

APO0001673

Approval to undertake assessable prospecting operations

Crow Mountain

9 April 2024

Application summary

Detail	Application
Reference	APO0001673
Date of approval	9 April 2024
Title	EL 6648 (1992)
Contact	[REDACTED]
Project name	Crow Mountain
Project location	17km south east of Barraba, NSW
Activity type	Complying exploration activity

Important note

While every effort is being made to ensure that documents hosted by the NSW Resources Regulator are WCAG 2.0 Level AA compliant, we acknowledge that not all resources have achieved this. If you require this document in an alternative format, please email industry.engagement@regional.nsw.gov.au

The Regulator may make the information in your application and any supporting information (including this approval) available for inspection by members of the public, including by publication on its website or by displaying the information at any of its offices. If you consider any part of your application to be confidential, please communicate this to the Regulator via the message function on this application within the Portal.

Project

Project details

Assessable prospecting activity APO0001673 relates to the Crow Mountain at 17km south east of Barraba, NSW.

The project has the following approved characteristics.

Detail	Proposal
Activity description	<p>10 RC holes are planned targeting the Magnesite Hill Gold discovery as drilled by Abgiano in 1983 and Icon in 2010. The holes will be drilled in open areas which require minimal clearing. Drillholes PMHRC001 and 002 will be drilled from the same drill pad. Given endangered and/ or threatened species exist near the drill application (Regent Honeyeater and BoxGum Woodland) the following mitigating activities will take place:</p> <ol style="list-style-type: none"> 1) No removal of trees or small vegetation that are greater than 15cm diameter at breast height. 2) No earth works for access tracks or drill pads. Clearing of grassland using a whipper snipper only and removal of dead vegetation for the prevention of tyre damage to the drilling equipment, and fire risk minimisation. Grassland and dead vegetation will be placed next to the drill pad and not removed from site. 3) No drilling during key breeding times of the Regent Honeyeater (August - January) 4) Drill pads will be 20m x 20m. The supplied collar location is preliminary at this stage and may change by +/- 50m. The above mitigating factors will be adhered to with any collar change. The RC rig will drill the holes and drill cuttings will be placed on the ground in 1m piles. Once a hole is finished a plastic hole cap will be placed in the collar to avoid fauna falling down the hole. Once the hole is no longer needed, drill cuttings will be placed back down the hole and the collar cut 1.5m beneath the ground, a hole cap placed down the hole and backfilled to ground level. If the sample piles cannot fit down the hole they will be disposed of at a suitable waste facility. Photos will be taken before drilling and slashing takes place and after drill photos will also be taken, to support a rehabilitation report.

Detail	Proposal
Earthworks or vegetation clearing	No earth works for access tracks or drill pads will occur. Clearing of grassland only using a whipper snipper and removal of dead vegetation for the prevention of tyre damage to the drilling equipment, and fire risk minimisation. Drill spoils will be placed back down the hole once the drillhole is no longer needed and/or disposed of at a waste facility.
Access to exploration activities	The drill area is access by the sealed Fossikers Way highway, then east along the partially sealed/ unsealed Pera Linton Road and finally by station tracks. The station tracks will grant access to the majority of the drill holes and where they do not exist, the drill pads will be accessed by simply driving over the grassland.
Ancillary activities	
Anticipated start date	1 May 2024
Expected duration (weeks)	4 weeks
Expected rehabilitation completion date	1 May 2025
Proposed hours of operation	Other 7am - 6pm
On-site employee or contractor numbers	6

Exempted areas

The Crow Mountain has not proposed prospecting in an exempted area.

State conservation areas

The Crow Mountain has not proposed prospecting in a State Conservation Area.

Site description and existing environment

The project comprises the following existing land uses:

Land use is pastoral only and includes livestock. No changes to the existing land use will take place.

The project is located near the following sensitive receptors:

The area of drilling is considered remote with the closest township being Barraba, some 17km to the northwest. Several homesteads are within a 5km radius of the drilling with the closest positioned 1km south west of the drilling. This station owner will be notified before drilling commences, however, the drilling will dominantly take place on the northern side of Magnesite Hill, which will shield much of the sound.

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

Not within Strategic Agricultural land Soil class 4 - moderate to severe limitations No Acid Sulphate Soils

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

Crow Mountain Creek is positioned 750-800m to the west of the drilling. Drilling will not impact this creek. Several dams are within 150-600m of the drilling and will not be impacted.

