

## 12. OVERVIEW AND CONCLUSION

### 12.1 OVERVIEW

The Happy Valley Proposal consists of the mining and subsequent rehabilitation of 248 ha of a combination of cleared areas (94 ha) and native vegetation on freehold (92 ha) and Crown land (63 ha) on the Whicher Scarp, located on the boundary of the Swan Coastal Plain (SWA) and Jarrah Forest (JF) Bioregions.

The Proposal has been through many iterations since it was first referred to the EPA in 1999, with changes to the proposal being made in response to advice from the EPA and other stakeholders, changes in EPA Policy and survey requirements and the results of scientific studies.

The Environmental Review of the ERMP has considered the potential impacts of the proposal as per the Environmental Scoping Document (Strategen 2007a) and additional consultation outcomes. The environmental factors that have been reviewed and the nature of that review are listed in Table 12-1.

### 12.2 CONCLUSION

The Proposal area is habitat for a diverse range of species-rich plant communities, including two Priority Ecological Communities. It also contains habitat of the DRF taxon *Daviesia elongata* subsp. *elongata* and potentially fourteen Priority species. However, the Proposal disturbance area (155 ha of vegetation) is contiguous with/part of the much larger State Forest Argyle Block (>10,000 ha) and it has been shown that the values and functions of the Proposal area that will be affected by the Proposal are also present elsewhere, including areas of the Whicher Scarp beyond the Argyle Block.

The Proposal has exhausted all options to avoid, minimise and mitigate its potential impacts on the ecological values and functions of the landscape, including the retention of creeklines and foothills vegetation, and its rehabilitation capabilities have been verified as best practice. The Proposal also includes offsets that include the formal conservation of good quality vegetation adjacent to the State Forest, including areas that contain occurrences of two Priority Ecological Communities, the DRF *Daviesia elongata* subsp. *elongata* and Priority taxa, and the under-reserved Whicher Valleys vegetation complex.

The environmental values and functions of the Proposal area (and surrounds, where applicable) have been assessed and it is reasonably concluded that the Proposal does not appear to represent an adverse significant impact on critical assets, as identified by the EPA (2006a) (Section 11). Additionally, the restricted scale of the proposal, the high level of management commitment and the proven capacity of the proponent support the proposition that the implementation of the proposal by the proponent will not compromise the stated objectives of the EPA.

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**Table 12-1 Overview of the assessment of relevant environmental factors against EPA objectives**

