

**ADDITIONAL INFORMATION**  
**APPLICATION for (Purpose) CLEARING PERMIT 2026**  
**M77/1245- North Pit**

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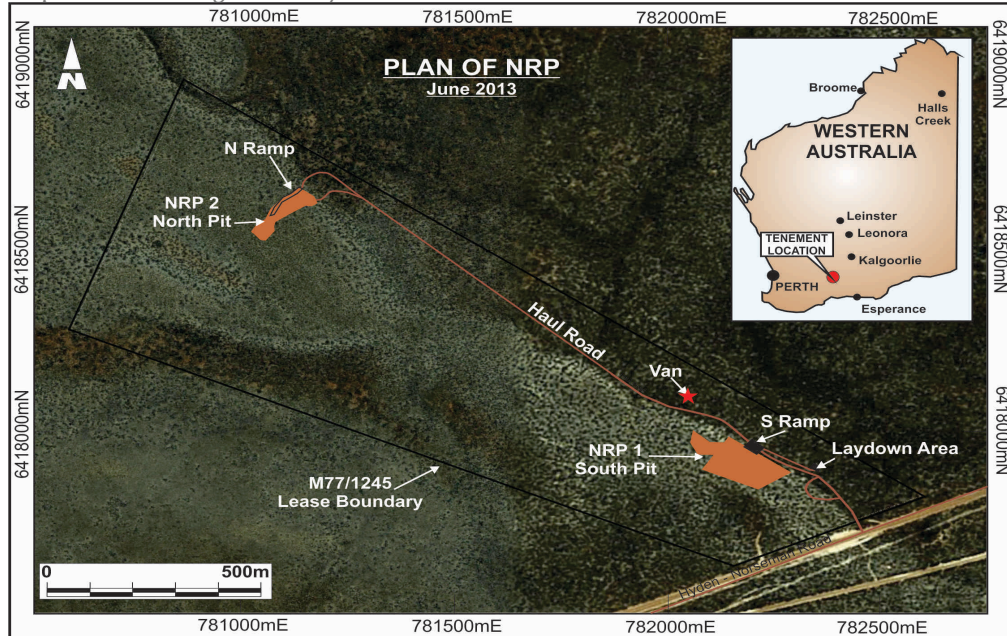
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#### 1. HISTORY OF TENEMENT CLEARING INCLUDING PREVIOUS CLEARING PERMITS & TENEMENT OWNERSHIP BY RELATED PARTIES

Map 1: Sand Mining Pits M77/1245



In 2011 M77/1245 (owned by Ronald William Brown) tenement had two limited impact mining operations (LIMOs) approved based on 'desk-top surveys' because the area was not located with-in any ESAs or "non-permitted" area and the amount of sand the owner wanted to mine was under 10,000tonne per year. (Reg ID 27557, dated 24.12.2010 was related to the South Pit and Reg ID 29917, dated 30.3.2011, was related to the North Pit.)

Clearing was done under Regulation 5, Item 20 of *Environmental Protection (Clearing of Native Vegetation)* Reg. 2004 allowing 10 hectares of clearing per year.

Under the LIMOs the South Pit 2.7500 hectares was cleared and rehabilitated.

A haul road to the North Pit was cleared and a turn around area, ramp and office area. A pit was commenced and 0.6 hectares cleared.

On 29 June, 2011 (stamp duty completed 21 September 2011) M77/1245 was transferred to the Brown Family Trust (BFT) - trustees Ronald William Brown and Carolyn Joy Brown. **The title of M77/1245 used individual trustee's names reflecting DMPE policy of not showing Trust name.**

BFT as Mining Operator sought to increase the tonnes mined so began preparing a Mining Operations Proposal. As part of the approvals process BFT commissioned an environmental desktop review and reconnaissance survey from PEK ENVIRO in September 2011 titled *Level 1 Vegetation and Flora Survey*.

After finding a Threatened Species *Calectasia Pignattania* in the soil type of the proposed pit area, the owners commissioned PEK ENVIRO to do a further survey in November 2012. The purpose was to find the extent of the plant on M77/1245 and E 77/1604 (adjoining land which was also held by Brown Family Trust). PEK ENVIRO's report titled *Threatened Flora Reconnaissance Search Report* has been previously submitted to DMPE.

PEK ENVIRO's botanist noted 872 plants in his survey (section 4.0, page 3) and further prospective areas so BFT decided to apply to continue mining sand.

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An application was made to Federal Government Department of Environment in under the EPBC Act in 2014. The referral decision was that it was 'not a controlled action' was made on 24 April 2014.

### Permit CPS 5934/1 & TFN 94-1314

Purpose Permit to clear and mine an additional 4 hectares was applied for. It was granted and given the number CPS 5934/1. Concurrently a Threatened Permit TFN 94- 1314 was applied for to DBCA to take 30 plants (based on PEK Enviro's extrapolation of 7 plants per hectares).

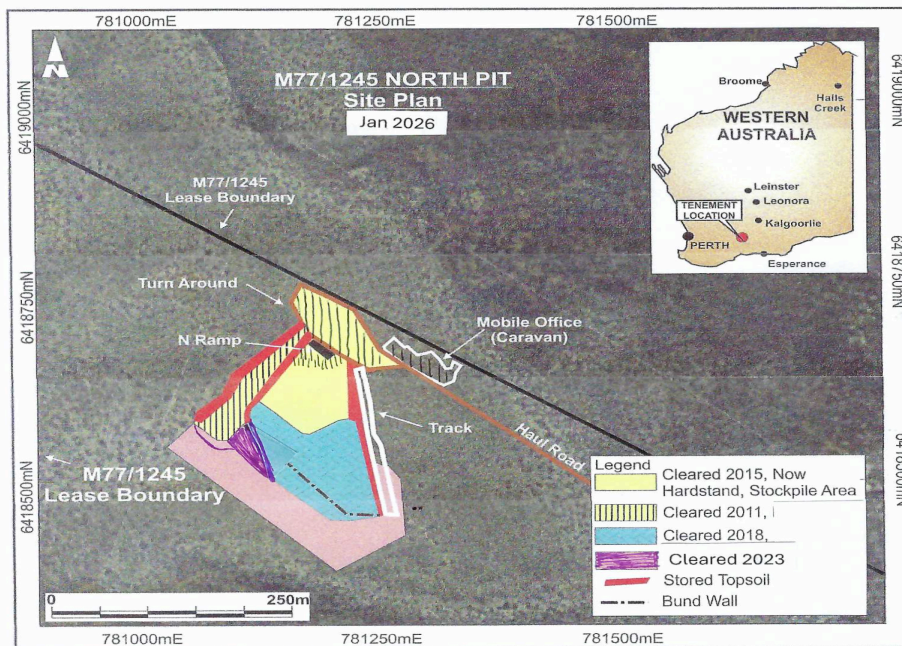
Only 1.747 hectares was cleared when the permits expired 1 March 2019. The demand for sand did not meet the expectations of the owners so less was cleared (and mined) than applied for.

### Permit CPS 8401/1 & TFN 50-1819

At the expiry of the previous permits the owners applied to clear the remaining area of 2.253 hectares. Purpose Permit CPS 8401/1 was granted, along with the concurrent Threatened Permit TFN 50-1819. These permits expired 31 December 2025. Only 0.1935 hectares were cleared during the duration of these permits.

