Coolabah - White Cypress Pine shrubby woodland mainly in the Cobar Penneplain Bioregion. • 11.8ha of PCT 104 - Gum Coolabah woodland on sedimentary substrates mainly in the Cobar Penneplain Bioregion. • 7.8ha of PCT 174 - Mallee - Gum Coolabah woodland on red earth flats of the eastern Cobar Penneplain Bioregion. • 5.0ha of PCT 180 - Grey Mallee - White Cypress Pine woodland on rocky hills of the eastern Cobar Penneplain Bioregion. • 0.6ha of 184 - Dwyer's Red Gum - White Cypress Pine – Currawang low shrubgrass woodland of the Cobar Penneplain Bioregion. <p>Soil and vegetation cleared during the construction phase would be stockpiled and used during rehabilitation activities. Development of the underground exploration decline would generate approximately 15,000t of potential acid-forming (PAF) material and approximately 285,000t of non-acid forming (NAF) material. Assuming a material density of 2.2t per cubic metre, the decline would generate approximately 136,363m³ of waste rock material. PAF and NAF material would be stored in the PAF Stockpiling Area and NAF Stockpiling Area respectively. Following the cessation of exploration activities all PAF material would be used to backfill the decline.</p>
<p>Access to exploration activities</p>	<p>The REF Area would be accessed via a Site Access Road to be constructed off Shuttleton Road following existing trails where possible. The Site Access Road would be approximately 3km long and would be constructed from NAF waste rock material from the decline to minimise dust generation over the life of the Project.</p> <p>Haul roads and internal roads would be constructed within the proposed limit of disturbance to permit transportation of waste rock and access to site infrastructure.</p>
<p>Ancillary activities</p>	<ul style="list-style-type: none"> • Box cut to a maximum depth of approximately 12 metres below ground level(mbgl). • Exploration decline to a maximum depth of approximately 400mbgl. • Portal within the box cut, approximately 6m high and 5.5m wide. • A 5m x 5m adit for ventilation (i.e. ventilation rise). • Surface infrastructure including a: <p>Rehabilitation of the disturbance footprint within the REF Area.</p> <p>Where practicable, workers would make use of the temporary accommodation facilities at Peel Mining's Mallee Bull Project.</p>
<p>Anticipated start date</p>	<p>31 January 2025</p>

Detail	Proposal
Expected duration (weeks)	104 weeks
Expected rehabilitation completion date	30 August 2034
Proposed hours of operation	Continuous work hours (24 hours a day, 7 days a week).
On-site employee or contractor numbers	30

Exempted areas

The Wirlong Exploration Project has not proposed prospecting in an exempted area.

State conservation areas

The Wirlong Exploration Project has not proposed prospecting in a State Conservation Area.

Site description and existing environment

The project comprises the following existing land uses:

Land uses are shown on Figure 9 of the REF (RWC, 2024). Land uses within the REF Area include the following.

- Grazing native vegetation – typically low intensity, intermittent grazing.
- Production native forestry (native vegetation).
- Other minimal use / remnant vegetation - areas of land that are largely unused, likely as a result of steep slopes or dense vegetation.

Other land uses in the vicinity of the REF Area include the following.

- Cropping.
- Transportation – including Shuttleton Road.
- Residential – isolated homesteads and other rural infrastructure in the region.
- Mineral exploration and mining – mining operations including the Hera Mine, Wonawinta Project, and exploration activities.

The project is located near the following sensitive receptors:

The locations of sensitive receivers are shown on Figure 2 of the REF (RWC, 2024). Sensitive receivers identified within 10km of the REF Area include the following. The closest

non-project related sensitive receiver (residence) is located approximately 5km south-southwest of the REF Area.

The project is located with the following soil types and properties:

Figure 8 of the REF (RWC, 2024) shows soil land systems and soil land capability classes mapped within the REF Area. Three soil landscape system and land capability classes are mapped as occurring within the REF Area (Figure 8):

Soil Land System – Yackerboon.

– Soil Land Capability Class – 5 Moderate–low capability land with high limitations for high-impact land uses. Limitations must be managed to prevent long-term degradation.

Soil Land System – Lachlan Downs.

– Soil Land Capability Class – 6 Low capability land with very high limitations for high-impact land uses. Management of limitations is required to avoid severe land and environmental degradation.

Soil Land System – Glenown.

– Soil Land Capability Class – 8 Extremely low capability land with severe limitations which make land incapable of sustaining any land use other than nature conservation.

Disturbance of native vegetations should be avoided.

An Agricultural Impact Statement is included as Appendix 8 of the REF (RWC, 2024).

The project has the following existing surface water sources in the area that are likely to be affected by the activity:

The REF Area is located within the area covered by the Water Sharing Plan for the Lachlan Unregulated River Water Source 2012, within the Mount Hope Area Water Source. The proposed exploration activities would not trigger the requirements of this water sharing plan. The REF Area is not located within a drinking water catchment, and the local community does not rely upon surface water flows from the REF Area for drinking water supply.

Typically, surface water drainage within the locality is ephemeral and responds to infrequent intense rainfall events that occur sporadically. Surface water drainage within the REF Area is characterised by sheet wash with mapped drainage features limited to indistinct, discontinuous, ephemeral watercourses.

Watercourses in the REF Area form part of the catchment for Sandy Creek which is situated within an endorheic basin. Surface water drainage within and immediately surrounding the REF Area consists of a number of 1st order and 2nd order ephemeral streams (see REF Figure 6). Two first order streams which begin on the ridge to the east of the REF Area converge and form a second order stream which bisects the southern section of the REF Area.

Where possible, proposed infrastructure within the REF Area has been located to avoid waterfront land which includes all and within 40m of an identified watercourse (see REF

Figure 3).

Proposed infrastructure which would occur on waterfront land would include portions of the growth medium stockpile areas and sections of the haul road and internal roads connecting the box cut, magazine and ventilation rise to the remainder of the site.

The project has the following existing groundwater sources that occur in the area that are likely to be affected by the activity:

The closest registered bore is a stock bore located 10.7km southeast of the Exploration Project. Therefore, the impact of drawdown is not anticipated to impact surrounding groundwater users and the predicted impacts meet the Level 1 minimal impact considerations for landholder bores as outlined in the NSW Aquifer Interference Policy. State mapping indicates the potential presence of GDEs within and in the vicinity of the REF area (Figure 9). However, GHD (2023) determined that there are no known GDEs within 20km of the REF Area. During the installation of monitoring bores, groundwater was intercepted at depths greater than 70m, which is beyond the reasonable limit of tree rooting depths (GHD, 2023). Due to the deep groundwater levels and the ephemeral nature of watercourses in the vicinity of the REF Area, it is considered unlikely that there are vegetative or aquatic GDEs in the vicinity of the REF Area.

As there are no known GDEs within 20km of the REF Area, GHD (2023) determined that the potential impacts of the Exploration Project meet the Level 1 minimal impact considerations for GDEs outlined in the NSW Aquifer Interference Policy.

The project is in an area with the following topography, vegetation cover type, density and condition:

The topography of the area immediately surrounding the REF Area is varied, with a large ridge on the Eastern boundary, and smaller ridges and hills to the southeast and southwest of the REF Area (see REF Figure 6). Elevations in the vicinity in the REF Area range from approximately 298m AHD to 400 AHD at the top of the ridge.

Native vegetation within the proposed limit of disturbance for the Project consists of the following PCTs, as identified by AREA (2024a). Further details of vegetation within the REF Area are provided in Section 2.2.8 of the REF (RWC, 2024).

