Resources Regulator
Department of Regional NSW

Thursday 16 May 2024

Assessable Prospecting Operation Application Decision Briefing and Review of Environmental Factors

Maules Creek | APO0001700

Decision Maker	Christine Fawcett
Prepared by	Mark Buchan
Title	CL 375 (1973)
Authorised Representative	[redacted]
Project name	Maules Creek
Activity type	Non-Complying Exploration Activity

Issue

[redacted] has sought an activity approval in respect of Maules Creek, within CL 375 (1973), at Maules Creek mine.

Pursuant to section 2.8 of *State Environmental Planning Policy (Resources and Energy) 2021*, development for the purposes of exploration (i.e. prospecting) may be carried out without development consent.

An authority issued under the *Mining Act 1992* is subject to a condition that the authority holder must not carry out an assessable prospecting operation on land over which the authority is granted unless an activity approval has been obtained for the carrying out of the assessable prospecting operation.

As assessable prospecting operations require approval by the Minister under the *Mining Act 1992*, a duty is imposed on determining authorities under Part 5 of the *Environmental Planning and Assessment Act 1979* to:

- examine and take into account to the fullest extent possible all matters affecting or likely to affect the environmental by reason of the proposed activity; and
- if the activity is likely to significantly affect the environment, examine and consider an environmental impact statement in respect of the activity.

The Minister is the determining authority for all exploration activities subject to environmental assessment under Part 5 of the *Environmental Planning and Assessment Act 1979*.

The Decision Maker, under delegation from the Minister, is required to determine whether:

- the proposed activity is not likely to have a significant impact on the environment and is not likely to significantly affect threatened species, populations or ecological communities (or their habitats) or impact biodiversity values and can be approved,
- the proposed activity is likely to have a significant impact on the environment and therefore an Environmental Impact Statement (EIS) is required,

- the proposed activity will be carried out in a declared area of outstanding biodiversity value and is likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values, meaning a Species Impact Statement (SIS) and/or Biodiversity Development and Assessment Report (BDAR) is required, or
- there is insufficient information to make a decision.

Background

This exploration activity approval is being sought under Mining Lease CL 375 (granted 4/06/1991 & expiry 4/06/2033) to undertake assessable prospecting operations.

Proposed exploration activity

The proposed exploration activity (including details of the site, the existing environment, impact thresholds and impact management) are described in *APPLICATION TO UNDERTAKE ASSESSABLE PROSPECTING OPERATIONS Maules Creek* report and the information provided in support of the application.

The objective of the proposed exploration activity is to carry out works on, or to remove samples from, land for the purpose of testing the resource quality and/or quantity of the land. This is consistent with the objects of the *Mining Act 1992*, including to facilitate the discovery and development of resources in NSW.

No alternatives options to the proposed activity were considered.

Security

The application triggered a review of the assessed deposit to secure funding for the fulfilment of obligations if Maules Creek is approved.

An RCE was not found, however the applicant indicated that rehabilitation would likely exceed $30,000.

Assessment of Impacts (Non-complying exploration activity)

An assessment of the significance of environmental impacts associated with the proposed activity was undertaken in accordance with the Department of Planning and Environment's "*Guidelines for Division 5.1 assessments*". The results of this assessment are documented in the attached Review of Environmental Factors document.

The assessment has determined that 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.

Additional terms (if approved)

No additional terms are required.

Summary

Based on the information provided in the *APPLICATION TO UNDERTAKE ASSESSABLE PROSPECTING OPERATIONS Maules Creek* report, and the Review of Environmental Factors document, the proposed activity has been assessed as is not likely to have a significant impact on the environment and therefore an EIS is not required.

The application has been assessed and the recommendation is to Approve the activity.

Certification

I, Mark Buchan, certify that I have reviewed and endorsed the contents of the attached Review of Environmental Factors document and, to the best of my knowledge, it is in accordance with the *Environmental Planning and Assessment Act 1979,* the Environmental Planning and Assessment Regulation 2021 and the Guidelines approved under clause 170 of the EP&A Regulation, and the information it contains is neither false nor misleading.

Recommendation

The Decision Maker, under delegation from the Minister:

- Assesses the environmental impact of Maules Creek and determines that the activity is is not likely to have a significant impact on the environment and therefore an EIS is not required under Part 5 of the *Environmental Planning and Assessment Act 1979*.
- Approve the activity pursuant to the *Mining Act 1992*.

Review of Environmental Factors document

Criteria	Air Impacts: Air quality impacts (including impacts on nearby sensitive receptors).		
Potential impacts	The Activities are unlikely to impact air quality on nearby sensitive receivers. Any potential impacts to air quality (e.g. wind erosion and dust from disturbed soil, including from driving on access tracks and from operating machinery) would be mitigated using the controls described below.		
Proposed management controls	• The Activities would not involve the venting or flaring of gas. • Any surface disturbance associated with the Activities would be minimised as far as practicable. • If required, drilling would utilise water injection methods to mitigate dust production. • Speed limits when driving on unsealed roads and unsealed access tracks would be reduced where required, e.g. on windy and dry days. • Air quality management for the Activities would follow the Exploration Code of Practice: Environmental Management. • The Activities are not considered high dust generating activities.		
Duration	approximately 8 weeks		
Application ranking	null,2		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	

Do the operations comply with standards, plans, policies?	Yes		
Criteria	Air Impacts: Greenhouse or ozone impacts.		
Potential impacts	The Activities are unlikely to impact air quality on nearby sensitive receivers. Any potential impacts to air quality (e.g. wind erosion and dust from disturbed soil, including from driving on access tracks and from operating machinery) would be mitigated using the controls described below.		
Proposed management controls	• The Activities would not involve the venting or flaring of gas. • Any surface disturbance associated with the Activities would be minimised as far as practicable. • If required, drilling would utilise water injection methods to mitigate dust production. • Speed limits when driving on unsealed roads and unsealed access tracks would be reduced where required, e.g. on windy and dry days. • Air quality management for the Activities would follow the Exploration Code of Practice: Environmental Management. • The Activities are not considered high dust generating activities.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Air Impacts: Additional impacts on areas with degraded air quality.		
Potential impacts	The Activities are unlikely to impact air quality on nearby sensitive receivers. Any potential impacts to air quality (e.g. wind erosion and dust from disturbed soil, including from driving on access tracks and from operating machinery) would be mitigated using the controls described below.		
Proposed management controls	• The Activities would not involve the venting or flaring of gas. • Any surface disturbance associated with the Activities would be minimised as far as practicable. • If required, drilling would utilise water injection methods to mitigate dust production. • Speed limits when driving on unsealed roads and unsealed access tracks would be reduced where required, e.g. on windy and dry days. • Air quality management for the Activities would follow the Exploration Code of Practice: Environmental Management. • The Activities are not considered high dust generating activities.		
Duration	approximately 8 weeks		
Application ranking	null,2		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from the use of surface or groundwater.		
Potential impacts	The Activities do not propose to utilise surface water. Water required for the Activities would be sourced from an onsite, in-pit dams and transferred to each drill site via a mine site water cart, as required. Water would be transferred and recycled between sites until new water is required. A maximum of approximately 0.27 megalitres of water resources would be required for the Activities. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks.		

Proposed management controls	required. • Sediment controls would be installed as required. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Maules Creek Coal Mine Water Management Plan, the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Purposeful avoidance of any drainage lines that may be located proximal to the Activities. • Appropriate water management practices would be implemented in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from storage of water		
Potential impacts	The Activities do not propose to utilise surface water. Water required for the Activities would be sourced from an onsite, in-pit dams and transferred to each drill site via a mine site water cart, as required. Water would be transferred and recycled between sites until new water is required. A maximum of approximately 0.27 megalitres of water resources would be required for the Activities. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks.		
Proposed management controls	required. • Sediment controls would be installed as required. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Maules Creek Coal Mine Water Management Plan, the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Purposeful avoidance of any drainage lines that may be located proximal to the Activities. • Appropriate water management practices would be implemented in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	2,null		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from changes to natural water bodies, wetlands or runoff patterns.		
Potential impacts	The Activities do not propose to utilise surface water. Water required for the Activities would be sourced from an onsite, in-pit dams and transferred to each drill site via a mine site water cart, as required. Water would be transferred and recycled between sites until new water is required. A maximum of approximately 0.27 megalitres of water resources would be required for the Activities. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks.		
Proposed management controls	required. • Sediment controls would be installed as required. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Maules Creek Coal Mine Water Management Plan, the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Purposeful avoidance of any drainage lines that may be located proximal to the Activities. • Appropriate water management practices would be implemented in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		

Application ranking	2,null		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from aquifer interference, including changes to inter-aquifer connectivity.		
Potential impacts	The Activities do not propose to utilise surface water. Water required for the Activities would be sourced from an onsite, in-pit dams and transferred to each drill site via a mine site water cart, as required. Water would be transferred and recycled between sites until new water is required. A maximum of approximately 0.27 megalitres of water resources would be required for the Activities. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks.		
Proposed management controls	required. • Sediment controls would be installed as required. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Maules Creek Coal Mine Water Management Plan, the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Purposeful avoidance of any drainage lines that may be located proximal to the Activities. • Appropriate water management practices would be implemented in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from changes to flooding or tidal regimes.		
Potential impacts	The Activities do not propose to utilise surface water. Water required for the Activities would be sourced from an onsite, in-pit dams and transferred to each drill site via a mine site water cart, as required. Water would be transferred and recycled between sites until new water is required. A maximum of approximately 0.27 megalitres of water resources would be required for the Activities. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks.		
Proposed management controls	required. • Sediment controls would be installed as required. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Maules Creek Coal Mine Water Management Plan, the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Purposeful avoidance of any drainage lines that may be located proximal to the Activities. • Appropriate water management practices would be implemented in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	2,null		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain

Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from changes in surface or groundwater quality and quantity.		
Potential impacts	The Activities do not propose to utilise surface water. Water required for the Activities would be sourced from an onsite, in-pit dams and transferred to each drill site via a mine site water cart, as required. Water would be transferred and recycled between sites until new water is required. A maximum of approximately 0.27 megalitres of water resources would be required for the Activities. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks.		
Proposed management controls	required. • Sediment controls would be installed as required. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Maules Creek Coal Mine Water Management Plan, the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Purposeful avoidance of any drainage lines that may be located proximal to the Activities. • Appropriate water management practices would be implemented in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Soil & Stability Impacts: Degradation of soil quality (including contamination, salinisation or acidification).		
Potential impacts	The Activities are unlikely to impact soil quality or land stability. Vegetation clearance and surface disturbance would be minimised as much as practicable. Appropriate erosion and sediment controls would be installed as required, consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) at each drill site. The erosion and sediment controls would remain in place at all sites until the risk of erosion has been reduced to negligible levels through on-site rehabilitation. No acid sulfate soils are mapped in proximity to the Activities.		
Proposed management controls	• Vegetation clearance and surface disturbance would be minimised as much as practicable. • Access for the Activities would occur via established access tracks where possible. Exploration sites where no tracks exist would require temporary access tracks which would involve slashing, light grading or driving on paddocks to the desired exploration site location. Any new access tracks would be selected to link drill sites with existing access tracks via the shortest route that minimises environmental impacts. Any access tracks will be slashed in, and personnel will not be able to deviate off these areas unless internal approval is provided. All access tracks would have a maximum width of 4 metres (m). • Appropriate erosion and sediment controls would be installed as required, consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) at each drill hole. The erosion and sediment controls would remain in place at all sites until the risk of erosion has been reduced to negligible levels through on site rehabilitation. • Above surface tanks would be utilised for drilling, i.e. no in-ground sumps would be required. • Fuel required for the Activities would be contained within compliant fuel cells for use in filling up on-site equipment (e.g. drill rig, compressor). • Adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No

How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Soil & Stability Impacts: Impacts on land with high agricultural capability.		
Potential impacts	The Activities are unlikely to impact soil quality or land stability. Vegetation clearance and surface disturbance would be minimised as much as practicable. Appropriate erosion and sediment controls would be installed as required, consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) at each drill site. The erosion and sediment controls would remain in place at all sites until the risk of erosion has been reduced to negligible levels through on-site rehabilitation. No acid sulfate soils are mapped in proximity to the Activities.		
Proposed management controls	• Vegetation clearance and surface disturbance would be minimised as much as practicable. • Access for the Activities would occur via established access tracks where possible. Exploration sites where no tracks exist would require temporary access tracks which would involve slashing, light grading or driving on paddocks to the desired exploration site location. Any new access tracks would be selected to link drill sites with existing access tracks via the shortest route that minimises environmental impacts. Any access tracks will be slashed in, and personnel will not be able to deviate off these areas unless internal approval is provided. All access tracks would have a maximum width of 4 metres (m). • Appropriate erosion and sediment controls would be installed as required, consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) at each drill hole. The erosion and sediment controls would remain in place at all sites until the risk of erosion has been reduced to negligible levels through on site rehabilitation. • Above surface tanks would be utilised for drilling, i.e. no in-ground sumps would be required. • Fuel required for the Activities would be contained within compliant fuel cells for use in filling up on-site equipment (e.g. drill rig, compressor). • Adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Soil & Stability Impacts: Loss of soil from wind or water erosion.		
Potential impacts	The Activities are unlikely to impact soil quality or land stability. Vegetation clearance and surface disturbance would be minimised as much as practicable. Appropriate erosion and sediment controls would be installed as required, consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) at each drill site. The erosion and sediment controls would remain in place at all sites until the risk of erosion has been reduced to negligible levels through on-site rehabilitation. No acid sulfate soils are mapped in proximity to the Activities.		

Proposed management controls	• Vegetation clearance and surface disturbance would be minimised as much as practicable. • Access for the Activities would occur via established access tracks where possible. Exploration sites where no tracks exist would require temporary access tracks which would involve slashing, light grading or driving on paddocks to the desired exploration site location. Any new access tracks would be selected to link drill sites with existing access tracks via the shortest route that minimises environmental impacts. Any access tracks will be slashed in, and personnel will not be able to deviate off these areas unless internal approval is provided. All access tracks would have a maximum width of 4 metres (m). • Appropriate erosion and sediment controls would be installed as required, consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) at each drill hole. The erosion and sediment controls would remain in place at all sites until the risk of erosion has been reduced to negligible levels through on site rehabilitation. • Above surface tanks would be utilised for drilling, i.e. no in-ground sumps would be required. • Fuel required for the Activities would be contained within compliant fuel cells for use in filling up on-site equipment (e.g. drill rig, compressor). • Adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Soil & Stability Impacts: Loss of structural integrity of the soil.		
Potential impacts	The Activities are unlikely to impact soil quality or land stability. Vegetation clearance and surface disturbance would be minimised as much as practicable. Appropriate erosion and sediment controls would be installed as required, consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) at each drill site. The erosion and sediment controls would remain in place at all sites until the risk of erosion has been reduced to negligible levels through on-site rehabilitation. No acid sulfate soils are mapped in proximity to the Activities.		
Proposed management controls	• Vegetation clearance and surface disturbance would be minimised as much as practicable. • Access for the Activities would occur via established access tracks where possible. Exploration sites where no tracks exist would require temporary access tracks which would involve slashing, light grading or driving on paddocks to the desired exploration site location. Any new access tracks would be selected to link drill sites with existing access tracks via the shortest route that minimises environmental impacts. Any access tracks will be slashed in, and personnel will not be able to deviate off these areas unless internal approval is provided. All access tracks would have a maximum width of 4 metres (m). • Appropriate erosion and sediment controls would be installed as required, consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) at each drill hole. The erosion and sediment controls would remain in place at all sites until the risk of erosion has been reduced to negligible levels through on site rehabilitation. • Above surface tanks would be utilised for drilling, i.e. no in-ground sumps would be required. • Fuel required for the Activities would be contained within compliant fuel cells for use in filling up on-site equipment (e.g. drill rig, compressor). • Adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	

Do the operations comply with standards, plans, policies?	Yes		
Criteria	Soil & Stability Impacts: Increased land instability with high risks from land slides or subsidence.		
Potential impacts	The Activities are unlikely to impact soil quality or land stability. Vegetation clearance and surface disturbance would be minimised as much as practicable. Appropriate erosion and sediment controls would be installed as required, consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) at each drill site. The erosion and sediment controls would remain in place at all sites until the risk of erosion has been reduced to negligible levels through on-site rehabilitation. No acid sulfate soils are mapped in proximity to the Activities.		
Proposed management controls	• Vegetation clearance and surface disturbance would be minimised as much as practicable. • Access for the Activities would occur via established access tracks where possible. Exploration sites where no tracks exist would require temporary access tracks which would involve slashing, light grading or driving on paddocks to the desired exploration site location. Any new access tracks would be selected to link drill sites with existing access tracks via the shortest route that minimises environmental impacts. Any access tracks will be slashed in, and personnel will not be able to deviate off these areas unless internal approval is provided. All access tracks would have a maximum width of 4 metres (m). • Appropriate erosion and sediment controls would be installed as required, consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) at each drill hole. The erosion and sediment controls would remain in place at all sites until the risk of erosion has been reduced to negligible levels through on site rehabilitation. • Above surface tanks would be utilised for drilling, i.e. no in-ground sumps would be required. • Fuel required for the Activities would be contained within compliant fuel cells for use in filling up on-site equipment (e.g. drill rig, compressor). • Adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Noise & Vibration Impacts: Results in increased noise or vibration.		
Potential impacts	The Activities would occur entirely on Whitehaven-owned land. Any noise from vehicles, drilling rigs, plant and machinery impacting on nearby sensitive receivers would be managed and mitigated through implementing the controls and measures below.		
Proposed management controls	• The Activities would be undertaken on a working roster of nine days on, five days off. On the days explorations works are proposed, the Activities would be undertaken between the hours of 6:00 am to 6:00 pm. • Work outside of standard hours as prescribed in the Exploration Code of Practice: Environmental Management would only occur where acceptable noise criteria can be met, being the Rating Background Level (RBL) +5dB(A)/(15 min) at any residence or sensitive receiver. • Noise management would follow the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Low Adverse		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		

Criteria	Noise & Vibration Impacts: Affects sensitive receptors.		
Potential impacts	The Activities would occur entirely on Whitehaven-owned land. Any noise from vehicles, drilling rigs, plant and machinery impacting on nearby sensitive receivers would be managed and mitigated through implementing the controls and measures below.		
Proposed management controls	• The Activities would be undertaken on a working roster of nine days on, five days off. On the days explorations works are proposed, the Activities would be undertaken between the hours of 6:00 am to 6:00 pm. • Work outside of standard hours as prescribed in the Exploration Code of Practice: Environmental Management would only occur where acceptable noise criteria can be met, being the Rating Background Level (RBL) +5dB(A)/(15 min) at any residence or sensitive receiver. • Noise management would follow the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Low Adverse		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Coastal Location & Processes: Affects coastal processes and coastal hazards, including those under projected climate change conditions.		
Potential impacts	The Activities would not affect coastal processes and hazards, including those under projected climate change conditions. The exploration activities are located more the 180 kilometres (km) west of any coastal processes and hazards.		
Proposed management controls	No management controls and/or mitigation measures for impacts to coastal processes are proposed as this is not considered applicable to the Activities.		
Duration	approximately 8 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Hazardous substances or chemicals: Impacts associated with the use, generation, storage or transport of hazardous substances or chemicals.		
Potential impacts	The Activities are unlikely to result in any impacts associated with the use, generation, storage or transport of hazardous substances or chemicals. Any hazardous substances or chemicals would be managed and mitigated through implementing the controls and measures below.		
Proposed management controls	• Fuel, drilling chemicals and other hydrocarbons would be contained on site within fuel cells and appropriate containers. • Spill events within the exploration activity areas are unlikely as appropriate handling mechanisms for hazardous substances would be undertaken. • Notwithstanding, adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities. • A list of any chemicals and hydrocarbons would be maintained by Whitehaven and subcontractors.		
Duration	approximately 8 weeks		
Application ranking	Negligible		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts to the environment resulting from the generation or disposal of wastes.		
Potential impacts	The Activities are unlikely to result in any environmental impacts associated with the generation or disposal of gaseous, liquid or solid wastes or emissions. Any environmental impacts associated with the generation or disposal of gaseous, liquid or solid wastes or emissions would be managed and mitigated through implementing the controls and measures below.		
Proposed management controls	• Fuel, drilling chemicals and other hydrocarbons would be contained on site within fuel cells and appropriate containers. • Spill events within the exploration activity areas are unlikely as appropriate handling mechanisms for hazardous substances would be undertaken. • Notwithstanding, adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities. • A list of any chemicals and hydrocarbons would be maintained by Whitehaven and subcontractors. • Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Vegetation clearance and surface disturbance would be minimised as much as practicable. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • General domestic waste products and packaging generated during the Activities would be collected and appropriately stored or removed from the area associated with the Activities at the end of each shift. • Due to the lack of facilities in the field, mobile toilets will be provided. These would be located within the drill site areas and removed at the end of the Activities. • Waste and excess material would be managed in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts on drinking water catchments, wetlands, natural water bodies, riparian zones or flood prone areas.		
Potential impacts	The Activities are unlikely to impact areas sensitive to the generation or disposal of gaseous, liquid or solid wastes or emissions provided the management controls and mitigation measures outlined below are implemented.		