Environmental factor	EPA objective	Existing environment	Potential impacts	Management	Predicted outcomes
1. Soils and landforms	To maintain the integrity, ecological functions and environmental values of the soil and landform.	<p>The Whicher Scarp is a sickle-shaped landform unit that lies between the Blackwood Plateau and the Swan Coastal Plain and extends from Burekup, where it meets the Darling Scarp, to Dunsborough, where it meets the Leeuwin Ridge</p> <p>It is incised by a series of rivers draining from the Blackwood Plateau.</p>	<p>Implementation of the Proposal may:</p> <ul style="list-style-type: none"> <li>• reduce or alter the environmental values of the Proposal footprint by altering topsoil and/or soil compaction</li> <li>• reduce or alter the ecological functions and environmental values of the pit areas by altering soil profile</li> <li>• reduce soil or landform integrity as a result of erosion.</li> </ul>	<p>Potential impact to soils and landforms will be mitigated through measures to be implemented in accordance with the Integrated Mining and Rehabilitation Plan. Management measures include:</p> <ul style="list-style-type: none"> <li>• removing topsoil in two layers prior to commencement of significant earthworks and stockpiled on basis of land use, vegetation cover and dieback status</li> <li>• rehabilitating the top 6 m of the soil profile in accordance with agreed prescriptions for each of the four key profiles</li> <li>• ensuring site works are properly drained and that rehabilitation incorporates natural drainage lines and is promptly stabilised and/or revegetated to minimise the potential for soil erosion.</li> </ul>	<p>Implementation of the Proposal is likely to result in:</p> <ul style="list-style-type: none"> <li>• extensive disturbance to the soil profile (74 ha), however stable landforms and productive soils are likely to be achieved at closure</li> <li>• a reduction in landform heterogeneity</li> <li>• a shift towards freer-draining (sandplain) habitat.</li> </ul>
2. Flora and vegetation	To maintain the abundance, diversity, geographic distribution and productivity of flora at species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge.	<p>With the exception of wetlands and creeklines, which are both varied and restricted, the vegetation complexes are often indistinct and many dryland taxa are present in more than one floristic community type. The proposal area contains some vegetation types considered to be Priority Ecological Communities.</p> <p>The condition of the Proposal area is already compromised by large areas of <i>Phytophthora cinnamomi</i> infestation, exacerbated by previous gravel extraction and uncontrolled access to the area by the general public using a network of local tracks.</p> <p>The presence of the following conservation significant flora species has been recorded within or adjacent to the proposal area:</p>	<p>Implementation of the proposal may:</p> <ul style="list-style-type: none"> <li>• impact on restricted riparian vegetation</li> <li>• result in a loss or severe alteration of abiotic factors that are responsible for establishing/ maintaining floristic diversity and productivity</li> <li>• reduce the extent of vegetation communities including Priority Ecological Communities.</li> <li>• disturb known occurrences of Declared Rare Flora and Priority Flora.</li> </ul>	<p>Potential impacts on vegetation and flora will be mitigated through mine planning and management measures to be implemented under the Environmental Management and Monitoring Plan, the Integrated Mining and Rehabilitation Plan. Management measures include:</p> <ul style="list-style-type: none"> <li>• prioritisation of natural vegetation for preservation in the mine planning process</li> <li>• retention of a 30 m buffer from mining around the creeks at Happy Valley South, and 50 m mining buffer around the creek and State Forest at Happy Valley North.</li> <li>• limiting clearing in State Forest to pits and buffers, infrastructure corridors, access roads and vegetated topsoil stockpiles.</li> <li>• collecting and storing seed and cuttings required for propagation in rehabilitation</li> </ul>	<p>The proposal will disturb 155 ha of natural vegetation, the majority of which will be rehabilitated, disturbance is likely to result in a:</p> <ul style="list-style-type: none"> <li>• decrease in the structural diversity of the vegetation in rehabilitated areas, until natural processes are re-exerted (following rehabilitation)</li> <li>• decrease in floristic diversity and productivity, which may or may not be permanent in the local area</li> <li>• change in vegetation structure and floristics to an extent that the community descriptions may be altered, thus reducing representation of existing communities</li> <li>• moderately increased risk of dieback and weeds being spread into currently un-infested areas.</li> </ul> <p>The proposal is unlikely to cause the level of representation of any vegetation</p>

