

Pro Forma: Advice for Native Vegetation Clearing Permit amendment pathway

Application to extend ‘no clearing after’ and expiry date

Department of Mines, Industry Regulation and Safety (DMIRS) requires that amendments to clearing permits, including administrative amendments, be reviewed. The purpose of the review is to clarify whether there have been any substantial changes in conservation values and/or impacts within the application area since the original assessment. Such changes may result in supporting surveys no longer being adequate to support the revised assessment and/or change the outcomes when assessed against the 10 Clearing Principles listed under Schedule 5 of the *Environmental Protection Act 1986*.

The purpose of this pro forma is to provide DMIRS with information on:

- changes in conservation values since the original assessment.
- the significance of those changes; and
- the appropriate approval pathway for the area in question.

Where demonstrated through this pro forma, that previous survey information meets current regulator expectations and no substantial changes to known conservation values and/or clearing impacts exist, Rio Tinto Iron Ore (RTIO) would not pursue further survey work to support the administrative amendment.

Where previous supporting surveys are no longer adequate to meet current regulator expectations, or there have been significant changes to the known conservation values since assessment was made, supplementary supporting information will accompany an amendment to the NVCP or new clearing permit application. Rio Tinto will seek confirmation from DMIRS on the appropriate pathway.

Current		Proposed	
CPS#	7608/1	CPS#	7608/2
No clearing after date	31/12/2022	No clearing after date	31/12/2028
Expiry date	31/12/2027	Expiry date	31/12/2033
Clearing approved (ha)	170		
Clearing carried out to date (ha)	3.95		
Rehabilitation carried out to date (ha)	3.01		

Justification of extension:	<p>CPS 7608 is required for ongoing exploration activities around the Marandoo mine.</p> <p>Drilling will target known areas of iron mineralisation, as well as potential exploration extensions of the deposit. Drilling is essential to further define the size and shape of the orebody; quality of the orebody; ore/waste ratios; and provide broader geological (i.e. structural, stratigraphical, mineralogical, chemical etc.) context of the area.</p> <p>These works are critical for facilitating ore body knowledge and tenure planning.</p>
Bio Input/Desktop assessment	
Date/s of field surveys:	<p>Flora and vegetation:</p> <ul style="list-style-type: none"> - 23rd May - 1st June 2008 (Biota 2008a) - 9-15th March, 22-28th March 2018 (Astron 2018) <p>Fauna</p> <ul style="list-style-type: none"> - 6th May – 12th May 2008 (Biota 2008b) - 1-11th March 2007, 10-15th April 2007, 6-12th November 2007 (Biota 2008c)
Survey type/s:	<p>Flora and vegetation:</p> <p>Biota (2008a) –single-phase detailed flora and vegetation survey</p> <p>Astron (2018) – systemic flora survey</p> <p>Fauna:</p> <p>Biota (2009b) – single-phase detailed fauna survey</p> <p>Biota (2008c) – multi-phase detailed fauna survey</p>
Constraints / limitations:	<p>Seasonal conditions at the time of the Biota (2008a) surveys were considered dry and not optimal for the collection of ephemeral flora or cryptic perennial species. Another limitation for this survey was that the entire survey area was not systematically searched. The Astron (2018) survey systematically searched the entire Application Area and did not list any major limitations.</p> <p>Survey limitations for Biota (2008b) report that not all sections of the study area were ground-truthed or equally sampled for fauna, however, systematic fauna sampling was completed on the basis of trapping grid installed in habitats considered representative of the range of units present within the expansion area. This was also supplemented by data from previous surveys in the locality.</p>
Have any additional field surveys been undertaken within the Permit area since the original application was submitted?	<p>Yes:</p> <ul style="list-style-type: none"> • Astron (2018) – systemic flora survey over the entirety of the Application Area. <p>There has also been surveys in defined small areas to support approval conditions and other applications including:</p> <ul style="list-style-type: none"> • RTIO (2017) - Systematic Flora Survey – Marandoo Prospecting Licences Phase 1 Drilling.
Presence of Threatened flora/fauna?	No Threatened flora or fauna have been identified within the Application Area.