Proposed management controls	• Fuel, drilling chemicals and other hydrocarbons would be contained on site within fuel cells and appropriate containers. • Spill events within the exploration activity areas are unlikely as appropriate handling mechanisms for hazardous substances would be undertaken. • Notwithstanding, adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities. • A list of any chemicals and hydrocarbons would be maintained by Whitehaven and subcontractors. • Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Vegetation clearance and surface disturbance would be minimised as much as practicable. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • General domestic waste products and packaging generated during the Activities would be collected and appropriately stored or removed from the area associated with the Activities at the end of each shift. • Due to the lack of facilities in the field, mobile toilets will be provided. These would be located within the drill site areas and removed at the end of the Activities. • Waste and excess material would be managed in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts on groundwater recharge areas or areas with high water table.		
Potential impacts	The Activities are unlikely to impact areas sensitive to the generation or disposal of gaseous, liquid or solid wastes or emissions provided the management controls and mitigation measures outlined below are implemented.		
Proposed management controls	• Fuel, drilling chemicals and other hydrocarbons would be contained on site within fuel cells and appropriate containers. • Spill events within the exploration activity areas are unlikely as appropriate handling mechanisms for hazardous substances would be undertaken. • Notwithstanding, adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities. • A list of any chemicals and hydrocarbons would be maintained by Whitehaven and subcontractors. • Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Vegetation clearance and surface disturbance would be minimised as much as practicable. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • General domestic waste products and packaging generated during the Activities would be collected and appropriately stored or removed from the area associated with the Activities at the end of each shift. • Due to the lack of facilities in the field, mobile toilets will be provided. These would be located within the drill site areas and removed at the end of the Activities. • Waste and excess material would be managed in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No

How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes and Emissions: Impacts on coastlines or dunes, alpine areas, karst features or other unique landforms.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Wastes & Emissions: Impacts on erosion prone areas, areas with slopes of greater than 18 degrees.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Wastes & Emissions: Impacts on subsidence or slip areas.		
Potential impacts	The Activities are unlikely to impact areas sensitive to the generation or disposal of gaseous, liquid or solid wastes or emissions provided the management controls and mitigation measures outlined below are implemented.		

Proposed management controls	• Fuel, drilling chemicals and other hydrocarbons would be contained on site within fuel cells and appropriate containers. • Spill events within the exploration activity areas are unlikely as appropriate handling mechanisms for hazardous substances would be undertaken. • Notwithstanding, adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities. • A list of any chemicals and hydrocarbons would be maintained by Whitehaven and subcontractors. • Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Vegetation clearance and surface disturbance would be minimised as much as practicable. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • General domestic waste products and packaging generated during the Activities would be collected and appropriately stored or removed from the area associated with the Activities at the end of each shift. • Due to the lack of facilities in the field, mobile toilets will be provided. These would be located within the drill site areas and removed at the end of the Activities. • Waste and excess material would be managed in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts on areas with acid sulphate, sodic or highly permeable soils.		
Potential impacts	NA		
Proposed management controls	NA		
Duration	approximately 8 weeks		
Application ranking			
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts on areas with salinity or potential salinity problems.		
Potential impacts	The Activities are unlikely to impact areas sensitive to the generation or disposal of gaseous, liquid or solid wastes or emissions provided the management controls and mitigation measures outlined below are implemented.		

Proposed management controls	• Fuel, drilling chemicals and other hydrocarbons would be contained on site within fuel cells and appropriate containers. • Spill events within the exploration activity areas are unlikely as appropriate handling mechanisms for hazardous substances would be undertaken. • Notwithstanding, adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities. • A list of any chemicals and hydrocarbons would be maintained by Whitehaven and subcontractors. • Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Vegetation clearance and surface disturbance would be minimised as much as practicable. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • General domestic waste products and packaging generated during the Activities would be collected and appropriately stored or removed from the area associated with the Activities at the end of each shift. • Due to the lack of facilities in the field, mobile toilets will be provided. These would be located within the drill site areas and removed at the end of the Activities. • Waste and excess material would be managed in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts on areas with degraded or contaminated land.		
Potential impacts	The Activities are unlikely to impact areas sensitive to the generation or disposal of gaseous, liquid or solid wastes or emissions provided the management controls and mitigation measures outlined below are implemented.		
Proposed management controls	• Fuel, drilling chemicals and other hydrocarbons would be contained on site within fuel cells and appropriate containers. • Spill events within the exploration activity areas are unlikely as appropriate handling mechanisms for hazardous substances would be undertaken. • Notwithstanding, adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities. • A list of any chemicals and hydrocarbons would be maintained by Whitehaven and subcontractors. • Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Vegetation clearance and surface disturbance would be minimised as much as practicable. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • General domestic waste products and packaging generated during the Activities would be collected and appropriately stored or removed from the area associated with the Activities at the end of each shift. • Due to the lack of facilities in the field, mobile toilets will be provided. These would be located within the drill site areas and removed at the end of the Activities. • Waste and excess material would be managed in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No

How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts on areas with degraded or contaminated water (ground or surface).		
Potential impacts	The Activities are unlikely to impact areas sensitive to the generation or disposal of gaseous, liquid or solid wastes or emissions provided the management controls and mitigation measures outlined below are implemented.		
Proposed management controls	• Fuel, drilling chemicals and other hydrocarbons would be contained on site within fuel cells and appropriate containers. • Spill events within the exploration activity areas are unlikely as appropriate handling mechanisms for hazardous substances would be undertaken. • Notwithstanding, adequate spill prevention and oil absorbent materials for the management of spills and leaks for all chemicals, fuels and oil on-site would be readily available for the duration of the Activities. • A list of any chemicals and hydrocarbons would be maintained by Whitehaven and subcontractors. • Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. • Recirculated water and spoil from drilling activities would be managed and disposed of in accordance with the Exploration Code of Practice: Rehabilitation and by a licenced waste removal contractor. • Vegetation clearance and surface disturbance would be minimised as much as practicable. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • General domestic waste products and packaging generated during the Activities would be collected and appropriately stored or removed from the area associated with the Activities at the end of each shift. • Due to the lack of facilities in the field, mobile toilets will be provided. These would be located within the drill site areas and removed at the end of the Activities. • Waste and excess material would be managed in accordance with the Exploration Code of Practice: Environmental Management.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Vegetation: Any clearing or modification of vegetation (including impacts on wildlife corridors, remnant vegetation & habitat for species of conservation significance).		

Potential impacts	The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. The drilling for the exploration drilling program would involve the development of drill site areas up to 30 m x 30 m (approximately 900 metres squared [m2]). Site preparation works would primarily involve delineation of the proposed drill site with temporary fencing (or similar) to prevent unauthorised access, exclude stock, and ensure disturbance activities are confined within the area. Grass within the fenced areas may be slashed to minimise bushfire hazard around the working machinery and provide a clear working area for operating personnel. Ground disturbance would be limited to the area of the drill hole itself, with some levelling of drill sites required if located on steep or rough terrain. No other ground preparation/earthworks would be undertaken at the drill sites. In total, the Activities within ML 1719/CL 375 would involve a surface disturbance area (i.e. sum total of all exploration site areas) of approximately 1.3 hectares (ha). The need for vegetation clearing, however, would be reduced as a truck mounted drill rig would be utilised. This would also promote the potential for rapid re-establishment of vegetation once the Activities cease. A site selection process has been conducted to locate the sites within areas of lower potential impact for the Activities while still ensuring critical geological information can be collected. Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included ecological exclusion areas. In addition, the following has been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies.		
Proposed management controls	In addition to the above, mitigation measures that would be implemented for the duration of the Activities to avoid and/or mitigate potential impacts to vegetation include: • All access tracks are to be fully rehabilitated upon the completion of the Activities, and tracks are to be fully rehabilitated to return to their pre-activity landform. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • A follow-up inspection at each drill site would be undertaken after the Activities are complete to confirm regeneration and/or revegetation performance, determine whether any supplementary measures (e.g. seeding) is required and to confirm there are no ongoing erosion and weed risks as a result of the Activities. • Monitoring would involve monthly visual inspections (monitoring frequency may be reduced subject to progression of regeneration and/or revegetation and/or reduced erosion risk). • Additional rehabilitation measures (such as supplementary seeding) would be implemented as required.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Threatened Fauna Species: Any adverse effect on the life cycle of any threatened species such that a viable local population of the species is likely to be placed at risk of extinction.		

Potential impacts	The Activities are unlikely to have a significant impact on threatened flora and fauna species due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The Activities are unlikely to have a significant impact on threatened flora and fauna species due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The Activities would remove approximately 0.09 ha of Plant Community Type (PCT) 101 in regenerating condition and 0.28 ha of PCT 101 in derived native grassland (DNG) condition, and 0.94 ha of PCT 592 in DNG condition. PCT 101 in the study is considered to be associated with the following threatened ecological community (TEC): Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions, listed as Endangered under the BC Act. The proposal would remove 0.37 ha of this TEC. An impact assessment in accordance with Section 7.3 of the Biodiversity Conservation Act (i.e. Test of Significance) has been undertaken (Ecoplanning, 2024). Ecoplanning (2024) found that subject to mitigation measures outlined below, there will be no significant impacts to this TEC (Ecoplanning, 2024). The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. A site selection process has been conducted to locate the sites within areas of lower potential impact for the Activities while still ensuring critical geological information can be collected. Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included ecological exclusion areas. In addition, the following has been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies.
Proposed management controls	As described above, a site selection process has been conducted to locate the sites within areas of lower potential impact for the Activities while still ensuring critical geological information can be collected. Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included ecological exclusion areas. In addition, the following has been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. In addition, mitigation measures that would be implemented for the duration of the Activities to avoid and/or mitigate potential impacts to threatened species include: • Avoidance of large native trees, including Koala feed tree species. • Avoidance of hollow-bearing trees, dead stags and hollow logs. • All access tracks are to be fully rehabilitated upon the completion of the Activities, and tracks are to be fully rehabilitated to return to their pre-activity landform. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • A follow-up inspection at each drill site would be undertaken after the Activities are complete to confirm regeneration and/or revegetation performance, determine whether any supplementary measures (e.g. seeding) is required and to confirm there are no ongoing erosion and weed risks as a result of the Activities. • Monitoring would involve monthly visual inspections (monitoring frequency may be reduced subject to progression of regeneration and/or revegetation and/or reduced erosion risk). • Additional rehabilitation measures (such as supplementary seeding) would be implemented as required. Should a threatened species be identified during the Activities, work in the surrounding area would stop immediately and an appropriate ecologist engaged for advice and handling. Whitehaven would facilitate and consult with the relevant authorities in line with the ecologist's recommendations.

Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Threatened Flora Species: Any adverse effect on the life cycle of any threatened species such that a viable local population of the species is likely to be placed at risk of extinction.		
Potential impacts	The Activities are unlikely to have a significant impact on threatened flora and fauna species due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The Activities are unlikely to have a significant impact on threatened flora and fauna species due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The Activities would remove approximately 0.09 ha of Plant Community Type (PCT) 101 in regenerating condition and 0.28 ha of PCT 101 in derived native grassland (DNG) condition, and 0.94 ha of PCT 592 in DNG condition. PCT 101 in the study is considered to be associated with the following threatened ecological community (TEC): Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions, listed as Endangered under the BC Act. The proposal would remove 0.37 ha of this TEC. An impact assessment in accordance with Section 7.3 of the Biodiversity Conservation Act (i.e. Test of Significance) has been undertaken (Ecoplanning, 2024). Ecoplanning (2024) found that subject to mitigation measures outlined below, there will be no significant impacts to this TEC (Ecoplanning, 2024). The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. A site selection process has been conducted to locate the sites within areas of lower potential impact for the Activities while still ensuring critical geological information can be collected. Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included ecological exclusion areas. In addition, the following has been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies.		

Proposed management controls	As described above, a site selection process has been conducted to locate the sites within areas of lower potential impact for the Activities while still ensuring critical geological information can be collected. Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included ecological exclusion areas. In addition, the following has been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. In addition, mitigation measures that would be implemented for the duration of the Activities to avoid and/or mitigate potential impacts to threatened species include: • Avoidance of large native trees, including Koala feed tree species. • Avoidance of hollow-bearing trees, dead stags and hollow logs. • All access tracks are to be fully rehabilitated upon the completion of the Activities, and tracks are to be fully rehabilitated to return to their pre-activity landform. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • A follow-up inspection at each drill site would be undertaken after the Activities are complete to confirm regeneration and/or revegetation performance, determine whether any supplementary measures (e.g. seeding) is required and to confirm there are no ongoing erosion and weed risks as a result of the Activities. • Monitoring would involve monthly visual inspections (monitoring frequency may be reduced subject to progression of regeneration and/or revegetation and/or reduced erosion risk). • Additional rehabilitation measures (such as supplementary seeding) would be implemented as required. Should a threatened species be identified during the Activities, work in the surrounding area would stop immediately and an appropriate ecologist engaged for advice and handling. Whitehaven would facilitate and consult with the relevant authorities in line with the ecologist's recommendations.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Areas of outstanding biodiversity value/Critical habitat: This includes: a. declared areas of outstanding biodiversity value under the Biodiversity Conservation Act 2016 b. areas declared critical habitat under the Fisheries Management Act 1994.		
Potential impacts	No declared areas of outstanding biodiversity value under the Biodiversity Conservation Act 2016 are mapped within the area associated with the Activities. Similarly, no areas declared as critical habitat under the Fisheries Management Act 1994 are mapped within the area associated with the Activities.		
Proposed management controls			
Duration	approximately 8 weeks		
Application ranking			
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain

Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Endangered ecological community or critically endangered ecological community: Whether the activity: is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.		
Potential impacts	The Activities are unlikely to have a significant impact on threatened flora and fauna species due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The Activities would remove approximately 0.09 ha of Plant Community Type (PCT) 101 in regenerating condition and 0.28 ha of PCT 101 in derived native grassland (DNG) condition, and 0.94 ha of PCT 592 in DNG condition. PCT 101 in the study is considered to be associated with the following threatened ecological community (TEC): Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions, listed as Endangered under the BC Act. The proposal would remove 0.37 ha of this TEC. An impact assessment in accordance with Section 7.3 of the Biodiversity Conservation Act (i.e. Test of Significance) has been undertaken (Ecoplanning, 2024). Ecoplanning (2024) found that subject to mitigation measures outlined below, there will be no significant impacts to this TEC (Ecoplanning, 2024). The areas associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. A site selection process has been conducted for the Activities to locate the sites within areas of lower potential impact for the Activities while still ensuring critical geological information can be collected. Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included ecological exclusion areas. Previously cleared/disturbed areas would be utilised for the Activities instead of areas consisting of intact native vegetation. In addition, the following has been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. Due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use, the Activities are unlikely to have an adverse effect on an endangered ecological community or critically endangered ecological community.		

Proposed management controls	As described above, a site selection process has been conducted for the Activities to locate the sites within areas of lower potential impact for the Activities while still ensuring critical geological information can be collected. Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included ecological exclusion areas. Previously cleared/disturbed areas would be utilised for the Activities instead of areas consisting of intact native vegetation. In addition, the following has been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. In addition, mitigation measures that would be implemented for the duration of the Activities to avoid and/or mitigate potential impacts to endangered ecological communities and critically endangered ecological communities include: • All access tracks are to be fully rehabilitated upon the completion of the Activities, and tracks are to be fully rehabilitated to return to their pre-activity landform. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • A follow-up inspection at each drill site would be undertaken after the Activities are complete to confirm regeneration and/or revegetation performance, determine whether any supplementary measures (e.g. seeding) is required and to confirm there are no ongoing erosion and weed risks as a result of the Activities. • Monitoring would involve monthly visual inspections (monitoring frequency may be reduced subject to progression of regeneration and/or revegetation and/or reduced erosion risk). • Additional rehabilitation measures (such as supplementary seeding) would be implemented as required.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Habitat of a threatened species or ecological community		

Potential impacts	The Activities would remove approximately 0.09 ha of Plant Community Type (PCT) 101 in regenerating condition and 0.28 ha of PCT 101 in derived native grassland (DNG) condition, and 0.94 ha of PCT 592 in DNG condition. PCT 101 in the study is considered to be associated with the following threatened ecological community (TEC): Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions, listed as Endangered under the BC Act. The proposal would remove 0.37 ha of this TEC. An impact assessment in accordance with Section 7.3 of the Biodiversity Conservation Act (i.e. Test of Significance) has been undertaken (Ecoplanning, 2024). Ecoplanning (2024) found that subject to mitigation measures outlined below there will be no significant impacts to this TEC (Ecoplanning, 2024). The Activities would remove 1.31 ha of native vegetation. Whilst this vegetation consists of potential foraging habitat for a range of species, no mature trees or hollow bearing trees would be removed as part of the proposal. One threatened bird species, the Spotted Harrier, was considered to have a moderate likelihood of occurring within the subject site. The proposal would directly remove 1.31 ha of potential foraging habitat for these species across the 10 sites. No breeding habitat would be removed by the proposal. An impact assessment in accordance with Section 7.3 of the BC Act (i.e. Test of Significance) has been undertaken (Ecoplanning, 2024) and found that subject to mitigation measures outlined below significant impacts to this species are unlikely. No additional threatened fauna would be impacted by the proposal. In consideration of the above, the Activities are unlikely to have a significant impact on the habitat of a threatened species or ecological community due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. This land use is consistent with the surrounding area, which is largely an agricultural landscape, comprising primarily of grazing and cropping activities dominating the area to the north, south, east and west of Leard State Forest. Additionally, the active open cut mining operations of Boggabri Coal Mine and Tarrawonga Coal Mine are located south-east of the Activities, within the Leard State forest. A site selection process has been conducted to locate the sites within areas of lower potential impact for the Activities still ensuring critical geological information can be collected. Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included ecological exclusion areas. In addition, the following has been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies.

Proposed management controls	As described above, a site selection process has been conducted to locate the sites within areas of lower potential impact for the Activities while still ensuring critical geological information can be collected. Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included ecological exclusion areas. In addition, the following has been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. In addition, mitigation measures that would be implemented for the duration of the Activities to avoid and/or mitigate potential impacts to the habitat of threatened species and ecological communities include: • Avoidance of large native trees, including Koala feed tree species. • Avoidance of hollow-bearing trees, dead stags and hollow logs. • All native vegetation will be protected during the entire extent of the works, e.g. temporary fencing, flagging and tree protection. No personnel or machinery are to enter the protected area. • If any fauna are identified during works and require rescue, a qualified Ecologist, or fauna rescue volunteer, will be notified. Works will not continue until the animal has been rescued. Call WIRES on 1300 094 737. • During clearing works or construction works, if any native fauna are identified in the works area, works will stop immediately and a qualified Ecologist should be contacted. • Best practise bush regeneration techniques, including disposal of weeds to a licenced waste disposal facility. • All access tracks are to be fully rehabilitated upon the completion of the Activities, and tracks are to be fully rehabilitated to return to their pre-activity landform. • Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site. • A follow-up inspection at each drill site would be undertaken after the Activities are complete to confirm regeneration and/or revegetation performance, determine whether any supplementary measures (e.g. seeding) is required and to confirm there are no ongoing erosion and weed risks as a result of the Activities. • Monitoring would involve monthly visual inspections (monitoring frequency may be reduced subject to progression of regeneration and/or revegetation and/or reduced erosion risk). • Additional rehabilitation measures (such as supplementary seeding) would be implemented as required.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Habitat of protected aquatic species or those with conservation status.		

Potential impacts	The Activities would remove approximately 0.09 ha of Plant Community Type (PCT) 101 in regenerating condition and 0.28 ha of PCT 101 in derived native grassland (DNG) condition, and 0.94 ha of PCT 592 in DNG condition. PCT 101 in the study is considered to be associated with the following threatened ecological community (TEC): Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions, listed as Endangered under the BC Act. The proposal would remove 0.37 ha of this TEC. An impact assessment in accordance with Section 7.3 of the Biodiversity Conservation Act (i.e. Test of Significance) has been undertaken (Ecoplanning, 2024). Ecoplanning (2024) found that subject to mitigation measures outlined below there will be no significant impacts to this TEC (Ecoplanning, 2024). The Activities would remove 1.31 ha of native vegetation. Whilst this vegetation consists of potential foraging habitat for a range of species, no mature trees or hollow bearing trees would be removed as part of the proposal. One threatened bird species, the Spotted Harrier, was considered to have a moderate likelihood of occurring within the subject site. The proposal would directly remove 1.31 ha of potential foraging habitat for these species across the 10 sites. No breeding habitat would be removed by the proposal. An impact assessment in accordance with Section 7.3 of the BC Act (i.e. Test of Significance) has been undertaken (Ecoplanning, 2024) and found that subject to mitigation measures outlined below significant impacts to this species are unlikely. No additional threatened fauna would be impacted by the proposal. In consideration of the above, the Activities are unlikely to have a significant impact on the habitat of a threatened species or ecological community due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. This land use is consistent with the surrounding area, which is largely an agricultural landscape, comprising primarily of grazing and cropping activities dominating the area to the north, south, east and west of Leard State Forest. Additionally, the active open cut mining operations of Boggabri Coal Mine and Tarrawonga Coal Mine are located south-east of the Activities, within the Leard State forest. A site selection process has been conducted to locate the sites within areas of lower potential impact for the Activities still ensuring critical geological information can be collected. Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included ecological exclusion areas. In addition, the following has been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies.