- 8.2ha of PCT 103 - Poplar Box - Gum Coolabah - White Cypress Pine shrubby woodland mainly in the Cobar Penneplain Bioregion.
- 11.8ha of PCT 104 - Gum Coolabah woodland on sedimentary substrates mainly in the Cobar Penneplain Bioregion.
- 7.8ha of PCT 174 - Mallee - Gum Coolabah woodland on red earth flats of the eastern Cobar Penneplain Bioregion.
- 5.0ha of PCT 180 - Grey Mallee - White Cypress Pine woodland on rocky hills of the eastern Cobar Penneplain Bioregion.
- 0.6ha of 184 - Dwyer's Red Gum - White Cypress Pine – Currawang low shrubgrass

woodland of the Cobar Peneplain Bioregion.

The project will impact the following matters of national environmental significance:

The Project would not impact on matters of National Environmental Significance under the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act).

AREA Environmental Consulting (AREA) undertook a Biodiversity Development Assessment Report (BDAR) for the Project to assess potential impacts on biodiversity values. AREA (2024a) concluded that the Project would not be a controlled action and does not require referral to the Commonwealth under the EPBC Act.

Three threatened species were identified as potentially occurring within the biodiversity Study Area, including the Blue-winged Parrot (*Neophema chrysostoma*), Striated Grasswren (*Amytornis striatus striatus*), and Southern Whiteface (*Aphelocephala leucopsis*). An assessment of significance concluded that the Project would be unlikely to result in a significant impact on these species (AREA, 2024a). All other species listed under the EPBC Act were considered unlikely to be present, unlikely to be impacted, or were addressed in the BDAR under the relevant NSW legislation (AREA, 2024a).

The project is in an area with the following threatened species, ecological communities (or habitats):

Details of threatened species, threatened ecological communities and threatened species habitat within the REF Area are provided in Sections 2.2.9, 2.2.11, and 2.2.12 respectively of the REF (RWC, 2024a). In summary, AREA (2024a) determined that the Project would not significantly impact any threatened flora, threatened fauna, or threatened ecological communities.

The project is in an area with the following historic cultural or natural heritage items:

No historic cultural or natural heritage items are located within the REF Area.

The project is in an area with the following critical habitat/area of outstanding biodiversity value:

No areas of critical habitat or areas of outstanding biodiversity value are located within the REF Area.

The project is located in an area with the following location, type and distance to the nearest Aboriginal heritage sites:

AREA Environmental and Heritage Consultants (AREA) undertook an Aboriginal Cultural Heritage Assessment Report (ACHAR) for the Project to assess potential impacts on Aboriginal cultural heritage values associated with the Project. The resulting report (AREA,

2024b) is presented as Appendix 7 of the REF (RWC, 2024).

AREA (2024b) conducted a search of relevant online Aboriginal heritage databases and found the following.

- The Aboriginal heritage Information Management System (AHIMS) identified 34 Aboriginal sites within 20km of the REF Area, with no sites located within Study Area.
- No Aboriginal heritage sites are identified in the Cobar Local Environmental Plan (LEP) in proximity to the Study Area.
- No Aboriginal heritage items were recorded as occurring within the Study Area on the State Heritage Register, with the nearest site occurring approximately 60km north of the Study Area.

Native Title has recently been determined for the Ngemba, Ngiyampaa, Wangaaypuwan and Wayilwan which covers the area of the REF. This group has been represented in the surveys and documentation review process.

The regional and local Aboriginal cultural context, as well as details of Aboriginal land use, relevant landscape features, and the predictive model developed for the ACHAR, are discussed in Sections 4 and 5 of AREA (2024b).

Exploration activities

The following exploration activities have been approved.

Drill holes

There are no drill holes for this application.

Other exploration activities

Id/ Regulator no.	Type	Surface disturbance (m²)	Veg. Clearing (m²)	Excavations (m³)	Produced water (ml)	Block number	Unit letters
Wirlong Exploration Decline – Box Cut & Portal) EA0005020	Other drilling	330700	330700	0	0	CAN98	H
Wirlong Exploration Decline – Box Cut & Portal) EA0005019	Other drilling	300	300	136363	124	CAN98	H

Impact management

The project includes the following measures to manage surface water impacts:

Where possible, proposed infrastructure within the REF Area has been located to avoid waterfront land which includes all and within 40m of an identified watercourse (Figure 3). Proposed infrastructure which would occur on waterfront land would include portions of the growth medium stockpile areas and sections of the haul road and internal roads connecting the box cut, magazine and ventilation rise to the remainder of the site. The dispersive nature of the soil at the Exploration Project Site and the evident erosion from surface water flows demonstrate that there is a high risk that surface water has potential to cause impacts on the surrounding environment. To mitigate and minimise the risk, various surface water management infrastructure including clean water diversion drains and bunds would be constructed. These infrastructure items would work to prevent flow of surface water runoff into disturbed areas and to protect stockpiled growth medium and vegetation resources.

The project includes the following measures to manage groundwater impacts:

The following measures would be implemented to ensure that any impacts on surface water are minimised.

- Prepare, implement and monitor the performance of the Erosion and Sediment control Plan for the REF Area.
- Ensure that surface water within the ROM Pad and PAF storage areas are directed to the lined water storage facility.
- Monitor quality of water in sediment ponds as per the approved Water Management Plan.
- Ensure that surface water from all other disturbed areas is directed to sediment basins and that all diversions and the sediment basins themselves are constructed in accordance with Managing Urban Stormwater.
- Ensure that clean water from undisturbed sections of the REF Area is diverted away from disturbed areas.
- Preferentially use water from the sediment basins and water catchment area for dust suppression and other exploration operations.
- Engage a suitably skilled land management professional to opportunistically vegetate the riparian corridor to stabilise soil.

The project includes the following measures to manage waste and excess materials:

The estimated quantities of PAF and NAF at Wirlong are 29,000 tonnes and 261,000 tonnes respectively. These estimates are based on an estimated split of 10% PAF and 90% NAF material.

All general waste will be collected and disposed of a licenced facility. Recyclable waste will be collected and managed at a licenced facility for recycling. Non Acid Forming (NAF)

and Potentially Acid Forming (PAF) will be stockpiled until either completion of the REF activities (and rehabilitation). Following the cessation of the exploration program, all PAF will be stored underground in accordance with a developed and implemented Waste Rock Management Plan. Stockpile PAF and NAF waste rock material on hard stand areas that would drain to a water storage. Design on-site water storages and retention structures to capture up to 90th percentile rainfall events and prevent discharge from site of potentially contaminated water as per the Site Water Balance.

The project includes the following measures regarding the handling, use, storage and transportation of any chemicals and hydrocarbons:

Peel Mining would implement the following mitigation strategies to manage the risk of contamination or inappropriate chemical or waste management.

- Ensure that all hazardous materials and chemicals are stored in accordance with the requirements of the Safety Data Sheets and relevant Australian Standards.
- Ensure all equipment is regularly inspected and maintained, including scheduled replacement of hydraulic hoses to minimise the risk of hydrocarbon spills.
- Ensure that all personnel are trained and aware of the procedures and requirements of hydrocarbon and chemical materials management prior to the proposed activities commencing.
- Management of explosives is conducted in accordance with the Explosives Act 2003.
- Explosives storage licence to be obtained by Peel Mining prior to the commencement of works.
- Development and implementation of a Security Plan.

The project includes the following measures of how noise impacts will be managed to minimise impacts on nearby sensitive receptors:

Peel Mining anticipates that the potential for noise-related impacts would be negligible considering that the majority of exploration activities would be undertaken underground and the distance to the nearest sensitive receiver.

Noise impacts would be largely restricted to the site establishment and operation of the ventilation fans which are required to be established to support the exploration activities underground. The following mitigation measures would be implemented to reduce potential noise and vibration impacts on sensitive receivers.

