



Clearing Permit Decision Report

1. Application details and outcome

1.1. Permit application details

Permit number:	9178/2
Permit type:	Purpose Permit
Applicant name:	BHP Iron Ore Pty Ltd
Application received:	1 December 2021
Application area:	110 hectares within a total boundary of approximately 429.6 hectares
Purpose of clearing:	Solar array, geotechnical investigations, and associated activities
Method of clearing:	Mechanical Removal
Tenure:	<i>Iron Ore (McCamey's Monster) Agreement Authorisation Act 1972</i> , Mining Lease 266SA (AM 70/266); Miscellaneous Licence 52/109
Location (LGA area/s):	Shire of East Pilbara
Colloquial name:	Jimblebar West Solar Project

1.2. Description of clearing activities

The Jimblebar West Solar project is located approximately 28 kilometres east of Newman, within the Shire of East Pilbara (GIS Database). The proposed clearing is for the construction of a 25 to 50 MW solar array to the west of the existing Jimblebar iron ore mining operations (BHP Billiton, 2021).

Clearing permit CPS 9178/1 was granted by the Department of Mines, Industry Regulation and Safety on 11 March 2021 and was valid from 3 April 2021 to 30 November 2037. The permit authorised the clearing of up to 70 hectares of native vegetation within a boundary of approximately 429.6 hectares, for the purposes of a solar array, geotechnical investigations, and associated activities.

On 1 December 2021, the Permit Holder applied to amend CPS 9178/1 to increase the area authorised to clear by 40 hectares to 110 hectares, include additional tenure on the permit, and update the Permit Holder name to reflect a change in the company name. The clearing permit boundary remains unchanged.

The proponent has reported that clearing for geotechnical investigations commenced on 29 October 2021 and a total of 2.69 hectares had been cleared under this permit up to December 2021 (BHP Iron Ore, 2021). However, as planning for the project has progressed, it has been determined that an additional 40 hectares of clearing will be required for the project due to a change in the design for the solar array (BHP Iron Ore, 2021).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	24 February 2022
Decision area:	110 hectares within a total boundary of approximately 429.6 hectares

1.4. Reasons for decision

This clearing permit amendment application was made in accordance with section 51KA of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Mines, Industry Regulation and Safety (DMIRS) on 1 December 2021. DMIRS advertised the application for public comment for a period of 21 days, and no submissions were received.

In undertaking the assessment, the Delegated Officer had regard for the site characteristics, relevant datasets, supporting information provided by the applicant including the results of a flora and vegetation survey and a fauna survey, the Clearing Principles set out in Schedule 5 of the EP Act, and any other matters considered relevant to the assessment.

The assessment of the amendment application remains consistent with the assessment of the original permit application, CPS 9178/1. The Delegated Officer determined that the proposed clearing of an additional 40 hectares of native vegetation within a total permit area of approximately 429.6 hectares is unlikely to result in any significant additional impacts to environmental values.

After consideration of the available information, the Delegated Officer determined that the proposed amendment is not likely to lead to an unacceptable risk to the environment. The Delegated Officer decided to grant the amended clearing permit with the existing permit conditions.

2. Assessment of application

2.1. Avoidance and mitigation measures

The Permit Holder has advised that the following mitigation measures will be implemented to minimise potential impacts of the proposed clearing on environmental values (BHP Iron Ore, 2021):

- track widths and drill pad sizes will be restricted to the minimum size required to safely accommodate equipment;
- existing tracks will be used to cross drainage lines wherever possible, and if new crossing points are required, the natural surface flow will be maintained;
- clearing of Priority flora will be avoided by a 10 metre buffer, where practicable;
- clearing of active mounds of the Western Pebble-mound Mouse will be avoided by a 10 metre buffer, where practicable; and
- clearing of active Mulgara burrows will be avoided, where practicable.

