



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6603/2  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: GPM Resources Pty Ltd

### 1.3. Property details

Property: Mining Leases: 24/11, 24/43, 24/99, 24/121, 24/122, 24/135, 24/326, 24/469, 24/854, 24/869, 24/870, 24/871, 24/886, 24/887, 24/888 and 24/951  
Local Government Area: City of Kalgoorlie-Boulder  
Colloquial name: Kalgoorlie North Gold Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
127		Mechanical Removal	Mineral Production and associated infrastructure

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 3 March 2016

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

##### Vegetation Description

The entire clearing permit area has been broadly mapped as Beard vegetation association: 2903: Medium woodland; Salmon gum, goldfield blackbutt, gimlet & *Allocasuarina cristata* (GIS Database).

A flora and vegetation survey was conducted by Alexander Holm and Associates (Holm) during 2012 and 2014 over the broader North Kalgoorlie Project area, which included the permit area approved under CPS 6603/1, and the current amendment application area (Excelsior Gold, 2015a).

Holm (2015a) defined and mapped 14 plant communities within the original permit area, grouped according to landform types, and these are detailed in Decision Report CPS 6603/1.

The following three landform types were recorded within the amendment area, all of which also occurred within the original permit area (Holm, 2015a):

##### Land Unit 1b: Low hills on mafic or ultra mafic metamorphosed rocks

**GNEW:** Woodlands or shrublands. Woodlands (6 - 14 metres) are very scattered (Projected Foliar Cover (PFC) 1 - 3%) and dominated by *Eucalyptus clelandii*, *E. griffithsii*, other *Eucalyptus* spp. and *Casuarina obesa* with scattered (PFC 10 - 15%) undershrubs dominated by *Senna artemisioides* subsp. *filifolia*, *Scaevola spinescens*, *Acacia erinacea*, *Eremophila* spp., *Dodonaea lobulata*, and *Ptilotus obovatus*.

**GHAS:** Shrublands (to 5 metres) are scattered to moderately close (PFC 15 - 25%) and dominated by *Acacia burkittii*, *A. quadrimarginea*, *Dodonaea lobulata*, *Scaevola spinescens* and *Senna artemisioides* subsp. *filifolia*, sometimes with isolated emergent eucalypt or *Casuarina obesa* small trees.

##### Land Unit 2b: Low rises and gently undulating plains on basalt or metamorphosed rocks

**GEHW, PECW:** Woodlands (5 - 12 metres) are very scattered (PFC 2 - 5%) dominated by *Eucalyptus clelandii*, *E. gracilis*, *Eucalyptus yilgarnensis* and other *Eucalyptus* spp., with scattered (PFC 10 - 25%) understorys dominated by *Atriplex nummularia*, *Maireana* spp., *Senna artemisioides* subsp. *filifolia*, *Dodonaea lobulata*, *Eremophila scoparia* and other species, *Scaevola spinescens* and *Ptilotus obovatus*.

**GHAS, CEAS, SCJS:** Shrublands (to 3 - 4 metres) are scattered to moderately close (PFC 15 - 30%) and dominated by *Acacia burkittii*, *A. hemiteles*, *A. quadrimarginea*, *A. erinacea*, *Casuarina obesa*, *Senna artemisioides* subsp. *filifolia*, *Scaevola spinescens* and *Eremophila* spp.

**GEHS:** Hummock grasslands (*Triodia irritans*) (PFC 15 - 25%) with very scattered (PFC 5%) *Eucalyptus griffithsii*, *E. oleosa* subsp. *oleosa* and *E. yilgarnensis* (5 - 10 metres) with scattered (PFC 5 - 15%) undershrubs including *Dodonaea stenozyga*, *Eremophila parvifolia* subsp. *auricampa* and *Westringia rigida*. mixed *T. epactia* hummock / tussock grassland.

##### Land Unit 6a: Drainage tracts with shrublands or sparse woodlands

**PXHS, PSAS:** Shrublands or sparse woodlands. Shrublands are low (<1 metre), very scattered to moderately close (PFC 5 - 30%) and dominated by *Atriplex bunburyana*, *A. nummularia*, *Maireana pyramidata* and other *Maireana* spp.

**DRAT:** Scattered to close (PFC 10 - 70%) tall shrublands (to 4 metres) dominated by *Eremophila scoparia*, *E. oldfieldii*, *Acacia burkittii*, *A. erinacea* and *Ptilotus obovatus*, with isolated emergent small *Eucalyptus* and

*Casuarina obesa* trees.

**PECW, PESW, PEAW:** Woodlands (4 - 15 metres) are very scattered (PFC 2 – 3%) and dominated by *Casuarina obesa*, *Eucalyptus salmonophloia*, *E. ravida* and other *Eucalyptus* spp. with very scattered to close (PFC 5 – 40%) shrub layers dominated by *Atriplex bunburyana*, *Maireana pyramidata*, other *Maireana* spp., *Sclerolaena* spp., *Eremophila* spp. and *Ptilotus obovatus*.