- Maintain vehicles, plant equipment and generators to system requirements and relevant standards to maintain appropriate sound power levels.
- Promptly respond to any complaints relating to noise and modify activities as required.
- Ensure that all activities are undertaken during the proposed hours of operation.

The project includes the following measures to manage air quality impacts:

Peel Mining have committed to implementing the following management and mitigation

measures to avoid and minimise particulate matter generation as a result of the Exploration Project.

Monitor weather conditions and dust generation and adjust and/or cease on-site activities during adverse weather conditions, where required, to minimise dust generation.

Check weather forecasts prior to undertaking material handling activities.

Ensure that mobile equipment, plant and vehicles are switched off when not in use.

Ensure that vehicles are regularly maintained and serviced and are fitted with pollution reduction devices where practicable.

Minimise the extent of exposed surfaces and material stockpiles where practicable.

Minimise dust generation by keeping exposed surfaces to a minimum and regularly applying water to dampen exposed surfaces (including access and haul roads), material stockpiles, and material being handled.

Regular inspections will be conducted.

Sensitivity of the land to be disturbed

Question	Yes/no
Conservation areas	
Land reserved under the <i>National Parks and Wildlife Act 1974</i> ?	No
Land acquired by the Minister under Part 11 of the <i>National Parks and Wildlife Act 1974</i> ??	No
Land subject to a "conservation agreement" under the <i>National Parks and Wildlife Act 1974</i> and/or the <i>Biodiversity Conservation Act 2016</i> ?	No
Land declared as an aquatic reserve under the <i>Marine Estate Management Act 2014</i> ?	No
Land declared as a marine park under the <i>Marine Estate Management Act 2014</i> ?	No
Land within State Forests set aside under the <i>Forestry Act 2012</i> for conservation values, including Flora Reserves or Special Management (and other) Zones?	No
Land reserved or dedicated under the <i>Crown Lands Act 1989</i> / <i>Crown Lands Management Act 2016</i> (as applicable) for the preservation of flora, fauna, geological formations or other environmental protection purposes?	No
Land identified as wilderness or declared a wilderness area under the <i>Wilderness Act 1987</i> ?	No
Land subject to a Biobanking agreement (established under the now repealed Threatened Species Conservation Act 1995) or a Biodiversity Stewardship agreement established under the Biodiversity Conservation Act 2016?	No
Land subject to a Wildlife Refuge agreement under the <i>Biodiversity Conservation Act 2016</i> ?	No
Land subject to existing conservation agreements on private land under repealed legislation that continue to have effect (e.g., trust agreements under Native Conservation Trust Act 2001, Property vegetation plans under Native Vegetation Act 2003, Registered property agreements under Native Vegetation Conservation Act 1997)?	No

Question	Yes/no
Drinking water catchment protection areas	
Land declared to be a "controlled area" or a "special area" under the <i>Water NSW Act 2014</i> ?	No
Land declared to be a "special area" under the <i>Water Management Act 2000</i> or <i>Hunter Water Act 1991</i> ?	No
Sensitive areas	
Land declared as area of outstanding biodiversity value under the <i>Biodiversity Conservation Act 2016</i> or critical habitat under Part 7A of the <i>Fisheries Management Act 1994</i> ?	No
Wetlands of international significance listed under the Ramsar Wetlands Convention?	No
Land designated as a nationally important wetland in the Directory of Important Wetlands?	No
Coastal wetlands mapped under State Environmental Planning Policy (Resilience and Hazards) 2021?	No
Littoral rainforests mapped under State Environmental Planning Policy (Resilience and Hazards) 2021?	No
Coastal zone as defined in the <i>Coastal Management Act 2016</i> ?	No
Land identified in an environmental planning instrument as being of biodiversity/conservation significance or zoned for environmental conservation, protection and/or management?	No
Waterfront land defined under the <i>Water Management Act 2000</i> ?	Yes
Land with a slope greater than 18 degrees measured from the horizontal?	Yes
Land with potential for soil and water contamination	
Land mapped as Actual Acid Sulfate Soils (AASS) or Potential Acid Sulfate Soils (PASS) on the Acid Sulfate Soils Risk Maps for NSW?	No
Aboriginal protection areas	
Land identified in an environmental planning instrument (such as a State Environmental Planning Policy or Local Environment Plan) as being of Aboriginal cultural significance?	No
Land declared as an Aboriginal place under the <i>National Parks and Wildlife Act 1974</i> ?	No
Historic or natural heritage protection areas	
Land listed on the World Heritage List, National Heritage List or Commonwealth Heritage List?	No
Land, places, buildings or structures listed on the NSW State Heritage Register?	No
Land identified in an environmental planning instrument (such as a State Environmental Planning Policy or Local Environment Plan) as being of heritage significance or a heritage conservation area?	No
Critical industry clusters	
Land identified as Critical Industry Cluster under State Environmental Planning Policy (Resources and Energy) 2021?	No
Community land	

Question	Yes/no
Public land classified as community land under the <i>Local Government Act 1993</i> ?	No
Other areas	
Land identified on the authority (e.g., exploration licence or assessment lease) as environmentally sensitive land?	No
Ecology	
Will the activity have a significant effect on threatened species or their habitats?	No
Will the activity have a significant effect on threatened ecological communities or their habitats?	No
Will vegetation be removed as part of access track upgrade works in waterfront land?	Yes
Aboriginal and European heritage	
Will the activity harm Aboriginal objects as defined under the <i>National Parks and Wildlife Act 1974</i> ?	Yes
Will the activity damage any listed heritage items?	No

Attachment 1 – Statement of commitments

Item	Commitment
Activity type	Exploration activity comprising: <ul style="list-style-type: none"> • 331000 square metres of other drilling
Activity location	Lot 1747/DP763817 and Lot 420/DP761250, within EL 8126 (1992).
Activity scope (including any ancillary activities)	<p>The objectives of the proposed project are to define the mineral resources in the deeper portions of the Wirlong Project and to providing drill core samples for metallurgic, geotechnical and associated test work. The program would involve the construction of the following.</p> <p>Box cut to a maximum depth of approximately 12 metres below ground level (mbgl).</p> <ul style="list-style-type: none"> • Exploration decline to a maximum depth of approximately 400mbgl. • Portal within the box cut, approximately 6m high and 5.5m wide. • A 5m x 5m adit for ventilation (i.e. ventilation rise). • Surface infrastructure including a: <ul style="list-style-type: none"> – Workshop and warehouse; – administration buildings and geology block; – ROM pad (for use as a core yard laydown area); – magazine; – potentially acid forming (PAF) waste rock stockpiling area; – non-acid-forming (NAF) waste rock stockpiling area; – water storage dams and settling ponds; – site access road and internal roads; and – other ancillary infrastructure (e.g. growth medium and vegetation stockpile areas). • Rehabilitation of the disturbance footprint within the REF Area in the event that future mining activities are not approved. <p>The construction phase of the Project would first involve establishing the Site Access Road and primary Water Storage Area and delineating the disturbance footprint with permanent markers. All required surface water infrastructure would then be established. Surface infrastructure would be constructed as vegetation is cleared progressively and development of the decline would commence.</p> <p>Ventilation would initially be provided using a ventilation fan installed within the box cut and ventilation duct from the portal. Once the decline has progressed sufficiently far, the initial ventilation rise would be established as an exhaust air rise before being converted to a fresh air intake later in the life of the exploration decline.</p> <p>Following the cessation of exploration activities the REF area would be rehabilitated.</p> <ul style="list-style-type: none"> • Box cut to a maximum depth of approximately 12 metres below ground level(mbgl). • Exploration decline to a maximum depth of approximately 400mbgl. • Portal within the box cut, approximately 6m high and 5.5m wide. • A 5m x 5m adit for ventilation (i.e. ventilation rise). • Surface infrastructure including a: <p>Rehabilitation of the disturbance footprint within the REF Area.</p> <p>Where practicable, workers would make use of the temporary accommodation facilities at Peel Mining’s Mallee Bull Project.</p>

