



## **Limitations of the Hawkins Rumker Project REF**



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## Introduction

The Hawkins Rumker Project is a coal exploration project undertaken by the NSW Government. This Project is located near Rylstone in the Mid-Western Regional local government area.

A Review of Environmental Factors (REF) was prepared for the Hawkins Rumker Project in 2015 by the proponent, Coal and Petroleum Geoscience Resources & Energy – Maitland Department Of Industry

([https://search.geoscience.nsw.gov.au/api/download/149ffadb31749be6d36bbccbb6d2cabb/REF - Hawkins Rumker Project - Exploration Drilling Program- Aug 2015.pdf](https://search.geoscience.nsw.gov.au/api/download/149ffadb31749be6d36bbccbb6d2cabb/REF_-_Hawkins_Rumker_Project_-_Exploration_Drilling_Program-__Aug_2015.pdf))

REFs are prepared under Part 5 of the NSW *Environmental Planning and Assessment Act* (EP&A Act). Under Part 5 of the EP&A Act, proponents must 'examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity'. The minimum statutory requirements that must be considered are set out in Clause 228 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation) and in the guideline *Is an EIS required? – Best Practice Guidelines for Part 5 of the Environmental Planning and Assessment Act 1979*.

The Hawkins Rumker Project REF was used as the approval document to undertake coal exploration activities in the Hawkins and Rumker areas. These exploration activities have then informed a Preliminary Regional Issues Assessment (PRIA) process, a process which is now underway, whereby the NSW Department of Planning, Industry and Environment (DPIE) is considering the benefits, opportunities, risks and constraints of releasing coal exploration licenses for these two adjacent areas to the market. More information here: <https://www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Preliminary-Regional-Issues-Assessment>

The Rylstone Region Coal Free Community (RRCFC) has reviewed the Hawkins Rumker Project REF report and has found there are fundamental flaws in the assessment.

RRCFC's review was limited in its scope, and only considered four aspects of the REF, namely:

1. The proposed activity
2. The assessment of impacts on water
3. The assessment of threatened flora
4. The assessment of Aboriginal heritage

The findings of the review of these three aspects are discussed below. The remaining content of the REF has not been examined and no opinion is formed on it.

This review has found that the Hawkins Rumker Project REF did not 'examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity'. It has not properly assessed the threatened flora in the area, nor the Aboriginal heritage. It does not comply with the EP&A Act and has drawn conclusions based on limited and inadequate assessments.

As such, it is concluded that the approval that relied on the REF is invalid, and approval is flawed, and as such, the activities associated with it should not have proceeded.

It is noted that this REF was prepared to undertake exploration activities that would firm up understanding regarding coal deposits within the Hawkins and Rumker areas. The PRIA process – which was informed by these coal exploration activities - was developed following the ICAC report on reducing the opportunities and incentives for corruption in the state’s management of coal resources. Part of the discussion in the ICAC report revolved around the issues of a transparent and fully informed process. Given that Hawkins Rumker Project REF is neither transparent nor fully informed, it seems that the learnings arising from ICAC’s findings have yet to be integrated into the government’s decision-making processes.

## The proposed activity

The REF said:

The project will involve the drilling of 27 boreholes and each drill site will be approximately 30 x 30m in size. Holes will be designed, drilled and abandoned in accordance with licence conditions and relevant guidelines. No road or infrastructure (other than site fencing as appropriate) will be constructed during the project. Existing tracks will be used for access and in places may require minor upgrading. Drill site preparation will involve the slashing of grass and small shrubs. At some drill sites minor earthworks may be required to level the site. Leveling will be carried out by an excavator. Water for drilling will be stored onsite within above ground sumps. Water will be extracted from nearby dams with the consent of the landholder or transported onsite from an external source using a licenced operator. Drill fluids will be removed from site and disposed of by an approved method at the completion of each drill hole.

The nature and extent of any upgrades to tracks should have been assessed and considered as part of the REF.