<b>Clearing Description</b>	Kalgoorlie North Gold Project. GPM Resources Pty Ltd (GPM) proposes to clear up to 127 hectares of native vegetation within a boundary of approximately 648 hectares, for the purposes of mineral production and mining-related infrastructure. The project is located approximately 46 kilometres north-northwest of Kalgoorlie, within the City of Kalgoorlie-Boulder.
<b>Vegetation Condition</b>	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994);  To  Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).
<b>Comment</b>	The vegetation condition was derived from a vegetation survey conducted by Alexander Holm and Associates (Holm, 2015a).  Clearing permit CPS 6603/1 was granted on 13 August 2015 and authorised the clearing of up to 114 hectares of native vegetation within a boundary of approximately 613 hectares.  On 31 December 2015, GPM Resources Pty Ltd applied to amend CPS 6603/1 to increase the area approved to clear from 114 hectares to 127 hectares, and to extend the permit boundary from approximately 613 hectares to approximately 648 hectares.  The proposed amendment is for the development of the Pipeline South gold deposit. Clearing of native vegetation will be required for a mine pit and associated mining related infrastructure (Excelsior Gold, 2015b).

### 3. Assessment of application against clearing principles

#### Comments

GPM Resources Pty Ltd has applied to increase the amount of clearing authorised by 13 hectares and to increase the permit boundary by approximately 35 hectares to include the Pipeline South mining area.

Alexander Holm and Associates (Holm) conducted flora and vegetation surveys over the amendment application area during 2012 and 2014 (Holm, 2015a) and in December 2015 (Holm, 2015b). The 2012 and 2014 surveys covered an extensive area encompassing the entire North Kalgoorlie Project area, while the 2015 survey covered approximately 68 hectares, over the Pipeline North and Pipeline South project areas, and included the current 35 hectare amendment application area (Holm, 2015a; 2015b).

The most recent survey (Holm, 2015b) focussed on identifying any flora, fauna or ecological communities of conservation significance, and any unique or significant fauna habitats within the survey area. Holm (2015b) reported that the survey area consisted of low ironstone hills with rock-strewn slopes grading down to broad drainage tracts, and included areas of previous disturbance from current and historical mining activities.

The vegetation associations, landforms, and fauna habitat types occurring within the amendment area are similar to those occurring within the original permit area, and are well represented in the region (Holm, 2015a; 2015b; GIS Database). The amendment area is not likely to represent an area of greater biodiversity than the original permit area or surrounding areas (Holm, 2015a; 2015b; GIS Database).

One declared weed species *Carthamus lanatus* (Saffron thistle) was recorded within the amendment area (Holm, 2015b). Weeds have the potential to out-compete native flora and reduce the biodiversity of an area. The existing weed management condition on the permit may minimise impacts to biodiversity from the further introduction or spread of weeds.

Holm (2015b) inspected the amendment area for significant fauna habitat such as malleefowl mounds, rocky outcrops and large trees containing hollows. No malleefowl mounds or evidence of malleefowl were found, and very few rocky crevices suitable for ground-dwelling fauna (such as the Carpet Python) were recorded within the survey area (Holm, 2015b). One large tree within the amendment area was considered to be locally significant fauna habitat (Holm, 2015b). A Level 1 fauna and habitat survey was conducted by Bamford Consulting Ecologists (Bamford) in March 2012 over the broader project area including the current amendment application area. Bamford (2012) reported that the majority of fauna habitats found within the project area were relatively common and widespread in the region. Bamford (2012) concluded that potential impacts to fauna from the proposed clearing were generally likely to be minor, and although some restricted fauna habitats may be considered locally significant, the vegetation proposed to be cleared was unlikely to represent significant habitat for fauna in a regional context. The additional clearing of up to 13 hectares of native vegetation is unlikely to have a significant impact on fauna habitat availability at a local or regional scale.

No Threatened or Priority flora have been recorded within the amendment area (Holm, 2015a; 2015b). No Threatened or Priority Ecological Communities have been recorded within the vicinity of the permit area (Holm, 2015a; GIS Database).

The original permit area and the amendment area are broadly mapped as Beard vegetation association 2903 (GIS Database). Approximately 96% of the pre-European extent of this vegetation association remains uncleared at both the state and bioregional level (Government of Western Australia, 2014). Hence, the amendment area does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

The amendment area falls within the Bevon and Gundockerta land systems, which also occur within the original permit area (GIS Database). DAFWA (2015) advised that the local soil types may be prone to erosion where vegetation is cleared or protective stony mantles are disturbed. Potential land degradation as a result of the proposed clearing may be minimised by continued implementation of the existing staged clearing condition.

