APO0001717

Approval to undertake assessable prospecting operations

2024 Outer Reef Diamond Drilling Program

27 March 2024

Application summary

Detail	Application
Reference	APO0001717
Date of approval	27 March 2024
Title	CML 5 (1992)
Contact	[redacted]
Project name	2024 Outer Reef Diamond Drilling Program
Project location	Outer Reef Prospect
Activity type	Non-complying exploration activity

Important note

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Project

Project details

Assessable prospecting activity APO0001717 relates to the 2024 Outer Reef Diamond Drilling Program at Outer Reef Prospect.

The project has the following approved characteristics.

Detail	Proposal
Activity description	- Program planning February 2024 - Site environmental inspections, site disturbance permit (internal), environmental risk assessment, rehabilitation objectives and completion criteria completed February 2024 - Site preparation and access track clearing following APO approval and ROCC submission, anticipated to occur in late April 2024. Experienced operator will be used for clearing, 1 x backhoe and 1 x excavator - Diamond drilling (4,600m) to be undertaken by experienced service provider, anticipate drilling to commence in May 2024. During drilling operations the following resources will be onsite: 1 x UDR1200HC drill rig, 2 x support truck, 1 x lighting plant, 1 x site caravan, 2 x light vehicle, 3 x drill crew members per shift, 1 x cmpl employee. The program does not require any laydown sites or offices, these are located at the CSA Mine. - DHEM geophysical survey will be completed on all drillholes following completion of the program (~October 2024) - Rehabilitation of drill sites will occur post receival of all drilling and geophysical results (anticipated December 2024)
Earthworks or vegetation clearing	- Existing access tracks on CML5 and EL5693 Facility will be used, <80m of new track construction is required for the entire program - Drill sites occur in variably disturbed areas from historic mining or prospecting activities, grazing by feral animals and vehicle movements through the area. Sites avoid clearing of any significant trees - Blade up technique used where possible to limit disruption to topsoil structure and flora - Any vegetation removed is stockpiled at the drill site and scattered over the drill site during rehabilitation to promote regeneration of the area and provide habitat for fauna. - For sump construction, topsoil removed will be placed aside, all other material placed

Detail	Proposal
	separately to topsoil. Sumps will be lined. Contents removed will be returned to sump in reverse order and topsoil placed on top and mounded so no subsidence occurs during compaction. - Any drilling spoils from the drilling operation will be disposed of at the approved Tailings Storage Facility on CML5 - General waste will be disposed of at the CSA Mine site through appropriate waste disposal processes or at the Cobar Waste Storage Facility - Biodegradable drilling muds, lubricants and foams will be used in the operation - Any water produced during the drilling operation will be contained in sumps on the drill site, material will be pumped out and disposed of at the approved Tailings Storage Facility on CML5
Access to exploration activities	- Access will be via existing access tracks located on CML5 - Most of the drill sites occur adjacent to existing tracks and only a short access track will need to be constructed for site access. - Any new tracks will be through the path of least resistance and avoid removal of vegetation where possible to minimise disturbance as much as reasonably practical - ORDD24006 will require approximately 80 m of access track to be constructed from the established track. - All other drill sites will be accessed from pre-existing tracks.
Ancillary activities	
Anticipated start date	22 April 2024
Expected duration (weeks)	26
Expected rehabilitation completion date	31 December 2024
Proposed hours of operation	Continuous work hours (24 hours a day, 7 days a week).
On-site employee or contractor numbers	4

State conservation areas

The 2024 Outer Reef Diamond Drilling Program has not proposed prospecting in a State Conservation Area.

Site description and existing environment

The project comprises the following existing land uses:

The sites are located within the Cobar Peneplain bioregion, generally characterised by undulating landscapes with red earth soils and open Eucalypt and Mulga woodlands and mixed shrubland. The area is already variably disturbed with heavy grazing by feral animals and the movement of vehicles through the area and historic mining/prospecting activities over the past century. The programme will not impact the current land uses except for the immediate drill site areas, which will be rehabilitated to pre-existing environment levels or better.

The project is located near the following sensitive receptors:

The Outer Reef prospect is within 3km of the CSA Mine and is ~6km NNE of the nearest residences of the Township of Cobar. There are no sensitive receivers near the program area.

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

NSW Land Systems of the area generally follow a north-south pattern in the broader landscape. At a property scale, only two Land Systems, Ironstone (Ir) and Cobar (Cz), are represented in the same north-south trending pattern. Soils found in the area are defined as Rudosols (soils with little pedologic organisation) and Tenosols (soils with weak pedologic organisation). Whilst Rudosols generally grade

into Tenosols, their distribution in the Project Area has not been mapped but are expected to reflect the spatial pattern of drainage and landscape high points of the property.

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

The nearest water resource is the Cobar Reservoir, located 4km SSW of the Outer Reef prospect.

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

There are no known groundwater resources in the area of the drill program.

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

At a property scale, only two Land Systems, Ironstone (Ir) and Cobar (Cz) occur, with only three vegetation communities listed in the Project Area. These consist predominantly of eucalypt woodlands from three Plant Community Types (NSW BioNET) – PCT'103, PCT'108 and PCT'125. The SEED mapping also portrays the spatial distribution of the three PCTs as reasonably complex but following a number of broad landscape trends. Confirmed by field observation, the associations and trends consist of: • PCT'103 – trending towards lower sections of the landscape (broad drainage lines) and on more elevated areas as pockets of impeded drainage; PCT'103 generally grades into PCT'108 • PCT'108 – largely as a peripheral or bordering assemblage to PCT'103, occupying deeper soils with better moisture holding capacity and internal drainage; generally not associated with areas of impeded drainage • PCT'125 – associated predominantly with shallow, restricted soils occurring on elevated areas in the landscape, often found in areas with bedrock close to the surface and with minimal soil cover; more drought tolerant than the other two The project area is traversed by several broad-based (shallow) drainage lines that cross the project area in a generally west-east manner. Whilst not defined in the sense of a formal drainage channel, these drainage lines are more defined by vegetation as they carry a greater level (biomass) of vegetative material than that found on the adjacent mid to upper slopes. The sites are located within the Cobar Peneplain bioregion, generally characterised by undulating landscapes with red earth soils and open Eucalypt and Mulga woodlands and mixed shrubland. The area is already variably disturbed with heavy grazing by feral animals and the movement of vehicles through the area.