The REF says the maximum area of disturbance will be 900m<sup>2</sup>; however, it will in fact be 24,300m<sup>2</sup> being 27 x 30m x 30m plus whatever disturbance there was along access tracks to get to these sites (not quantified in the REF but should have been).

The Activity Location is given as 'north-east of Dunedoo, Mendooran area, Goonoo SCA'. This is incorrect. It is possible this explains an odd statement made in relation to Aboriginal heritage site inspection (refer discussion below for further details).

## Assessment of water impacts

The REF says 'the activity will have negligible impacts on water. The only impact will be on the extraction of water for drilling purposes from farm dams – but only with the consent of the Landholder.'

Cored exploration holes of a depth of up to 365m were proposed as part of this activity. There was no assessment presented in this document of the nature of the geology or the groundwater systems present. This region is rich in natural springs and aquifers. Local experience is that within close proximity, there are saline and fresh underground water resources. The sandstone units behave as porous and fractured rock aquifers whereas claystones and shales behave as aquitards (Context statement for the Sydney Basin bioregion).

Drilling traverses any aquifers within the alignment of the bore and the risks are a loss of an aquifer or cross contamination. There was no consideration of the potential for water loss or contamination that could result of the proposed activity or whether it was possible that both fresh and saline aquifers could lie below the surface.

The REF simply stated that cross-contamination of aquifers will be avoided as holes will be fully sealed. For rehabilitation, the REF did note 'EDG01 Borehole Sealing Requirements on Land will be followed', but this appears on the superseded guidelines (as these are found here: <https://resourcesandgeoscience.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/superseded-guidelines>, accessed 15/7/21). EDG01 discusses 'approved cement mixtures' and that 'setting and weight testing shall be satisfactory completed', but does not give any criteria or standards against which 'approved' or 'satisfactory' can be measured.

## Assessment of threatened flora

The REF says a NSW National Parks and Wildlife Service Atlas of NSW Wildlife search was carried out for flora within the project area and it showed there was no threatened flora within the Project Area.

It then later stated:

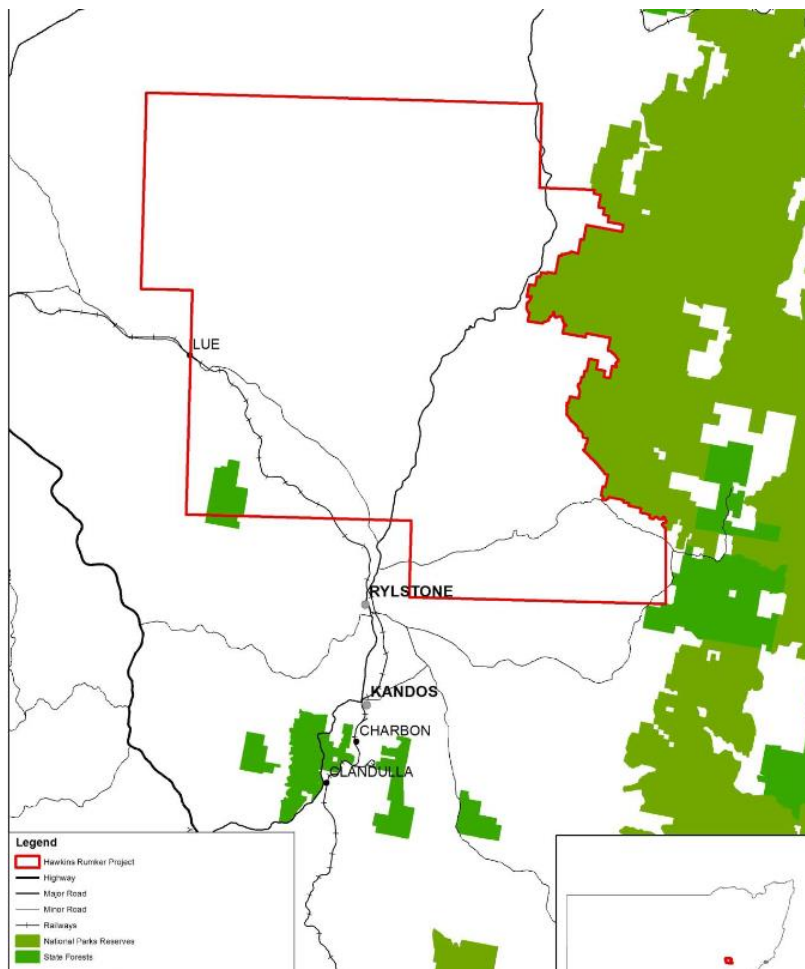
- No vegetation of conservation significance will be impacted.
- Drilling operations will be located more than 200m from a listed flora and fauna species location