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

2.2. Assessment of impacts on environmental values

The Permit Holder has applied to amend the permit, to increase the amount of authorised clearing by 40 hectares, add Miscellaneous Licence 52/109 to the permit and update the Permit Holder name to reflect a recent change in company name. There is no change to the permit boundary which covers an area of approximately 429.6 hectares.

The permit area is located within the Augustus subregion of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) Gascoyne bioregion and the Hamersley subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Pilbara Bioregion (GIS Database). The increased amount of clearing (110 hectares) will result in the disturbance of approximately 25 percent of the clearing permit area. However, approximately 99% of the pre-European vegetation still exists in these two Bioregions (Government of Western Australia, 2019). The permit area is broadly mapped as Beard vegetation associations: 29: Sparse low woodland; mulga, discontinuous in scattered groups; 82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*; and 216: Low woodland; mulga (with spinifex) on rises (GIS Database). More than 98% of the pre-European extent of each of these vegetation associations remains uncleared at both the state and bioregional level (Government of Western Australia, 2019). Hence, the vegetation proposed to be cleared does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

A vegetation survey conducted over the permit area and surrounding areas described the vegetation condition as Very Good to Excellent on the Keighery scale (Onshore Environmental, 2015). Three weed species have been recorded within the permit area: *Bidens bipinnata* (Bipinnate Beggartick), *Cenchrus ciliaris* (Buffel Grass) and *Malvastrum americanum* (Spiked Malvastrum), (BHP Iron Ore, 2021). Weeds have the potential to out-compete native flora species and reduce the biodiversity of an area, and care should be taken to prevent the introduction or spread of weeds in the permit area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the continued implementation of the existing weed management condition on the permit.

No Threatened Ecological Communities or Priority Ecological Communities have been recorded within or in close proximity to the permit area (BHP Iron Ore, 2021; Onshore Environmental, 2015; GIS Database).

No Threatened flora have been recorded within or in close proximity to the permit area (BHP Iron Ore, 2021; Onshore Environmental, 2015). One Priority flora taxa, *Goodenia nuda* (Priority 4) has been recorded at several locations within the permit area (BHP Iron Ore, 2021). *Goodenia nuda* has been recorded from three IBRA Bioregions including a wide distribution within the Pilbara Bioregion (Western Australian Herbarium, 1998-), and the additional 40 hectares of proposed clearing within the total permit area of approximately 429.6 hectares is unlikely to have any significant impact on this species.

A fauna survey conducted over the current permit area and surrounding areas recorded a total of 76 fauna species, comprising 14 mammal species (11 native and three introduced), 57 bird species and five reptile species (Biologic,

2020). Several fauna species of conservation significance have the potential to occur within the permit area, based on known distributions and available habitats (BHP Billiton, 2021; Biologic, 2020; GIS Database), however, none are likely to be specifically dependant on the habitats within the permit area. No fauna species of conservation significance have been recorded within the permit area (BHP Iron Ore, 2021; Biologic, 2020). Although the proposed additional 40 hectares of clearing will impact on fauna habitats at a local scale, it is not likely to have a significant impact on fauna or fauna habitats in a regional context.

There are no permanent watercourses or wetlands within the permit area, however, there are several minor seasonal drainage lines (BHP Billiton, 2021; GIS Database). Clearing of vegetation growing in association with drainage lines should be avoided where possible, however, given the ephemeral nature of the drainage lines, any impacts are likely to be minimal.

The western edge of the application area falls within the Newman Water Reserve, a Priority 1 Public Drinking Water Source Area (PDWSA) (GIS Database). DWER (2021) advised that solar energy production is a compatible activity within a Priority 1 PDWSA, provided activities are conducted in accordance with DWER's water quality protection notes and guidelines. The Newman Water Reserve covers a total area of approximately 78,000 hectares, and the proposed additional clearing is unlikely to have any significant impact on the Newman Water Reserve.

Temporary, localised flooding may occur following heavy rainfall, however, the additional clearing is unlikely to have any significant impact on surface or groundwater quality, or on the incidence or intensity of natural flooding events.