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

There are no matters of national environmental significance in the area of proposed work.

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

There are however some threatened species that were identified in a a Risk Assessment undertaken and search of NSW BioNET for Threatened Populations has identified the following species within the vicinity of the proposed Program - Antechinomys laniger (Kultarr) - Climacteris affinis (White-browed Treecreeper) - Grantiella picta (Painted Honeyeater) - Lophochroa leadbeateri (Major Mitchell's Cockatoo) Controls in place to minimise potential impacts to threatened species that may occur within the project footprint include: - Minor vegetation clearing involved, significant or habitat trees to be avoided were possible; - Adoption of LOW impact survey methods purposed specifically to reduce (ALARP) impacts to the site; - Contractor management that includes contractual conditions, prestart items, regular works inspections and contacts.

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

Query through AHIMS returned no known registered items or places of Cultural Significance. There are no other heritage items in vicinity to the project area.

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

Risk Assessment undertaken and search of NSW BioNET for Threatened Populations has identified the following species within the vicinity of the proposed Program - Antechinomys laniger (Kultarr) - Climacteris affinis (White-browed Treecreeper) - Grantiella picta (Painted Honeyeater) - Lophochroa leadbeateri (Major Mitchell's Cockatoo) Controls in place to minimise potential impacts to threatened

species that may occur within the project footprint include: - Minor vegetation clearing involved, significant or habitat trees to be avoided were possible; - Adoption of LOW impact survey methods purposed specifically to reduce (ALARP) impacts to the site; - Contractor management that includes contractual conditions, prestart items, regular works inspections and contacts.

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

AHIMS database search returned no registered sites, places or items located in the project area. No items were encountered during CMPL site inspections. Notwithstanding, should any matter of Aboriginal Cultural Heritage (ACH) be intersected during the course of works, condition of contract requires that works must discontinue at that place and the project manager be notified for review of the matter. CMPL personnel should refer to the Cultural Heritage Management Plan.

Exploration activities

The following exploration activities have been approved.

Drill holes

Id/ Regulator no.	Type	Surface disturbance (m^2)	Veg. Clearing (m^2)	Excavations (m^3)	Produced water (ml)	Depth (m)	Block number	Unit letters
ORDD24003 EDH0014606	DDH drill hole	1,600	1,600	67.5		750	BOU2902	D
ORDD24006 EDH0014608	DDH drill hole	1,600	1,600	67.5		1,100	BOU2902	D
ORDD24001 EDH0014604	DDH drill hole	1,600	1,600	67.5		750	BOU2902	D
ORDD24002 EDH0014605	DDH drill hole	1,600	1,600	67.5		900	BOU2902	D
ORDD24005 EDH0014607	DDH drill hole	1,600	1,600	67.5		1,100	BOU2902	D

Other exploration activities

Id/ Regulator no.	Type	Surface disturbance (m^2)	Veg. Clearing (m^2)	Excavations (m^3)	Produced water (ml)	Block number	Unit letters
Access track to ORDD24006 (track 80m long) EA0005025	Access tracks	240	240			BOU2974	D

Impact management

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

- The area is generally flat lying . Where access tracks are created or drill pads, all measures will be taken to reduce any erosion induced by the construction or operations - No water sources occur near the drill sites or access tracks - In the event of significant downpour access tracks or drill sites will not impede or divert waterflow in natural or manmade drainage channels - Water used for the drilling operation will be stored onsite in 3 x 10,000L tanks and fed via polypipe to the drill sumps for use in the operation. - Drill cuttings, mud and waste water will be pumped from the sumps as required and at the end of the program and disposed of in the approved Tailings Storage Facility on CML5. Sumps will be lined.

The project includes the following measures to manage groundwater impacts:

- no known aquifers are in the location of the program and the drillholes are not anticipated to produce water. - any ground water intersected will be contained in the sumps on the drill site and subsequently disposed of at the approved tailings storage facility on CML 5.

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

- Approximately 135m3 of waste water is expected to be disposed of at the approved Tailings Storage Facility on CML5, for the program. - Biodegradable muds, lubricants and foams will be used in the drilling operation and will be mixed with water, this waste water will be disposed of at the approved Tailings Storage Facility on CML5. - General waste from the operation will be limited and disposed at at the CSA Mine or at the approved Cobar Waste Facility.

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

- All chemicals used in the drilling operation are biodegradable, MSDSs for all chemicals will be kept at the drill site. - All chemicals will be transported via the support truck to site and stored on bunded pallets - Hydrocarbons will be transported in a specially designed fuel trailer and will be used to refuel the drill rig.

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

- Noise deadening is used surrounding the drill rig engine, noise from site will be minimal - No sensitive receivers are within 5km of any of the drill sites

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

- No dust will be generated by the drilling operation - Minor dust may be generated by vehicle movement, this will be monitored and if required a water cart will be used to suppress dust. - There will be no venting, flaring or fugitive emissions due to the program.

