



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4976/7
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Millennium Minerals Limited

1.3. Property details

Property: Mining Leases: 46/3, 46/47, 46/98, 46/129, 46/146, 46/163, 46/164, 46/166, 46/182, 46/186, 46/192, 46/198, 46/199, 46/200, 46/225, 46/261, 46/262, 46/265, 46/266, 46/272, 46/273, 46/274, 46/277, 46/282, 46/302, 46/431, 46/433, 46/436, 46/441, 46/442, 46/444, 46/446, 46/447;
Miscellaneous Licences: 46/88, 46/89, 46/90, 46/91, 46/92, 46/98, 46/105.
Local Government Area: Shire of East Pilbara
Colloquial name: Nullagine Gold Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
890.62		Mechanical Removal	Mineral Production and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 24 August 2017

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The application area has been broadly mapped as Beard vegetation association 190: Hummock grasslands, sparse shrub steppe; *Acacia bivenosa* and *A. trachycarpa* over hard spinifex, *Triodia wiseana*; very poor rocky country on gneiss (GIS Database).

Extensive flora and vegetation surveys of the broader Nullagine Gold Project area were undertaken during the period July 2005 to January 2017 by several botanical consultants including Mattiske Consulting Pty Ltd (Mattiske) in July 2005, April 2006, May 2010 and April 2011 (Mattiske, 2012), Plantecology Consulting (Plantecology) (2016), Woodgis (2016), Waters (2017a; 2017b) and Waters & Chalwell (2017).

A Level 1 flora and vegetation survey of Millennium Minerals Ltd tenements (MML) within the Nullagine area and inclusive of the application area was undertaken by Plantecology (2016) during the period 12 April to 9 June 2016. A detailed Level 2 flora and vegetation survey was undertaken by Waters (2017a) and Waters & Chalwell (2017) during the periods 12 to 21 April 2016, 11 to 16 May 2016, 2 to 9 September 2016, 3 August to 18 August 2016 and 12 to 20 January 2017.

The vegetation survey identified the following six vegetation types in the amended application area:

1. **AEBG**: Alluvial plain eucalypt buffel grass woodland,
2. **DAHW**: Drainage acacia hummock grass shrubland/woodland,
3. **DESG**: Drainage spinifex grassland with Eucalypt overstorey,
4. **HSPG**: Hill spinifex grassland,
5. **PHSG**: Plain hard spinifex grassland, and
6. **SSCG**: Stony plain spinifex grassland with chenopods.

Additional vegetation associations cover the rest of the permit area and are detailed in previous decision reports.

Clearing Description Nullagine Gold Project.
MML proposes to clear up to 890.62 hectares of native vegetation within a total boundary of approximately 1,436.72 hectares, for the purpose of extending several open pit gold mines and mining related infrastructure. The project is located approximately seven kilometres east of Nullagine, in the Shire of East Pilbara.

Vegetation Condition Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994);
to
Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Comment

Clearing permit CPS 4976/1 was granted by the Department of Mines and Petroleum (DMP) on 12 July 2012 and was valid from 4 August 2012 to 28 February 2021. Amended permit CPS 4976/2 was granted on 15 January 2015, increasing the area approved to clear from 190 hectares to 294 hectares and increasing the permit boundary from approximately 534 hectares to approximately 591 hectares. Amended permit CPS 4976/3 was granted on 21 May 2015, increasing the area approved to clear from 294 hectares to 387.8 hectares, and increasing the permit boundary from approximately 591 hectares to approximately 702 hectares.

On 21 September 2015, the Permit Holder applied to amend CPS 4976/3 to increase the amount of clearing authorised from 387.8 hectares to 489.03 hectares, to increase the permit boundary from approximately 703 hectares to approximately 804 hectares and to add Mining Lease 46/436 to the permit. The additional clearing was required for the construction of a new tailings storage facility (TSF) and two new access roads. CPS 4976/4 was granted on 16 June 2016.

An application to amend CPS 4976/4 was submitted to the DMP on 29 July 2016. The applicant requested an increase in the amount of clearing authorised, an increase in the clearing permit boundary and clearing on Mining Lease 46/192. The total clearing required for CPS 4976/5 is 774.73 hectares. The new mining areas include satellite deposits at the Five Mile Creek area (comprising Anna de Vidia, Otways extension and Gambols deposits), All Nations Extension area (comprising All Nations Extension, All Nations Extension East), Little Wonder Extension, two additional areas located near the TSF2 and access roads. CPS 4976/5 was granted on 5 January 2017.

An application to amend CPS 4976/5 was submitted to the DMP on 22 March 2017. The applicant requested an increase in the amount of clearing authorised from 774.73 to 890.62 hectares and an increase in the clearing permit boundary. The total clearing approved for CPS 4976/6 was 890.62 hectares.

An application to amend CPS 4976/6 was submitted to the Department of Mines, Industry Regulation and Safety (DMIRS) (formerly the Department of Mines and Petroleum) on 11 July 2017. The applicant requested an increase in the clearing permit boundary. The total clearing required for CPS 4976/7 is 890.62 hectares.