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		<ul style="list-style-type: none"> <li>• a species of Declared Rare Flora <i>Daviesia elongata subsp. elongata</i> (also listed as Vulnerable under the EPBC Act)</li> <li>• two Priority 1 flora (<i>Boronia humifusa</i> and <i>Logania wendyae</i>)</li> <li>• a Priority 2 flora (<i>Synaphea petiolaris subsp. simplex</i>)</li> <li>• three Priority 3 flora (<i>Acacia semitrullata</i>, <i>Stylidium barleei</i> and <i>Synaphea whicherensis</i>)</li> <li>• a Priority 4 flora (<i>Evandra aristata</i>).</li> </ul>		<ul style="list-style-type: none"> <li>• striping the upper topsoil in 50 mm layer and lower topsoil in a 150 mm layer in dry conditions, where practicable and stripping a further 0.5 m of subsoil from the yellow sand plain management unit to specifically re-use in same strata in restored profile.</li> <li>• implementing high-level hygiene measures to combat the spread of weeds and of <i>P. cinnamomi</i>.</li> </ul>	<p>community to fall below the 30% threshold adopted by the EPA, including Priority Ecological Communities.</p> <p>The impacts to conservation significant plant taxa and PECs will not be significant, both by virtue of the relative scale of the Proposal on local populations and by the best rehabilitation measures to be implemented and the record of rehabilitation at other sites in the region by the Proponent.</p>
3. Terrestrial fauna	To maintain the abundance, diversity, geographic distribution and productivity of fauna at species and ecosystem levels through the avoidance or management of adverse impacts and improvement in knowledge.	<p>The Proposal area does not contain any critical habitats for protected species or populations although it does contain locally significant habitats that support high densities of animals (yellow sand vegetation communities, riparian areas and deep shaded valleys).</p> <p>Vertebrate assemblages in the proposal area consisted of twelve frog species (eight recorded), 36 reptile species (25 recorded), 121 bird species (78 recorded) and 29 mammal species (19 recorded) including six introduced species. Conservation significant species of fauna that are considered to be at a inherently high or moderate level of risk locally from the implementation of the proposal are:</p> <ul style="list-style-type: none"> <li>• five species of fauna listed under State and/or Australian legislation - <i>Calyptorhynchus banksii naso</i> (Forest Red-tailed Black-Cockatoo), <i>Calyptorhynchus baudinii</i> (Baudin's Cockatoo),</li> </ul>	Implementation of the proposal may result in: <ul style="list-style-type: none"> <li>• loss of fauna habitat</li> <li>• death or critical injury to individual fauna during clearing activities and other mine-related operations</li> <li>• displacement of fauna from the Proposal site that may increase pressures on surrounding habitats.</li> </ul>	Potential impact on fauna habitat and individuals will be mitigated through measures to be implemented under the Fauna Management Plan and the Integrated Mining and Rehabilitation Plan. Measures include: <ul style="list-style-type: none"> <li>• developing and implementing site and/or area specific Clearing Procedures as part of EMS</li> <li>• retention of a 50 m buffer for the creek through Happy Valley North and a 30 m buffer from the centre of all other identifiable creeklines, with the exception of roads and service corridors</li> <li>• prioritisation of clearing activities for times that avoid the majority of breeding/nesting periods for the majority of conservation significant fauna (late summer-early winter)</li> <li>• staging clearing of vegetation such that habitat trees are left overnight after clearing surrounding vegetation</li> <li>• removing cleared vegetation from areas as soon as possible to prevent recolonisation</li> <li>• implementation of a feral bee control program for the surrounding area at</li> </ul>	The Proposal is: <ul style="list-style-type: none"> <li>• likely to temporarily reduce the general availability of habitat (including the yellow-sand plain habitat and foraging habitat for Black Cockatoos) for those fauna species that are present in the area, however, overall reduction at a regional level is relatively minor and localised.</li> <li>• likely to have an overall net gain as a consequence of rehabilitation mined areas and long-term conservation offsets. including for Black Cockatoos</li> <li>• unlikely to disturb riparian corridors</li> <li>• highly unlikely to result in the loss of a species of terrestrial invertebrate or invertebrate fauna or adversely affect their conservation status highly unlikely to have an adverse impact on fauna of conservation significance at a regional scale, and those local scales are considered to be acceptable with rehabilitation of disturbed areas and the potential for environmental benefits from proposed offsets.</li> </ul>