There are a number of issues with these statements.

### Inaccurate information

A search of the NSW National Parks and Wildlife Service Atlas of NSW Wildlife search in 2015 would have in fact revealed a number of threatened flora. Below is a discussion of what would have been present, as well as what could have been found with further investigation, as the RRCFC did in a matter of a couple of hours.

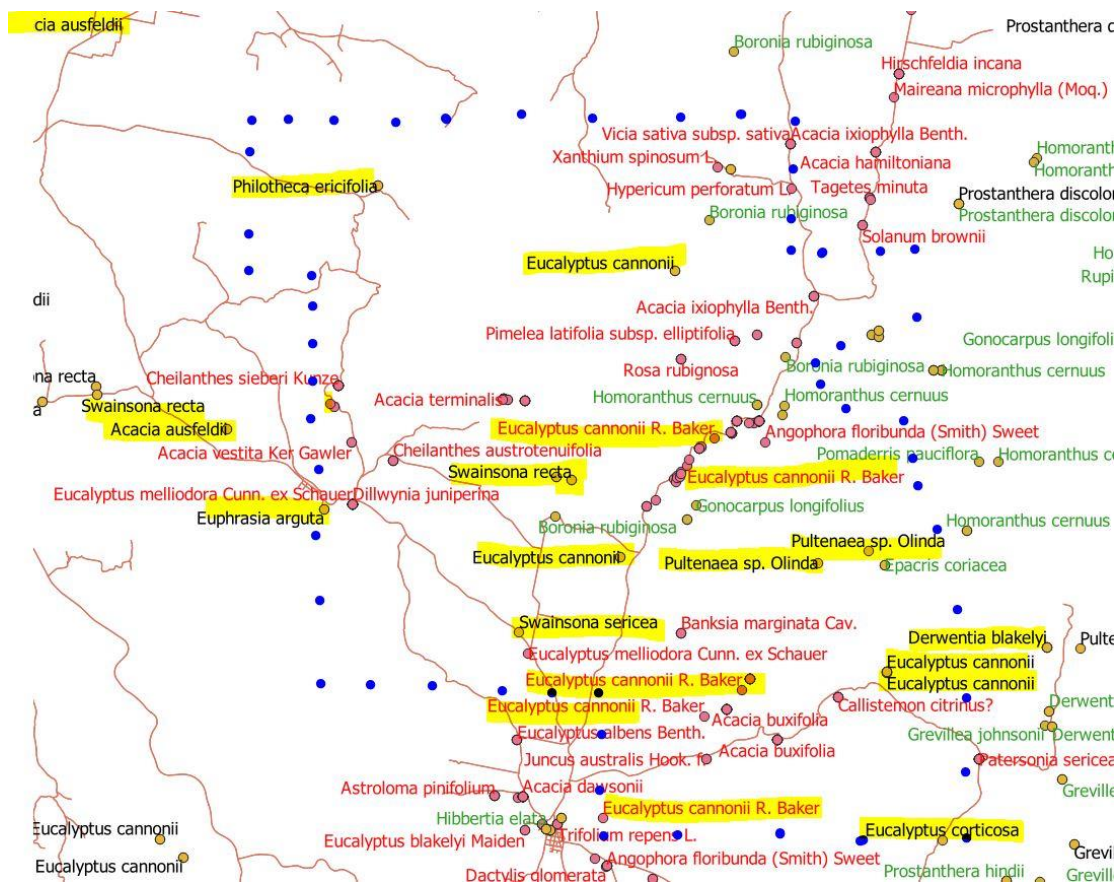
#### The Hawkins Rumker area as per the REF:



[https://search.geoscience.nsw.gov.au/api/download/149ffadb31749be6d36bbccb6d2cabb/REF - Hawkins\\_Rumker\\_Project - Exploration\\_Drilling\\_Program- Aug\\_2015.pdf](https://search.geoscience.nsw.gov.au/api/download/149ffadb31749be6d36bbccb6d2cabb/REF - Hawkins_Rumker_Project - Exploration_Drilling_Program- Aug_2015.pdf)

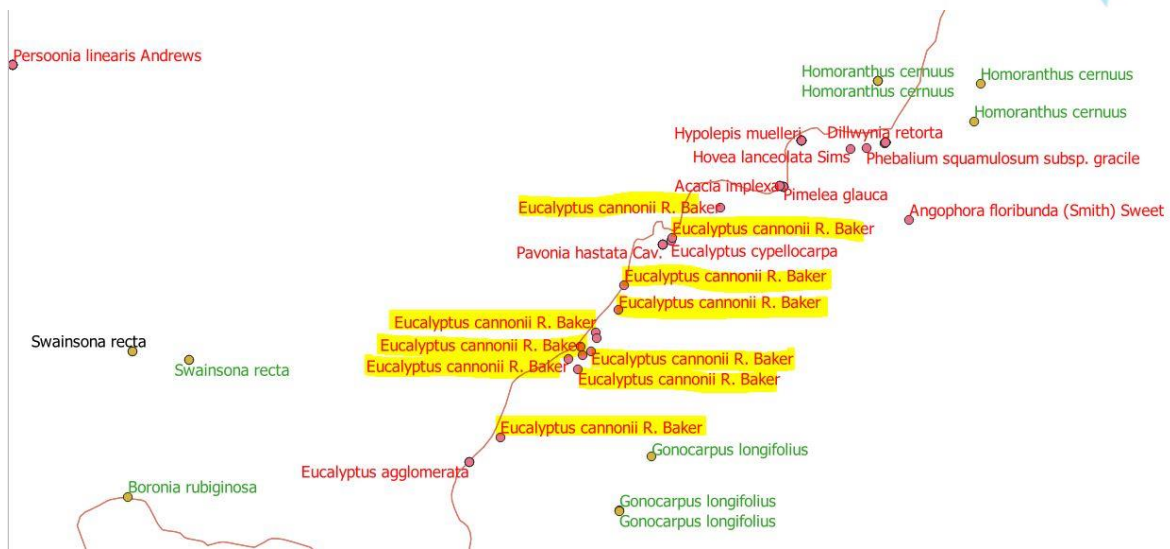
As part of the review of the REF, databases available at the time the MWRC Roadside Corridor project was completed (March 2011) were reviewed (<http://www.midwestern.nsw.gov.au/resident-services/Environmental-Services/Environmental-Projects-1/Roadside-Corridor-Management-Project/> )

The blue dots approximate the Hawkins Rumker Project study area. All species highlighted in yellow are threatened species.



Given the close proximity of the sightings along the Bylong Valley Way, the map above has not shown all labels. A close up of this area is below. As the Bionet limitations (below) state, sightings often follow patterns of human movement, such as along roads.