<table>
<tr><td>Proposed management controls</td><td colspan="3">As described above, a site selection process has been conducted to locate the sites within areas of lower potential impact for the Activities while still ensuring critical geological information can be collected. Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included ecological exclusion areas. In addition, the following has been considered and would continue to be considered in the site selection process:

• Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation.
• Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies.

In addition, mitigation measures that would be implemented for the duration of the Activities to avoid and/or mitigate potential impacts to the habitat of threatened species and ecological communities include:

• Avoidance of large native trees, including Koala feed tree species.
• Avoidance of hollow-bearing trees, dead stags and hollow logs.
• All native vegetation will be protected during the entire extent of the works, e.g. temporary fencing, flagging and tree protection. No personnel or machinery are to enter the protected area.
• If any fauna are identified during works and require rescue, a qualified Ecologist, or fauna rescue volunteer, will be notified. Works will not continue until the animal has been rescued. Call WIRES on 1300 094 737.
• During clearing works or construction works, if any native fauna are identified in the works area, works will stop immediately and a qualified Ecologist should be contacted.
• Best practise bush regeneration techniques, including disposal of weeds to a licenced waste disposal facility.
• All access tracks are to be fully rehabilitated upon the completion of the Activities, and tracks are to be fully rehabilitated to return to their pre-activity landform.
• Appropriate erosion and sediment control measures consistent with Managing Urban Stormwater: Soils and Construction (Landcom, 2004), would be implemented at each site.
• A follow-up inspection at each drill site would be undertaken after the Activities are complete to confirm regeneration and/or revegetation performance, determine whether any supplementary measures (e.g. seeding) is required and to confirm there are no ongoing erosion and weed risks as a result of the Activities.
• Monitoring would involve monthly visual inspections (monitoring frequency may be reduced subject to progression of regeneration and/or revegetation and/or reduced erosion risk).
• Additional rehabilitation measures (such as supplementary seeding) would be implemented as required.</td></tr>
<tr><td>Duration</td><td colspan="3">approximately 8 weeks</td></tr>
<tr><td>Application ranking</td><td colspan="3">Negligible</td></tr>
<tr><td>What is the confidence in predicting impacts?</td><td>High</td><td>Are further studies required on impacts or mitigation?</td><td>No</td></tr>
<tr><td>How resilient is the environment to cope with impacts?</td><td>Medium Resilience</td><td>What is the level of public concern?</td><td>Uncertain</td></tr>
<tr><td>Can the impacts be reversed?</td><td>Yes</td><td>Ranking of potential significance</td><td>Low</td></tr>
<tr><td>Can the impacts be mitigated?</td><td>Fully</td><td colspan="2">Justification for ranking</td></tr>
<tr><td>Do the operations comply with standards, plans, policies?</td><td>Yes</td><td colspan="2"></td></tr>
<tr><td>Criteria</td><td colspan="3">Key Threatening Processes: As outlined in Schedule 4 of Biodiversity Conservation Act 2016. Includes: a. alteration, removal, clearly or degradation of habitat and native vegetation b. loss of hollow bearing trees c. removal of dead wood and dead trees d. invasion and establishment of exotic species.</td></tr>
</table>

Potential impacts	The Activities are unlikely to endanger, displace or disturb fauna or create a barrier to their movement. The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. Access for the Activities would occur via established access tracks where possible. Exploration sites where no tracks exist would require temporary access tracks which would involve slashing, light grading or driving on paddocks to the desired exploration site location. Any new access tracks would be selected to link drill or soil investigation sites with existing access tracks via the shortest route that minimises environmental impacts and the potential for the Activities to endanger, displace or disturb fauna, or create a barrier to their movement. Any access tracks will be slashed in, and personnel will not be able to deviate off these areas unless internal approval is provided. All access tracks would have a maximum width of 4 m. A follow-up inspection at each drill site would be undertaken after the Activities are complete to confirm regeneration and/or revegetation performance, determine whether any supplementary measures (e.g. seeding) is required and to confirm there are no ongoing erosion and weed risks as a result of the Activities. Monitoring would involve monthly visual inspections (monitoring frequency may be reduced subject to progression of regeneration and/or revegetation and/or reduced erosion risk). Additional rehabilitation measures (such as supplementary seeding) would be implemented as required.		
Proposed management controls	As described above, access for the Activities would occur via established access tracks where possible. Exploration sites where no tracks exist would require temporary access tracks which would involve slashing, light grading or driving on paddocks to the desired exploration site location. Any new access tracks would be selected to link drill or soil investigation sites with existing access tracks via the shortest route that minimises environmental impacts and the potential for the Activities to endanger, displace or disturb fauna, or create a barrier to their movement. Any access tracks will be slashed in, and personnel will not be able to deviate off these areas unless internal approval is provided. A follow-up inspection at each drill site would be undertaken after the Activities are complete to confirm regeneration and/or revegetation performance, determine whether any supplementary measures (e.g. seeding) is required and to confirm there are no ongoing erosion and weed risks as a result of the Activities. Monitoring would involve monthly visual inspections (monitoring frequency may be reduced subject to progression of regeneration and/or revegetation and/or reduced erosion risk). Additional rehabilitation measures (such as supplementary seeding) would be implemented as required.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Barriers to movement of fauna: Any potential to endanger, displace or disturb fauna (including fauna of conservation significance) or create a barrier to their movement.		

Potential impacts	The Activities are unlikely to endanger, displace or disturb fauna or create a barrier to their movement. The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. Access for the Activities would occur via established access tracks where possible. Exploration sites where no tracks exist would require temporary access tracks which would involve slashing, light grading or driving on paddocks to the desired exploration site location. Any new access tracks would be selected to link drill or soil investigation sites with existing access tracks via the shortest route that minimises environmental impacts and the potential for the Activities to endanger, displace or disturb fauna, or create a barrier to their movement. Any access tracks will be slashed in, and personnel will not be able to deviate off these areas unless internal approval is provided. All access tracks would have a maximum width of 4 m. A follow-up inspection at each drill site would be undertaken after the Activities are complete to confirm regeneration and/or revegetation performance, determine whether any supplementary measures (e.g. seeding) is required and to confirm there are no ongoing erosion and weed risks as a result of the Activities. Monitoring would involve monthly visual inspections (monitoring frequency may be reduced subject to progression of regeneration and/or revegetation and/or reduced erosion risk). Additional rehabilitation measures (such as supplementary seeding) would be implemented as required.		
Proposed management controls	As described above, access for the Activities would occur via established access tracks where possible. Exploration sites where no tracks exist would require temporary access tracks which would involve slashing, light grading or driving on paddocks to the desired exploration site location. Any new access tracks would be selected to link drill or soil investigation sites with existing access tracks via the shortest route that minimises environmental impacts and the potential for the Activities to endanger, displace or disturb fauna, or create a barrier to their movement. Any access tracks will be slashed in, and personnel will not be able to deviate off these areas unless internal approval is provided. A follow-up inspection at each drill site would be undertaken after the Activities are complete to confirm regeneration and/or revegetation performance, determine whether any supplementary measures (e.g. seeding) is required and to confirm there are no ongoing erosion and weed risks as a result of the Activities. Monitoring would involve monthly visual inspections (monitoring frequency may be reduced subject to progression of regeneration and/or revegetation and/or reduced erosion risk). Additional rehabilitation measures (such as supplementary seeding) would be implemented as required.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Ecological & Biosecurity Impacts: Any threat to the biological diversity or ecological integrity of an ecological community.		

Potential impacts	The Activities are unlikely to have an adverse impact on ecology or biosecurity. The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. The exploration drilling program would involve the development of 10 drill pads up to 30 x 30 m (approximately 900 m2). Site preparation works would primarily involve delineation of the proposed drill site with temporary fencing (or similar) to prevent unauthorised access, exclude any stock, and ensure any disturbance activities are confined within the area. Grass within the fenced areas may be slashed to minimise bushfire hazard around the working machinery and provide a clear working area for operating personnel. Ground disturbance would be limited to the area of the drill hole itself, with some levelling of drill sites required if located on steep or rough terrain. No other ground preparation/earthworks would be undertaken at the drill sites. In total, the Activities within ML 1719/CL 375 would involve a surface disturbance area (i.e. sum total of all exploration site areas) of approximately 1.31 ha. The need for vegetation clearing, however, would be reduced as a truck mounted drill rig would be utilised. This would also promote the potential for rapid re-establishment of vegetation once the Activities cease. The Activities would not significantly increase the risk of priority weeds, vermin, biosecurity threats, feral species, or genetically modified organisms being introduced into the area associated with the Activities. The Activities are also unlikely to cause a bushfire risk.		
Proposed management controls	The Activities are unlikely to have an adverse impact on ecology or biosecurity.		
Duration	approximately 8 weeks		
Application ranking	null,2		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Ecological & Biosecurity Impacts: Creates a biosecurity risk or introduces genetically modified organisms into an area. Includes impacts from the introduction of: a. mobilisation of pollutants b. animal pests, c. plant pests and diseases, d. animal diseases, e. noxious weeds, or f. genetically modified organisms.		
Potential impacts	The Activities are unlikely to have an adverse impact on ecology or biosecurity. The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. The exploration drilling program would involve the development of 10 drill pads up to 30 x 30 m (approximately 900 m2). Site preparation works would primarily involve delineation of the proposed drill site with temporary fencing (or similar) to prevent unauthorised access, exclude any stock, and ensure any disturbance activities are confined within the area. Grass within the fenced areas may be slashed to minimise bushfire hazard around the working machinery and provide a clear working area for operating personnel. Ground disturbance would be limited to the area of the drill hole itself, with some levelling of drill sites required if located on steep or rough terrain. No other ground preparation/earthworks would be undertaken at the drill sites. In total, the Activities within ML 1719/CL 375 would involve a surface disturbance area (i.e. sum total of all exploration site areas) of approximately 1.31 ha. The need for vegetation clearing, however, would be reduced as a truck mounted drill rig would be utilised. This would also promote the potential for rapid re-establishment of vegetation once the Activities cease. The Activities would not significantly increase the risk of priority weeds, vermin, biosecurity threats, feral species, or genetically modified organisms being introduced into the area associated with the Activities. The Activities are also unlikely to cause a bushfire risk.		
Proposed management controls	The Activities are unlikely to have an adverse impact on ecology or biosecurity.		
Duration	approximately 8 weeks		