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

Narrow perched aquifers may be intersected in drilling but the holes will not be drilled deep enough to encounter a pressurised aquifer. Please note, the historic diamond drilling did not encounter and major ground water sources.

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

The dominant area of drilling lies in a small, open and generally flat valley floor with steep topography to the north and east, and a small rise directly to the south which is termed Magnesite Hill. South and west of Magnesite Hill the topography drops away and eventually meets undulating/ rolling plains and hills. The open valley consists of grassland and sparse shrubs and bushes and the occasional fig tree, while Magnesite Hill consists of outcropping Listwanite rock with tall grass and more frequent eucalyptus trees and some fig trees.

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

Threatened Species and Communities: 35 listed threatened species as per Protected Matters Search Tool. Migratory Species: 10 migratory listed species as per Protected Matters Search Tool. Ramsar Wetlands: Banrock Station, Riverland and Coorong Wetlands are listed but are positioned 900-1100km upstream from Ramsar site. Commonwealth marine: NIL World Heritage: NIL National Heritage: NIL Nuclear Actions: NIL Water Resource: NA

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

There are no endangered species across the exploration licence as per the BioNet Atlas. The drill area does overlap with Biodiversity Values. Clearing, if required, will be kept to an absolute minimum. The SEED portal shows that the Spotted Gudgeon is a threatened species in the creeks directly north and south of the drill area. Drilling will not affect these creeks.

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

No historic cultural or natural heritage items are mapped over the drill permit area

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

To the best of my knowledge/ research there are no critical habitats listed under the register of Fisheries Management. To the best of my knowledge/ research there are no areas of outstanding biodiversity listed i.e.: no Goulds Petrel, Little Penguin population, Mitchells Rainforest Snail and Wollemi Pine

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

There are no Aboriginal sites recorded in the AHIMS database. Drilling is not taking place next to a major water source. It is not located within a sand dune system. Some of the drilling may take place on a minor relief ridge line termed Magnesite Hill. There is an existing access track across this low relief ridge line and drilling has previously taken place here in 1983 and 2010. Drilling will not take place 200m above or below a cliff face and nor will it take place within 20m of a cave or rock shelter. Please note, if clearing for drilling is required, part of the pre drill inspection is to look for any evidence of Aboriginal artefacts or similar. This is conducted in consultation with Sozo Resource's Standard Operating Procedure for the Protection of Aboriginal Objects and Sensitive Places.

Exploration activities

The following exploration activities have been approved.

Drill holes

Id/ Regulator no.	Type	Surface disturbance (m ²)	Veg. Clearing (m ²)	Excavation s (m ³)	Produced water (ml)	Depth (m)	Block number	Unit letters
PMHRC0 09 EDH0013 885	RC drill hole		400			250	2098	Q
PMHRC0 03 EDH0013 879	RC drill hole		400			200	2098	I
PMHRC0 05 EDH0013 881	RC drill hole		400			250	2098	I
PMHRC0 07 EDH0013 883	RC drill hole		400			250	2098	Q
PMHRC0 01 EDH0013 877	RC drill hole		400			170	2098	I
PMHRC0 06 EDH0013 882	RC drill hole		400			250	2098	I
PMHRC0 08 EDH0013 884	RC drill hole		400			250	2098	Q
PMHRC0 02 EDH0013 878	RC drill hole					150	2098	I
PMHRC0 10 EDH0013 886	RC drill hole		400			250	2098	I
PMHRC0 04 EDH0013 880	RC drill hole		400			200	2098	I

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
-------------------------	------	---	------------------------------------	----------------------------------	------------------------	-----------------	--------------

Impact management

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

There is no surface water present. It is unlikely that water will be required. Any creeks within the drill application area will be excluded from the drill area i.e.: a minimum buffer of 40m will be applied to the creeks and no drilling will take place within this buffer.

The project includes the following measures to manage groundwater impacts:

Drilling will not be drilled deep enough to encounter a pressurised aquifer. Narrow perched aquifers may be encountered in the drilling and will be recorded in the geological logging as best as possible. RC drilling uses minimal water and any water required will be stored on a support truck.

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

Reverse Circulation: Drill cuttings will be placed on the ground in 1m piles close to the drill collar. When the drillhole is complete and the no longer needed the cuttings will be placed back down the hole and the drill pad scarified. If the sample piles do not fit down the hole, they will be buried on the drill pad/ close to the drill pad and/ or transported to a waste facility for disposal.