## Limitations of the BioNet data

This is from the BioNet website (<https://www.environment.nsw.gov.au/wildlifeatlas/about.htm>) and it speaks for itself:

Data in the BioNet Atlas, whilst extensive, is nevertheless patchy. It covers all areas of NSW and also includes some records from neighbouring states, but will not provide information on the full distribution of a species. The BioNet Atlas is not a comprehensive inventory of all species, nor of all locations of species in NSW. **Except in areas where detailed survey information has been incorporated into the database, the search results for a particular area are based on a mix of reported sightings. For example, sightings often follow patterns of human movement, such as along roads.**

It is also important to realise that the number of recorded sightings for a species does not necessarily correspond in any way to the actual abundance of that species in NSW. Contributors often focus their efforts on recording threatened species, with the result that rare species may have more recorded sightings in the BioNet Atlas than common species. Conversely, a common species in an area may not be recorded in BioNet Atlas, because no-one has thought to report its occurrence.

The data may contain errors and omissions and you use the data at your own risk. Neither the Office of Environment and Heritage nor any other data custodian will accept liability for any loss, damage, cost or expenses that you may incur as a result of the use of or reliance upon the data. Data in the BioNet Atlas is constantly updated and you should use the current data from the BioNet Atlas website and not rely on material you have previously printed or downloaded.

The relatively undisturbed nature of the project area, and its proximity to World Heritage and extensive State Forests and Crown Lands, are clear indicators that there are sensitive environmental areas and therefore a high likelihood threatened flora could be present.

Further investigation should have been undertaken to ascertain what species were likely to be in the area. The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Protected Matters Search Tool should also have been used to assess what species may have been likely in the study area.

### Summary of flora findings

The REF gives the commitment '*no threatened ecological species, population or communities will be adversely impacted*'. This statement cannot be made based on the level of desktop investigation and that only desktop investigation was undertaken as part of the REF. As the information has not been assessed to the fullest possible extent, or even to a reasonable extent, it is not possible to conclude this.

To properly inform the REF, further investigation should have been undertaken by an ecologist within the proposed drilling locations and along any areas being disturbed through earthworks or slashing to determine what threatened species were present.