Again, the demand for sand did not meet expectations due to a slump in nickel prices (our main customer). Therefore, less area was cleared than applied for. One owner died and all worked stopped for some time as he was also Senior Site Executive.

Map 2: Positioning of Land Cleared at North Pit, M77/1245 at January 2026



### SUMMARY OF CLEARING:

**The current total clearing on the tenement is 4.4979 hectares.**

This includes the 1.940 hectares done under Clearing Permits 5934/1 and 8401/1. It also includes clearing done under the initial LIMOs -including the haul road to the North Pit, turn around area, ramp and office area and 0.6 hectares at North Pit.

It does not include the 2.7500 hectares that has been rehabilitated at the South Pit.

It can be assumed (by extrapolation) that 15 *Calectasia Pignattana* plants have been taken.

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**SUMMARY OF CURRENT OWNERSHIP:**

In June 2024, at the death of Ronald William Brown, Carolyn Joy Brown became the sole trustee of Brown Family Trust.

The trustee role of Brown Family Trust was handed to son Jadd William Brown (in the entity of RWB Farms Pty Ltd). The process of valuation and duty was completed on 21 January 2026 and was submitted to Mining Titles of DMPE on 2 February 2026.

The entity of RWB Farms Pty Ltd as trustee of Brown Family Trust is applying for a Clearing Permit.

**2.1 PROPOSED CLEARING AREA**

RWB Farm Pty Ltd seeks a permit to clear a total of 4 hectares over five years. There are 2 parts to this:

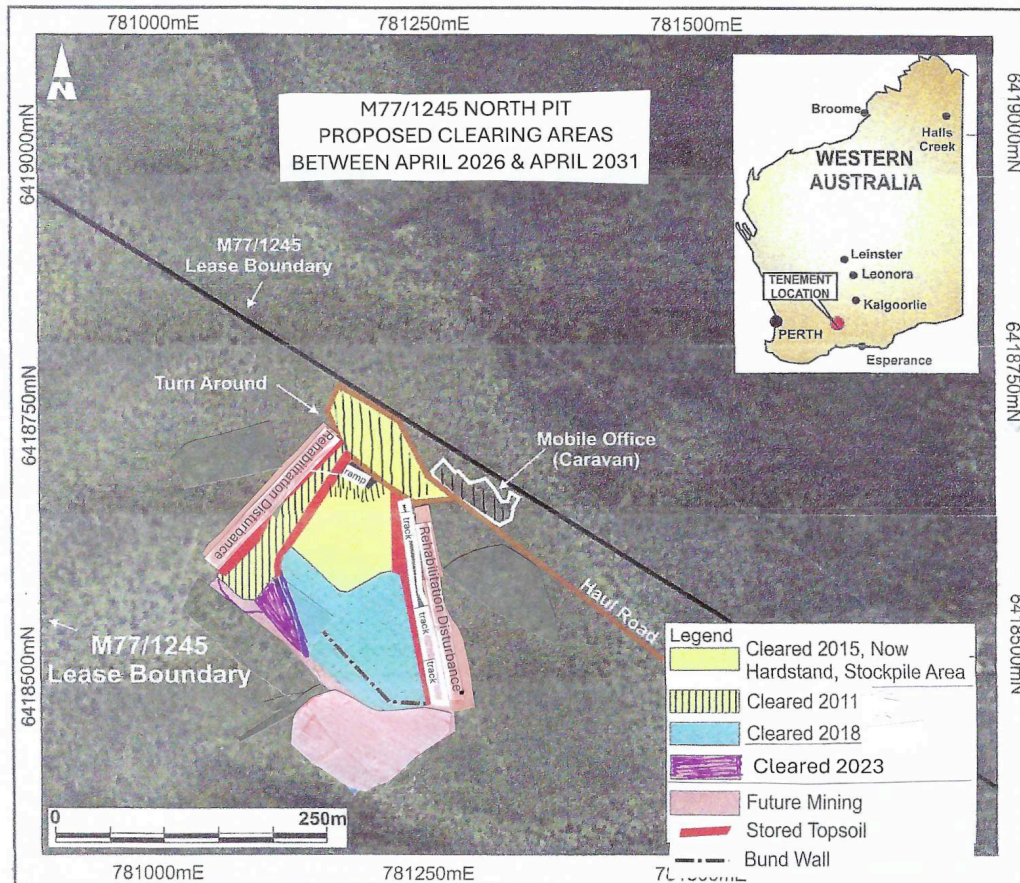
1. Clear the 'remaining' 2.0595 hectares in the area of the original Ronald William Brown and Carolyn Joy Brown (as trustee for Brown Family Trust) 4 hectare application. This is for sand extraction.

The position on the maps area is a slight variation from the original maps, to reflect where the sand has low clay qualities. However, the area is the same.

1. Allow 1.9505 hectares for the disturbance of native vegetation along the edges of the North Pit. This may occur during contouring when rehabilitating the area.

The area is shown on Map 3.

*Map 3: Proposed Clearing Area at North Pit.*



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#### 2.2 TIMING OF PROPOSED MINING & REHABILITATION

No mining is planned at the present time as there is a sand stockpile.

As previously mentioned, two things happened to halt any work on M77/1245.

1. Owner (who also had role of Senior Site Executive) of M77/1245 died leaving no one to guide the operation.
2. The main nickel client suffered seismic action at their mine and with depressed product prices closed the mine.

However, RWB FARMS PTY LTD as trustee for Brown Family Trust wishes to have a Purpose Clearing Permit should the need arise. As with previous permits, clearing will only be done if sand can be sold.

The pit design did not allow for rehabilitation as the cleared pit has been used as a stockpile area. On the positive side, this did reduce the amount needing to be cleared.

The new 'plan' for clearing may give a better opportunity for rehabilitation but this has yet to be explored. We note a Mine Closure Report is due July 2026.

The tenement expires on 11 April 2031; rehabilitation will be done before that.

*Photograph of Rehabilitation at South Pit, M77/1245*



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### 3. SITE OVERVIEW

#### 3.1 LANDFORMS

There are no distinguishing landforms. The area is slightly undulating sand hills.

In the report *Level 1 Vegetation and Flora Survey* PEK ENVIRO has quoted Beard:

*"Soils on granite are developed in a catenary arrangement according to their topographic position. On the highest ground in the east are the sandplains of the profile type AC1 [Atlas of Australian Soils] sand soils with weak pedologic development, yellow in colour with an earthy fabric. These tend to be very deep featureless sands, and are without profile differentiation."* (page 5).