3. Assessment of application against clearing principles

Comments MML has applied to increase the clearing permit boundary from 1,334.75 hectares to 1,436.72 hectares. The amendment is needed due to an administrative error following the approval of CPS 4976/6. The clearing boundary has therefore changed; however, the authorised clearing area remains unchanged. The environmental factors have previously been assessed under CPS 4976/6. The assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in the previous decision report CPS 4976/6.

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 mostly consistent with the assessment contained in decision reports CPS 4976/1, 4976/2, 4976/3, 4976/4, 4976/5 and 4976/6.

Methodology Keighery (1994)
Mattiske (2012)
MML (2017a)
MML (2017b)
Plantecology (2016)
Waters (2017a)
Waters (2017b)
Waters & Chalwell (2017)
Woodgis (2016)

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments There are two native title claims over the application area (WC1999/008 and WC1999/016) (DPLAH, 2017). These claims have been registered with the National Native Title Tribunal on behalf of the claimant groups. However, the mining tenements have 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 is one registered Aboriginal Site of Significance within the application area (Site 36953) (DPLAH, 2017). One other registered Aboriginal Site of Significance (Site 704) occurs within close proximity to the area proposed for the construction of the TSF2 (DPLAH, 2017). 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.

The Golden Eagle Satellite Deposits Development (which included parts of the area covered by CPS 4976/1) was assessed by the former Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPAC) (now the Department of the Environment and Energy (DotEE)) under the *Environment*

Protection and Biodiversity Conservation Act 1999 (EPBC Act). The project was determined to be a controlled action under the EPBC Act for the protection of listed threatened species and communities. The development was approved on 17 January 2012 subject to conditions (EPBC 2011/5855). The conditions of the EPBC Act approval included limiting the disturbance area for the project to 294 hectares (DotEE, 2012). Although the amended clearing permit area is greater than 294 hectares, the majority of the clearing permit footprint falls outside of the EPBC Act approval area where this restricted clearing limit applies. MML has advised that the clearing limit imposed by the EPBC Act approval has not been exceeded (MML, 2017b).

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.

The amendment application was advertised on 31 July 2017 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received.

Methodology DPLAH (2017)
DotEE (2012)
MML (2017b)

4. References

- DPLAH (2017) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://maps.daa.wa.gov.au/ahis/> (Accessed 14 August 2017).
- DotEE (2012) Golden Eagle Satellite Deposits Development, Pilbara, WA (EPBC 2011/5855). Department of the Environment and Energy, 17 January 2012.
- Government of Western Australia (2016) 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2016. WA Department of Parks and Wildlife, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske (2012) Flora and Vegetation of the Nullagine Project Areas. Report Prepared by Mattiske Consulting Pty Ltd for Millennium Minerals Limited, April 2012.
- MML (2017a) Golden Eagle Satellite Deposits: Native Vegetation Clearing Permit Amendment CPS 4976/6. Millennium Minerals Ltd, Perth, Western Australia, 10 March 2017.
- MML (2017b) Additional information received in relation to Clearing Permit Application CPS 4976/6. Millennium Minerals Ltd, Perth, Western Australia, 13 June 2017.
- Plantecology (2016) Millennium Minerals Ltd, Nullagine Gold Project Flora and Vegetation Survey for CPS 4976/5 - 22/08/2016. Report prepared for Millennium Minerals Ltd by Plantecology Consulting, August 2016.
- Waters, A & Chalwell, S (2017) Priority Flora of the Mosquito Land System, version 1.0. Unpublished report by Woodgis and Plantecology Consulting for Millennium Minerals Ltd, February, 2017.
- Waters, A (2017a) Millennium Minerals Ltd, Nullagine Gold Project. Vegetation of the MML Nullagine Tenements (version 1.0). Report prepared for Millennium Minerals Ltd by Woodgis and Plantecology Consulting, March 2017.
- Waters, A (2017b) Millennium Minerals Ltd, Nullagine Gold Project. Stony Plains of the Mosquito Land System PEC (version 1.0). Report prepared for Millennium Minerals Ltd by Woodgis and Plantecology Consulting, March 2017.
- Woodgis (2016) Survey of Priority Flora and Ecological Communities Update. Additional Information received in relation to CPS 4976/5. Woodgis Environmental Assessment and Management, September, 2016.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLAH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DBCA	Department of Biodiversity Conservation and Attractions, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
DotEE	Department of the Environment and Energy, Australian Government
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)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLAH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora
DotEE	Department of the Environment and Energy, Australian Government
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DWER	Department of Water and Environmental Regulation, Western Australia
EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , 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
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

{DPaW (2017) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T	<p>Threatened species: Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).</p> <p>Threatened fauna is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the Wildlife Conservation Act.</p> <p>Threatened flora is flora that has been declared to be 'likely to become extinct or is rare, or otherwise in need of special protection', pursuant to section 23F(2) of the Wildlife Conservation Act.</p> <p>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.</p>
CR	<p>Critically endangered species Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
EN	<p>Endangered species Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
VU	<p>Vulnerable species Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
EX	<p>Presumed extinct species Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.</p>
IA	<p>Migratory birds protected under an international agreement 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 the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
CD	<p>Conservation dependent fauna Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
OS	<p>Other specially protected fauna Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
P	<p>Priority species Species which are poorly known; or Species that are adequately known, are rare but not threatened, and 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</p>

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 indigenous to Western Australia.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare 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 clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