Presence of Priority flora/fauna?	<p>Yes – six species of priority flora have been recorded within the Application Area. Five of these species were not included in the flora assessment submitted with the initial NVCP application.</p> <ul style="list-style-type: none"> • <i>Acacia effusa</i> (P3) (Astron 2018, Rio Tinto 2017) • <i>Dolichocarpa</i> sp. Hamersley Station (A.A. Mitchell PRP 1479) (P3) (Astron 2018) • <i>Goodenia lyrata</i> (P3) (RTIO Internal Database Record) – included in the initial assessment • <i>Rostellularia adscendens</i> var. <i>latifolia</i> (P3) (Astron 2018) • <i>Themeda</i> sp. Hamersley Station (M.E. Trudgen 11431) (P3) (Astron 2018) • <i>Vittadinia</i> sp. Coondewanna Flats (S. van Leeuwen 4684) (P3) (Astron 2018) <p>One Priority fauna species has also been identified within the Application Area:</p> <ul style="list-style-type: none"> • Western Pebble-mound Mouse - <i>Pseudomys chapmani</i> (P4) (RTIO 1994)
Presence of Threatened Ecological Communities?	No.
Presence of Priority Ecological Communities?	<p>No.</p> <p>The Permit area lies within the buffer of the Coolibah – Lignum Flats: sub type 3. Coolibah woodland over lignum over silky browntop (Mt Bruce flats) (P1) PEC. However, this PEC has not been detected within the Application Area.</p>
Have there been any changes to the conservation rank of species or communities identified in previous surveys?	<p>In considering changes to species conservation rank since the Application was submitted, a search of the Rio Tinto database was completed for any additional species recorded within the Application Area (changes in species conservation ranking is updated in the Rio Tinto internal biological database as they occur), and previously listed species were cross checked on flora base or the DBCA threatened or priority flora and fauna websites.</p> <p>Flora: None relevant.</p> <p>Fauna: One species formally listed as a priority species at the time of assessment is now listed as threatened; Grey Falcon. The conservation status of Grey Falcon increased from P4 to VU in 2020. The potential presence of this species was not considered in the initial assessment, however was included in the Biota (2008b) fauna assessment which covered the Application Area. Biota (2008b) reported that the Grey Falcon is likely to occur in the study area, but its presence has not been detected. The closest record on the RTIO biological database is located 74 km northwest of the Application Area. The</p>

	<p>survey area is considered to have been sufficiently surveyed to account for this species.</p> <p>The Southern Whiteface (<i>Aphelocephala leucopsis</i>) was listed as Vulnerable in 2023 after not previously being listed under the EPBC or BC Acts. This species was not directly targeted during previous assessments of the Application Area as it did not have priority or threatened status, however the Biota (2008b) survey was detailed in nature and recorded any and all observed vertebrate fauna using both systematic and non-systematic techniques. This survey included 19 hours of avifauna census time which is designed to capture any active bird at the time of the survey, including the Southern Whiteface and Grey Falcon. The closest record of the Southern Whiteface is located approximately 37 km west-southwest of the Application Area in the town of Tom Price. This record was collected by BirdLife Australia in 2008. The Application Area is considered to have been sufficiently surveyed to account for this species.</p>
<p>Have any new species, communities or habitats of elevated environmental value been identified within the boundary of the clearing permit?</p>	<p>The following flora species have since been recorded in the Application Area within the Rio Tinto database:</p> <ul style="list-style-type: none"> • <i>Acacia effusa</i> (P3 – 4744 individuals recorded within Application area by Astron (2018)) • <i>Dolichocarpa</i> sp. Hamersley Station (A.A. Mitchell PRP 1479) (P3 – 18 individuals recorded within Application Area by Astron (2018)) • <i>Rostellularia adscendens</i> var. <i>latifolia</i> (P3 – five individuals recorded within Application Area by Astron (2018)) • <i>Themeda</i> sp. Hamersley Station (M.E. Trudgen 11431) (P3 – 67 individuals recorded within Application Area by Astron (2018)) • <i>Vittadinia</i> sp. Coondewanna Flats (S. van Leeuwen 4684) (P3 – 831 individuals recorded within Application Area by Astron (2018)) <p>The location of these species is identified as restriction zones with disturbance to be avoided where practicable. As per condition 8 d(i) of CPS 7608/1 no clearing is permitted within 10 metres of priority flora, unless first approved by the CEO.</p>
<p>Other changes relevant to conservation of significant biological values in the context of the impact assessment (e.g., changes in known species distributions, new threats etc.)?</p>	<p>In considering changes to relevant conservation significant biota distribution since the Application was submitted, a PMST search was undertaken with a 20 km buffer over the Application Area. Any species mentioned in the PMST search which were not previously assessed in the Application are reported below:</p> <ul style="list-style-type: none"> • The Southern Whiteface (<i>Aphelocephala leucopsis</i>) was listed as of 2023 as a Vulnerable species. This species was not previously listed within the state as a threatened or priority species. The Application Area may contain suitable habitat for this species. The closest record is 37 km from the Application Area. • Curlew Sandpiper (<i>Calidris ferruginia</i>) (CR) – species prefers intertidal mudflats and freshwater swamps and lakes. Suitable habitat is not available within Application Area and the species has not been recorded within Rio Tinto database. • Princess Parrot (<i>Polytelis alexandrae</i>) (VU) – species prefers sand dunes and sand flats. Suitable habitat is unlikely to occur within area. The closest record is 200 km from the Application Area. <p>Previous fauna surveys within the Application Area covered all vertebrate fauna species which would have included Southern Whiteface, Curlew Sandpiper and Princess Parrot had they been present at the time of survey. None of these species were detected during surveys (which comprised 19 hours of avifauna census).</p>