#### 3.2 GEOLOGY

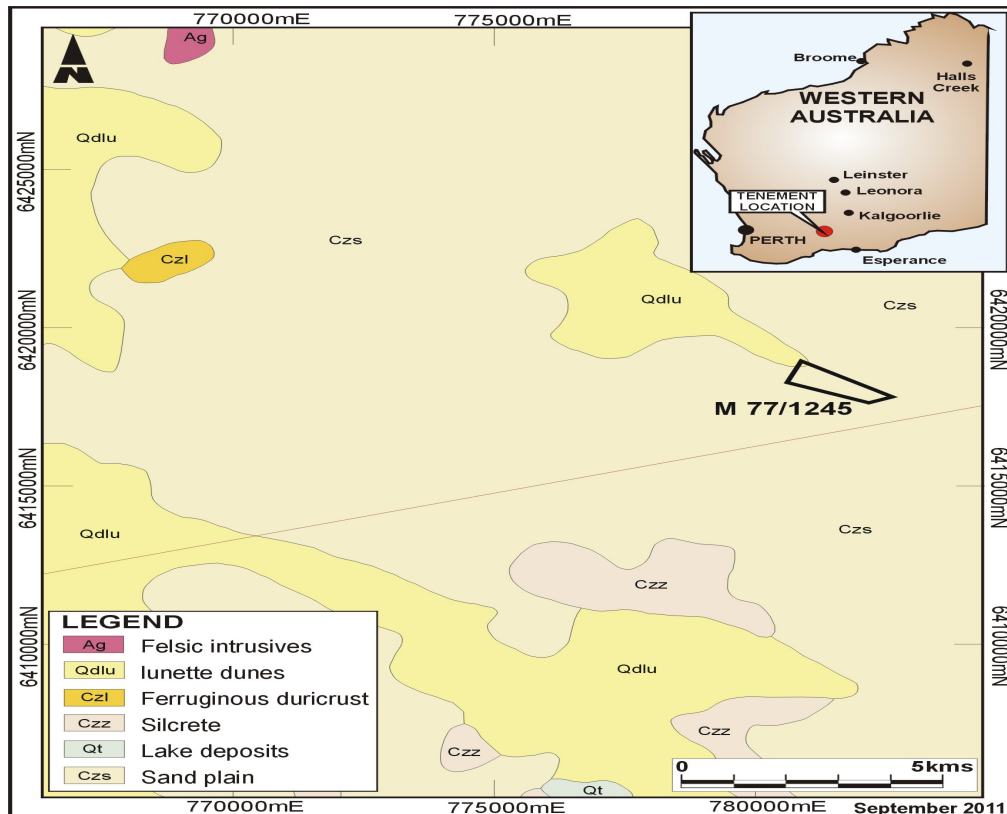
The underlying rock type is granite "GSA (1984) have mapped and described the general geology in the vicinity of the survey area as consisting of two main geological features as follows:

(1) Quaternary eolian and alluvial deposits comprised of silt and sand which are gypsiferous in part and which are usually found adjacent to playa lake systems. Both the SP and the NP areas are probably located mostly on this type of feature however the depth of the sand deposits appears to vary considerably.

(2) Tertiary remnant sandplain comprised of yellow and white sand containing locally abundant limonite pebbles and which is derived from laterite. This type of sandplain is common in adjacent areas."

(page 4, *Level 1 Vegetation and Flora Survey*)

*Map 4: Tenement Geology*



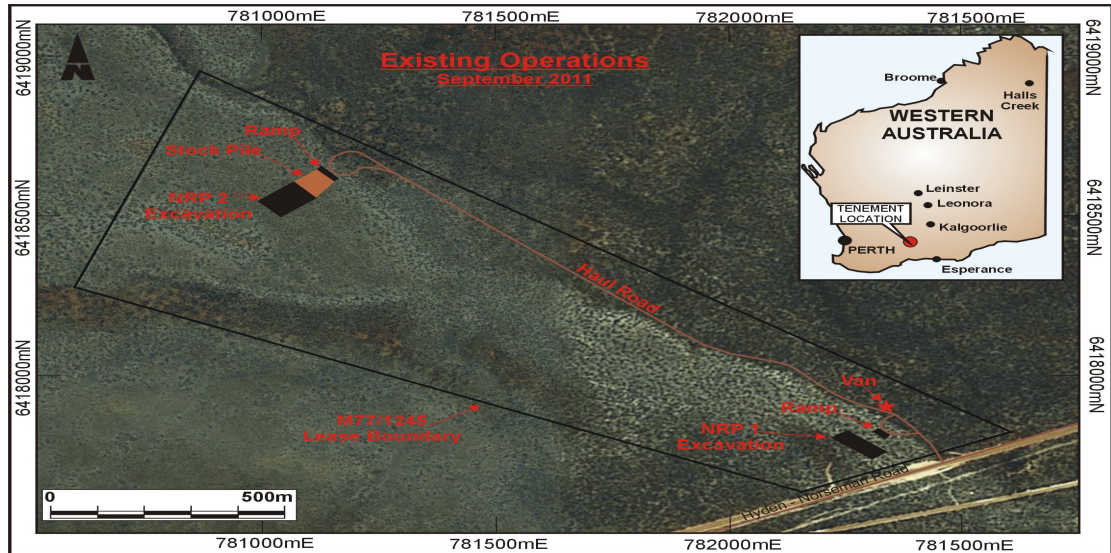
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The following Google Earth map also shows the extent of the sand seam.

Map 5: Google Map showing Sand Seam



### 3.2 SOILS & SOIL PROFILE

Page 5 of appendix 1 (Report: *Level 1 Vegetation and Flora Survey*) says :  
“Soils on granite are developed in a catenary arrangement according to their topographic position. On the highest ground in the east are the sandplains of the profile type AC1 [Atlas of Australian Soils] sand soils with weak pedologic development, yellow in colour with an earthy fabric. These tend to be very deep featureless sands, and are without profile differentiation.”

Photograph showing Soil Profile



Soil samples show clay and silt at 10% or less. The clay appeared to be kaolinite clay. Sieve size testing showed the following:

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*Table 1: Particle Size Distribution*

Sieve Size	%Passing
2.36	100%
1.18	99%
0.6	84%
0.425	67%
0.300	48%
0.150	18%
0.075	5%

**3.3 HYDROLOGY**

There are no surface water courses/creeks and there is no salt on the tenement.

The nature of the sandy soil with low clay, is that it has an infinite ability to absorb water.

Page 4 of *Level 1 Vegetation and Flora Survey* says :

“...in exceptionally wet years floodwaters move along the paleodrainages.”

**4. HYDROLOGICAL SUMMARY**

There are no surface water courses/creeks/wetlands and there is no salt on the tenement.

The climate of the area can be considered semi-arid warm mediterranean with the annual mean rainfall at the Hyden Bureau of Meteorology (BoM) weather station (#10568) being recorded as 338.6 mm. The annual mean rainfall at the BoM Holt Rock weather station (#10565) is recorded as being 328.3 mm (BoM website 2011). “

In a ‘one in hundred’ year, 72 hour duration rainfall event, the sandy soil with low clay, has an infinite ability to absorb water. Paleodrainages allow water to move in exceptionally wet years.

Bund walls will be in place on the mine site. In addition, this mine is also only worked part-time and in dry weather (as the sand cannot be screened when wet), so a huge rain deluge would have little impact.