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		<p><i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo), <i>Phascogale tapoatafa</i> (Brush-tailed Phascogale) and <i>Dasyurus geoffroyi</i> (Chuditch)</p> <ul style="list-style-type: none"> <li>two species listed as Threatened Fauna or Priority species by DEC - <i>Isoodon obesulus fusciventer</i> (Quenda) and <i>Macropus irma</i> (Brush Wallaby).</li> </ul>		<p>least six months prior to clearing to increase availability of tree hollows</p> <ul style="list-style-type: none"> <li>installing artificial nesting boxes for small animals and birds, such as phascogales, bats, and Black Cockatoos.</li> </ul>	
4. Surface water	<p>To maintain the quantity of water so that existing and potential environmental values, including ecosystem maintenance, are protected.</p> <p>To ensure that emissions do not adversely affect environmental values or the health, welfare, and amenity of people and land uses by meeting statutory requirements and acceptable standards.</p>	<p>The Proposal area lies within the upper slopes of the Gynudup Brook and Tren Creek Surface Water Management Areas.</p> <p>Four small unnamed tributaries of Gwnudup Brook cross the Proposal tenements.</p>	<p>Implementation of the Proposal may result in:</p> <ul style="list-style-type: none"> <li>a reduction of catchment yield during mining as a result of diversion of stormwater runoff</li> <li>an increase in surface flow rates (erosion risk) due to decreasing infiltration and/or vegetation cover</li> <li>a reduction in surface water quality through disturbance to the catchment/interrupting processes and through poor handling/storage of potentially hazardous materials.</li> </ul>	<p>Potential impact on surface water values will be mitigated through the implementation of measures under the Water Resources Management Plan. Management measures include:</p> <ul style="list-style-type: none"> <li>retention of a 50 m buffer for the creek through Happy Valley North and a 30 m buffer from the centre of all other identifiable creeklines, with the exception of roads and service corridors</li> <li>onsite surface water drainage management and monitoring</li> <li>storing hazardous materials in accordance with permits and/or Australian Standards.</li> </ul>	<p>The Proposal is:</p> <ul style="list-style-type: none"> <li>unlikely to result in an increase to streamflow or discharge rates as the disturbance area will have a segregated drainage system</li> <li>unlikely to significantly impact on existing watercourses given the retention of vegetated buffers to a distance of 50 m at Happy Valley North, and 30 m for the lesser watercourses at Happy Valley South.</li> </ul>
5. Groundwater	<p>To maintain the quantity of water so that existing and potential environmental values, including ecosystem maintenance, are protected.</p>	<p>There are three key groundwater resources associated with the Happy Valley Proposal:</p> <ul style="list-style-type: none"> <li>superficial aquifer (Ridge Hill Formation)</li> <li>Leederville Formation</li> <li>Yarragadee Formation.</li> </ul> <p>There are no groundwater dependant ecosystems in vicinity to the Proposal area.</p>	<p>Implementation of the Proposal may:</p> <ul style="list-style-type: none"> <li>reduce groundwater availability to surrounding users as a result of production bore (Yarragadee)</li> <li>affect or groundwater quality by disturbance of potentially acid sulphate soils</li> </ul>	<p>Potential impact on groundwater values will be mitigated through the implementation of measures under the Water Resources Management Plan. Management and monitoring measures relating to groundwater will include:</p> <ul style="list-style-type: none"> <li>monitoring pit walls for inflows</li> <li>limiting abstraction from the production bore to 1.5 GL/annum</li> <li>continuing to monitoring the groundwater piezometer network for all</li> </ul>	<p>The Proposal:</p> <ul style="list-style-type: none"> <li>will result in the continuation of groundwater abstraction of 1.5 GL/annum, as per Groundwater Licence No. 161841(3)</li> <li>is unlikely to affect groundwater quality.</li> </ul>