Item	Commitment
Hours of operation	Continuous work hours (24 hours a day, 7 days a week).
Expected duration (weeks)	104 weeks
Anticipated start date	31 January 2025
Expected rehabilitation completion date	Estimated 30 August 2034
Maximum area of disturbance	331,000 square metres
Agricultural impact	The activity will be undertaken in accordance with Appendix 10_Agricultural Impact Statement_20240214.pdf (3548717 bytes)undefined
Air quality	<p>Peel Mining have committed to implementing the following management and mitigation measures to avoid and minimise particulate matter generation as a result of the Exploration Project. Monitor weather conditions and dust generation and adjust and/or cease on-site activities during adverse weather conditions, where required, to minimise dust generation. Check weather forecasts prior to undertaking material handling activities. Ensure that mobile equipment, plant and vehicles are switched off when not in use. Ensure that vehicles are regularly maintained and serviced and are fitted with pollution reduction devices where practicable. Minimise the extent of exposed surfaces and material stockpiles where practicable. Minimise dust generation by keeping exposed surfaces to a minimum and regularly applying water to dampen exposed surfaces (including access and haul roads), material stockpiles, and material being handled. Regular inspections will be conducted.</p>
Protection of water sources	<p>Where possible, proposed infrastructure within the REF Area has been located to avoid waterfront land which includes all and within 40m of an identified watercourse (Figure 3). Proposed infrastructure which would occur on waterfront land would include portions of the growth medium stockpile areas and sections of the haul road and internal roads connecting the box cut, magazine and ventilation rise to the remainder of the site. The dispersive nature of the soil at the Exploration Project Site and the evident erosion from surface water flows demonstrate that there is a high risk that surface water has potential to cause impacts on the surrounding environment. To mitigate and minimise the risk, various surface water management infrastructure including clean water diversion drains and bunds would be constructed. These infrastructure items would work to prevent flow of surface water runoff into disturbed areas and to protect stockpiled growth medium and vegetation resources.</p> <p>The following measures would be implemented to ensure that any impacts on surface water are minimised.</p> <ul style="list-style-type: none"> • Prepare, implement and monitor the performance of the Erosion and Sediment control Plan for the REF Area. • Ensure that surface water within the ROM Pad and PAF storage areas are directed to the lined water storage facility. • Monitor quality of water in sediment ponds as per the approved Water Management Plan. • Ensure that surface water from all other disturbed areas is directed to sediment basins and that all diversions and the sediment basins themselves are constructed in accordance with Managing Urban Stormwater. • Ensure that clean water from

Item	Commitment
	<p>undisturbed sections of the REF Area is diverted away from disturbed areas. • Preferentially use water from the sediment basins and water catchment area for dust suppression and other exploration operations. • Engage a suitably skilled land management professional to opportunistically vegetate the riparian corridor to stabilise soil.</p>
<p>Soil and land stability</p>	<p>Soil and stability impacts are detailed in Section 2.2.3 of the REF (RW Corkerys 2024)</p>
<p>Noise and vibration</p>	<p>Peel Mining anticipates that the potential for noise-related impacts would be negligible considering that the majority of exploration activities would be undertaken underground and the distance to the nearest sensitive receiver. Noise impacts would be largely restricted to the site establishment and operation of the ventilation fans which are required to be established to support the exploration activities underground. The following mitigation measures would be implemented to reduce potential noise and vibration impacts on sensitive receivers. • Maintain vehicles, plant equipment and generators to system requirements and relevant standards to maintain appropriate sound power levels. • Promptly respond to any complaints relating to noise and modify activities as required. • Ensure that all activities are undertaken during the proposed hours of operation.</p>
<p>Coastal processes and hazards</p>	<p>N/A</p>
<p>Hazardous substances or chemicals</p>	<p>Peel Mining would implement the following mitigation strategies to manage the risk of contamination or inappropriate chemical or waste management. • Ensure that all hazardous materials and chemicals are stored in accordance with the requirements of the Safety Data Sheets and relevant Australian Standards. • Ensure all equipment is regularly inspected and maintained, including scheduled replacement of hydraulic hoses to minimise the risk of hydrocarbon spills. • Ensure that all personnel are trained and aware of the procedures and requirements of hydrocarbon and chemical materials management prior to the proposed activities commencing. • Management of explosives is conducted in accordance with the Explosives Act 2003. • Explosives storage licence to be obtained by Peel Mining prior to the commencement of works. • Development and implementation of a Security Plan.</p>
<p>Wastes and emissions</p>	<p>The estimated quantities of PAF and NAF at Wirlong are 29,000 tonnes and 261,000 tonnes respectively. These estimates are based on an estimated split of 10% PAF and 90% NAF material. All general waste will be collected and disposed of a licenced facility. Recyclable waste will be collected and managed at a licenced facility for recycling. Non Acid Forming (NAF) and Potentially Acid Forming (PAF) will be stockpiled until either completion of the REF activities (and rehabilitation). Following the cessation of the exploration program, all PAF will be stored underground in accordance with a developed and implemented Waste Rock Management Plan. Stockpile PAF and NAF waste rock material on hard stand areas that would drain to a water storage. Design on-site water storages and retention structures to capture up to 90th percentile rainfall events and prevent discharge from site of potentially contaminated water as per the Site Water Balance.</p>
<p>Vegetation</p>	<p>Management and mitigation measures are detailed in Section 2.2.8.2 of the REF (RW Corkery, 2024).</p>

Item	Commitment
Threatened fauna and flora species	<p>The following management and mitigation measures would be implemented to minimise impacts to flora and fauna.</p> <ul style="list-style-type: none"> • Pre-clearing inspections would be undertaken by a qualified ecologist, during which, exclusion zones would be determined and hollow bearing trees identified. • Weeds, pests and disease would be regularly monitored and inspected. • Establish nestboxes and/or create tree hollows to compensate for any loss of large hollows as required.
Areas of outstanding biodiversity value/critical habitat	
Endangered ecological community or critically endangered ecological community	<p>As there are no endangered, critically endangered, or threatened ecological communities within the Assessment Area, no management and mitigation measures are required.</p>
Habitat of a threatened species or ecological community	<p>The Project has been designed to minimise the effects on rocky habitat, as a precautionary approach. As there are no threatened species or ecological communities identified in the Assessment Area, no additional management and mitigation measures are proposed.</p>
Key threatening processes	<p>The following management and mitigation measures would be implemented to minimise the impacts of the Project regarding key threatening processes.</p> <ul style="list-style-type: none"> • All hollow-bearing trees would be inspected prior to removal and any nesting or roosting fauna would be encouraged to escape or would be relocated, as required. An ecologist or spotter/catcher would be present removal is occurring. • Tree trunks would be retained for use in rehabilitation activities. Smaller vegetation would be mulched and similarly used for rehabilitation activities. • Reuse fallen timber for habitat. • Compensate for the loss of large hollows using nest-boxes or creating tree hollows.
Barriers to movement of fauna	<p>As the Project would not impact any wildlife corridors or habitat connectivity, no management and mitigation measures are required.</p>
Ecological and biosecurity impacts	<p>As there are no areas of outstanding biodiversity value or critical habitat within the Assessment Area, no management and mitigation measures are required.</p>