**5. FLORA & VEGETATION SURVEY**

**5.1 GENERAL FLORA SURVEY**

An Environmental Consultant (PEK Enviro) undertook a comprehensive Level 1 desktop review and reconnaissance flora and vegetation survey of the whole tenement. The research was done in early spring, which is the beginning of the recommended optimum time. A 32 page report (*Level 1 Vegetation & Flora Survey*) was submitted to DMPE and DBCA/DPAW. The survey was carried out at the appropriate time of year, and follow DEC guidelines concerning methodology, research and EPA approval of research methods- EPA Guidance Statement 51.

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*Photograph of vegetation at North Pit*



The following table of the Flora vegetation groups was done by PEK ENVIRO.

*Table 2: List of Flora Per Vegetation Group Recorded*

<b>Family</b>	<b>Genus and species</b>	<b>Mallee low woodland</b>	<b>Sandplain heath</b>
Apiaceae	<i>Platysace maxwellii</i>	X	
Casuarinaceae	<i>Allocasuarina corniculata</i>		X
Cupressaceae	<i>Callitris preissii?</i>	X	X
Cyperaceae	<i>Lepidosperma pruinosum</i>		X
	<i>Schoenus brevisetis</i>		X
<b>Dasyopogonaceae</b>	<b><i>Calectasia pignattiana</i> (T)</b>		<b>X</b>
Dilleniaceae	<i>Hibbertia gracilipes</i>	X	
Ericaceae	<i>Leucopogon brevicuspis</i>	X	
	<i>Lysinema ciliatum</i>	X	X
Fabaceae	<i>Acacia camptoclada</i>	X	
	<i>Acacia coolgardiensis</i>	X	
	<i>Acacia lasiocarpa</i> var. <i>bracteolata</i>	X	
	<i>Acacia sphacelata</i> subsp. <i>sphacelata</i>		X
	<i>Acacia quinquenervia</i>	X	
	<i>Gompholobium baxteri</i>		X
	<i>Jacksonia</i> sp.?	X	X
Haemodoraceae	<i>Conostylis petrophiloides</i>		X
Lamiaceae	<i>Lachnostachys verbascifolia</i>		X
	<i>Westringia rigida</i>	X	
Myrtaceae	<i>Melaleuca eleuterostachya</i>	X	
	<i>Melaleuca rigidifolia?</i>	X	
	<i>Melaleuca uncinata</i>	X	
	<i>Melaleuca villosisepala?</i>		X
	<i>Calytrix duplistipulata</i>	X	X

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	<i>Eremaea pauciflora</i>		X
	<i>Eucalyptus olivina</i>	X	
	<i>Eucalyptus phenax subsp. phenax</i>	X	
	<i>Eucalyptus pileata</i>	X	
	<i>Eucalyptus scyphocalyx</i>		X
	<i>Leptospermum erubescens</i>		X
	<i>Leptospermum spinescens</i>		X
	<i>Verticordia plumosa var. incrassata</i>	X	
Proteaceae	<i>Banksia audax</i>		X
	<i>Grevillea cagiana</i>	X	X
	<i>Grevillea huegelii</i>	X	
	<i>Grevillea incrassata</i>		X
	<i>Hakea corymbosa</i>	X	X
	<i>Hakea multilineata</i>		X
	<i>Petrophile ericifolia</i>	X	X
	<i>Petrophile stricta</i>		X
	<i>Synaphea spinulosa</i>		X
Restionaceae	<i>Desmocladius myriocladus</i>	X	X
Rhamnaceae	<i>Cryptandra recurva</i>	X	
Rutaceae	<i>Phebalium filifolium</i>	X	
	<i>Phebalium obovatum</i>		X
Santalaceae	<i>Exocarpos aphyllus</i>	X	X
	<i>Santalum acuminatum</i>	X	

Here are some comments about flora in relationship of the reconnaissance survey.

“The reconnaissance survey covered an area of approximately 8.5 ha and confirmed that there were 2 relatively undisturbed native vegetation groups located within the survey area.

The first was considered to be a sub-group within the broader “*Shrublands; Mallee (Eucalyptus species with a heath understorey)*” vegetation group described by Beard (1972). This was:

Mallee low woodland; *Eucalyptus olivina* over mixed heath. (~7 ha);

The second was considered to be a sub-group within the broader “*Scrub Heath; Mixed Proteaceae – Myrtaceae*” vegetation group described by Beard (1972). This was:

Sandplain heath; *Eremaea pauciflora*/*Acacia sphacelata* subsp. *sphacelata* with emergent *Eucalyptus scyphocalyx* (~1.5 ha)

Within these two sub-groups, 47 species were recorded representing 16 families. Species from the Myrtaceae, Proteaceae and Fabaceae families showed the highest representation of species with 13, 9 and 6 species respectively. The boundaries of the two vegetation sub-groups are shown in Figure 3.

There were no weed species recorded within the survey area.

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A brief description of the dominant features of each of the vegetation sub-groups recorded follows. Terminology used is based generally on Hnatiuk et al (2009).

#### 1.1 Mallee low woodland; *Eucalyptus* sp. over mixed heath

This group, as surveyed, included 28 species from 12 families. The dominant upper stratum species in this group was *Eucalyptus olivina*, which covered approximately 30% (crown cover) of the quadrat. There was a lesser representation of *Eucalyptus phenax* subsp. *phenax*, which covered approximately 5% (crown cover) of the quadrat. *Eucalyptus pileata* was also represented.

*Lysinema ciliatum* and *Acacia coogardiensis* were prominent in the mid stratum together covering approximately 10% (crown cover) of the quadrat. Other mid stratum species included *Callitris*, *Grevillea cagiana*, *Santalum acuminatum* and *Hakea multilineata*.

The ground stratum was dominated by *Desmocladius myriocladus*, which covered approximately 40% (ground cover) of the quadrat. Other common species included *Calytrix duplistipulata*, *Acacia camptoclada*, *Acacia lasiocarpa* var. *bracteolata*, *Phebalium filifolium*, *Cryptandra recurva* and *Hibbertia gracilipes*.

Also within this group was *Leucopogon brevicuspis*, which was of interest to the WA Herbarium as this record represented a slight north range extension for the species and the foliar character was considered to be rather different to that typically expected.

This vegetation group is more broadly represented within areas adjacent to the survey area.

#### 1.2 Sandplain heath; *Eremaea pauciflora*/*Acacia sphacelata* subsp. *sphacelata* with emergent *Eucalyptus scyphocalyx*

This group, as surveyed, included 28 species from 12 Families. The dominant upper stratum species in this group was *Eucalyptus scyphocalyx*. This should be considered an emergent species in this vegetation group and was very sparsely distributed. In this case it covered <5% (crown cover) of the quadrat.

The dominant mid stratum species was *Eremaea pauciflora*, which covered approximately 40% (crown cover) of the quadrat. *Acacia sphacelata* subsp. *sphacelata* was also dominant and covered approximately 30% (crown cover) of the quadrat. Other common mid stratum species included *Callitris*, *Leptospermum erubescens* and *Petrophile ericifolia*. *Petrophile stricta*, *Allocasuariana corniculata* and *Lachnostachys verbascifolia* were also represented.

The ground stratum was dominated by *Desmocladius myriocladus* which covered approximately 20% (ground cover) of the quadrat. *Phebalium obovatum* and *Jacksonia* were also common within the ground stratum together covering approximately 20% (ground cover) of the quadrat. Other ground stratum species included *Conostylis petrophiloides* and *Synaphea spinulosa*.