The permit area is broadly mapped as occurring within the Divide, Jamindie, McKay, and Newman land systems (GIS Database). These land systems are considered to be not generally susceptible to erosion (Van Vreeswyk et al., 2004), and the additional 40 hectares of proposed clearing is unlikely to result in appreciable land degradation.

There are no conservation areas within or in close proximity to the permit area (GIS Database), and the proposed additional 40 hectares of clearing is unlikely to impact on any conservation areas.

The vegetation associations, fauna habitats and landform types present within the permit area, are well represented in surrounding areas and the region remains largely uncleared (BHP Billiton, 2021; GIS Database). The increase in authorised clearing from 70 hectares to 110 hectares within the existing permit boundary is unlikely to result any significant change to the environmental impacts of the proposed clearing.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision report CPS 9178/1.

2.3. Relevant planning instruments and other matters

The clearing permit amendment application was advertised on 14 December 2021 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim (WC2005/006) over the area under application (DPLH, 2022). This claim has been determined by the Federal Court on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2022). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

Appendix A - References and databases

1. GIS datasets

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- DBCA - Lands of Interest (DBCA-012)
- DBCA - Legislated Lands and Waters (DBCA-011)

- Environmentally Sensitive Areas (DWER-046)
- Hydrography, Lakes
- Hydrography, linear
- IBRA Australia
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)

Restricted GIS Databases used:

- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

2. References

- BHP Billiton (2021) Application for the Jumblebar West Solar Project NVCP. Native Vegetation Clearing Permit Application Supporting Document. BHP Billiton Iron Ore Pty Ltd, Western Australia, January 2021.
- BHP Iron Ore (2021) Amendment application for CPS 9178/1 Jumblebar West Solar Project NVCP. Native Vegetation Clearing Permit Amendment Application Supporting Document. BHP Iron Ore Pty Ltd, Western Australia, December 2021.
- Biologic (2020) Jumblebar Greenhouse Gas Abatement Study. Basic Vertebrate Fauna Survey. Report prepared for BHP Western Australian Iron Ore, by Biologic Environmental Survey Pty Ltd, December 2020.
- DPLH (2022) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 16 February 2022).
- DWER (2021) Advice received in relation to Clearing Permit Application CPS 9178/1. North West Region, Department of Water and Environmental Regulation, Western Australia, February 2021.
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Onshore Environmental (2015) Dynasty and West Jumblebar Level 2 Flora and Vegetation Survey. Report prepared for BHP Billiton Iron Ore Pty Ltd, by Onshore Environmental Consultants Pty Ltd, June 2015.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) An inventory and condition survey of the Pilbara Region, Western Australia. Technical Bulletin No. 92. Department of Agriculture, South Perth, Western Australia.
- Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 16 February 2022).

Appendix B - Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016, Western Australia</i>
BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DAWE	Department of Agriculture, Water and the Environment, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia
DMP	Department of Mines and Petroleum, Western Australia (now DMIRS)
DoEE	Department of the Environment and Energy (now DAWE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)

DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

T Threatened species:

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

Threatened fauna is that subset of ‘Specially Protected Fauna’ listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

Threatened flora is that subset of ‘Rare Flora’ listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR Critically endangered species

Threatened species considered to be “*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN Endangered species

Threatened species considered to be “*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU Vulnerable species

Threatened species considered to be “*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

Extinct Species:

EX Extinct species

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW

Extinct in the wild species

Species that “is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI

Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

CD

Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS

Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P

Priority species:

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

- P1 Priority One - Poorly-known species**
 Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
- P2 Priority Two - Poorly-known species**
 Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
- P3 Priority Three - Poorly-known species**
 Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
- P4 Priority Four - Rare, Near Threatened and other species in need of monitoring**
 (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.
 (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.
 (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

Principles for clearing native vegetation:

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.
- (j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.