Sensitivity of the land to be disturbed

Question	Yes/no
Conservation areas	
Land reserved under the *National Parks and Wildlife Act 1974*?	No
Land acquired by the Minister for Energy and Environment under Part 11 of the *National Parks and Wildlife Act 1974*?	No
Land subject to a 'conservation agreement' under the *National Parks and Wildlife Act 1974*?	No
Land declared as an aquatic reserve under the *Marine Estate Management Act 2014*?	No
Land declared as a marine park under the *Marine Estate Management Act 2014*?	No

Question	Yes/no
Land within State Forests set aside under the *Forestry Act 2012* for conservation values, including Flora Reserves or Special Management (and other) Zones?	No
Land reserved or dedicated under the *Crown Lands Act 1989/Crown Lands Management Act 2016* (as applicable) for the preservation of flora, fauna, geological formations or other environmental protection purposes?	No
Land identified as wilderness or declared a wilderness area under the *Wilderness Act 1987*?	No
Land subject to a Biobanking agreement (established under the now repealed *Threatened Species Conservation Act 1995*) or a Biodiversity Stewardship agreement established under the *Biodiversity Conservation Act 2016*.	No
Land subject to a Wildlife Refuge agreement established under the *Biodiversity Conservation Act 2016*.	No
Land subject to existing conservation agreements that continue to have effect even where legislation has been repealed.	No
Drinking water catchment protection areas	
Land declared to be a 'controlled area' or a 'special area' under the *Water NSW Act 2014*?	No
Land declared to be a 'special area' under the *Water Management Act 2000* or *Hunter Water Act 1991*?	No
Sensitive areas	
Land declared as area of outstanding biodiversity value under the *Biodiversity Conservation Act 2016* or critical habitat under Part 7A of the *Fisheries Management Act 1994*?	No
Wetlands of international significance listed under the Ramsar Wetlands Convention?	No
Land designated as a nationally important wetland in the Directory of Important Wetlands?	No
Coastal wetlands mapped under State Environmental Planning Policy (Resilience and Hazards) 2021?	No
Littoral rainforests mapped under State Environmental Planning Policy (Resilience and Hazards) 2021?	No
Coastal zone as defined in the *Coastal Management Act 2016*?	No
Land identified in an environmental planning instrument as being of biodiversity/conservation significance or zoned for environmental conservation, protection and/or management?	No
Waterfront land defined under the *Water Management Act 2000*?	No
Land with a slope greater than 18 degrees measured from the horizontal?	No
Land with potential for soil and water contamination	
Land mapped as Actual Acid Sulfate Soils (AASS) or Potential Acid Sulfate Soils (PASS) on the Acid Sulfate Soils Risk Maps for NSW?	No
Heritage protection areas (Aboriginal and European)	
Land declared as an Aboriginal place under the *National Parks and Wildlife Act 1974*?	No
Land listed on the World Heritage List, National Heritage List or Commonwealth Heritage List?	No
Land, places, buildings or structures listed on the NSW State Heritage Register?	No
Land identified in an environmental planning instrument (such as a State Environmental Planning Policy or Local Environment Plan) as being of Aboriginal or European heritage significance?	No
Critical industry clusters	
Land identified as Critical Industry Cluster under State Environmental Planning Policy (Resources and Energy) 2021?	No
Community land	
Public land classified as community land under the *Local Government Act 1993*?	No
Other areas	

Question	Yes/no
Land identified on the title instrument as environmentally sensitive land?	No
Ecology	
Will the activity have a significant effect on threatened species or their habitats?	No
Will the activity have a significant effect on threatened ecological communities or their habitats?	No
Will vegetation be removed as part of access track upgrade works in waterfront land?	No
Aboriginal and European heritage	
Will the activity harm Aboriginal objects as defined under the *National Parks and Wildlife Act 1974*?	No
Will the activity damage any listed heritage items?	No

Attachment 1 – Statement of commitments

Item	Commitment
Activity type	Exploration activity comprising: • 5 diamond drill holes • 0 reverse circulation drill holes • 0 other drill holes • 0 cubic metres of bulk sampling • 240 square metres of new access tracks • 0 lines of seismic testing • 0 square metres of air core drilling • 0 square metres of other drilling
Activity location	Outer Reef Prospect, within CML 5 (1992).
Activity scope (including any ancillary activities)	- Program planning February 2024 - Site environmental inspections, site disturbance permit (internal), environmental risk assessment, rehabilitation objectives and completion criteria completed February 2024 - Site preparation and access track clearing following APO approval and ROCC submission, anticipated to occur in late April 2024. Experienced operator will be used for clearing, 1 x backhoe and 1 x excavator - Diamond drilling (4,600m) to be undertaken by experienced service provider, anticipate drilling to commence in May 2024. During drilling operations the following resources will be onsite: 1 x UDR1200HC drill rig, 2 x support truck, 1 x lighting plant, 1 x site caravan, 2 x light vehicle, 3 x drill crew members per shift, 1 x cmpl employee. The program does not require any laydown sites or offices, these are located at the CSA Mine. - DHEM geophysical survey will be completed on all drillholes following completion of the program (~October 2024) - Rehabilitation of drill sites will occur post receival of all drilling and geophysical results (anticipated December 2024) There will be no ancillary activities.
Hours of operation	Continuous work hours (24 hours a day, 7 days a week).
Expected duration (weeks)	26
Anticipated start date	22 April 2024
Expected rehabilitation completion date	Estimated 31 December 2024
Maximum area of disturbance	8,240 square metres
Agricultural impact	The activity will be undertaken in accordance with Agricultural Impact Statement_Outer Reef Diamond Drilling 2024.pdf (1559786 bytes)
Air quality	- No dust will be generated by the drilling operation - Minor dust may be generated by vehicle movement, this will be monitored and if required a water cart will be used to suppress dust. - There will be no venting, flaring or fugitive emissions due to the program.
Protection of water sources	- The area is generally flat lying . Where access tracks are created or drill pads, all measures will be taken to reduce any erosion induced by the construction or operations - No water sources occur near the drill sites or access tracks - In the event of significant downpour access tracks or drill sites will not impede or divert waterflow in natural or manmade drainage channels - Water used for the drilling operation will be stored onsite in 3 x 10,000L tanks and fed via polypipe to the drill sumps for use in the operation. - Drill cuttings, mud and waste water will be pumped from the sumps as required and at the end of the