	No other changes to conservation significant biological values in the context of this impact assessment have been identified. No new activities are being proposed within this application.
Is a field survey required to validate desktop assessment? Why / why not?	A field survey is not required. The desktop assessment has indicated good overall survey coverage with few significant limitations, and no additional concerns around conservation listed species not previously addressed by biological surveys. The NVCP area and clearing limit are not being increased. Only changes relating to dates have been requested.
Is a new survey required? Why / why not?	<p>A new survey is not required. A single-phase detailed fauna survey (Biota 2008b) was conducted over the Application Area, and a multi-phase detailed fauna assessment (Biota 2008c) was conducted over part of the Application Area which could have identified the newly listed or uplisted Southern Whiteface or Grey Falcon if they had been present at the time of survey. During the Biota 2008b survey, a total of 38 avifauna censuses were completed across twenty sites, sixteen systematic trapping sites and four opportunistic sites comprising a total of 19 hours of dedicated avifauna sampling. Fauna survey effort is considered to be sufficient to support this application.</p> <p>The single-phase detailed flora and vegetation survey completed by Biota (2008a) combined with the systematic flora survey completed by Astron (2018) are considered to provide suitable flora and vegetation information for the Application Area.</p> <p>No changes are requested for the scope of work, and no changes to the clearing limit have been requested. The current survey coverage provides a sufficient level of environmental information for the Application Area. Where individual records or potential habitat has been identified for threatened or priority flora or fauna it has been classified as exclusion and restriction areas to minimise any impact to these species.</p>

Based on the above information the risk of significant impacts to ecological values (flora, fauna, and ecological communities) due to extending the 'no clearing' and expiry date, is low.

RTIO proposes an administrative amendment to extend the 'no clearing after' date and the expiry date. DMIRS Native Vegetation Branch to advise if this approach is considered appropriate.

Desktop Assessment Completed by:

Name: Madi Roberts
Title: Zoologist, Biological Assessments

Review Completed by:

Name: Alicia Michael
Title: Superintendent Biological Assessments

References

Astron (2018) Marandoo Prospecting Licences, Systematic Conservation Listed Flora Assessment, March 2018. Astron Environmental Services, East Perth, Western Australia

RTIO (2017) Systematic Flora Survey – Marandoo Prospecting Licences Phase 1 Drilling, September 2017. Rio Tinto Iron Ore, Perth, Western Australia

Biota (2008a) A Vegetation and Flora Survey of the Rio Tinto Rail Duplication – Bellbird Siding to Juna Downs, August 2008. Biota Environmental Sciences, West Perth, Western Australia

Biota (2008b) Rio Tinto Rail Duplication Fauna Assessment – Bellbird Siding to Juna Downs, August 2008. Biota Environmental Sciences, West Perth, Western Australia

Biota (2008c) Marandoo Mine Phase 2 Seasonal Fauna Survey, August 2008. Biota Environmental Sciences, West Perth, Western Australia