Application ranking	null,2		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Ecological & Biosecurity Impacts: Likely to cause a significant bushfire risk.		
Potential impacts	The Activities are unlikely to have an adverse impact on ecology or biosecurity. The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. The exploration drilling program would involve the development of 10 drill pads up to 30 x 30 m (approximately 900 m2). Site preparation works would primarily involve delineation of the proposed drill site with temporary fencing (or similar) to prevent unauthorised access, exclude any stock, and ensure any disturbance activities are confined within the area. Grass within the fenced areas may be slashed to minimise bushfire hazard around the working machinery and provide a clear working area for operating personnel. Ground disturbance would be limited to the area of the drill hole itself, with some levelling of drill sites required if located on steep or rough terrain. No other ground preparation/earthworks would be undertaken at the drill sites. In total, the Activities within ML 1719/CL 375 would involve a surface disturbance area (i.e. sum total of all exploration site areas) of approximately 1.31 ha. The need for vegetation clearing, however, would be reduced as a truck mounted drill rig would be utilised. This would also promote the potential for rapid re-establishment of vegetation once the Activities cease. The Activities would not significantly increase the risk of priority weeds, vermin, biosecurity threats, feral species, or genetically modified organisms being introduced into the area associated with the Activities. The Activities are also unlikely to cause a bushfire risk.		
Proposed management controls	The Activities are unlikely to have an adverse impact on ecology or biosecurity.		
Duration	approximately 8 weeks		
Application ranking	null,2		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Community Resources: Any degradation of infrastructure or significant increase in the demand for services and infrastructure resources.		
Potential impacts	It is estimated that up to 7 personnel (contractors and/or Whitehaven employees) would be on site at any one time. This small workforce presents minimal flow on economic benefits to the local community. In this way, the Activities would not present any significant additional pressures on local temporary accommodation requirements, remove significant economic activity from the local community upon cessation of the Activities, or degrade or significantly increase the demand for services and infrastructure resources. The Activities are anticipated to result in a negligible increase in traffic on local roads. Vehicle movements associated with the Activities would be largely limited to land owned by Whitehaven, and the access road from Therribri Road.		
Proposed management controls	The Activities are anticipated to result in a negligible increase on local infrustructure.		
Duration	approximately 8 weeks		

Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Community Resources: Any diversion of resources to the detriment of other communities or natural systems.		
Potential impacts	The Activities would not likely result in the diversion of resources to the detriment of other communities or natural systems.		
Proposed management controls	Natural resources are unlikely to be impacted due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The site selection process has included avoidance of ecological exclusion areas. The following has also been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. • For any sites that are proximal to drainage lines, selecting a location that involves the least potential impacts to the drainage line. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. Recirculated water and spoil from drilling activities would be managed and disposed of as per Exploration Code of Practice: Rehabilitation by a licenced waste removal contractor.		
Duration	approximately 8 weeks		
Application ranking			
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Natural Resources: Any disruption, depletion or destruction of natural resources.		

Potential impacts	The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. Commissioning of each site for the exploration drilling would involve the development of drill site areas up to 30 x 30 m (approximately 900 m2). Site preparation works would primarily involve delineation of the proposed drill site with temporary fencing (or similar) to prevent unauthorised access, exclude any stock, and ensure any disturbance activities are confined within the area. Grass within the fenced areas may be slashed to minimise bushfire hazard around the working machinery and provide a clear working area for operating personnel. Ground disturbance would be limited to the area of the drill hole itself, with some levelling of drill sites required if located on steep or rough terrain. No other ground preparation/earthworks would be undertaken at the drill sites. In total, the Activities within ML 1719/CL 375 would involve a surface disturbance area (i.e. sum total of all exploration site areas) of approximately 1.3 ha. The need for vegetation clearing, however, would be reduced as a truck mounted drill rig would be utilised. This would also promote the potential for rapid re-establishment of vegetation once the Activities cease. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. Recirculated water and spoil from drilling activities would be managed and disposed of as per Exploration Code of Practice: Rehabilitation by a licenced waste removal contractor. The impact of the Activities on natural resources would be negligible due to the small disturbance area (i.e. approximately 1.3 ha), the short-term, progressive and mobile nature of the Activities, and the regeneration and/or rehabilitation of the disturbance areas to the pre-disturbance land use.		
Proposed management controls	Natural resources are unlikely to be impacted due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The site selection process has included avoidance of ecological exclusion areas. The following has also been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. • For any sites that are proximal to drainage lines, selecting a location that involves the least potential impacts to the drainage line. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. Recirculated water and spoil from drilling activities would be managed and disposed of as per Exploration Code of Practice: Rehabilitation by a licenced waste removal contractor.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Natural Resources: Any disruption of existing activities which rely on natural resources, including forestry, farming or extractive industries (or reduction of options for future activities).		

Potential impacts	The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. This land use is consistent with the surrounding area, which is largely an agricultural landscape, comprising primarily of grazing and cropping activities dominating the area to the north, south, east and west of Leard State Forest. Additionally, the active open cut mining operations of Boggabri Coal Mine and Tarrawonga Coal Mine are located south-east of the Activities, within the Leard State forest. The Activities would not result in any disruption to existing land uses or activities, or reduce options for future activities.		
Proposed management controls	Natural resources are unlikely to be impacted due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The site selection process has included avoidance of ecological exclusion areas. The following has also been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. • For any sites that are proximal to drainage lines, selecting a location that involves the least potential impacts to the drainage line. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. Recirculated water and spoil from drilling activities would be managed and disposed of as per Exploration Code of Practice: Rehabilitation by a licenced waste removal contractor.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Natural Resources: Any use which results in the degradation of any area reserved for conservation purposes.		
Potential impacts	The Activities would not traverse any areas reserved for conservation purposes. Therefore, the campaign would not degrade any area reserved for conservation purposes.		
Proposed management controls	Natural resources are unlikely to be impacted due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The site selection process has included avoidance of ecological exclusion areas. The following has also been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. • For any sites that are proximal to drainage lines, selecting a location that involves the least potential impacts to the drainage line. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. Recirculated water and spoil from drilling activities would be managed and disposed of as per Exploration Code of Practice: Rehabilitation by a licenced waste removal contractor.		
Duration	approximately 8 weeks		
Application ranking	Negligible		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Sensitive Land Impacts: Impacts on National parks and other areas reserved or dedicated or acquired under the National Parks and Wildlife Act 1974.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Land subject to a 'conservation agreement' under the National Parks and Wildlife Act 1974 and/or the Biodiversity Conservation Act 2016. This includes: 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. b. Wildlife Refuge agreement established under the Biodiversity Conservation Act 2016. c. Existing conservation agreements that continue to have effect even where legislation has been repealed: Trust agreements under the now repealed Nature Conservation Trust Act 2001 Property vegetation plans made under the now-repealed Native Vegetation Act 2003 Registered property agreements under the repealed Native Vegetation Conservation Act 1997		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on aquatic reserves or marine parks declared under the Marine Estate Management Act 2014. Impacts on Coastal Zone as defined in the Coastal Management Act 2016.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		

What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Fishing grounds and commercial fish breeding or nursery areas.		
Potential impacts	The Activities would not traverse any areas reserved for conservation purposes. Therefore, the campaign would not degrade any area reserved for conservation purposes.		
Proposed management controls	Natural resources are unlikely to be impacted due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The site selection process has included avoidance of ecological exclusion areas. The following has also been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. • For any sites that are proximal to drainage lines, selecting a location that involves the least potential impacts to the drainage line. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. Recirculated water and spoil from drilling activities would be managed and disposed of as per Exploration Code of Practice: Rehabilitation by a licenced waste removal contractor.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Sensitive Land Impacts: Impacts on other sensitive lands including: a. Land within a state forest set aside under the Forestry Act 2012 for conservation values. This includes flora reserves and special management (and other) zones. b. Drinking water catchment protection areas - land declared to be a 'controlled area' or a 'special area' under the Water NSW Act 2014, or a 'special area' under the Water Management Act 2000 or Hunter Water Act 1991. c. Waterfront land as defined under the Water Management Act 2000.		
Potential impacts	The Activities would not traverse any areas reserved for conservation purposes. Therefore, the campaign would not degrade any area reserved for conservation purposes.		

Proposed management controls	Natural resources are unlikely to be impacted due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The site selection process has included avoidance of ecological exclusion areas. The following has also been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. • For any sites that are proximal to drainage lines, selecting a location that involves the least potential impacts to the drainage line. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. Recirculated water and spoil from drilling activities would be managed and disposed of as per Exploration Code of Practice: Rehabilitation by a licenced waste removal contractor.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Sensitive Land Impacts: Impacts on land reserved or dedicated within the meaning of the Crown Lands Act 1989/Crown Lands Management Act 2016 for preservation of the environment or other environmental protection purposes.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on land identified as wilderness or declared a wilderness area under the Wilderness Act 1987.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	

Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Lands: Impacts on wetlands of international significance designated under the Ramsar Convention on Wetlands and those designated as a nationally important wetland in the Directory of Important Wetlands of Australia.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on land identified in an environmental planning instrument as being of biodiversity / conservation significance or zoned for environmental conservation, protection and/or management. Includes Coastal Wetlands and Littoral rainforests under State Environmental Planning Policy (Resilience and Hazards) 2021.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on Aboriginal heritage protection areas: a. Aboriginal places and objects under the National Parks and Wildlife Act 1974 b. Areas of Aboriginal cultural significance identified in an environmental planning instrument.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	

Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on heritage protection areas (historic or natural): a. Nationally and internationally recognised heritage sites or areas (World Heritage List, National Heritage List of Commonwealth Heritage List) b. Items listed on State Heritage c. Heritage items and conservation areas identified in an environmental planning instrument		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on community land classified under the Local Government Act 1993 (for which a plan of management has been prepared).		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on bushfire prone areas.		
Potential impacts	The Activities would not traverse any areas reserved for conservation purposes. Therefore, the campaign would not degrade any area reserved for conservation purposes.		
Proposed management controls	Natural resources are unlikely to be impacted due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The site selection process has included avoidance of ecological exclusion areas. The following has also been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. • For any sites that are proximal to drainage lines, selecting a location that involves the least potential impacts to the drainage line. Any incidental groundwater produced would be utilised in the recirculation of drilling fluids and confined to above ground tanks. Recirculated water and spoil from drilling activities would be managed and disposed of as per Exploration Code of Practice: Rehabilitation by a licenced waste removal contractor.		
Duration	approximately 8 weeks		
Application ranking	Negligible		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Social Impacts: Any impacts which result in a change in the demographic structure of the community, including changes to workforce or industry structure of the area/region. Including change in demand for community resources (eg community facilities, community services and labour force).		
Potential impacts	It is estimated that up to 7 personnel (contractors and/or Whitehaven employees) would be on site at any one time. This small workforce presents minimal flow on economic benefits to the local community. In this way, the Activities would not present any significant additional pressures on local temporary accommodation requirements, remove significant economic activity from the local community upon cessation of the Activities, or change the demographic structure of the community.		
Proposed management controls	Given the limited workforce required to undertake the exploration activities and the Activities being proposed entirely on Whitehaven-owned land, no management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Social Impacts: Any environmental impact that may cause substantial change or disruption to the community (including loss of facilities or loss of community identity).		
Potential impacts	The Activities would occur entirely on Whitehaven-owned land. As such, the campaign would not result in an environmental impact that would result in substantial change or disruption to the community (i.e loss of facilities, reduced links to other communities or loss of community identity).		
Proposed management controls	Given the limited workforce required to undertake the exploration activities and the Activities being proposed entirely on Whitehaven-owned land, no management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Social Impacts: Any impacts which result in some individuals or communities being significantly disadvantaged (e.g. change to community facilities, services or labour force).		
Potential impacts	The Activities are unlikely to result in individuals or communities being significantly disadvantaged.		