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			<ul style="list-style-type: none"> <li>affect groundwater quality by poor handling/storage of potentially hazardous materials.</li> </ul>	aquifers <ul style="list-style-type: none"> <li>storing hazardous materials in accordance with permits and/or Australian Standards.</li> </ul>	
6. Natural areas	To protect the environmental values of areas identified as having significant environmental attributes.  To maintain the integrity, ecological functions and environmental values of landscapes and landforms.	The proposal area is located on the Whicher Scarp, which, when the remaining naturally vegetated areas are considered together is considered to be regionally significant.	Implementation of the Proposal may result in the disturbance to two landform elements that are regionally restricted, namely the mid-slope gravel ridges and the yellow sandplain on mid-upper slopes.	The Proponent has made a commitment to sacrifice the mineral component of the upper yellow sands to a depth of 0.7 m, equivalent to the rooting depth of the herb/shrub layer that contributes to the ecological importance of the unit.	The Proposal: <ul style="list-style-type: none"> <li>is likely to affect the Whicher Valleys (WCv) vegetation complex, which is not adequately reserved.</li> <li>is unlikely to have a significant detrimental impact on the regionally significant natural values of the Whicher Scarp</li> </ul>
7. Noise	To ensure that operations do not adversely affect environmental values or the health, welfare or amenity of people and land uses by meeting statutory requirements and acceptable standards	Existing and nearby land uses such mining at Gwindinup generate some noise emissions.  Six residences occur within 2 km of the proposed mining operation.	Heavy haulage vehicles to be used as part of the Proposal have the potential to be a significant noise source potentially affecting residences located near haulage routes.	Noise mitigation measures will be implemented in accordance with the Noise Management Plan. Noise mitigation measures include: <ul style="list-style-type: none"> <li>constructing acoustic bund walls at the north ends of the northern pit (6 m) and the southern pit (8 m)</li> <li>designing the mine layout such that the effect of noise emissions from static sources on sensitive receptors is minimised</li> <li>considering meteorological conditions and location in scheduling of noise intensive activities and limiting use of heavy haulage vehicles as appropriate.</li> </ul> 'Noise Agreements' will also be sought with surrounding residences	Noise modeling indicates that the proposal will comply with noise criteria under most operating conditions.  Under worst case conditions and assuming that tonality is present, noise criteria may be exceeded at some locations. The implementation of management measures will reduce the likelihood of such occurrences.
8. Aboriginal heritage	To ensure that changes to the biophysical environment do not adversely affect historical and cultural	The proposal area occurs within the Gnarla Karla Booja native title claim area.  Creeks running through the project area have ethnographical significance due to their association with the Waugal.	Mining is proposed to occur approximately 30m of un-named creek at Happy Valley South and 50m from an un-named creek at Happy Valley North.  The Proposal may:	Native title agreements are in place for the Happy Valley deposits and the Proponent has received conditional approval under Section 18 of the Aboriginal Heritage Act 1972 (WA).  The Proponent has made several commitments in relation to aboriginal	Implementation of the proposal is unlikely to significantly affect Aboriginal heritage values of the area.

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	associations and comply with relevant heritage legislation.	These creeks were subsequently registered with the Department of Indigenous Affairs (DIA) (Location 18941- Gynudup Brook Ephemeral Creeks) following completion of ethnographic surveys	<ul style="list-style-type: none"> <li>affect ethnographic values of creeklines within the proposal area</li> <li>uncover aboriginal artefacts through earthworks and clearing of cultural significance and burial remains. The potential for this to occur is greatest in along the creeks and lower areas.</li> </ul>	<p>heritage for existing operations in the area and will uphold these commitments for the Happy Valley proposal.</p> <p>Potential impact on ethnographic values will be mitigated by the retention of a 50 m buffer for the creek through Happy Valley North and a 30 m buffer from the centre of all other identifiable creeklines, with the exception of roads and service corridors.</p> <p>The Proponent has developed a response procedure in the event of unearthing potential Aboriginal artefacts or remains (WI045 – Aboriginal Heritage Monitoring and Contingency Plan) which is managed and updated under the Proponent's EMS.</p>	
9. Air quality	To ensure that air emissions to air do not adversely affect environmental values or the health, welfare and amenity of people and land uses by meeting statutory requirements and acceptable standards.	<p>Existing and nearby land uses such as agriculture and mining at Gwindinup generate a small volume of atmospheric emissions.</p> <p>Six residences occur within 2 km of the proposed mining operation.</p>	Dust and particulate emissions may result from materials handling and transfer as well as vehicle and mobile machinery movement over exposed ground and controlled burning.	<p>Management measures will be implemented under the Environmental Management and Monitoring Plan to mitigate potential impacts on air quality. Mitigation measures include:</p> <ul style="list-style-type: none"> <li>considering meteorological conditions and dust risk prior to and during earthmoving activities</li> <li>using water carts as appropriate to water down exposed surfaces</li> <li>sealing areas and roads that are heavily used (as appropriate) including at mine site entrance</li> <li>covering material during transportation where appropriate</li> <li>restricting speed limits (particularly on un sealed roads).</li> </ul>	Dust emissions from the Proposal are likely to be significantly less than that at the nearby Gwindinup mine site primarily due to the lower over burden removal requirements and reduced earth moving fleet.
10. Greenhouse gas emissions	To minimise levels to as low as practicable on an on-going basis and consider offsets to further reduce cumulative emissions.	Existing and nearby land uses such as agriculture and mining at Gwindinup generate a small volume of greenhouse gas emissions.	Greenhouse gas emissions will be released through combustion in engines of cars and machinery and through clearing of native vegetation.	<p>Greenhouse gas emissions will be mitigated through rehabilitation which will capture atmospheric carbon.</p> <p>The Proponent will pursue energy efficiency initiatives, including Greenhouse Challenge.</p> <p>The Proponent will report on its greenhouse emissions and energy usage as required under the NGER Act and will comply with the Carbon Pollution Reduction Scheme (or equivalent) as required when and if legislated.</p>	<p>The Proposal is unlikely to result in a net change in annual emissions by the Proponent as the Proposal represents a continuation of the existing mining project (Gwindinup).</p> <p>Rehabilitation is estimated to offset emissions from clearing.</p>