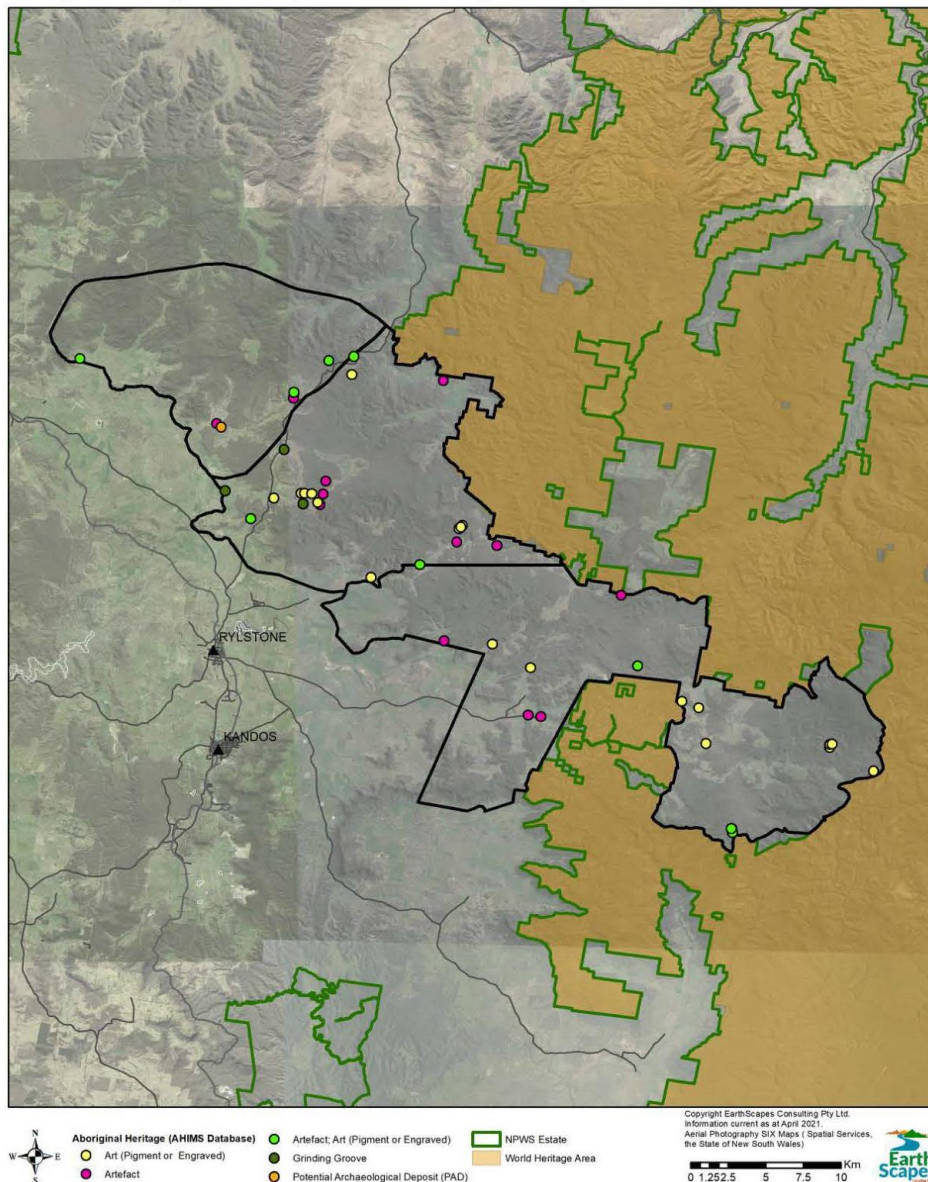
## Aboriginal heritage

The REF says:

Under Section 86(4) of the National Parks and Wildlife Act 1974(NPW), it is an offence to harm or desecrate a declared Aboriginal place. A search of AHIMS for any known Aboriginal objects and the DECCW listing of Aboriginal places has been undertaken. The results of the search areas are as follows:

- AHIMS: There are no known Aboriginal objects within the project area.
- DECCW: There are no declared Aboriginal places within the project area.

It is uncertain how this finding occurred, given a large number of Aboriginal heritage items have been recorded on the Aboriginal Heritage Information Management System (AHIMS) site within the MWRC LGA and this has been the case for many years. The figure below shows the Aboriginal heritage sites currently recorded in AHIMS (Earthscapes, 2021) for the currently defined Hawkins and Rumker areas (which it should be noted, is less than the area defined as the project area in the REF).



In addition, the REF says the proposed activities are on disturbed land and:

- some sites are within 200m of drainage lines
- Some sites are on a ridgeline

Disturbed land or land already disturbed by previous activity is defined in The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (2010):

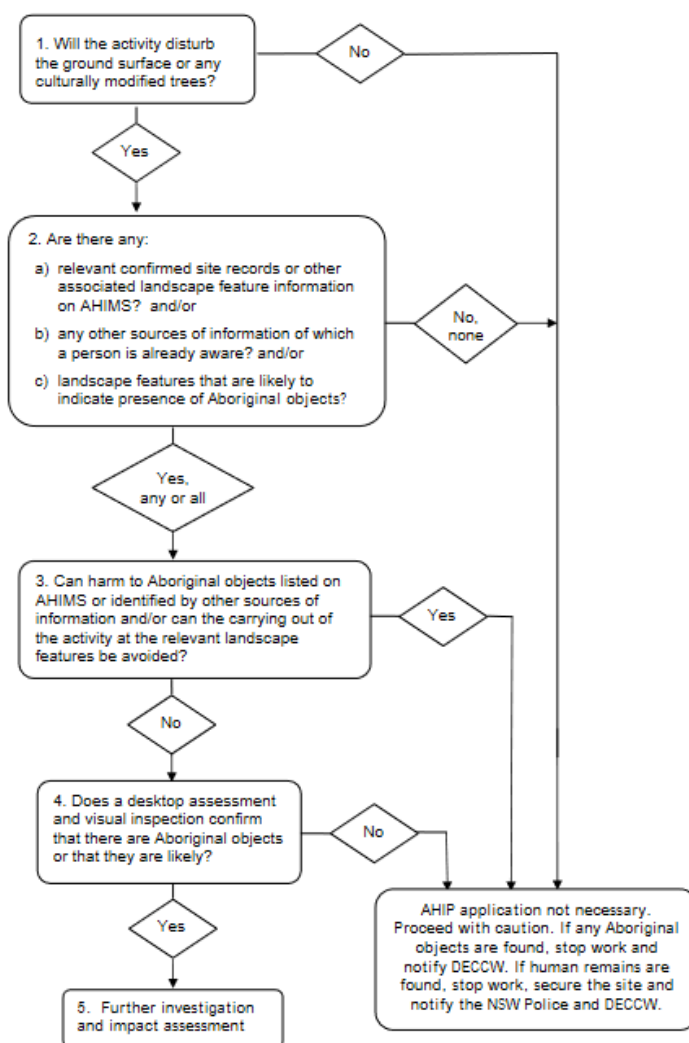
Land is disturbed if it has been the subject of a human activity that has changed the land's surface, being changes that remain clear and observable. Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure,