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

All fuel and chemicals are safely transported in fully sealed metal containers. Appropriate spill kits will be available. Material Safety Data Sheets will be available for all chemicals on site. Additives in RC drilling include MaxFoam (biodegradable) and Hammer Oil 320 (non-hazardous but will be handled with appropriate gloves). Pressure Lube (biodegradable), Gel Extra (bentonite; non toxic and environmentally acceptable) and Trol (environmentally acceptable). The following website provides details on these materials: <http://www.mudlogic.com.au/product-mineral-exploration-drilling.shtml>

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

Drilling will take place 1000m away from the closest homestead. Hours of operation will be from 7am to 6pm. Appropriate hearing protection will be used by all people working next to the drill rig.

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

Water dust suppression will be used in the percussion drilling if the drill rig is fitted with such a device. Dust masks will also be used by personnel working close to the rig.

Sensitivity of the land to be disturbed

Question	Yes/no
Conservation areas	
Land reserved under the <i>National Parks and Wildlife Act 1974</i> ?	No
Land acquired by the Minister for Energy and Environment under Part 11 of the <i>National Parks and Wildlife Act 1974</i> ?	No
Land subject to a 'conservation agreement' under the <i>National Parks and Wildlife Act 1974</i> ?	No
Land declared as an aquatic reserve under the <i>Marine Estate Management Act 2014</i> ?	No
Land declared as a marine park under the <i>Marine Estate Management Act 2014</i> ?	No
Land within State Forests set aside under the <i>Forestry Act 2012</i> for conservation values, including Flora Reserves or Special Management (and other) Zones?	No
Land reserved or dedicated under the <i>Crown Lands Act 1989/Crown Lands Management Act 2016</i> (as applicable) for the preservation of flora, fauna, geological formations or other environmental protection purposes?	No
Land identified as wilderness or declared a wilderness area under the <i>Wilderness Act 1987</i> ?	No

Question	Yes/no
Land subject to a Biobanking agreement (established under the now repealed <i>Threatened Species Conservation Act 1995</i>) or a Biodiversity Stewardship agreement established under the <i>Biodiversity Conservation Act 2016</i> .	No
Land subject to a Wildlife Refuge agreement established under the <i>Biodiversity Conservation Act 2016</i> .	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 <i>Water NSW Act 2014</i> ?	No
Land declared to be a 'special area' under the <i>Water Management Act 2000</i> or <i>Hunter Water Act 1991</i> ?	No
Sensitive areas	
Land declared as area of outstanding biodiversity value under the <i>Biodiversity Conservation Act 2016</i> or critical habitat under Part 7A of the <i>Fisheries Management Act 1994</i> ?	No
Wetlands of international significance listed under the Ramsar Wetlands Convention?	No
Land designated as a nationally important wetland in the Directory of Important Wetlands?	No
Coastal wetlands mapped under State Environmental Planning Policy (Resilience and Hazards) 2021?	No
Littoral rainforests mapped under State Environmental Planning Policy (Resilience and Hazards) 2021?	No
Coastal zone as defined in the <i>Coastal Management Act 2016</i> ?	No
Land identified in an environmental planning instrument as being of biodiversity/conservation significance or zoned for environmental conservation, protection and/or management?	No
Waterfront land defined under the <i>Water Management Act 2000</i> ?	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 <i>National Parks and Wildlife Act 1974</i> ?	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 <i>Local Government Act 1993</i> ?	No
Other areas	
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

Question	Yes/no
Aboriginal and European heritage	
Will the activity harm Aboriginal objects as defined under the <i>National Parks and Wildlife Act 1974</i> ?	No
Will the activity damage any listed heritage items?	No