Item	Commitment
	program and disposed of in the approved Tailings Storage Facility on CML5. Sumps will be lined. - no known aquifers are in the location of the program and the drillholes are not anticipated to produce water. - any ground water intersected will be contained in the sumps on the drill site and subsequently disposed of at the approved tailings storage facility on CML 5.
Soil and land stability	Clearing will use a blade up techniques to avoid disturbing soil profiles. Where excavations occur, soil will be placed aside and returned during rehabilitation of sites and tracks.
Noise and vibration	- Noise deadening is used surrounding the drill rig engine, noise from site will be minimal - No sensitive receivers are within 5km of any of the drill sites
Coastal processes and hazards	Not Applicable
Hazardous substances or chemicals	- All chemicals used in the drilling operation are biodegradable, MSDSs for all chemicals will be kept at the drill site. - All chemicals will be transported via the support truck to site and stored on bunded pallets - Hydrocarbons will be transported in a specially designed fuel trailer and will be used to refuel the drill rig.
Wastes and emissions	- Approximately 135m3 of waste water is expected to be disposed of at the approved Tailings Storage Facility on CML5, for the program. - Biodegradable muds, lubricants and foams will be used in the drilling operation and will be mixed with water, this waste water will be disposed of at the approved Tailings Storage Facility on CML5. - General waste from the operation will be limited and disposed at at the CSA Mine or at the approved Cobar Waste Facility.
Vegetation	Minor vegetation clearing involved, significant or habitat trees to be avoided were possible. Adoption of LOW impact survey methods purposed specifically to reduce (ALARP) impacts to the site. All vegetation to be returned to site upon rehabilitation to create habitats for fauna.
Threatened fauna species	Sites and access tracks have been positioned to reduce environmental harm as much as reasonably practicable, inspections completed by Environmental Deaprtment. No habitat trees or significant trees to be removed.
Threatened flora species	Sites and access tracks have been positioned to reduce environmental harm as much as reasonably practicable, inspections completed by Environmental Deaprtment. No habitat trees or significant trees to be removed.
Areas of outstanding biodiversity value/critical habitat	Not Applicable
Endangered ecological community or critically endangered ecological community	Access tracks and sites have been positioned to reduce harm as much as reasonable possible to the environment. Tracks and sites must avoid habitat or significant trees. Inspections undertaken by Environmental Department.
Habitat of a threatened species or ecological community	Access tracks and sites are position to reduce harm on the environment as much as reasonably practicable. No habitat or signficant trees will be removed. Clearing will not fragment the landscape.
Key threatening processes	Access tracks and sites have been position to avoid fragmentation of the landscape or creating physical barriers for fauna.. These locations have been inspected by CMPLs environmental department.
Barriers to movement of fauna	Access tracks and sites have been position to avoid fragmentation of the landscape or creating physical barriers for fauna.. These locations have been inspected by CMPLs environmental department.
Ecological and biosecurity impacts	Not Applicable

Item	Commitment
Community resources	The program will not rely on any natural resources. Water will be used under the CSA Mines approved water licences.
Natural resources	The program will not rely on any natural resources. Water will be used under the CSA Mines approved water licences.
Social impacts	Operation will be completed in line with the Mining Act, Mining Regulation, Codes of practice, APO and internal standards and requirements of CMPL.
Economic impacts	Regular inspections of drill sites to ensure compliance is maintained
Heritage impacts	Inspections and searches prior to commencement of the program to ensure no heritage items.
Aesthetic impacts	Community access to the CSA Mine site is restricted.
Aboriginal cultural heritage	Site inspections by Environmental Department prior to works. AHIMS search for any registered sites, places, items. should any matter of Aboriginal Cultural Heritage (ACH) be intersected during the course of works, condition of contract requires that works must discontinue at that place and the project manager be notified for review of the matter. CMPL personnel should refer to the Cultural Heritage Management Plan.
Land use impacts	Access tracks and drill sites have been positioned to reduce clearing as much as reasonably possible. Environmental department have inspected proposed sites and access tracks.
Transportation impacts	Railways or roads are not to be impeded or impacted by the program.
Matters of national environmental significance	Vegetation clearing must not impact habitat or signficant trees. Vegetation clearing will not fragment the landscape. Removed vegetation will be reused during rehabilitation to create habitats for fauna.
Cumulative impacts	Any future planned exploration activities must assess cumulative impact.
Rehabilitation commitments	The activity will be undertaken in accordance with the rehabilitation objectives and targets provided for this project.
Risk assessments	The titleholder must monitor the risks associated with activities and, if the risk associated with an activity changes, implement revised environmental management controls.
Incident management	The NSW Resources Regulator will be notified of all incidents in accordance with the requirements of CML 5 (1992).
Reporting	Reporting to the NSW Resources Regulator and Mining, Exploration and Geoscience – Department of Regional NSW will be in accordance with the conditions of CML 5 (1992).
Codes of Practice	2024 Outer Reef Diamond Drilling Program will be operated in accordance with: • Exploration Code of Practice: Environmental Management Exploration Code of Practice: Rehabilitation
Other (as applicable)	1. No additional terms specified.