Proposed management controls	Given the limited workforce required to undertake the exploration activities and the Activities being proposed entirely on Whitehaven-owned land, no management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Social Impacts: Any impacts on the health, safety, privacy or welfare of individuals or communities caused by factors such as pollution, odour, noise, vibration, lighting, visual impacts, etc).		
Potential impacts	The Activities would occur entirely on Whitehaven-owned land. As such, the Activities would not result in any impacts on the health, safety, privacy or welfare of individuals or communities because of factors such as air pollution, odour, noise, vibration and lighting.		
Proposed management controls	Given the limited workforce required to undertake the exploration activities and the Activities being proposed entirely on Whitehaven-owned land, no management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Social Impacts: 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?		
Potential impacts	The Activities are unlikely 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.		
Proposed management controls	Given the limited workforce required to undertake the exploration activities and the Activities being proposed entirely on Whitehaven-owned land, no management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Social Impacts: Impacts on communities with strong sense of identity.		

Potential impacts	The Activities would occur entirely on Whitehaven-owned land. As such, the campaign would not result in an environmental impact that would result in substantial change or disruption to the community (i.e loss of facilities, reduced links to other communities or loss of community identity).		
Proposed management controls	Given the limited workforce required to undertake the exploration activities and the Activities being proposed entirely on Whitehaven-owned land, no management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Social Impacts: Impacts on disadvantaged communities.		
Potential impacts	The Activities would occur entirely on Whitehaven-owned land. As such, the campaign would not result in an environmental impact that would result in substantial change or disruption to the community (i.e loss of facilities, reduced links to other communities or loss of community identity).		
Proposed management controls	Given the limited workforce required to undertake the exploration activities and the Activities being proposed entirely on Whitehaven-owned land, no management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Economic Impacts: Any impacts which may affect economic activity (positive or negative), including a decrease to net economic welfare.		
Potential impacts	It is estimated that up to 7 personnel (contractors and/or Whitehaven employees) would be on site at any one time. This small workforce presents minimal flow on economic benefits to the local community. In this way, the Activities would not present any significant additional pressures on local temporary accommodation requirements, remove significant economic activity from the local community upon cessation of the Activities, or degrade or significantly increase the demand for services and infrastructure resources. There is not expected to be any negative impacts on economic activity, economic stability of the Narrabri Local Government Area, or public sector revenue as a result of the Activities.		
Proposed management controls	Given no negative impacts on economic activities or economic stability are anticipated as a result of the Activities, no management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low

Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Economic Impacts: Any impacts that result in a decrease in the economic stability of the community.		
Potential impacts	It is estimated that up to 7 personnel (contractors and/or Whitehaven employees) would be on site at any one time. This small workforce presents minimal flow on economic benefits to the local community. In this way, the Activities would not present any significant additional pressures on local temporary accommodation requirements, remove significant economic activity from the local community upon cessation of the Activities, or degrade or significantly increase the demand for services and infrastructure resources. There is not expected to be any negative impacts on economic activity, economic stability of the Narrabri Local Government Area, or public sector revenue as a result of the Activities.		
Proposed management controls	Given no negative impacts on economic activities or economic stability are anticipated as a result of the Activities, no management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Economic Impacts: Any impacts which result in a change to the public sector revenue or expenditure base.		
Potential impacts	It is estimated that up to 7 personnel (contractors and/or Whitehaven employees) would be on site at any one time. This small workforce presents minimal flow on economic benefits to the local community. In this way, the Activities would not present any significant additional pressures on local temporary accommodation requirements, remove significant economic activity from the local community upon cessation of the Activities, or degrade or significantly increase the demand for services and infrastructure resources. There is not expected to be any negative impacts on economic activity, economic stability of the Narrabri Local Government Area, or public sector revenue as a result of the Activities.		
Proposed management controls	Given no negative impacts on economic activities or economic stability are anticipated as a result of the Activities, no management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Heritage Impacts: Any impacts on a locality, place, landscape, building or archaeological relic of heritage significance.		
Potential impacts	Historic cultural or natural heritage items listed on the World Heritage List, Commonwealth Heritage List, National Heritage Register, or State Heritage Register are not located in proximity to the Activities. As such, the Activities are not likely to cause impacts on localities, places, landscapes, buildings or archaeological relics of heritage significance.		
Proposed management controls	Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included cultural heritage exclusion zones and historical heritage sites. As such, the Activities are not likely to cause impacts on localities, places, landscapes, buildings or archaeological relics of heritage significance and accordingly, no management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Aesthetic Impacts: Any impacts on the visual or scenic landscape, including lighting, venting or flaring of gas.		
Potential impacts	The Activities are unlikely to impact on the visual or scenic landscape as all activities associated with the campaign are to be located on land owned by Whitehaven. No venting or flaring of gas is proposed for the Activities.		
Proposed management controls	No management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Aesthetic Impacts: Areas or items of high aesthetic or scenic value.		
Potential impacts	The Activities are unlikely to impact on the visual or scenic landscape as all activities associated with the campaign are to be located on land owned by Whitehaven. No venting or flaring of gas is proposed for the Activities.		
Proposed management controls	No management controls or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Any disturbance of the ground surface or any culturally modified trees (e.g. a scar tree).		

Potential impacts	The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. The Activities would involve ground surface disturbance and therefore have the potential to disturb Aboriginal objects. Notwithstanding, areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included cultural heritage exclusion zones. The exploration sites would be placed to avoid the known Aboriginal sites and/or objects, to ensure that no impacts to recorded Aboriginal cultural heritage are incurred by the Activities. The disturbance footprint of the Activities would be minimised as far as practicable. No culturally modified trees have been recorded within the area associated with the Activities.		
Proposed management controls	Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included cultural heritage exclusion zones. As such, the exploration sites would be placed to avoid the five Aboriginal sites and/or objects listed above, to ensure that no impacts to Aboriginal cultural heritage are incurred by the Activities. Should an Aboriginal site and/or object be newly identified during the Activities, work in the surrounding area would stop immediately, with temporary fencing erected around the feature and an appropriate archaeologist engaged to investigate the feature. Should the archaeologist determine the feature to be an Aboriginal site and/or object, Whitehaven would facilitate and consult with the relevant authorities in line with the appropriate archaeologist's recommendations.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Any impacts on known Aboriginal objects or Aboriginal places.		
Potential impacts	An AHIMS database search was conducted in the Aboriginal Cultural Heritage Due Diligence prepared for the Activities (Whincop Archaeology, 2024). Whincop Archaeology identified 99 AHIMS sites in the vicinity of the Activities, 5 of which were located in the immediate area associated with or surrounding the Activities. The following AHIMS Sites are located within the area associated with or surrounding the Activities: • 20-4-1056 • 20-4-1097 • 20-4-1096 • 20-4-0464 • 20-4-0478 Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included cultural heritage exclusion zones. As such, the exploration sites would be placed to avoid the five Aboriginal sites and/or objects listed above, to ensure that no impacts to Aboriginal cultural heritage are incurred by the Activities.		
Proposed management controls	Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included cultural heritage exclusion zones. As such, the exploration sites would be placed to avoid the five Aboriginal sites and/or objects listed above, to ensure that no impacts to Aboriginal cultural heritage are incurred by the Activities. Should an Aboriginal site and/or object be newly identified during the Activities, work in the surrounding area would stop immediately, with temporary fencing erected around the feature and an appropriate archaeologist engaged to investigate the feature. Should the archaeologist determine the feature to be an Aboriginal site and/or object, Whitehaven would facilitate and consult with the relevant authorities in line with the appropriate archaeologist's recommendations.		
Duration	approximately 8 weeks		
Application ranking	Negligible		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Affects areas where the landscape features indicate the likely presence of Aboriginal objects.		
Potential impacts	Two of the proposed drill pads (2312_05 and 2312_09) are located within areas with higher potential to contain Aboriginal objects (i.e. within 200 m of a named water course, 100 m of an unnamed drainage line or 50 m of a known Aboriginal Heritage site) (Whincop Archaeology, 2024).		
Proposed management controls	Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included cultural heritage exclusion zones. As such, the exploration sites would be placed to avoid the five Aboriginal sites and/or objects listed above, to ensure that no impacts to Aboriginal cultural heritage are incurred by the Activities. Should an Aboriginal site and/or object be newly identified during the Activities, work in the surrounding area would stop immediately, with temporary fencing erected around the feature and an appropriate archaeologist engaged to investigate the feature. Should the archaeologist determine the feature to be an Aboriginal site and/or object, Whitehaven would facilitate and consult with the relevant authorities in line with the appropriate archaeologist's recommendations.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Affects areas subject to native title claims, indigenous land use agreements or joint management arrangements.		
Potential impacts	The area associated with the Activities is not located within any areas subject to native title determinations, indigenous land use agreements and/or joint management agreement. It is noted the land associated with the Activities subject to a native title claim submitted by the Gomeroi People.		
Proposed management controls	Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included cultural heritage exclusion zones. As such, the exploration sites would be placed to avoid the five Aboriginal sites and/or objects listed above, to ensure that no impacts to Aboriginal cultural heritage are incurred by the Activities. Should an Aboriginal site and/or object be newly identified during the Activities, work in the surrounding area would stop immediately, with temporary fencing erected around the feature and an appropriate archaeologist engaged to investigate the feature. Should the archaeologist determine the feature to be an Aboriginal site and/or object, Whitehaven would facilitate and consult with the relevant authorities in line with the appropriate archaeologist's recommendations.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No