Attachment 1 – Statement of commitments

Item	Commitment
Activity type	<p>Exploration activity comprising:</p> <ul style="list-style-type: none"> • 0 diamond drill holes • 10 reverse circulation drill holes • 0 other drill holes • 0 cubic metres of bulk sampling • 0 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	17km south east of Barraba, NSW, within EL 6648 (1992).
Activity scope (including any ancillary activities)	<p>10 RC holes are planned targeting the Magnesite Hill Gold discovery as drilled by Abgiano in 1983 and Icon in 2010. The holes will be drilled in open areas which require minimal clearing. Drillholes PMHRC001 and 002 will be drilled from the same drill pad. Given endangered and/ or threatened species exist near the drill application (Regent Honeyeater and BoxGum Woodland) the following mitigating activities will take place: 1) No removal of trees or small vegetation that are greater than 15cm diameter at breast height. 2) No earth works for access tracks or drill pads. Clearing of grassland using a whipper snipper only and removal of dead vegetation for the prevention of tyre damage to the drilling equipment, and fire risk minimisation. Grassland and dead vegetation will be placed next to the drill pad and not removed from site. 3) No drilling during key breeding times of the Regent Honeyeater (August - January) 4) Drill pads will be 20m x 20m. The supplied collar location is preliminary at this stage and may change by +/- 50m. The above mitigating factors will be adhered to with any collar change. The RC rig will drill the holes and drill cuttings will be placed on the ground in 1m piles. Once a hole is finished a plastic hole cap will be placed in the collar to avoid fauna falling down the hole. Once the hole is no longer needed, drill cuttings will be placed back down the hole and the collar cut 1.5m beneath the ground, a hole cap placed down the hole and backfilled to ground level. If the sample piles cannot fit down the hole they will be disposed of at a suitable waste facility. Photos will be taken before drilling and slashing takes place and after drill photos will also be taken, to support a rehabilitation report.</p> <p>The RC drilling may require water for dust suppression and the drill contractor will be engaged to carry sealed water on their support truck for this purpose.</p>
Hours of operation	Other
Expected duration (weeks)	4 weeks
Anticipated start date	1 May 2024
Expected rehabilitation completion date	Estimated 1 May 2025
Maximum area of disturbance	square metres
Agricultural impact	The activity will be undertaken in accordance with
Air quality	Water dust suppression will be used in the percussion drilling if the drill rig is fitted with such a device. Dust masks will also be used by personnel working close to the rig.

Item	Commitment
Protection of water sources	<p>The title holder must implement all measures to prevent, so far as practicable, causing adverse impacts on water quality and quantity, including groundwater levels and pressure.</p> <p>Prior to the construction and use of any borehole, the holder of a coal prospecting title must prepare a Groundwater Monitoring and Modelling Plan in consultation with the Water Division of the NSW Department of Planning and Environment.</p>
Erosion, sediment and soil controls	<p>The title holder must implement all measures to prevent, so far as is practicable, causing any land degradation or pollution of land or water.</p> <p>The title holder must implement all practicable measures to prevent harm to the environment when disturbing land in areas of potential acid sulfate soils and actual acid sulfate soils.</p>
Noise and vibration	<p>The titleholder must implement all practicable noise management measures to ensure that noise levels meet acceptable noise criteria for sensitive receivers.</p> <p>Unless otherwise agreed with relevant landholders, the title holder must notify any potentially affected landholders at least 24 hours prior to detonating explosives. Drilling will take place 1000m away from the closest homestead. Hours of operation will be from 7am to 6pm. Appropriate hearing protection will be used by all people working next to the drill rig.</p>
Use of chemicals, fuels and lubricants	<p>The titleholder must implement all measures to prevent, so far as is practicable, causing contamination of the environment by the release of chemicals, fuels, lubricants and other potential pollutants.</p> <p>The title holder must ensure that all chemicals, fuels and lubricants, excluding those contained within plant and equipment, are:</p> <ol style="list-style-type: none"> stored and handled in accordance with any relevant Safety Data Sheet and Australian Standards for the material, and stored in appropriate containers that are in good condition and labelled to clearly identify the stored product, and kept in a facility or area which is capable of containing at least 110% of the largest container capacity stored within that area. <p>The title holder must:</p> <ol style="list-style-type: none"> ensure that adequate spill prevention and absorbent materials required to manage spills and leaks for all potential pollutants which are on site are readily available at all times, and use appropriate equipment and materials to capture any drips and spills which occur during the transfer of potential pollutants, and when carrying out maintenance of hydrocarbon filled plant and equipment.
Waste	<p>The titleholder must manage all waste in a manner which does not cause harm to the environment.</p>
Vegetation clearing and surface disturbance	<p>The title holder must minimise the extent of any vegetation clearing and surface disturbance to as low as practicable.</p> <p>The boundaries of any areas of vegetation clearing and surface disturbance must be demarcated.</p> <p>The title holder must implement all measures to prevent, so far as practicable, adverse impacts to fauna caused by vegetation clearing or surface disturbance.</p> <p>The title holder must inspect trees and canopy branches for fauna prior to felling or branch removal, and clearly demarcate any hollows or active bird nests.</p> <p>The title holder must not proceed with tree felling or branch removal until any resident fauna have been relocated by an ecologist or other competent party.</p>