Attachment 2 – Definitions

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

Word	Definition
Aboriginal object	Has the same meaning as it has in the *National Parks and Wildlife Act 1974.*
Aboriginal place	Has the same meaning as it has in the *National Parks and Wildlife Act 1974.*
Acid Sulfate Soils	Sediments and soils containing iron sulfides which, when exposed to oxygen, generate sulfuric acid. Acid sulfate soils include actual acid sulfate soils (AASS) or potential acid sulfate soils (PASS).
Activity	Any activity carried out in connection with exploration, including: • the use of land • means of accessing land • the carrying out of a work.
Activity approval	An approval to carry out assessable prospecting operations granted under the *Mining Act 1992*.
Actual Acid Sulfate Soils (AASS)	Sediments and soils containing highly acidic soil horizons or layers resulting from the aeration of sediments and soils that are rich in iron sulfides, primarily sulphide.
Applicant	In relation to an exploration activity, the person proposing to carry out the exploration activity.
Aquatic reserve	Has the same meaning as it has in the *Marine Estate Management Act 2014.*
Areas of Outstanding Biodiversity Value (AOBVs)	Has the same meaning as it has in the *Biodiversity Conservation Act 2016*. Note: Areas of declared critical habitat under the now repealed *Threatened Species Conservation Act 1995* have become Areas of Outstanding Biodiversity Value (AOBVs) under the *Biodiversity Conservation Act 2016*.
Assessable prospecting operation	Any prospecting operation that is not exempt development within the meaning of *State Environmental Planning Policy (Resources and Energy) 2021.*
Clearing of vegetation	Any one or more of the following: • cutting down, felling, thinning, lopping, logging or removing vegetation, or • killing, destroying, poisoning, ringbarking, uprooting or burning vegetation.
Complying exploration activities (CEA)	Exploration activities that are considered unlikely to significantly affect the environment as set out in *Exploration guideline: Application and assessment process for exploration activities*.
Critical habitat	Has the same meaning as it has in the *Fisheries Management Act 1994*. Areas of declared critical habitat under the now repealed *Threatened Species Conservation Act 1995* have become Areas of Outstanding Biodiversity Value (AOBVs) under the *Biodiversity Conservation Act 2016.*
Drill hole	A hole made by drilling or boring, but excludes: • sampling and coring using handheld equipment petroleum wells.
Drilling	The perforation of the earth's surface crust by mechanical means to form a hole, whether the hole caused by the perforation is vertical, inclined or horizontal, and includes all operations for preventing collapse of the sides of such hole or for preventing it from being filled with extraneous materials including water

Word	Definition
Environment	Has the same meaning as it has in the *Mining Act 1992*.
Environmentally sensitive area of State significance	Has the same meaning as it has in *State Environmental Planning Policy (Resources and Energy) 2021*.
Excavation	The removal of the surface layer to a depth greater than 500 mm from the natural surface level.
Exempt development	Has the same meaning as it has in *State Environmental Planning Policy (Resources and Energy) 2021*.
Exploration	Has the same meaning as it has in *State Environmental Planning Policy (Resources and Energy) 2021*.
Fauna	Has the same meaning as it has in the *National Parks and Wildlife Act 1974*.
Groundwater	Water that occurs beneath the ground surface in the saturated zone.
Habitat	Has the same meaning as it has in *the Biodiversity Conservation Act 2016* or the *Fisheries Management Act 1994* (as relevant).
Harm	In relation to matters of national environmental significance, has the same meaning as 'significant impact' as provided by the 'Significant Impact Guidelines' used to determine whether assessment and approval is required under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*. In relation to the environment, has the same meaning as it has in the *Protection of the Environment Operations Act 1997*. In relation to threatened species or ecological communities, has the same meaning as: • 'harm an animal' in the National Parks and Wildlife Act 1974 • 'pick a native plant' in the National Parks and Wildlife Act 1974 • 'harm' in the Fisheries Management Act 1994. In relation to an aquifer or waterfront land, has the same meaning as it has in the *Water Management Act 2000*. In relation to Aboriginal places or Aboriginal objects has the same meaning as it has in the *National Parks and Wildlife Act 1974*. In relation to items of heritage significance, has the same meaning as it has in the *Heritage Act 1977*. In relation to protected marine vegetation, has the same meaning as it has in the *Fisheries Management Act 1994*.
Items of heritage significance	Means: • any heritage items listed in one or more of the following: — the Commonwealth Heritage List — the World Heritage List — the National Heritage List — the State Heritage Register — an Environmental Planning Instrument • any relic (being any deposit, object or material evidence which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and which is 50 or more years old), or • within State Conservation Areas:

Word	Definition
	— items that are listed on the DECC Historic Heritage Information Management System, or — any deposit, object or material evidence relating to the settlement or occupation of New South Wales or a part of New South Wales (not being Aboriginal settlement or occupation) if the deposit, object or material evidence is more than 25 years old at the date of the interference or removal.
Land	Includes: • the sea or an arm of the sea • a bay, inlet, lagoon, lake or body of water, whether inland or not and whether tidal or non-tidal • a river, stream or watercourse, whether tidal or non-tidal, and • a building erected on the land
Marine vegetation	Has the same meaning as it has in the *Fisheries Management Act 1994*.
Matters of national environmental significance	'Matters of national environmental significance' protected under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*.
Minister	The Minister administering the *Mining Act 1992.*
Native vegetation	Has the same meaning as it has in the *Local Land Services Act 2013*.
Potential acid sulphate soils (PASS)	Sediments and soils that contain iron sulfides or sulfidic material which have not been exposed to air and oxidised
Produced water	Any form of groundwater that is actively extracted from a borehole or excavation, excluding incidental groundwater mixed with drilling fluids.
Rehabilitation	Has the same meaning as it has in the *Mining Act 1992*.
Seismic survey	The use of shock waves (generated in the ground using either small explosive charges detonated below the surface, hand-held mechanical hammers or vehicle-mounted hammers) and an array of geophones, which are connected to measuring instruments, to differentiate the geophysical properties of the subsurface of the earth.
Sensitive receiver	Includes: • dwellings • libraries • educational and research institutions (including schools, colleges and universities) • childcare centres • kindergartens • hospitals, surgeries and other medical institutions • places of worship • milking sheds and holding yards associated with dairies • animal boarding or training establishments • aquaculture • intensive livestock agriculture
Site	The land on which an activity is located.
State Conservation Area	Has the same meaning as it has in the *National Parks and Wildlife Act 1974.*