This vegetation group is more broadly represented within areas adjacent to the survey area.

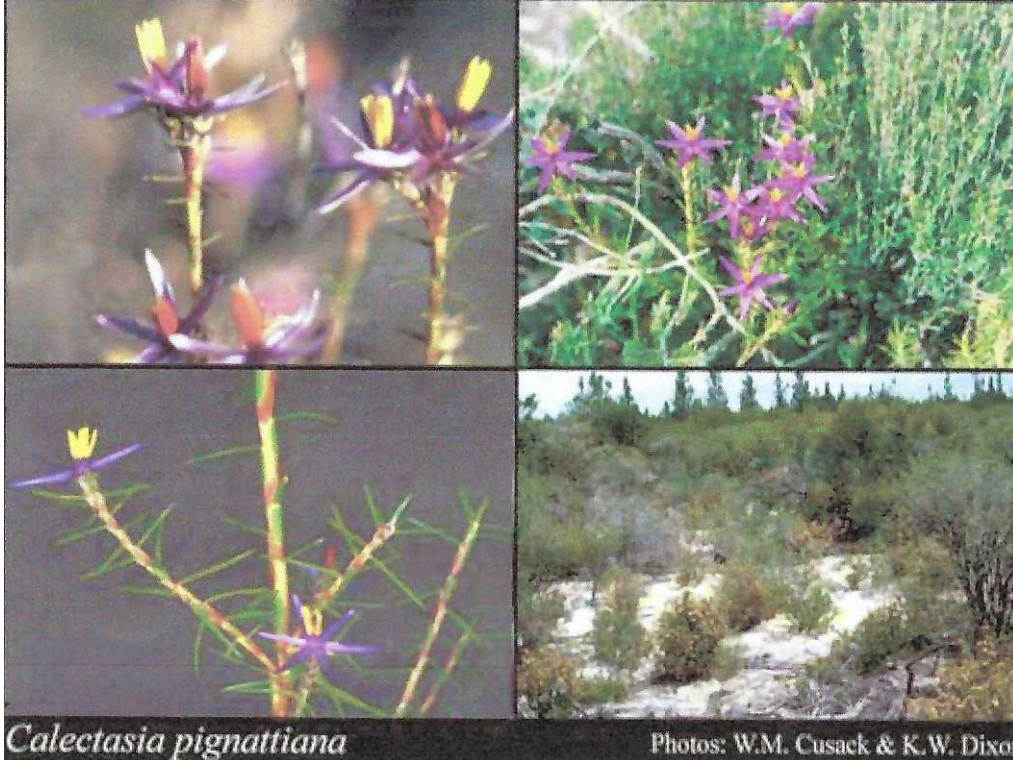
“The Threatened flora species *Calectasia pignattiana* was recorded from within this vegetation group.”

(pages 17 &18, *Level 1 Vegetation & Flora Survey*)

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**5.2 DECLARED RARE AND PRIORITY FLORA SPECIES**

*Plate 1: Calectasia Pignattiana*



Initial flora surveys showed that the threatened flora Species *Calectasia Pignattiana* was present. Therefore, in spring 2012, a comprehensive report *Threatened Flora Reconnaissance Search Report* was carried out by PEK Enviro. This report has been submitted to DMPE and DBCA.

The history /assessment methods are quoted below:

“Both the late 2011 search undertaken by the proponents and the November 2012 search undertaken by PEK Enviro consisted of single traverses undertaken on foot through the habitat type considered to be most prospective for *C. pignattiana* (i.e. sandplain heath).

*C. pignattiana* locations were recorded on a handheld GPS.

In order to provide some context, a brief desktop review has been undertaken for *C. pignattiana* based on currently available literature. A full reference list has been included in Section 7 of this report.

The proponents noted *C. pignattiana* in a number of locations during their reconnaissance search and took GPS coordinates at 10 of these. The proponents reported that at each of the 10 recorded locations there were generally numerous individual plants. All plants were located outside of the tenement area but still on the adjoining exploration licence, E77/1604 which is also owned by the proponents.

PEK Enviro noted a total of 872 individual *C. pignattiana* plants during the November 2012 search. Of these, 30 plants were located within the proposal area and 842 were located outside of the proposal area. Of those located outside of the proposal area 247 were located outside of the tenement area but still on the adjoining exploration licence E77/1604.

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Based on a traverse length of approximately 2.1 kms and a search width of approximately 2 m (i.e. an area of approximately 4,200 m<sup>2</sup>), it is estimated that *C. pignattiana* occurs at a density of ~0.2 plants/m<sup>2</sup> in the reconnaissance search area.

The locations of both late 2011 reconnaissance search and the November 2012 reconnaissance search are shown in Figure 4, Section 9.”

(page 2,3 *Threatened Flora Reconnaissance Search Report* )

PEK Enviro’s summary and discussion is copied here:

“The results of the reconnaissance searches undertaken in late 2011 and in November 2012 for the Threatened flora species *Calectasia pignattiana*, clearly show that this species is widespread in the sandplain heath areas in the immediate and adjacent vicinity of the proposal area. The species is almost exclusively associated with sandplain heath vegetation located on deep yellow sands, which, based on the literature review is as expected. An example of sandplain heath vegetation is shown in Plate 3.

The proposal area was searched thoroughly, although *C. pignattiana* can be hard to locate once it loses its distinctive flowers. The reconnaissance survey traverses of areas adjacent to the proposal area were quite limited in extent, however these covered enough ground to show that there is, at least in the context of what is currently known about the species, a significant population located here and that most of the population is located outside of the tenement, away from the proposal area. It is apparent that the majority of the population will be avoided by activities associated with the proposal.

Interpretation of aerial imagery of the proposal area and the area in the immediate and adjacent vicinity undertaken in the context of the reconnaissance search results, reveals that the habitat type (sandplain heath) within which *C. pignattiana* is likely to be locally widespread. Areas interpreted as being likely to provide habitat for *C. pignattiana* are shown in Figure 5, Section 9. These total an area of approximately 153 Ha. Based on a density of ~0.2 plants/m<sup>2</sup> this means that there is potentially in the order of 300,000 plants located in the vicinity.

It should be noted that the proponents hold the exploration licence, E77/1604, which is located immediately adjacent to the proposal area to the west. It is likely that the bulk of the plants predicted to be in the immediate and adjacent area are located on E77/1604.

Removal (taking) of approximately 30 plants of this species will be required, however this should not significantly alter the conservation status of the local population or that of the species in general.”