Item	Commitment
Roads and tracks	<p>The title holder must consult with relevant landholders prior to establishing any new roads or tracks.</p> <p>The title holder must plan, design, construct, maintain and use roads and tracks in a manner which minimises the area and duration of disturbance to the environment and landholders to as low as practicable.</p> <p>The title holder must construct any crossings of rivers, permanent and intermittent water lands and wetlands to prevent, so far as practicable, impacts on fish habitats.</p> <p>The title holder must refrain from using any unsealed road or track during wet conditions to prevent damage to that road or track, unless the road or track has been designed and constructed for use in wet conditions, or the landholder expressly consented to the use of that road or track in wet conditions.</p> <p>Unless otherwise agreed with the relevant landholder, the title holder must repair all damage to existing roads and tracks resulting from exploration activities.</p>
Aboriginal and other cultural heritage	The titleholder must implement all measures to prevent, so far as practicable, harm to Aboriginal cultural heritage and non-indigenous cultural heritage.
Weeds, pest animals and diseases	The titleholder must implement all practicable measures to prevent the introduction and spread of weeds, pest animals and animal and plant diseases.
Livestock protection	The title holder must implement all measures to prevent, so far as practicable, causing adverse impacts to livestock.
Fire prevention	The title holder must implement all measures to prevent, as far as practicable, the ignition and spread of fire.
Rehabilitation commitments	The activity will be undertaken in accordance with the rehabilitation objectives and targets provided for this project.
Risk assessments	The title holder 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 «location».
Reporting	Reporting to the NSW Resources Regulator and Mining, Exploration and Geoscience – Department of Regional NSW will be in accordance with the conditions of «location».
Codes of Practice	<p>Crow Mountain will be operated in accordance with:</p> <ul style="list-style-type: none"> • Exploration Code of Practice: Environmental Management Exploration Code of Practice: Rehabilitation Exploration Code of Practice: Produced Water Management, Storage and Transfer
Other (as applicable)	1. No additional terms specified.

Attachment 2 – Definitions

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

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

Word	Definition
Environment	Has the same meaning as it has in the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
Environmentally sensitive area of State significance	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
Excavation	The removal of the surface layer to a depth greater than 500 mm from the natural surface level.
Exempt development	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
Exploration	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
Fauna	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
Groundwater	Water that occurs beneath the ground surface in the saturated zone.
Habitat	Has the same meaning as it has in <i>the Biodiversity Conservation Act 2016</i> or the <i>Fisheries Management Act 1994</i> (as relevant).
Harm	<p>In relation to matters of national environmental significance, has the same meaning as 'significant impact' as provided by the 'Significant Impact Guidelines' used to determine whether assessment and approval is required under the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>.</p> <p>In relation to the environment, has the same meaning as it has in the <i>Protection of the Environment Operations Act 1997</i>.</p> <p>In relation to threatened species or ecological communities, has the same meaning as:</p> <ul style="list-style-type: none"> • 'harm an animal' in the 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. <p>In relation to an aquifer or waterfront land, has the same meaning as it has in the <i>Water Management Act 2000</i>.</p> <p>In relation to Aboriginal places or Aboriginal objects has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i>.</p> <p>In relation to items of heritage significance, has the same meaning as it has in the <i>Heritage Act 1977</i>.</p> <p>In relation to protected marine vegetation, has the same meaning as it has in the <i>Fisheries Management Act 1994</i>.</p>
Items of heritage significance	<p>Means:</p> <ul style="list-style-type: none"> • any heritage items listed in one or more of the following: <ul style="list-style-type: none"> — the Commonwealth Heritage List — the World Heritage List — the National Heritage List — the State Heritage Register — an Environmental Planning Instrument • any relic (being any deposit, object or material evidence which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and which is 50 or more years old), or • within State Conservation Areas:

Word	Definition
	<ul style="list-style-type: none"> — items that are listed on the DECC Historic Heritage Information Management System, or — any deposit, object or material evidence relating to the settlement or occupation of New South Wales or a part of New South Wales (not being Aboriginal settlement or occupation) if the deposit, object or material evidence is more than 25 years old at the date of the interference or removal.
Land	<p>Includes:</p> <ul style="list-style-type: none"> • the sea or an arm of the sea • a bay, inlet, lagoon, lake or body of water, whether inland or not and whether tidal or non-tidal • a river, stream or watercourse, whether tidal or non-tidal, and • a building erected on the land
Marine vegetation	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .
Matters of national environmental significance	'Matters of national environmental significance' protected under the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i> .
Minister	The Minister administering the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
Native vegetation	Has the same meaning as it has in the <i>Local Land Services Act 2013</i> .
Potential acid sulphate soils (PASS)	Sediments and soils that contain iron sulfides or sulfidic material which have not been exposed to air and oxidised
Produced water	Any form of groundwater that is actively extracted from a borehole or excavation, excluding incidental groundwater mixed with drilling fluids.
Rehabilitation	Has the same meaning as it has in the <i>Mining Act 1992 // Petroleum (Onshore) Act 1991</i> – as relevant.
Seismic survey	The use of shock waves (generated in the ground using either small explosive charges detonated below the surface, hand-held mechanical hammers or vehicle-mounted hammers) and an array of geophones, which are connected to measuring instruments, to differentiate the geophysical properties of the subsurface of the earth.
Sensitive receiver	<p>Includes:</p> <ul style="list-style-type: none"> • dwellings • libraries • educational and research institutions (including schools, colleges and universities) • childcare centres • kindergartens • hospitals, surgeries and other medical institutions • places of worship • milking sheds and holding yards associated with dairies • animal boarding or training establishments • aquaculture • intensive livestock agriculture

Word	Definition
Site	The land on which an activity is located.
State Conservation Area	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
Surface disturbance	Means: <ul style="list-style-type: none"> • disturbance or exposure of the soil or surface rock layer, or • degradation or deterioration in any manner of the physical surface of land.
Terms	In relation to activity approvals, the terms imposed by the decision-maker on the grant of an activity approval.
Threatened species or ecological communities	Has the same meaning as it has in the <i>Biodiversity Conservation Act 2016</i> or <i>Fisheries Management Act 1994</i> (as relevant).
Title	An authority under the <i>Mining Act 1992</i> / a title under the <i>Petroleum (Onshore) Act 1991</i> – as relevant.
Titleholder	A person or company to whom a title has been issued.
Track	All unsealed routes that will be traversed multiple times, but does not include single pass (ingress and egress) routes or seismic shot and receiver lines.
Waste	Has the same meaning as it has in the <i>Protection of the Environment Operations Act 1997</i> .
Water source	Has the same meaning as it has in the <i>Water Management Act 2000</i> .
Water land	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .
Waterfront land	Has the same meaning as it has in the <i>Water Management Act 2000</i> .
Wetlands	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .
Wilderness	Lands identified as wilderness under the <i>Wilderness Act 1987</i> .
Wilderness area	Lands (including subterranean lands) declared to be a wilderness area under the <i>Wilderness Act 1987</i> or the <i>National Parks and Wildlife Act 1974</i> .

Attachment 3 – List of supporting documents

- 1 Site Plan Updated.jpg
- 2 Photographs update.pdf
- 3 Protected Matters - MNES layers - January 11th 2024.pdf
- 4_5 Critical Habitat _ Bionet.pdf
- 5 Threatened Species.zip
- 6 Historic Cultural_Heritage.pdf
- 7 AHIMS.pdf
- APO0001673_Submission Report_23 Jan 2024 11:08am.pdf
- APO0001673_Submission Report_24 Mar 2024 8:29pm.pdf
- APO0001673_Submission Report_3 Mar 2024 8:43pm.pdf
- C502BB44BF0B48C989A27937C3738F4B.png
- Crow Mountain form-appointment-and-notification-of-operator-of-a-mine-or -petroleum-site_execute.pdf
- Fwd: APO0001673 | APO0001673 - Crow Mountain - EQ Resources Limited.eml
- RE: APO0001673 | APO0001673 - Crow Mountain - EQ Resources Limited.eml
- Sozo Resources - Crow Mountain Drill Program APO0001673 - Pre referral Meeting .eml

FORM: APO_C_Apvl v3.0