Word	Definition
Surface disturbance	Means: • disturbance or exposure of the soil or surface rock layer, or • degradation or deterioration in any manner of the physical surface of land.
Terms	In relation to activity approvals, the terms imposed by the decision-maker on the grant of an activity approval.
Threatened species or ecological communities	Has the same meaning as it has in the *Biodiversity Conservation Act 2016* or *Fisheries Management Act 1994* (as relevant).
Title	An authority under the *Mining Act 1992.*
Titleholder	A person or company to whom a title has been issued.
Track	All unsealed routes that will be traversed multiple times, but does not include single pass (ingress and egress) routes or seismic shot and receiver lines.
Waste	Has the same meaning as it has in the *Protection of the Environment Operations Act 1997.*
Water source	Has the same meaning as it has in the *Water Management Act 2000.*
Water land	Has the same meaning as it has in the *Fisheries Management Act 1994.*
Waterfront land	Has the same meaning as it has in the *Water Management Act 2000.*
Wetlands	Has the same meaning as it has in the *Fisheries Management Act 1994*.
Wilderness	Lands identified as wilderness under the *Wilderness Act 1987.*
Wilderness area	Lands (including subterranean lands) declared to be a wilderness area under the *Wilderness Act 1987* or the *National Parks and Wildlife Act 1974.*

Attachment 3 – Review of environmental factors

Air impacts
Provide a brief description of likely impacts to air quality, including the distance to, and impacts on, nearby sensitive receivers.
Sensitive receivers are greater than 6km from the project area. The program will have no impact on air quality as a result of drilling operations. Dust may be generated by movement of mobile equipment on access tracks, this dust generation will be monitored throughout the program. There will be no venting or flaring of gases.
What is the activity's likely impact due to generation of greenhouse gases emissions or release of chemicals which affect the ozone layer or produce photo-chemical smog?
Nil/Not applicable
What is the likely level of any impacts?
Nil/Not applicable Nil/Not applicable
Outline any proposed management controls and/or mitigation measures.
Dust generation is the main potential impact, although deemed negligible. CMPL will monitor access tracks and dust generation, where required a water cart will be deployed to mitigate dust generation.

Water impacts
Provide a brief description of the likely impacts to water quality and/quantity.
The program does not occur near any surface water resources. As the program area is flat and devoid of natural drainage lines, CMPL believe there will be negligible impact on water run-off in cleared areas. There are no known aquifers in the area, if a hole were to produce water, the excess water would be contained within the sumps.
What is the activity's impact due to the storage of water?
Nil/Not applicable Nil/Not applicable
What is the activity's impact to natural water bodies, wetlands or runoff patterns?
Nil/Not applicable Nil/Not applicable
What is the activity's impact due to aquifer interference, including changes to inter-aquifer connectivity?
Nil/Not applicable
What is the activity's impact due to changes to flooding or tidal regimes?
Nil/Not applicable Nil/Not applicable
What are the impacts from any hydraulic fracturing (well stimulation), including through gas and fluid migration?
Nil/Not applicable
What is the activity's impact due to changes in surface or groundwater quality and quantity?
Nil/Not applicable
What is the likely level of any water impacts?
Nil/Not applicable
Outline any proposed management controls and/or mitigation measures.
Construction of drill sites and access tracks will employe techniques to limit potential for water run-off or drainage that may cause erosion, this will include limiting clearing in areas subject to erosion and creating bunds or berms to slow any surface water run-off following a significant rain event.

Soil and stability impacts
Provide a brief description of the likely impacts to soil quality or land stability.

Soil and stability impacts

Impact to soil quality will result from clearing of access tracks and drill sites. Where excavation occurs topsoil will be stored onsite and used during rehabilitation. Sumps will be lined and heavy equipment will have plastic liners placed underneath to prevent any spills. The project area is flat and clearing activities will not impact surface run-off or enhance erosion.

What is the activity's impact on the degradation of soil quality including contamination, salinisation or acidification?

Nil/Not applicable

What is the activity's impact on land with high agricultural capability?

Nil/Not applicable

What is the activity's impact due to loss of soil from wind or water erosion?

Nil/Not applicable

What is the activity's impact due to the loss of structural integrity of the soil?

Negligible

What is the activity's impact due to increased land instability with high risks from landslides or subsidence?

Nil/Not applicable

What is the activity's impact due to any induced seismicity or ground movements associated with fracture stimulation or injection or extraction of groundwater?

Nil/Not applicable

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Clearing will use a blade up techniques to avoid disturbing soil profiles. Where excavations occur, soil will be placed aside and returned during rehabilitation of sites and tracks.

Noise and vibration impacts

Provide a brief description of the likely noise and/or vibration impacts.

There will be noise generated from the operating diamond drill rig and associated mobile equipment, however the impact is deemed negligible. This is due to sound deadening used on the drill rig. There are no sensitive receivers within 6km of the program area.

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Drill rig will have sound deadening installed around the engine. CMPL will monitor noise generation from the program. Noise and dust measurement devices may be worn from time to time by drilling crews.

Coastal locations and processes

Provide a brief description of likely impacts on coastal environments, coastal processes and coastal hazards.