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11. Radiation	To ensure that radiological impacts to the public and the environment are kept as low as reasonably achievable and comply with acceptable standards.	Mineral sands typically contain low-level traces of radiation, attributable to the naturally-occurring radioactive elements uranium and thorium.	The Happy Valley Proposal is a continuation of the Gwindinup mining operations and thus does not introduce additional radiation safety hazards or risks to public health, other than those that already exist which are recognised as being minor.	<p>The existing operations managed by the Proponent are implemented in accordance with a Radiation Management Plan (approved by the Department of Mines &amp; Petroleum and the Radiological Council of Western Australia) which addresses, amongst other things:</p> <ul style="list-style-type: none"> <li>• sources and pathways of radiation exposure, and their management</li> <li>• equipment and facilities for controlling radiation sources</li> <li>• institutional controls, safety personnel and workforce training</li> <li>• waste disposal and transport</li> <li>• a radiation monitoring program.</li> </ul> <p>The Radiation Management Plan will be updated to include the proposed mining areas and implemented for the proposal under the Environmental Monitoring and Management Plan.</p>	The Proposal is unlikely to result in a determinable change in public risk levels and environmental radiation levels.
12. Visual amenity	<p>To ensure that aesthetic values are considered and measures are adopted to reduce visual impacts on the landscape as low as reasonably practicable.</p> <p>To maintain the integrity, ecological functions and environmental values of landscapes and landforms.</p>	<p>The proposal area is located on the mid-slopes of the Whicher Scarp overlooking the Swan Coastal Plain.</p> <p>The proposal area is likely to be visible from some residences and roadways located on the Swan Coastal Plain and Whicher Scarp, which the Gwindinup and Yoganup extended mine are already visible from.</p>	<p>Activities or environmental aspects of the proposal that may potentially affect visual amenity include:</p> <ul style="list-style-type: none"> <li>• landform modification may reduce the aesthetic value and visual quality of the area due to the change in landscape (for example, removal of native vegetation and loss of rural character)</li> <li>• mining pit and infrastructure may be visible to the public thereby detracting from the visual quality of the area</li> <li>• dust emissions may detract from the visual quality of the area</li> </ul>	<p>The potential impact on visual amenity will be mitigated through measures to be implemented under the Environmental Monitoring and Management Plan. Measures include:</p> <ul style="list-style-type: none"> <li>• minimising the clearing footprint and disturbance timeframes</li> <li>• selecting colour schemes for buildings and infrastructure that blend in with the surrounding landscape</li> <li>• using vegetation for screening where appropriate and feasible</li> <li>• minimising outdoor lighting requirements and managing outdoor lighting in accordance with AS4282:1997.</li> </ul>	<p>The proposal will result in temporary, additional modification of an already highly modified landscape.</p> <p>The Proposal is expected to result in a short to medium term (3-8 years) moderate impact to visual amenity in a local context.</p>