(Page 5, PEK ENVIRO *Threatened Flora Reconnaissance Search Report* )

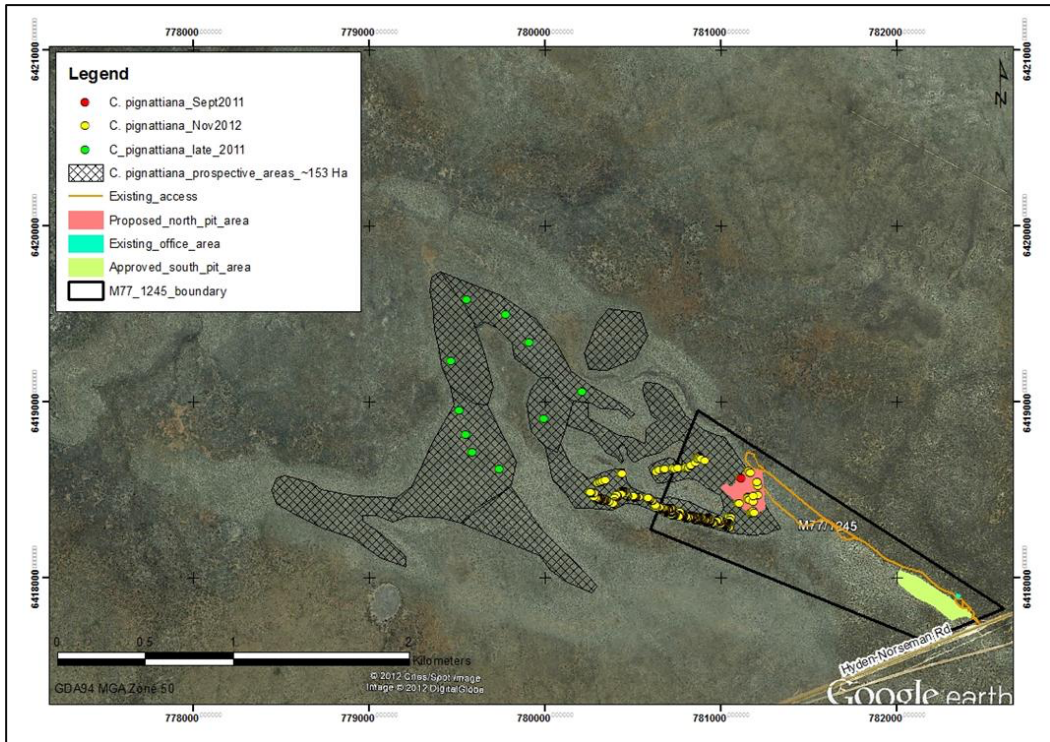
Using details from the report, Map 6 shows the prospective area of the species *Calectasia Pignattiana* in relationship to 4 hectares of mining area.

# ADDITIONAL INFORMATION

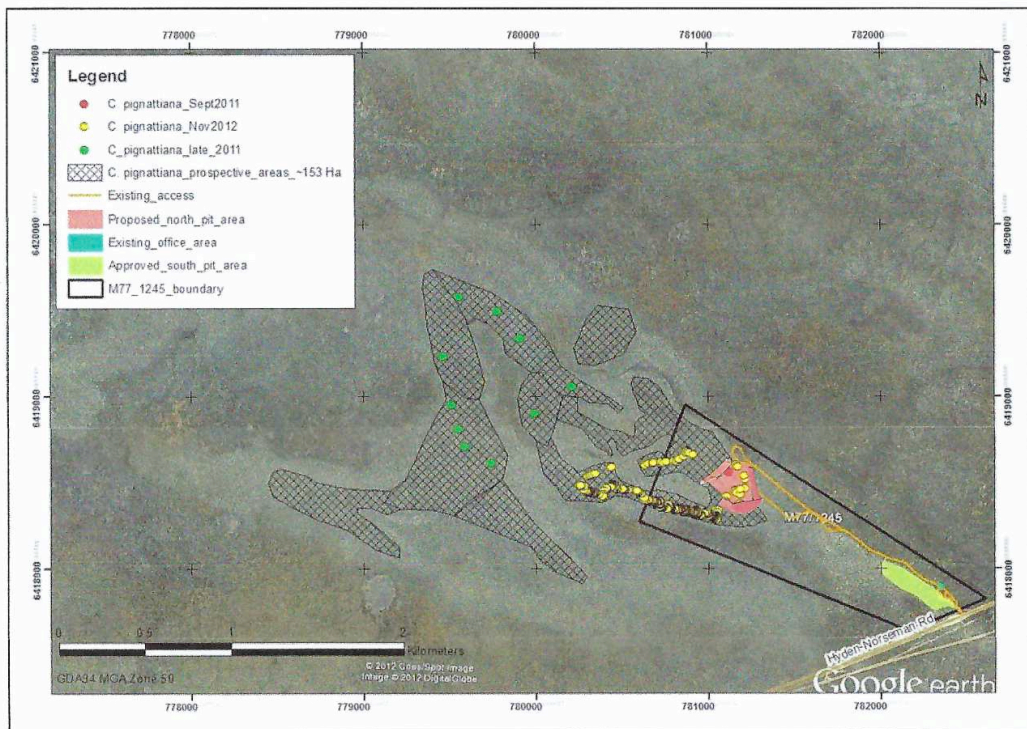
## APPLICATION for (Purpose) CLEARING PERMIT 2026

### M77/1245- North Pit

Map 6: Showing Prospective Areas of *Calectasia Pignattiana* as found by PEK ENVIRO.



Map 7: Showing Prospective Areas of *Calectasia Pignattiana* and new Proposed Clearing



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**6. FAUNA ASSESSMENT**

Informal visual surveys over since 2010 has shown very little wildlife, or signs of wildlife (example droppings). Similarly, two cameras that are movement activated both night and day have not taken one photograph of any wildlife. The lack of soil to retain water, no dams in the area and sparse vegetation could be the reason for this.

In 2019 the condition of the Clearing Permit was altered to no clearing between September and February to eliminate disturbing mallee fowl. We have never seen a mallee fowl in this area or any sign of a nest, but have abided by this condition.

Some spider webs have been noted but the 4 hectares we are proposing to clear would have little effect on any fauna or their habitat. When the area was rehabilitated there is no reason why they would not recolonize the area.

No known listed Threatened or Priority Ecological Communities (TEC/PEC) occur within or adjacent to the proposed mining area.

**7. VEGETATION DEGRADATION**

The type of shallow, surface mining that is proposed requires no chemicals, industry wastes or tailings. Therefore, the impact on vegetation is non-existent outside the pit and road area.

The type of vegetation is not susceptible to dieback.

The area is 70 kilometres from farmland and the road verges are weed free, so vehicles do not pick up weeds travelling to the site. Machinery is washed down before travelling to site. No fill is brought to the site, which also stops weeds being introduced. Mining has taken place on part of the tenement for since 2010 and there has been no weeds introduced.

It should be noted that actual mining (digging sand and screening it) only occurs for one month ever several years. The last screening was in March 2023 and the owner does not have another planned due to a large stockpile of sand.

The rest of the year a truck attends the site and is loaded with a rubber tyred 20 tonne front end loader. In 2024 the hours for the activity were 13 hours; in 2025 26 hours).

There are no camp or other buildings erected on site, which also decreases any chance of weeds.

The lack of a camp decreases any risk of fire starting by human error or electricity generation. As previously mentioned the equipment used to mine is a loader, a mobile screen and a mobile conveyor. This equipment is used in the sand pit which provides a natural 'fire-break'. The trucks do not travel the roads on fire-ban days. Thus it can be seen that the most likely cause of destroying the vegetation is not related to this mining proposal.