Not Applicable

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Not Applicable

Hazardous substances and chemicals

Provide a brief description of likely impacts associated with the use, generation, storage or transport of hazardous substances or chemicals.

Drilling lubricants muds and diesel fuel will be onsite Sumps will be at each site to contain drilling fluids.

What is the likely level of the impact associated with the use, generation, storage or transport of hazardous substances or chemicals?

Negligible

Outline any proposed management controls and/or mitigation measures.

All drilling lubricants and muds are biodegradable. Diesel fuel will be stored in appropriate storage containers. All chemicals will be kept on bunded pallets. Sumps will be lined and regularly emptied at the CSA Mines approved Tailings Storage Facility.

Wastes and emissions

Provide a brief description of likely impacts to the environment from the generation or disposal of gaseous, liquid or solid wastes or emissions.

Drilling is not expected to produce gasses or excessive water. Chemicals and hydocarbons will be onsite for the program.

Provide a brief description of likely impacts on areas sensitive to this type of impact.

Drilling will not impact water catchments, wetlands or other water bodies. No groundwater is known to occur in the area.

What is the likely level of the impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Drilling chemicals (muds/lubricants) and diesel will be appropriately stored onsite on bunded pallets. Spill kits will be available onsite. Sumps at each site to contain any produced water.

Vegetation

Provide a brief description of any vegetation clearing or modification and the likely impacts to the environment.

The sites are located within the Cobar Peneplain bioregion, generally characterised by undulating landscapes with red earth soils and open Eucalypt and Mulga woodlands and mixed shrubland. The area is already variably disturbed with heavy grazing by feral animals and the movement of vehicles through the area. Native-invasive vegetation characterises the vegetation distribution of the region, with hopbush and acacia competing with Poplar box eucalypts and grassland ecosystems. Each drill site (maximum pad size 40 m x 40 m = 1,600 m2) will be cleared of vegetation, a blade-up technique will be used to avoid disturbance to topsoil. Any vegetation removed from the drill site will be placed aside and used in the rehabilitation of the drill site on completion of the works. Topsoil will be carefully removed and placed aside, similarly any further material excavated for the construction of the sumps will be placed separately to the topsoil. There are endangered species in the area, including the Kultarr, White-browed treecreeper, painted honeyeater and major mitchell's cockatoo.

What is the likely level of the impacts?

Low adverse

Outline any proposed management controls and/or mitigation measures.

Minor vegetation clearing involved, significant or habitat trees to be avoided were possible. Adoption of LOW impact survey methods purposed specifically to reduce (ALARP) impacts to the site. All vegetation to be returned to site upon rehabilitation to create habitats for fauna.

Threatened species

Provide a brief description of any likely impacts to threatened fauna and flora species.

Removal of vegetation may potentially have an impact on threatened fauna and flora, however sites and access tracks have been positioned to reduce environmental harm as much as reasonably practicable.

What is the likely level of the impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Sites and access tracks have been positioned to reduce environmental harm as much as reasonably practicable, inspections completed by Environmental Deaprtment. No habitat trees or significant trees to be removed.

Area of outstanding biodiversity value (AOBV) / Critical habitat

Provide a brief description of any likely impacts to AOBV/critical habitat.

No area of Outstanding Biodiversity Value AOBV)/Critical Habitat within the project area.

What is the likely level of the impacts?

Nil/Not applicable Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Not Applicable

Endangered ecological community or critically endangered ecological community

Is the activity likely to have an adverse effect on an endangered ecological community or critically endangered ecological community? Select as relevant:

N/A

Provide a brief description of any impacts.

Removal of vegetation for the construction of drill sites and access tracks

What is the likely level of the impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Access tracks and sites have been positioned to reduce harm as much as reasonable possible to the environment. Tracks and sites must avoid habitat or significant trees. Inspections undertaken by Environmental Department.

Habitat of a threatened species or ecological community

Is the activity likely to have an adverse effect on the habitat of a threatened species or ecological community (including protected aquatic species)? Select as relevant:

N/A

Describe the impacts.

Minor vegetation will be cleared for construction of drill sites and access tracks, this will not cause fragmentation of adverse impacts on the existing environment.

Outline any proposed management controls and/or mitigation measures.

Access tracks and sites are position to reduce harm on the environment as much as reasonably practicable. No habitat or signficant trees will be removed. Clearing will not fragment the landscape.

Key threatening process

Provide a brief description of whether the activity will constitute, or form part of, a key threatening process - or is likely to increase the impact of a key threatening process.

The program and associated clearing will not clear habitat trees or structures or significant trees.

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Access tracks and sites have been position to avoid any habitat or significant trees. These locations have been inspected by CMPLs environmental department.

Barriers to movement of fauna

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

Minor vegetation clearing will occur as a result of the program, however it will not disrupt or fragment the environment and the movement of fauna.

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Access tracks and sites have been position to avoid fragmentation of the landscape or creating physical barriers for fauna.. These locations have been inspected by CMPLs environmental department.

Ecological and biosecurity impacts

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

N/A

Provide a brief description of any impacts.

There shall be no adverse ecological or biosecurity impacts as a result of the drilling or movement of equipment.

What is the likely level of any impacts?

Nil/Not applicable Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Not Applicable

Community resources

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

The program is located on CML5 and approximately 6km from the township of Cobar, it will not impact and community services or infrastructure.

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

The program will not divert any resources from the community.

What is the likely level of the impact?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Community resources

All resources are to be sourced by the CSA Mine and waste disposed of at approved waste facilities at the CSA Mine.

Natural resources

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

Only minor vegetation clearing will occur, the vegetation will remain onsite and be used during rehabilitation. The program will not permanently impact or degrade the land, water or soil.

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

Program will not rely on or disrupt any other industries

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

There are no reserved areas in the project area for conservation. The program will not cause any adverse impact on the environment.