Item	Commitment
Community resources	<p>Peel Mining would implement the following mitigation strategies to manage potential community impacts associated with the Project.</p> <ul style="list-style-type: none"> • Ensure that workers are accommodated at the Mallee Bull Exploration Project site, where practicable. • Ensure that a shuttle bus is provided to transport workers between the Mallee Bull Exploration project site and the REF Area.
Natural resources	<p>To avoid, minimise and mitigate potential impacts to natural resources associated with the Project, Peel Mining would implement the management and mitigation measures committed to throughout this document.</p>
Social impacts	<p>Aboriginal heritage-related management and mitigation measures are outlined in Section 2.4.5.2 of the REF (RW Corkery, 2024)</p>
Economic impacts	<p>Peel Mining would implement the following management and mitigation measures to ensure that positive economic impacts associated with the Project are maximised.</p> <ul style="list-style-type: none"> • Ensure that employees and contractors are preferentially selected from local community centres, where practicable. • Ensure that consumables are preferentially purchased from local suppliers, where practicable.
Heritage impacts	<p>No management and mitigation measures targeting potential historic heritage impacts are proposed to be implemented.</p>
Aesthetic impacts	<p>No management and mitigation measures targeting potential visual and aesthetic impacts are proposed to be implemented.</p>
Aboriginal cultural heritage	<p>Management and mitigation measures are detailed in Section 2.4.5.2 of the REF (RW Corkery 2024).</p>
Land use impacts	<p>Peel Mining would implement the following management and mitigation measures to minimise land use impacts.</p> <ul style="list-style-type: none"> • Undertake rehabilitation of the REF Area to achieve rehabilitation objectives and rehabilitation completion criteria outlined in Appendix 9 of the REF (RW Corkery's) • Undertake rehabilitation of disturbed areas progressively, where possible. • Ensure that the limit of disturbance for the Project is clearly delineated and communicated to site personnel.
Transportation impacts	<p>Mitigation measures are detailed in Section 2.4.7.2 of the REF (RW Corkery 2024).</p>
Matters of national environmental significance	<p>No additional management and mitigation measures are proposed as the Project would not impact any matters of national environmental significance.</p>
Cumulative	<p>No additional management and mitigation measures are proposed to manage potential</p>

Item	Commitment
impacts	cumulative environmental or social impacts associated with the Project.
Rehabilitation commitments	The activity will be undertaken in accordance with the rehabilitation objectives and targets provided for this project.
Risk assessments	The titleholder must monitor the risks associated with activities and, if the risk associated with an activity changes, implement revised environmental management controls.
Incident management	The NSW Resources Regulator will be notified of all incidents in accordance with the requirements of EL 8126 (1992).
Reporting	Reporting to the NSW Resources Regulator and Mining, Exploration and Geoscience – Department of Regional NSW will be in accordance with the legislation and conditions of EL 8126 (1992).
Codes of Practice	Wirlong Exploration Project will be operated in accordance with: <ul style="list-style-type: none"> • Exploration Code of Practice: Environmental Management • Exploration Code of Practice: Rehabilitation • Exploration Code of Practice: Produced Water Management, Storage and Transfer
Other (as applicable)	1. No additional terms specified.

Attachment 2 – Definitions

To search for NSW legislation, visit www.legislation.nsw.gov.au. Commonwealth legislation can be found at www.legislation.gov.au.

Word	Definition
Aboriginal object	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
Aboriginal place	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
Acid Sulfate Soils	Sediments and soils containing iron sulfides which, when exposed to oxygen, generate sulfuric acid. Acid sulfate soils include actual acid sulfate soils (AASS) or potential acid sulfate soils (PASS).
Activity	Any activity carried out in connection with exploration, including: <ul style="list-style-type: none"> • the use of land • means of accessing land • the carrying out of a work.
Activity approval	An approval to carry out assessable prospecting operations granted under the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
Actual Acid Sulfate Soils (AASS)	Sediments and soils containing highly acidic soil horizons or layers resulting from the aeration of sediments and soils that are rich in iron sulfides, primarily sulphide.
Applicant	In relation to an exploration activity, the person proposing to carry out the exploration activity.
Aquatic reserve	Has the same meaning as it has in the <i>Marine Estate Management Act 2014</i> .
Areas of Outstanding Biodiversity Value (AOBVs)	Has the same meaning as it has in the <i>Biodiversity Conservation Act 2016</i> . Note: Areas of declared critical habitat under the now repealed <i>Threatened Species Conservation Act 1995</i> have become Areas of Outstanding Biodiversity Value (AOBVs) under the <i>Biodiversity Conservation Act 2016</i> .
Assessable prospecting operation	Any prospecting operation that is not exempt development within the meaning of <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
Clearing of vegetation	Any one or more of the following: <ul style="list-style-type: none"> • cutting down, felling, thinning, lopping, logging or removing vegetation, or • killing, destroying, poisoning, ringbarking, uprooting or burning vegetation.
Complying exploration activities (CEA)	Exploration activities that are considered unlikely to significantly affect the environment as set out in <i>Exploration guideline: Application and assessment process for exploration activities</i> .
Critical habitat	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .

Word	Definition
	Areas of declared critical habitat under the now repealed <i>Threatened Species Conservation Act 1995</i> have become Areas of Outstanding Biodiversity Value (AOBVs) under the <i>Biodiversity Conservation Act 2016</i> .
Drill hole	A hole made by drilling or boring, but excludes: <ul style="list-style-type: none"> • sampling and coring using handheld equipment, • petroleum wells.
Drilling	The perforation of the earth's surface crust by mechanical means to form a hole, whether the hole caused by the perforation is vertical, inclined or horizontal, and includes all operations for preventing collapse of the sides of such hole or for preventing it from being filled with extraneous materials including water
Environment	Has the same meaning as it has in the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
Environmentally sensitive area of State significance	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
Excavation	The removal of the surface layer to a depth greater than 500 mm from the natural surface level.
Exempt development	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
Exploration	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
Fauna	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
Groundwater	Water that occurs beneath the ground surface in the saturated zone.
Habitat	Has the same meaning as it has in the <i>Biodiversity Conservation Act 2016</i> or the <i>Fisheries Management Act 1994</i> (as relevant).
Harm	<p>In relation to matters of national environmental significance, has the same meaning as "significant impact" as provided by the "Significant Impact Guidelines" used to determine whether assessment and approval is required under the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>.</p> <p>In relation to the environment, has the same meaning as it has in the <i>Protection of the Environment Operations Act 1997</i>.</p> <p>In relation to threatened species or ecological communities, has the same meaning as:</p> <ul style="list-style-type: none"> • "harm an animal" in the <i>National Parks and Wildlife Act 1974</i> • "pick a native plant" in the <i>National Parks and Wildlife Act 1974</i> • "harm" in the <i>Fisheries Management Act 1994</i>.