**8. LAND DEGRADATION**

The structure of the soil (deep sand with low clay) and the low rainfall precludes waterlogging. No dewatering is needed.

Erosion does not occur as the water is soaked up immediately in any rain. The rainfall is not high, which also means a low possibility of erosion.

## **ADDITIONAL INFORMATION**

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In addition, the proposed mining is shallow, surface mining (approximately three metres at the deepest) of a sandhill. When the land is rehabilitated, the land is contoured and left gently contoured to further ensure no run-off.

Acidification cannot occur as the mining that is proposed requires no chemicals, industry wastes, imported water or tailings. Fuel and other hydrocarbons are not stored on-site.

The area is not in an area where salt is a problem. Salinisation cannot occur as no salt water is introduced, no water is caught or stored in pits and the sandy soil drains immediately from the limited rain.

Please note that no new roads will be built for this proposed clearing or on the cleared land. Soil compaction can occur on the road system but the level of compaction on the existing road is able to be ripped during rehabilitation. It is natural soil (not bitumen).

Minimal equipment is needed to mine the sand. Besides a loader, the only other machines are a mobile sand screen and mobile conveyor. See the following photograph.

Photograph of Sand Mining on M77/1245



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**9. ENVIRONMENTAL MANAGEMENT**  
**POTENTIAL ENVIRONMENTAL IMPACTS**

The impact of the actual mining process is negligible on the immediate area or regional level as the area cleared is small and it is not 'sensitive' on other measures (see Ten Clearing Principles).

The environmental impact is considered at all times and the need to leave a small 'footprint'.

**9.1 Weeds**

Machinery is washed down before travelling to site. Light vehicles are kept to roads.

There is no camp on site which lessens the chance of weeds being inadvertently being brought on site.

The natural vegetation and topsoil are sufficient in quantity to cover the area when it is reshaped. No weed-affected fill is brought on site (or will be needed to be brought on site).

Visual inspections are made periodically, and immediate action would be taken if foreign weeds were found.

**9.2 Water Control**

There is no impact on regional water levels as the area is small, there is no salt, the soil is sandy so there is no run-off.

When the area is rehabilitated, it will be flat and make no difference to water run-off (which is negligible in the beginning).

The 2 km haul roads have 'off-cuts' for drainage. It is flat and does not cause any water diversion.

The pit has bund walls for safety, which keep water from the pit face.

No dams are built. This does not encourage feral animals such as rabbits to come to the area.

**9.3 Domestic and Industrial Wastes**

During any work done on the site, personnel will travel out to the mine site from Hyden daily. All rubbish will be contained in bins and removed off the tenement promptly. No landfill is used. No buildings need to be erected on the site.

Fuel and oil are the only 'chemicals' needed. No other dangerous goods or hazardous substances are applicable to this sort of mining.

Generally, fuel will not be stored on-site. (Mobile tankers are used for fuel during the 4 weeks of mining every several years.)

The transfer of fuel to loader is done in a manner to avoid spills.

If there is a fuel or hydraulic oil spill from a machine, the oil and/or fuel is scraped up and carted off the tenement.

**9.4 Atmospheric Pollution**

No fumes or gases are produced.

Mining only takes place approximately 4 weeks every several years, and because of this, the clearing and processing can be timed with the weather forecasts. (We aim for a dry period when sand goes through a screen, but when rain can be expected to dampen it. We do not mine in high winds either.) The sand quickly becomes wet due

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to winter and summer rain experienced in the area, and therefore, wind erosion and dust is not a problem.

The particle size of the sand (as compared with clay) is large enough to stop it blowing. The sand is low clay so therefore dust is not a problem. Even in 'gale force winds' the mined stockpiled sand only moves 1 to 2 centimetres.

As requested by the stakeholder (Shire of Kondinin) the mine is back from the Hyden –Norseman road and prevailing wind direction is away from the road.

#### **9.5 Fire**

Fire has been noted as a risk to vegetation. The lack of a camp decreases any risk of fire starting by human error or electricity generation. As previously mentioned the equipment used to mine is a loader, a mobile screen and a mobile conveyor. This is used in the sand pit which provides a natural 'fire-break'. The trucks do not travel the roads on fire-ban days. Thus it can be seen that the most likely cause of destroying the vegetation is not related to this mining proposal.

#### **9.6 Feral Animals**

No dams are built. This does not encourage feral animals such as rabbits to come to the area.

### **10. REHABILITATION PRACTISES**

The main aim in our mining is to minimise ground disturbance and rehabilitate progressively.

During rehabilitation the cleared areas are reshaped to be consistent with the surrounding 5 metres of uncleared land. No foreign material is used. Topsoil and vegetative soil (previously removed when clearing) is used.

### **DEFINED CLOSURE OBJECTIVES**

The following defined closure objectives have been proposed to address closure outcomes for key environmental aspects of the project area. These have been developed to aid in guiding decommissioning, rehabilitation and closure to an end point that will meet closure obligations and commitments and the expectations and aspirations (as far as is practicable) of identified stakeholders.

Pages 21 to 23 show the defined closure objectives on an action plan with Key Performance Indicators, Completion Criteria and Management Plan.

#### **1. Landscape safety**

- (a) To ensure that the project area is safe for both humans and the environment on closure and following abandonment.

#### **2. Landscape function**

- (a) To achieve rehabilitated sites and landforms that are safe, stable, non-polluting and capable of supporting a self-sustaining native vegetation community.
- (b) To ensure that there is no significant contamination or risk of contamination to the existing soils of the project area.

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**3. Biodiversity**

- (a) To achieve revegetation results that are self-sustaining and consistent with the structure and function of similar vegetation groups in the area.
- (b) To achieve rehabilitation and revegetation results that are safe and that work to encourage fauna and in particular native fauna of conservation significance back into the area post closure.
- (c) To ensure that no mine features remain that could encourage the survival and proliferation of feral animal species over and above native species.

**4. Conservation**

- (a) To ensure that there has been no significant short term or long term detrimental impact to the Threatened (DRF) species in the vicinity of the project area.

**5. Aesthetic**

- (a) To achieve rehabilitation and revegetation results that are aesthetically compatible with the immediate and surrounding landscape.

**6. Legal**

- (a) To ensure that there is a low risk of occurrence of significant breaches of legal obligations and commitments following closure of the site.