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13. Public recreation and safety	To ensure that existing and planned recreational uses are not compromised.	Parts of the proposal area occurs within and adjacent to State forest areas capable of supporting recreation. There are no notable recreational areas in vicinity to the proposal area.	<ul style="list-style-type: none"> <li>• light spill.</li> </ul> Implementation of the Proposal may prevent public access to previously accessible sites and result in the disturbance to natural assets.	The potential impact on public recreation and safety will be mitigated through: <ul style="list-style-type: none"> <li>• maintaining main thoroughfares as necessary but restricting access to operational areas for safety purposes</li> <li>• providing signposts to alternative accessible areas</li> <li>• rehabilitating disturbed sites following use to ensure safety and to establish natural assets for public use.</li> </ul>	Access to previously public sites located within the mining tenements will be restricted for the duration of the Proposal until rehabilitation is complete. This may result in a minor inconvenience to locals who use State forest within tenements. The local reduction in recreation values will be offset by rehabilitation of pits and donation of additional land and conservation resources.
14. Rehabilitation and closure	To ensure, as far as practicable, that rehabilitation achieves a stable and functioning landform which is consistent with the surrounding landscape and other environmental values.	The current features within and adjacent to the proposal area including hills, Jarrah/Marri forest, cleared pasture and existing mines are located within private and State owned land.	In a worst-case situation (i.e. before the application of management controls) the Proposal could result in the following inherent impacts: <ul style="list-style-type: none"> <li>• a loss of 155 ha of native vegetation of the diverse and regionally significant Whicher Scarp, out of a total remainder of 9,600 ha</li> <li>• a reduction of 50% in northwards habitat of the Declared Rare Flora <i>Daviesia elongata</i> subsp. <i>elongata</i>,</li> <li>• a reduction in the current occurrence and habitat for a confirmed five priority plant taxa and up to nine potential priority taxa</li> <li>• a 155 ha reduction in foraging habitat for the conservation significant species of fauna, out of total area of continuous native vegetation of &gt;10,000 ha (Argyle forest block)</li> </ul>	A Decommissioning and Closure Plan and an Integrated Mining and Rehabilitation Plan will be implemented to achieve closure and rehabilitation objectives and criteria to the satisfaction of the DEC. The plans address the complexity of the different landforms and vegetation and include actions to maximise rehabilitation resources and outcomes. The Integrated Mining and Rehabilitation Plan has also been assessed against the expectations of the EPA and the rehabilitation capacity of the Proponent has also been externally verified.	All sites proposed to be disturbed will be rehabilitated with a net increase in vegetation extent through offsets including revegetation of 14 ha of abandoned gravel quarries and access tracks in state forest. The following completion criteria will be met (non-exhaustive list current as of submission but subject to periodic review): <ul style="list-style-type: none"> <li>• The site meets the agreed end land use.</li> <li>• Ground coverage of weed species to be equivalent or less than corresponding State Forest and no Declared Plants as defined by DAFWA present within rehabilitation areas.</li> <li>• The site is capable of being integrated into the larger control burning program with surrounding State Forest.</li> <li>• The spread of dieback is effectively contained.</li> <li>• Average tree density at 15 years following closure will meet standards developed for Kingia, Whicher Slope and Sandplain communities.</li> <li>• At 5 years following closure species richness (abundance and diversity) of native plant species (including conservation significant species) to be at least 60% of that recorded in pre-mining assessment plots.</li> </ul>