water or sewerage pipelines, stormwater drainage and other similar infrastructure) and construction of earthworks.

The statement that the sites are on disturbed land is not consistent with the description given in the REF, which says ‘exploration sites are mostly well covered in a mixture of native and introduced grasses. The grasses support grazing, predominantly by cattle. The areas surrounding the exploration sites vary from grasses to lightly timbered areas. These timbered areas mainly consist of native trees and shrubs with a grassy understorey.’ Therefore, the Clause 80B Defence of carrying out certain low impact activities cannot be applied.

When land is not disturbed and there is no Clause 80B Defence, the flow chart from the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (2010) (below) is to be followed. This should have resulted in further investigation; however, from the information outlined in the REF this has not been undertaken.

### 8 The generic due diligence process



<https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Aboriginal-cultural-heritage/due-diligence-code-of-practice-aboriginal-objects-protection-100798.pdf>

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (2010) says at a minimum the information reviewed as part of the desktop assessment should include existing knowledge of Aboriginal cultural heritage gleaned from previous heritage studies or reports for the area, including any archaeological studies on AHIMS. Had there been any consideration of other studies within similar landscapes within this LGA it would have revealed that anywhere detailed investigations had been undertaken, there was a plethora of Aboriginal heritage objects located.

Further, the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (2010) says:

You must undertake a visual inspection of the area to see if Aboriginal objects can be identified or are likely to be present below the surface. This visual inspection must be done by a person with expertise in locating and identifying Aboriginal objects. This person with expertise could be an Aboriginal person or landholder with experience in locating and identifying Aboriginal objects or a consultant with appropriate qualifications or training in locating and identifying Aboriginal objects.

Oddly, the REF does say in one place in the report 'a visual drill site inspection prior to drill site preparation has not identified any possible Aboriginal objects'. However, there is no other information outlining details of a site inspection having been undertaken as part of the investigations informing the REF. There is no detail on who completed this 'visual drill site inspection', their qualifications for undertaking such an assessment or when it was done. It appears to be alluding to something that would happen in the future, given it is 'prior to drill site preparation' – which should only occur after the REF was approved. There is also no mention of such a site inspection in the impact assessment section of the REF report. As such, it would appear there was no site inspection by a suitably qualified person informing the REF on matters of Aboriginal heritage.

This review has therefore concluded that the Aboriginal heritage assessment has not been undertaken in accordance with the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (2010).

## Conclusion

After this review of the description of the proposed activity, and assessment of the potent water, Aboriginal heritage and flora components of the Hawkins Rumker Project REF, the RRCFC has formed the opinion that the REF does not 'examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity'.

It has not properly assessed the geology and water resources of the region, threatened flora in the area, nor the Aboriginal heritage. It has drawn inaccurate conclusions based on the limited and inadequate information and assessments.

As such, the RRCFC has concluded the REF and approval based upon this document is flawed, as it does not comply with the EP&A Act and the activities associated with this approval should not have proceeded.