How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Impacts on Aboriginal communities or areas subject to land rights claims.		
Potential impacts	An AHIMS database search was conducted in the Aboriginal Cultural Heritage Due Diligence prepared for the Activities (Whincop Archaeology, 2024). Whincop Archaeology identified 99 AHIMS sites in the vicinity of the Activities, 5 of which were located in the immediate area associated with or surrounding the Activities. The following AHIMS Sites are located within the area associated with or surrounding the Activities: • 20-4-1056 • 20-4-1097 • 20-4-1096 • 20-4-0464 • 20-4-0478 Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included cultural heritage exclusion zones. As such, the exploration sites would be placed to avoid the five Aboriginal sites and/or objects listed above, to ensure that no impacts to Aboriginal cultural heritage are incurred by the Activities.		
Proposed management controls	Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included cultural heritage exclusion zones. As such, the exploration sites would be placed to avoid the five Aboriginal sites and/or objects listed above, to ensure that no impacts to Aboriginal cultural heritage are incurred by the Activities. Should an Aboriginal site and/or object be newly identified during the Activities, work in the surrounding area would stop immediately, with temporary fencing erected around the feature and an appropriate archaeologist engaged to investigate the feature. Should the archaeologist determine the feature to be an Aboriginal site and/or object, Whitehaven would facilitate and consult with the relevant authorities in line with the appropriate archaeologist's recommendations.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Impacts on areas or items of high anthropological, archaeological, architectural, cultural, heritage, historical, recreational or scientific value.		
Potential impacts	The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. The Activities would involve ground surface disturbance and therefore have the potential to disturb Aboriginal objects. Notwithstanding, areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included cultural heritage exclusion zones. The exploration sites would be placed to avoid the known Aboriginal sites and/or objects, to ensure that no impacts to recorded Aboriginal cultural heritage are incurred by the Activities. The disturbance footprint of the Activities would be minimised as far as practicable. No culturally modified trees have been recorded within the area associated with the Activities.		

Proposed management controls	Areas of avoidance for the Activities identified in the planning and scoping of the investigation sites included cultural heritage exclusion zones. As such, the exploration sites would be placed to avoid the five Aboriginal sites and/or objects listed above, to ensure that no impacts to Aboriginal cultural heritage are incurred by the Activities. Should an Aboriginal site and/or object be newly identified during the Activities, work in the surrounding area would stop immediately, with temporary fencing erected around the feature and an appropriate archaeologist engaged to investigate the feature. Should the archaeologist determine the feature to be an Aboriginal site and/or object, Whitehaven would facilitate and consult with the relevant authorities in line with the appropriate archaeologist's recommendations.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Land Use Impacts: Any major changes in land use, including curtailment of other beneficial land uses.		
Potential impacts	The area associated with the Activities has primarily been subject to historical agricultural operations and is primarily composed of open grasslands of varying conditions and quality with some fragmented patches of timbered vegetation throughout. Former land uses consist of dryland cropping and livestock grazing. This land use is consistent with the surrounding area, which is largely an agricultural landscape, comprising primarily of grazing and cropping activities dominating the area to the north, south, east and west of Leard State Forest. Additionally, the active open cut mining operations of Boggabri Coal Mine and Tarrawonga Coal Mine are located south-east of the Activities, within the Leard State forest. Soil disturbance would be limited to the immediate vicinity of the drill hole and may be associated with the use of new access tracks if required. The Activities are not anticipated to change the existing land and soil capability class or soil fertility within the areas associated with the Activities. Rehabilitation of disturbed land as a result of the Activities would be conducted in accordance with the requirements and conditions within ML 1719/CL 375 and as detailed in the rehabilitation objectives and rehabilitation completion criteria prepared for the Activities. In summary, rehabilitation activities would include: • Boreholes grouted using cement mix for ground conditions. • Follow-up inspections undertaken to confirm regeneration and/or revegetation performance, determine whether supplementary measures are required, and confirm no ongoing erosion and weed risks. • Additional rehabilitation measures implemented as required. Due to the small area of disturbance, risks associated with successful rehabilitation to pre disturbance condition is considered low. The impact of the Activities on land use would be negligible due to the small disturbance area (i.e. approximately 1.3 ha), the short-term, progressive and mobile nature of the Activities, and the regeneration and/or rehabilitation of the disturbance areas to the pre-disturbance land use. The Activities are therefore unlikely to result in major changes to land use, including any curtailment of other beneficial land uses.		
Proposed management controls	As described above, soil disturbance would be limited to the immediate vicinity of the drill hole and may be associated with the use of new access tracks if required. Rehabilitation of disturbed land as a result of the Activities would be conducted in accordance with the requirements and conditions within ML 1719/CL 375 and as detailed in the in the rehabilitation objectives and rehabilitation completion criteria prepared for the Activities. Due to the small area of disturbance, risks associated with successful rehabilitation to pre disturbance condition is considered low.		
Duration	approximately 8 weeks		
Application ranking	Negligible		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Transportation Impacts: Substantial impacts on existing transportation systems (road, rail, pedestrian) which alter present patterns of circulation or movement.		
Potential impacts	It is estimated that up to 7 personnel (contractors and/or Whitehaven employees) would be on site at any one time. This small workforce presents a negligible increase in traffic on local roads. Vehicle movements associated with the Activities would be largely limited to land owned by Whitehaven, and the access road from Therribri Road.		
Proposed management controls	Given the level of impact associated with transportation for the Activities is considered to be negligible, no management controls and/or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Transportation Impacts: Impacts associated with direct or indirect additional traffic.		
Potential impacts	It is estimated that up to 7 personnel (contractors and/or Whitehaven employees) would be on site at any one time. This small workforce presents a negligible increase in traffic on local roads. Vehicle movements associated with the Activities would be largely limited to land owned by Whitehaven, and the access road from Therribri Road.		
Proposed management controls	Given the level of impact associated with transportation for the Activities is considered to be negligible, no management controls and/or mitigation measures are proposed.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Consistency with applicable local strategic planning statements, regional strategic plans or district strategic plans.		

Potential impacts	The Narrabri Shire 2040 Local Strategic Planning Statement (Narrarbri Strategic Planning Statement) outlines the Narrabri LGA economic, social and environmental land use needs over the next 20 years. The area associated with the Activities will partially occur within the land described in the Narrabri Strategic Planning Statement. The Narrabri Strategic Planning Statement identifies mining as a key engine industry in the region's economy. With the implementation of appropriate mitigation measures as described in this application, the Activities would be consistent with objectives to sustainably manage mining areas and to sustainably manage and conserve water resources, consistent with Planning Priorities 6 and 18, respectively. The New England North West Regional Plan 2041 (Regional Plan) was published by the DPE in September 2022 to outline planning priorities and decision-making objectives in the New England North West region for the next two decades. The area covered by the Regional Plan includes the area associated with the Activities. The Regional Plan acknowledges mining as being a major contributor to the regional economy, and recognises the importance of the mining industry in terms of job creation, both directly and indirectly. With the implementation of appropriate mitigation measures as described in this application, the Activities would be consistent with objectives to sustainably manage mining areas, consistent with Objective 4 of the Regional Plan.		
Proposed management controls	No management controls and/or mitigation measures are proposed given the alignment of the Activities with various objectives outlined in the Narrabri Planning Statement.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Matters of National Environmental Significance: Impacts on MNES under the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999:		

Potential impacts	Potentially relevant Matters of National Environmental Signficance were identified in a search area covering the extent of the Activities (and a 10 km buffer) using the EPBC Protected Matters Search Tool (attached to this application). The PMST indicated that the Activities may relate to three Wetlands of International Importance, which are located greater than 900 km (and up to 1,200 km) from the Activities. Eight Listed Threatened Ecological Communities were identified as likely to occur within the 10km buffer area encompassing the Activities: • Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions. • Grey Box (Eucalyptus macrocarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia • Natural grasslands on basalt and fine-textured alluvial plains of northern New South Wales and Queensland • Poplar Box Grassy Woodland on Alluvial Plains • Weeping Myall Woodlands. • White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland. • Mount Kaputar land snail and slug community. • New England Peppermint (Eucalyptus nova-anglica) Grassy Woddlands. A total of 43 Listed Threatened Species were identified as being related to the 10 km buffer area, including 18 birds, 2 fish, 6 mammals, 4 reptiles, and 13 flora species. In addition, 9 Listed Migratory Species were identified as being related to the 10 km buffer area. However, it is noted that most of the listed species are now within the development footprint of the exiting Maules Creek Coal Mine, and are no longer relevant for impact assessment. The MNES are unlikely to be impacted due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The site selection process included avoidance of ecological exclusion areas. The following has also been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. • For any sites that are proximal to drainage lines, selecting a location that involves the least potential impacts to the drainage line. MNES are unlikely to be impacted by the Activities provided the considerations above are implemented for the duration of the Activities.		
Proposed management controls	As described above, MNES are unlikely to be impacted due to the short-term, progressive and mobile nature of the Activities, and the regeneration/rehabilitation of the disturbance areas to pre disturbance land use. The site selection process included avoidance of ecological exclusion areas. The following has also been considered and would continue to be considered in the site selection process: • Minimisation of vegetation clearing, which would be restricted to ground cover, small shrubs and regenerating trees. Any material from vegetation clearing would be stockpiled and kept for rehabilitation. • Occasional tree branches may require removal to allow for the safe movement or operation of the drill rig. Each branch requiring removal would be inspected for evidence of recent habitation. Should evidence of recent habitation be present, the branch would not be removed without obtaining advice from an ecologist or suitably qualified professional regarding impact minimisation strategies. • For any sites that are proximal to drainage lines, selecting a location that involves the least potential impacts to the drainage line. MNES are unlikely to be impacted by the Activities provided the considerations above are implemented for the duration of the Activities.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No

How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cumulative Impacts: Cumulative environmental effects with other existing or likely future activities.		
Potential impacts	Previous land uses in the locality have resulted in extensive clearing as result of the combined impacts of continued forestry, agricultural and mining operations. These operations are still ongoing in the region. Approved mining activities that relate to the area associated with the Activities include the Maules Creek Coal Mine, Tarrawonga Coal Mine and Boggabri Coal Mine. The surveys, drilling, sampling, testing and reporting associated with the Activities would contribute to the feasibility of the continued operations at the Maules Creek Coal Mine and would inform further detailed design. The Activities would be undertaken prior to any construction works associated with continued operations at the Maules Creek Coal Mine, and are therefore not considered to result in any cumulative environmental effects associated with the Maules Creek Coal Mine. Notwithstanding, potential impacts arising from the existing Maules Creek Coal Mine have informed this Review of Environmental Factors. The Activities would also be short-term, progressive and mobile in nature, with disturbance areas regenerated/rehabilitated to pre disturbance land use.		
Proposed management controls	No management controls and/or mitigation measures are proposed as no cumulative environmental effects with other existing or likely future activities are anticipated.		
Duration	approximately 8 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	Medium Resilience	**What is the level of public concern?**	Uncertain
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		

FORM: Brief NonCEA (v3.4)

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