What is the likely level of the impact?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

The program will not rely on any natural resources. Water will be used under the CSA Mines approved water licences.

Social impacts

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

The program will not impact the community or workforce in the area.

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

The program occurs on CML5 and on CMPL owned property, it will not impact the community or community facilities.

Describe whether the activity is likely to result in some individuals or communities being significantly disadvantaged, including a change in the level of demand for community resources (e.g. community facilities / services, and labour force).

Program will not impact community resources

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

Drilling operations will not impact community resources

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

Program will not impact aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations

What is the likely level of any social impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Social impacts

Operation will be completed in line with the Mining Act, Mining Regulation, Codes of practice, APO and internal standards and requirements of CMPL.

Economic impacts

Provide a brief description of any likely economic impacts.

Program will not have any economic impact on the community.

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Regular inspections of drill sites to ensure compliance is maintained

Heritage impacts

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

The program will not cause impacts on localities, places, landscapes, buildings or archaeological relics of heritage significance

What is the likely level of the impact?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Inspections and searches prior to commencement of the program to ensure no heritage items.

Aesthetic impacts

Describe whether the activity is likely to cause impacts on the visual or scenic landscape, including any lighting, venting or flaring of gas.

No aspect of the program will be seen by the public or neighboring landholders as it occurs on the CSA Mine site and is located >6km from nearest residences. A lighting plant will be used at night.

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Community access to the CSA Mine site is restricted.

Cultural impacts

Describe the likely impacts associated with any disturbance of the ground surface or any culturally modified trees.

Program will not impact any cultural sites, items or places.

Describe whether the activity will affect known Aboriginal objects or Aboriginal places.

AHMIS search has not identifed any registered sites, places or items in the project area

Describe whether the activity is located in areas where landscape features indicate the presence of Aboriginal objects.

Cultural impacts

Program is not being undertaken within the prescribed distances of items listed above.

Describe whether the activity will affect areas where native title exists or land subject to native title claims, indigenous land use agreements or joint management agreements.

The program occurs on Western Land Lease 14587, therefore Native Title is considered extinguished as WLL area a PEPA (Wilson v Anderson)

What is the likely level of any cultural impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Site inspections by Environmental Department prior to works. AHIMS search for any registered sites, places, items. should any matter of Aboriginal Cultural Heritage (ACH) be intersected during the course of works, condition of contract requires that works must discontinue at that place and the project manager be notified for review of the matter. CMPL personnel should refer to the Cultural Heritage Management Plan.

Land use impacts

Provide a brief description of any impacts on land use including any major changes to land use and/or curtailment of other beneficial land uses.

Minor vegetation clearing will occur as a result of the program. The program does not occur on agricultural land.

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Access tracks and drill sites have been positioned to reduce clearing as much as reasonably possible. Environmental department have inspected proposed sites and access tracks.

Transportation impacts

Provide a brief description of any significant impacts on transportation.

Program will not have any impact on any for of transportation. Program occurs on CMPL owned property .

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Railways or roads are not to be impeded or impacted by the program.

Consistency with applicable local strategic planning statements, regional strategic plans or district strategic plans

Provide a brief description of any relevant local strategic planning statements, regional strategic plans or district strategic plans and whether the proposed activity is consistent with these.

There are no strategic planning statements, regional strategic plans or district strategic plans covering the project area. Program impact is only short term.

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Consistency with applicable local strategic planning statements, regional strategic plans or district strategic plans

Monitor NSW Planning Portal for changes

Matters of national environmental significance

Is the activity likely to impact on any of the following matters of national environmental significance under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*? Select as relevant:

Listed threatened species and communities

Provide further details relating to any impacts on matters of national environmental significance.

Four threatened species occur in the area:
Kultarr
White-browed treecreeper
Painted honeyeater
Major mitchells cockatoo

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Vegetation clearing must not impact habitat or signficant trees. Vegetation clearing will not fragment the landscape. Removed vegetation will be reused during rehabilitation to create habitats for fauna.

Cumulative impacts

Is the activity likely to result in cumulative environmental effects with other existing or likely future activities?

No

Describe the impact.

CSA Mine is located 3km north of the project area. The project area is not impacted by activities at the CSA Mine, nor is the project area near sensitive receivers. Future activities will not have a cumulative impact on the project area.

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Any future planned exploration activities must assess cumulative impact.

Environmental assessment conclusions

Having regard to the potential significance of the individual impacts of the proposed activity (as well as the aggregation of all the impacts of the activity) determine whether (select as relevant):

the activity is not likely to significantly affect the environment, including threatened species or ecological communities (or their habitats), or declared areas of outstanding biodiversity value/critical habitat.

Provide any further details as relevant.

The program has been planned to limit the impact on the environment as much as reasonably practicable. Rehabilitation of the sites will see the environment restored to pre-disturbance conditions.

Attachment 4 – List of supporting documents

- 2024 Outer Reef Diamond Drilling_AHIMS Search.pdf
- 2024 Outer Reef Diamond Drilling_Protected Matters - MNES layers - February 23rd 2024.pdf
- Agricultural Impact Statement_Outer Reef Diamond Drilling 2024.pdf
- APO0001717_Submission Report_24 Feb 2024 3:15pm.pdf
- bionet-threatened-populations-to-plant-community-types-association-data.xlsx
- CML5-EL5693_SDP & ROCC (FRM-384)_Outer Reef Diamond Drill Program 2024 - signed.pdf
- Environmental or Cultural Heritage.zip
- Outer Reef_Pre-disturbance Photographs.zip
- PLN-016-r4 CMPL Exploration Environmental Management Plan.doc.zip
- Threatened Species _GeoHabitatSearch_20240223.zip