Word	Definition
	<p>In relation to an aquifer or waterfront land, has the same meaning as it has in the <i>Water Management Act 2000</i>.</p> <p>In relation to Aboriginal places or Aboriginal objects has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i>.</p> <p>In relation to items of heritage significance, has the same meaning as it has in the <i>Heritage Act 1977</i>.</p> <p>In relation to protected marine vegetation, has the same meaning as it has in the <i>Fisheries Management Act 1994</i>.</p>
Items of heritage significance	<p>Means:</p> <ul style="list-style-type: none"> • any heritage items listed in one or more of the following: <ul style="list-style-type: none"> ◦ the Commonwealth Heritage List ◦ the World Heritage List ◦ the National Heritage List ◦ the State Heritage Register ◦ an Environmental Planning Instrument • any relic (being any deposit, object or material evidence which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and which is 50 or more years old), or • within State Conservation Areas: <ul style="list-style-type: none"> ◦ items that are listed on the DECC Historic Heritage Information Management System, or ◦ any deposit, object or material evidence relating to the settlement or occupation of New South Wales or a part of New South Wales (not being Aboriginal settlement or occupation) if the deposit, object or material evidence is more than 25 years old at the date of the interference or removal.
Land	<p>Includes:</p> <ul style="list-style-type: none"> • the sea or an arm of the sea • a bay, inlet, lagoon, lake or body of water, whether inland or not and whether tidal or non-tidal • a river, stream or watercourse, whether tidal or non-tidal, and • a building erected on the land
Marine vegetation	<p>Has the same meaning as it has in the <i>Fisheries Management Act 1994</i>.</p>
Matters of national environmental significance	<p>"Matters of national environmental significance" protected under the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>.</p>
Minister	<p>The Minister administering the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.</p>
Native vegetation	<p>Has the same meaning as it has in the <i>Local Land Services Act 2013</i>.</p>

Word	Definition
Potential acid sulphate soils (PASS)	Sediments and soils that contain iron sulfides or sulfidic material which have not been exposed to air and oxidised
Produced water	Any form of groundwater that is actively extracted from a borehole or excavation, excluding incidental groundwater mixed with drilling fluids.
Rehabilitation	Has the same meaning as it has in the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
Seismic survey	The use of shock waves (generated in the ground using either small explosive charges detonated below the surface, hand-held mechanical hammers or vehicle-mounted hammers) and an array of geophones, which are connected to measuring instruments, to differentiate the geophysical properties of the subsurface of the earth.
Sensitive receiver	Includes: <ul style="list-style-type: none"> • dwellings • libraries • educational and research institutions (including schools, colleges and universities) • childcare centres • kindergartens • hospitals, surgeries and other medical institutions • places of worship • milking sheds and holding yards associated with dairies • animal boarding or training establishments • aquaculture • intensive livestock agriculture
Site	The land on which an activity is located.
State Conservation Area	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
Surface disturbance	Means: <ul style="list-style-type: none"> • disturbance or exposure of the soil or surface rock layer, or • degradation or deterioration in any manner of the physical surface of land.
Terms	In relation to activity approvals, the terms imposed by the decision-maker on the grant of an activity approval.
Threatened species or ecological communities	Has the same meaning as it has in the <i>Biodiversity Conservation Act 2016</i> or <i>Fisheries Management Act 1994</i> (as relevant).
Title	An authority under the <i>Mining Act 1992</i> / a title under the <i>Petroleum (Onshore) Act 1991</i> – as relevant.
Titleholder	A person or company to whom a title has been issued.
Track	All unsealed routes that will be traversed multiple times, but does not include

Word	Definition
	single pass (ingress and egress) routes or seismic shot and receiver lines.
Waste	Has the same meaning as it has in the <i>Protection of the Environment Operations Act 1997</i> .
Water source	Has the same meaning as it has in the <i>Water Management Act 2000</i> .
Water land	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .
Waterfront land	Has the same meaning as it has in the <i>Water Management Act 2000</i> .
Wetlands	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .
Wilderness	Lands identified as wilderness under the <i>Wilderness Act 1987</i> .
Wilderness area	Lands (including subterranean lands) declared to be a wilderness area under the <i>Wilderness Act 1987</i> or the <i>National Parks and Wildlife Act 1974</i> .

Attachment 3 - Review of environmental factors

Air impacts
Provide a brief description of likely impacts to air quality, including the distance to, and impacts on, nearby sensitive receivers.
Details of predicted air quality impacts and air quality management and mitigation strategies are provided in Section 2.2.1 of the REF (RWC, 2024).
What is the activity's likely impact due to generation of greenhouse gases emissions or release of chemicals which affect the ozone layer or produce photo-chemical smog?
Negligible
What is the likely level of any impacts?
Negligible
Outline any proposed management controls and/or mitigation measures.
Details of predicted air quality impacts and air quality management and mitigation strategies are provided in Section 2.2.1 of the REF (RWC, 2024).
Water impacts
Provide a brief description of the likely impacts to water quality and/quantity.
Details of predicted surface water impacts and surface water management and mitigation measures are provided in Section 2.2.2 of the REF (RWC, 2024).
What is the activity's impact due to the storage of water?
Negligible Negligible
What is the activity's impact to natural water bodies, wetlands or runoff patterns?
Negligible Negligible
What is the activity's impact due to aquifer interference, including changes to inter-aquifer connectivity?
Negligible
What is the activity's impact due to changes to flooding or tidal regimes?
Negligible Negligible
What are the impacts from any hydraulic fracturing (well stimulation), including through gas and fluid migration?
Nil/Not applicable
What is the activity's impact due to changes in surface or groundwater quality and quantity?
Negligible
What is the likely level of any water impacts?

Water impacts
Negligible
Outline any proposed management controls and/or mitigation measures.
<p>Details of predicted surface water impacts and surface water management and mitigation measures are provided in Section 2.2.2 of the REF (RWC, 2024).</p> <p>Details of predicted groundwater impacts and groundwater management and mitigation measures are provided in Section 2.2.2 of the REF (RWC, 2024).</p>
Soil and stability impacts
Provide a brief description of the likely impacts to soil quality or land stability.
Soil and stability impacts are detailed in Section 2.2.3 of the REF (RW Corkerys 2024)
What is the activity's impact on the degradation of soil quality including contamination, salinisation or acidification?
Negligible
What is the activity's impact on land with high agricultural capability?
Nil/Not applicable
What is the activity's impact due to loss of soil from wind or water erosion?
Negligible
What is the activity's impact due to the loss of structural integrity of the soil?
Low adverse
What is the activity's impact due to increased land instability with high risks from landslides or subsidence?
Negligible
What is the activity's impact due to any induced seismicity or ground movements associated with fracture stimulation or injection or extraction of groundwater?
Negligible
What is the likely level of any impacts?
Negligible
Outline any proposed management controls and/or mitigation measures.
Soil and stability impacts are detailed in Section 2.2.3 of the REF (RW Corkerys 2024)
Noise and vibration impacts
Provide a brief description of the likely noise and/or vibration impacts.
Noise and vibration impacts and mitigation are detailed in Section 2.2.4 of the REF (RW Corkery 2024).
What is the likely level of any impacts?
Negligible

Noise and vibration impacts
Outline any proposed management controls and/or mitigation measures.
Noise and vibration impacts and mitigation are detailed in Section 2.2.4 of the REF (RW Corkery 2024).
Coastal locations and processes
Provide a brief description of likely impacts on coastal environments, coastal processes and coastal hazards.
The REF Area is not located in proximity to the coast and the proposed activities would not affect coastal processes or hazards.
What is the likely level of any impacts?
Nil/Not applicable
Outline any proposed management controls and/or mitigation measures.
N/A
Hazardous substances and chemicals
Provide a brief description of likely impacts associated with the use, generation, storage or transport of hazardous substances or chemicals.
Section 2.2.6 of the REF (RW Corkery 2024) details the potential impacts and management.
What is the likely level of the impact associated with the use, generation, storage or transport of hazardous substances or chemicals?
Negligible
Outline any proposed management controls and/or mitigation measures.
Management measures are detailed in Section 2.2.6.2 of the REF (RW Corkery, 2024).
Wastes and emissions
Provide a brief description of likely impacts to the environment from the generation or disposal of gaseous, liquid or solid wastes or emissions.
Potential impacts are detailed in Section 2.2.7.1 of the REF (RW Corkery , 2024)
Provide a brief description of likely impacts on areas sensitive to this type of impact.
Potential impacts are detailed in Section 2.2.7.1 of the REF (RW Corkery , 2024)
What is the likely level of the impacts?
Negligible
Outline any proposed management controls and/or mitigation measures.
Management measures are detailed in Section 2.2.7.2 of the REF (RW Corkery, 2004).
Vegetation
Provide a brief description of any vegetation clearing or modification and the likely impacts to the environment.