The nearest conservation area is the former Goongarrie pastoral lease, which is located approximately 20 kilometres northwest of the permit area, at its nearest point, and is managed by the Department of Parks and Wildlife (GIS Database). The clearing of an additional 13 hectares of native vegetation is unlikely to have any impacts on the environmental values of this or any other conservation area.

There are no permanent watercourses or wetlands within or in close proximity to the permit area (GIS Database). Two minor seasonal watercourses pass through the amendment area (GIS Database). Seasonal watercourses in the region are dry for most of the year, only flowing briefly following significant rainfall events (Excelsior Gold, 2015a). Temporary localised flooding may occur during heavy rainfall events. However, the impact of an additional 13 hectares of clearing on these watercourses is likely to be minimal, and the incidence or intensity of natural flooding events is unlikely to be affected.

DAFWA (2015) advised that the drainage tracts in the area are likely to be susceptible to erosion, and the removal of vegetation and stony surface mantles may result in increased runoff and increased sediment loads in surface water flows. Potential impacts to vegetation associated with these watercourses, and vegetation downstream from the application area, may be minimised by the continued implementation of the existing watercourse management condition.

A Water Reserve (Crown Reserve 3965), vested in the Department of Water, is located immediately adjacent to the south-eastern corner of the amendment area (GIS Database). The Broad Arrow Dam Public Drinking Water Source Area (PDWSA) is located approximately 3.5 kilometres south of the permit area, at its nearest point (GIS Database). The proposed clearing of an additional 13 hectares of native vegetation is unlikely to have any impacts on Water Reserve 3965, the PDWSA, or on the quality of local groundwater.

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*. The assessment of the proposed clearing against the clearing principles remains consistent with the assessment in decision report CPS 6603/1.

#### **Methodology**

Bamford (2012)  
DAFWA (2015)  
Excelsior Gold (2015a)  
Government of Western Australia (2014)  
Holm (2015a)  
Holm (2015b)

#### GIS Database:

- Bardoc 50cm Orthomosaic - Landgate 2012
- DPaW Tenure
- Hydrography, lakes
- Hydrography, linear
- Rangeland Land System Mapping
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Threatened and Priority Flora
- Threatened Ecological Sites Buffered

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

### Comments

The clearing permit amendment application was advertised on 8 February 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

There are no registered native title claims over the area under application (DAA, 2016). However, the mining tenement 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 located within or in close proximity to the application area (DAA, 2016; GIS Database). 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 Environment Regulation, the Department of Water, and the Department of Parks and Wildlife, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

**Methodology** DAA (2016)

GIS Database:

- Aboriginal Sites Register System

## 4. References

- Bamford (2012) Fauna Assessment of the Excelsior Gold Bardoc Project. Report prepared for Alex Holm and Associates on behalf of Excelsior Gold Ltd, by Bamford Consulting Ecologists, May 2012.
- DAA (2016) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 25 February 2016).
- DAFWA (2015) Advice received in relation to Clearing Permit Application CPS 6603/1. Commissioner of Soil and Land Conservation, Department of Agriculture and Food, Western Australia, July 2015.
- Excelsior Gold (2015a) Kalgoorlie North Gold Project. Zorastrian Mines and Haul Road Extension. Excelsior Gold Limited, May 2015.
- Excelsior Gold (2015b) Clearing Permit Amendment Application Supporting Document. Excelsior Gold Limited, December 2015.
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Parks and Wildlife, Perth.
- Holm (2015a) Environmental Assessment: Kalgoorlie North Gold Project. Report prepared for Excelsior Gold Ltd, by Alexander Holm and Associates, January 2015.
- Holm (2015b) Environmental Assessment Pipeline North and South Mining Sites. Report prepared for Excelsior Gold Ltd, by Alexander Holm and Associates, December 2015.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

## 5. Glossary

### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia (now DPaW and DER)
<b>DER</b>	Department of Environment Regulation, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DRF</b>	Declared Rare Flora
<b>DotE</b>	Department of the Environment, Australian Government
<b>DoW</b>	Department of Water, Western Australia
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia
<b>DSEWPaC</b>	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPBC Act</b>	<i>Environmental Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>PEC</b>	Priority Ecological Community, Western Australia
<b>RIWI Act</b>	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
<b>TEC</b>	Threatened Ecological Community

## **Definitions:**

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia):-

- T**                    **Threatened species:**  
Published as Specially Protected under the *Wildlife Conservation Act 1950*, 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).  
**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.  
**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.  
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. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
- EN**                    **Endangered species**  
Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
- VU**                    **Vulnerable species**  
Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
- EX**                    **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 *Wildlife Conservation Act 1950*, 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.
- IA**                    **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 *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- CD**                    **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 *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- OS**                    **Other specially protected fauna**  
Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- 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 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.