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Closure Objective	Key Performance Indicators	Completion Criteria	Management Plan
<p>(1) <u>Landscape safety</u></p> <p>(a) To ensure that the project area is safe for both humans and the environment on closure and following abandonment.</p>	<p>(1) The pit at the [project name] is closed and left abandoned in accordance with the relevant requirements of the <i>Mines Safety and Inspection Act 1994</i> and the <i>Mines Safety and Inspection Regulations 1995</i> and to Stakeholder conditions.</p> <p>(2) At closure the working faces of the pit will be contoured to ensure long term safety to humans and the environment.</p>	<p>1) The site is closed and left abandoned in a condition which meets all regulatory safety requirements.</p> <p>Note: When the tenement is relinquished the Shire of Kondinin requests will be met (take down signs, rip roads) and Shire notified.</p>	<p>Move foreign/rubbish items off site  Rip roads/hard areas  Contour site  Spread with stored vegetation and topsoil  Report in AER</p> <p>When whole tenement mining finished:  Rip roads  Move signs  Notify Shire</p>

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Closure Objective	KPIs	Completion Criteria	Management Plan
<p>(2) <u>Landscape function</u></p> <p>(a) To achieve rehabilitated sites and landforms that are safe, stable, non-polluting and capable of supporting a self-sustaining native vegetation community.</p>	<p>(3) Surface stability.            (4) Infiltration/runoff.            (5) Nutrient cycling status.            (6) Vegetation dynamics.</p>	<p>(2) When a significant long term (eg. 3-5 years) positive trend in progression towards the KPI values shown by the analogue site can be seen then it is proposed that the rehabilitation can be considered complete for the purposes of landscape function.</p>	<p>Monitor rehabilitation monthly for first year.            Check for plant growth yearly.            After 3 years do a full survey of growth and compare with control sites.</p>
<p>(b) To ensure that there is no significant contamination or risk of contamination to the existing soils of the project area.</p>	<p>(7) Sampling for nutrient status, EC, pH, TPH and full metals analysis near identified high risk sites.</p>	<p>(3) Suspected contaminated sites (identified through sampling) within the project area are managed in line with the requirements of the <i>Contaminated Sites Act 2003</i>, so that at closure there are no significant contaminated or polluted sites remaining that could breach closure conditions and commitments.</p>	<p>Contaminates liable to cause problems not on site therefore not applicable (but care will be taken with fuel and oil for machines i.e. pick up minor spills, use only in bunded wall area of a cleared area.</p>

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Closure Objective	KPIs	Completion Criteria	Management Plan
<p>3) <u>Biodiversity</u></p> <p>(a) To achieve revegetation results that are self-sustaining and consistent with the structure and function of similar vegetation groups in the area.</p> <p>(b) To achieve rehabilitation and revegetation results that are safe and that work to encourage fauna and in particular native fauna of conservation significance back into the area post closure.  (incl. not encourage feral species)</p>	<p>8) Identification of vegetation strata (as applicable).</p> <p>9) Measurement of % Crown cover (native) for each stratum identified.</p> <p>10) Flora species name and density.</p> <p>11) Measurement of % Crown cover (weeds) if identified.</p> <p>12) Evidence of fauna usage</p>	<p>(4) Vegetation structural trends that are progressing towards the typical stratum height characteristics expected of the target vegetation group</p> <p>(5) Typical growth forms for each stratum that are progressing towards the typical range of values show for the target vegetation</p> <p>(6) % Crown cover (native) value trends for each stratum that are progressing towards the typical range of values shown for the target vegetation group</p> <p>(7) A species diversity of 60% of the species listed in the interim species lists for each vegetation group</p> <p>(8) No weeds</p> <p>(9) Identifiable signs of fauna usage of the area (eg. ant nests, bird nests, tracks or scats).</p>	<p>Check for plant growth yearly to identify any problems. Report problems in AER.</p> <p>After 3 years do a proper survey as per KPIs of growth and compare with control sites.</p>

# **ADDITIONAL INFORMATION**

## **APPLICATION for (Purpose) CLEARING PERMIT 2026**

### **M77/1245- North Pit**

#### **11. TEN CLEARING PRINCIPLES**

The Ten Principals of Clearing have been considered for the 4 hectares to be cleared, including any effects on surrounding areas.

##### **1. Biological Diversity**

The area is not considered to have a high level of biological diversity. It has deep featureless clay with sparse vegetation and no major landforms that encourage diversity. The area is located 20 kilometres from Lake Cronin A-Class Nature reserve, and shares none of the geology, hydrology, flora and fauna of that area.

##### **2. Fauna**

The area does not comprise of land that is a significant habitat to any fauna. We have walked the entire 4 hectares previously applied for and the extra 1.9505 on the edges and seen no evidence of wildlife. Movement sensitive cameras have not caught photographs of any wildlife.

It is not necessary to the maintenance of any fauna indigenous to West Australia. The mining in the area does not encourage any feral animals as there is no water 'storage' during or after mining/rehabilitation.

When reapplying for the 2019 permit (CPS 8401/1) the owner was asked not to clear during the months of September through to February without engaging an environmental specialist to check for Malleefowl mounds. The owners have abided by this.

##### **3. Flora**

The area does have the presence of a previously thought to be rare flora *Calectasia Pignattiana*. However, ground surveys have shown that this is more prevalent than previously thought. See maps on page 15 of this document.

A thorough search has found only 10 plants in the original 4 hectares of the proposed mining area. The PEF ENVIRO (Environmental Consultant) used a formula based on plant density on the ground to estimate there could be 30 plants in the proposed 4 hectare mining area. The same formula calculates that there could be a possible 300,000 plants in the 153 hectares of similar soil. Therefore, the area is not necessary for the continued existence of rare flora.

However, it is acknowledged that we may have taken 15 plants and another 30 may be taken in the new 2026 proposed clearing.

##### **4. Threatened or Priority Ecological Communities (TEC/PEC)**

No Threatened or Priority Ecological Communities occur with-in or adjacent to the proposed mining area, so the limited, 'low impact' mining is not a threat to them.

##### **5. Amount of Clearing**

The proposed North Pit area has not been extensively cleared. The new area proposed to be cleared is 4 hectares of 150 hectares or more of similar vegetation. Therefore, the total cleared area is not significant in context of the total area.

The life of the tenement M 77/1245 (South Pit and North Pit) is 21 years. Including the proposed new clearing, the total clearing will be 11.2479 hectares of which 2.75 hectares is already rehabilitated.

The current clearing is 4.4979 hectares.

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**6. Water Courses**

The environment is not associated with water courses or wet lands.

**7. Land Degradation**

The clearing of the land will not cause appreciable land degradation as the mining is considered 'low impact' and has no chemicals. Other factors such as weeds, waterlogging, acidification, salinization, erosion are non-existent.

No new roads will be needed for this proposed new clearing. Less than one hectare of the whole tenement is haul road, and the type of existing road is 'natural' soil (not bitumen) and can be ripped easily during rehabilitation.

**8. Impact on Conservation Area**

Clearing will have no impact on environmental values of any adjacent or nearby conservation area. The mine site is sufficient distance from any conservation area and the mining method is 'low impact'.

**9. Surface and Underground Water**

Clearing will not cause any deterioration in the quality of surface water, as there is none apparent (deep, low clay, sandy soil does not hold water).

No chemicals or other hazardous substances are used during mining to effect underground water.

The mining is shallow (less than 3 metres) and not compacting, which does not impact on the underground water catchment.

**10. Flooding**

Clearing will not cause flooding and the deep, low clay sand absorbs the water to an infinite amount. When rehabilitated the ground will be left similar to surrounding terrain -mallee low woodland will be level and sand plain heath gently contoured.

Written by Carolyn Joy Brown  
Previous Trustee of Brown Family Trust  
2026

References:

PEK ENVIRO (2011) Level 1 Vegetation and Flora Survey. Unpublished report prepared for Ronald and Carolyn Brown.

PEK ENVIRO (2012) Threatened Flora Reconnaissance Search Report . Unpublished report prepared for Ronald and Carolyn Brown.