Vegetation
Impacts are detailed in Section 2.2.8.1 of the REF (RW Corkery, 2024).
What is the likely level of the impacts?
High adverse
Outline any proposed management controls and/or mitigation measures.
Management and mitigation measures are detailed in Section 2.2.8.2 of the REF (RW Corkery, 2024).
Threatened species
Provide a brief description of any likely impacts to threatened fauna and flora species.
AREA (2024a) determined that the Project would not have impacts on Threatened Ecological Communities (TECs), threatened flora, or threatened fauna. Therefore, the Project would not generate any species credits.
What is the likely level of the impacts?
Negligible
Outline any proposed management controls and/or mitigation measures.
The following management and mitigation measures would be implemented to minimise impacts to flora and fauna. <ul style="list-style-type: none"> • Pre-clearing inspections would be undertaken by a qualified ecologist, during which, exclusion zones would be determined and hollow bearing trees identified. • Weeds, pests and disease would be regularly monitored and inspected. • Establish nestboxes and/or create tree hollows to compensate for any loss of large hollows as required.
Area of outstanding biodiversity value (AOBV) / Critical habitat
Provide a brief description of any likely impacts to AOBV/critical habitat.
No areas of outstanding biodiversity value or critical habitats occur within the Assessment Area (AREA 2024a).
What is the likely level of the impacts?
Outline any proposed management controls and/or mitigation measures.
Endangered ecological community or critically endangered ecological community
Is the activity likely to have an adverse effect on an endangered ecological community or critically endangered ecological community? Select as relevant:
N/A
Provide a brief description of any impacts.
No endangered, critically endangered, or threatened ecological communities occur within the Assessment Area (AREA 2024a).
What is the likely level of the impacts?

Endangered ecological community or critically endangered ecological community
Nil/Not applicable
Outline any proposed management controls and/or mitigation measures.
As there are no endangered, critically endangered, or threatened ecological communities within the Assessment Area, no management and mitigation measures are required.
Habitat of a threatened species or ecological community
Is the activity likely to have an adverse effect on the habitat of a threatened species or ecological community (including protected aquatic species)? Select as relevant:
N/A
Describe the impacts.
No threatened species or ecological communities were identified in the Assessment Area, therefore any vegetation disturbance would not have impacts on their habitat (AREA 2024a). A small area of approximately 3.3 hectares of rocky habitat would be impacted by the Project. The <i>Acacia curranii</i> (Curly-bark Wattle) has the habitat constraints of rocky slopes, however, was determined not to occur (AREA 2024a).
What is the likely level of the impacts?
Negligible
Outline any proposed management controls and/or mitigation measures.
The Project has been designed to minimise the effects on rocky habitat, as a precautionary approach. As there are no threatened species or ecological communities identified in the Assessment Area, no additional management and mitigation measures are proposed.
Key threatening process
Provide a brief description of whether the activity will constitute, or form part of, a key threatening process - or is likely to increase the impact of a key threatening process.
The Project would involve the clearing of 33.4 ha of native vegetation and the clearing of approximately 4.2ha of non-native vegetation, as well as the removal of several hollow bearing trees. This clearing would be offset using ecosystem credits, however, would still result in immediate changes to the environment. The proposed vegetation clearing is not expected to have any impacts on threatened species, or threatened ecological communities.
What is the likely level of any impacts?
Medium adverse
Outline any proposed management controls and/or mitigation measures.
The following management and mitigation measures would be implemented to minimise the impacts of the Project regarding key threatening processes. . All hollow-bearing trees would be inspected prior to removal and any nesting or roosting fauna would be encouraged to escape or would be relocated, as required. An ecologist or spotter/catcher would be present removal is occurring. . Tree trunks would be retained for use in rehabilitation activities. Smaller vegetation would be mulched and

Key threatening process

similarly used for rehabilitation activities.

- Reuse fallen timber for habitat.

- Compensate for the loss of large hollows using nest-boxes or creating tree hollows.

Barriers to movement of fauna

Provide a brief description regarding the potential of the activity to endanger, displace or disturb fauna or create a barrier to their movement.

The Project would not have an impact on habitat connectivity in the vicinity of the Assessment Area, as the connectivity is good with vegetation largely intact and continuous (AREA 2024a). There are no wildlife corridors that would be impacted by the Project. Therefore, it is not anticipated that the Project would result in any significant barriers to the movement of fauna (AREA 2024a).

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

As the Project would not impact any wildlife corridors or habitat connectivity, no management and mitigation measures are required.

Ecological and biosecurity impacts

Is the activity likely to have any adverse ecological or biosecurity impacts? Select as relevant:

N/A

Provide a brief description of any impacts.

The Project would result in the clearing of 33.4 hectares of native vegetation and would therefore impact ecological communities within the Assessment Area. However, AREA (2024a) determined that the impact would not be significant due to the well-established and continuous vegetation surrounding the Assessment Area, as well as the lack of threatened species and communities.

The implementation of the management and mitigation measures discussed below ensure the Project would not be likely to cause a biosecurity risk or introduce genetically modified organisms (AREA 2024a). It also would not be likely to cause a significant bushfire risk.

What is the likely level of any impacts?

Nil/Not applicable
Low adverse

Outline any proposed management controls and/or mitigation measures.

As there are no areas of outstanding biodiversity value or critical habitat within the Assessment Area, no management and mitigation measures are required.

Community resources

Describe whether the activity is likely to degrade or significantly increase the demand for services and infrastructure resources.

An analysis of impacts is detailed in Section 2.3.1.1 of the REF (RW Corkery, 2024)

Community resources

Describe whether the activity is likely to result in any diversion of resources to the detriment of other communities or natural systems.

An analysis of impacts is detailed in Section 2.3.1.1 of the REF (RW Corkery, 2024)

What is the likely level of the impact?

Negligible

Outline any proposed management controls and/or mitigation measures.

Peel Mining would implement the following mitigation strategies to manage potential community impacts associated with the Project.

- Ensure that workers are accommodated at the Mallee Bull Exploration Project site, where practicable.

- Ensure that a shuttle bus is provided to transport workers between the Mallee Bull Exploration project site and the REF Area.

Natural resources

Describe any likely impacts that would disrupt, deplete or destroy natural resources.

Analysis of impacts is detailed in Section 2.3.2.1 of the REF (RW Corkery, 2024).

Describe whether the activity is likely to disrupt existing activities which rely upon natural resources, including forestry, farming or extractive industries (or will reduce options for future activities).

Analysis of impacts is detailed in Section 2.3.2.1 of the REF (RW Corkery, 2024).

Describe whether the activity is likely to result in the degradation of any area reserved for conservation purposes.

Analysis of impacts is detailed in Section 2.3.2.1 of the REF (RW Corkery, 2024).

What is the likely level of the impact?

Low adverse

Outline any proposed management controls and/or mitigation measures.

To avoid, minimise and mitigate potential impacts to natural resources associated with the Project, Peel Mining would implement the management and mitigation measures committed to throughout this document.

Social impacts

Describe whether the activity is likely to result in a change to the demographic structure of the community, including changes to the workforce or industry structure of the area/region.

Analysis of social impacts is detailed in Section 2.4.1.1 of the REF (RW Corkery, 2024).

Describe whether the activity is likely to have an environmental impact that may cause substantial change or disruption to the community, including loss of facilities, reduced links to other communities or loss of community identity.

Analysis of social impacts is detailed in Section 2.4.1.1 of the REF (RW Corkery, 2024).

Describe whether the activity is likely to result in some individuals or communities being significantly

Social impacts

disadvantaged, including a change in the level of demand for community resources (e.g. community facilities / services, and labour force).

Analysis of social impacts is detailed in Section 2.4.1.1 of the REF (RW Corkery, 2024).

Describe whether the activity likely to result in any impacts on the health, safety, privacy or welfare of individuals or communities because of factors such as pollution, odour, noise, vibration, lighting, visual impacts, etc.

Analysis of social impacts is detailed in Section 2.4.1.1 of the REF (RW Corkery, 2024).

Describe if the activity is likely to have any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations.

Analysis of social impacts is detailed in Section 2.4.1.1 of the REF (RW Corkery, 2024).

What is the likely level of any social impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Aboriginal heritage-related management and mitigation measures are outlined in Section 2.4.5.2 of the REF (RW Corkery, 2024)

Economic impacts

Provide a brief description of any likely economic impacts.

It is anticipated that the Project would generate a temporary positive economic impact in the Cobar region from activities including the purchase of consumables, and spending on local goods and services, and the employment of between 15 and 30 people during the construction and exploration phases respectively.

What is the likely level of any impacts?

Positive

Outline any proposed management controls and/or mitigation measures.

Peel Mining would implement the following management and mitigation measures to ensure that positive economic impacts associated with the Project are maximised.

- Ensure that employees and contractors are preferentially selected from local community centres, where practicable.

- Ensure that consumables are preferentially purchased from local suppliers, where practicable.

Heritage impacts

Describe whether the activity is likely to cause impacts on localities, places, landscapes, buildings or archaeological relics of heritage significance.

There are no sites of historic heritage value within the REF Area. As a result, the proposed activities would not adversely impact on historic heritage.

What is the likely level of the impact?

Heritage impacts
Nil/Not applicable
Outline any proposed management controls and/or mitigation measures.
No management and mitigation measures targeting potential historic heritage impacts are proposed to be implemented.
Aesthetic impacts
Describe whether the activity is likely to cause impacts on the visual or scenic landscape, including any lighting, venting or flaring of gas.
The proposed disturbance areas are set well back from the only publicly accessible vantage point on Shuttleton Road and are confined between ridge lines with elevations of up to 400m AHD. None of the proposed activities would be visible from surrounding residences. As a result, the visual and aesthetic impacts of the Project would be negligible.
What is the likely level of any impacts?
Negligible
Outline any proposed management controls and/or mitigation measures.
No management and mitigation measures targeting potential visual and aesthetic impacts are proposed to be implemented.
Cultural impacts
Describe the likely impacts associated with any disturbance of the ground surface or any culturally modified trees.
Analysis of impacts is detailed in Section 2.4.5.1 of the REF (RW Corkery 2024).
Describe whether the activity will affect known Aboriginal objects or Aboriginal places.
Analysis of impacts is detailed in Section 2.4.5.1 of the REF (RW Corkery 2024).
Describe whether the activity is located in areas where landscape features indicate the presence of Aboriginal objects.
Analysis of impacts is detailed in Section 2.4.5.1 of the REF (RW Corkery 2024).
Describe whether the activity will affect areas where native title exists or land subject to native title claims, indigenous land use agreements or joint management agreements.
Analysis of impacts is detailed in Section 2.4.5.1 of the REF (RW Corkery 2024).
What is the likely level of any cultural impacts?
Low adverse
Outline any proposed management controls and/or mitigation measures.
Management and mitigation measures are detailed in Section 2.4.5.2 of the REF (RW Corkery 2024).
Land use impacts
Provide a brief description of any impacts on land use including any major changes to land use and/or curtailment of other beneficial land uses.

Land use impacts
Analysis of impacts are detailed in Section 2.4.6.1 of the REF (RW Corkery 2024)
What is the likely level of any impacts?
Negligible
Outline any proposed management controls and/or mitigation measures.
<p>Peel Mining would implement the following management and mitigation measures to minimise land use impacts.</p> <ul style="list-style-type: none"> • Undertake rehabilitation of the REF Area to achieve rehabilitation objectives and rehabilitation completion criteria outlined in Appendix 9 of the REF (RW Corkery's) • Undertake rehabilitation of disturbed areas progressively, where possible. • Ensure that the limit of disturbance for the Project is clearly delineated and communicated to site personnel.
Transportation impacts
Provide a brief description of any significant impacts on transportation.
Analysis of impacts are detailed in Section 2.4.7.1 of the REF (RW Corkery's 2024)
What is the likely level of any impacts?
Negligible
Outline any proposed management controls and/or mitigation measures.
Mitigation measures are detailed in Section 2.4.7.2 of the REF (RW Corkery 2024).
Consistency with applicable local strategic planning statements, regional strategic plans or district strategic plans
Provide a brief description of any relevant local strategic planning statements, regional strategic plans or district strategic plans and whether the proposed activity is consistent with these.
Analysis of impacts are detailed in Section 2.4.8.1 of the REF (RW Corkery 2024).
What is the likely level of any impacts?
Positive
Outline any proposed management controls and/or mitigation measures.
No additional management and mitigation measures are proposed in response to available local strategies and plans.
Matters of national environmental significance
Is the activity likely to impact on any of the following matters of national environmental significance under the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>? Select as relevant:
N/A
Provide further details relating to any impacts on matters of national environmental significance.

Matters of national environmental significance
N/A
What is the likely level of any impacts?
Nil/Not applicable
Outline any proposed management controls and/or mitigation measures.
No additional management and mitigation measures are proposed as the Project would not impact any matters of national environmental significance.
Cumulative impacts
Is the activity likely to result in cumulative environmental effects with other existing or likely future activities?
No
Describe the impact.
The potential for cumulative impacts on various environmental aspects including air quality (Section 2.2.1), groundwater (Section 2.2.2), biodiversity (Sections 2.2.8 – 2.2.15), and traffic (Section 2.4.7) have been assessed throughout this document. No significant adverse cumulative environmental or social impacts are expected to arise as a result of the Project.
What is the likely level of any impacts?
Negligible
Outline any proposed management controls and/or mitigation measures.
No additional management and mitigation measures are proposed to manage potential cumulative environmental or social impacts associated with the Project.
Environmental assessment conclusions
Having regard to the potential significance of the individual impacts of the proposed activity (as well as the aggregation of all the impacts of the activity) determine whether (select as relevant):
the activity is not likely to significantly affect the environment, including threatened species or ecological communities (or their habitats), or declared areas of outstanding biodiversity value/critical habitat.
Provide any further details as relevant.
As per REF (RW Corkery 2024).

Attachment 4 – List of supporting documents

- APO0001712_Submission Report_24 Oct 2024 1:07pm.pdf
- AINST0015327Survey Results.pdf
- 20240920 Wirlong REF.pdf
- 20240920 Wirlong REF.pdf
- 20240920 Wirlong REF.pdf
- APO0001712_Submission Report_17 Sep 2024 12:51pm.pdf
- Appendix 8 biodiversity-development-assessment-report_Wirlong_Peel Mining_Feb2024.pdf
- Appendix 9 V3.1_AREAAEnv_Wirlong_ACHAR.pdf
- Appendix 9 V3.1_AREAAEnv_Wirlong_ACHAR.pdf
- Appendix 8 biodiversity-development-assessment-report_Wirlong_Peel Mining_Feb2024.pdf
- Appendix 10_Agricultural Impact Statement_20240214.pdf
- RE: APO0001712 | APO0001712 - Wirlong Exploration Project - PEEL (CSP) PTY LTD.eml
- image002.png
- RE: APO0001712 | APO0001712 - Wirlong Exploration Project - PEEL (CSP) PTY LTD.eml
- image005.png
- message.eml
- APO0001712_Submission Report_21 Feb 2024 8:29pm.pdf

APO Outcome Report:20240722