Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2986/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Paddington Gold Pty Ltd**

1.3. Property details

Property: Mining Lease 26/446
Local Government Area: City of Kalgoorlie-Boulder
Colloquial name: Janet Ivy Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
200		Mechanical Removal	Mineral Production

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The proposed clearing area is mapped at 1:250,000 scale as Beard Vegetation Association:

9; Medium woodland; Coral gum (*Eucalyptus torquata*) and Goldfields blackbutt (*Eucalyptus lesouefii*);

468; Medium woodland; Salmon gum & Goldfields blackbutt.

During a flora survey in September 2005, Jims Seeds, Weeds & Trees identified five vegetation types. These are Jims Seeds, Weeds & Trees (2006):

(1) *Eucalyptus lesouefii* woodland with an understorey of *Ptilotus obovatus*, *Alyxia buxifolia* and *Olearia muelleri*, *Halgania andromedifolia*, *Senna artemisioides ssp artemisioides*, *Casuarina pauper*, *Atriplex codonocarpa*, *Maireana brevifolia*, *Cratystylis microphylla*, *Scaevola spinescens*, *Acacia hemiteles*, *Eremophila glabra ssp glabra*, *Pittosporum angustifolium*, *Melaleuca sheathiana*, *Exocarpos aphyllus* and *Alectryon oleifolius*;

(2) Eucalyptus woodland over spinifex, comprising dominant *Eucalyptus gracilis* and *E. oleosa* over *Triodia scariosa*;

(3) *Acacia acuminata* and *Allocasuarina helmsii* over spinifex (*Triodia scariosa*), *Alyxia buxifolia*, *Olearia muelleri*, *Senna artemisioides ssp filifolia*, *Maireana triptera*, *Scaevola spinescens*, *Acacia hemiteles*, *Eremophila glabra ssp glabra*, *E. oppositifolia ssp angustifolia*, *Grevillea nematophylla ssp nematophylla*, *Stenanthemum stipulosum* and *Exocarpos aphyllus*;

(4) *Acacia acuminata* plain comprising dominant *A. acuminata* with *Ptilotus obovatus*, *Marsdenia australis*, *Olearia muelleri*, *Halgania andromedifolia*, *Senna artemisioides ssp filifolia*, *Allocasuarina helmsii*, *Casuarina pauper*, *Maireana triptera*, *Rhagodia eremaea*, *Sclerostegia disarticulata*, *Scaevola spinescens*, *Codonocarpus contifolius*, *Protsanthera grylloana*, *Isotoma petraea*, *Eremophila oppositifolia ssp angustifolia*, *Eucalyptus griithsii, Dianella revoluta*, *Triodia scariosa*, *Grevillea nemantophylla ssp nematophylla, Melaleuca hamata*, *Exocarpos aphyllus*, *Dodonaea lobulata*, *Solanum ferrocissimum* and *Brachychiton gregorii*; and,

(5) *Eucalyptus griffithsii* woodland comprising dominant *E. griffithsii* with understorey of *Ptilotus obovatus*, *Alyxia buxifolia*, *Olearia muelleri*, *Senna artemisioides ssp filifolia*, *Atriplex codonocarpa*, *A vesicaria*, *Sclerolaena cuneata*, *Cratystylis conocephala*, *Scaevola spinescens*, *Westringia cephalantha*, *Prostanthera grylloana*, *Acacia tetragonophylla*, *A. hemiteles*, *Eremophila oppositifolia ssp angustifolia*, *E. parvifolia ssp auricampa*, *E. scoparia*, *Eucalyptus lesouefii*, *E. salubris*, *Triodia scariosa* and *Exocarpos aphyllus*.

Clearing Description Paddington Gold Pty Ltd (Paddington Gold) have applied to clear up to 200 hectares within an application area of approximately 510 hectares for the purpose of mineral production, involving the excavation of an open pit and construction of waste dumps, roads and other mine infrastructure.

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Comment

A site visit was conducted by an officer from the Department of Mines and Petroleum on 27 October 2006. Vegetation sampling points used by Jims Seeds, Weeds & Trees were observed and vegetation type, representative species and vegetation condition were noted. The vegetation types identified by Jims Seeds, Weeds & Trees are an accurate description of the vegetation types present both in species composition, vegetation condition and classification according to Muir. Vegetation condition overall can be described as 'Very Good' according to the Keighery scale (Keighery, 1994). Vegetation shows obvious signs of disturbance from recreational activities, historical mining, exploration and rubbish dumping.

A purpose permit (CPS 1490/1) to clear native vegetation was originally granted over the current application area to Barrick Kanowna Pty Ltd on 29 December 2006. Barrick Kanowna Pty Ltd did not conduct any clearing under that permit. In August 2007, Paddington Gold purchased the mining Lease 26/446 from Barrick Kanowna Pty Ltd which related to this clearing permit (CPS 1490/1). As the permit which was granted to Barrick Kanowna Pty Ltd was a purpose permit in accordece with s51N of the *Environmental Protection Act 1986* the ownership of the clearing permit could not be transferred to Paddington Gold and therefore the clearing permit became void. Consiquently, Paddington Gold have applied for a new clearing permit over the same area as the original clearing permit was granted.

3. Assessment of application against Clearing Principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposal is not likely to be at variance to this Principle

The proposed clearing area falls within the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) Bioregion (GIS database). The region is characterised by an arid to semi arid climate, supporting Eucalypt woodlands, scrub heaths and samphire flats (CALM, 2002). The region is described as a biogeographic interzone, lending itself to high biodiversity particularly in Acacia and Eucalypt species, as well as ephemeral species in shrublands and valley floors (CALM, 2002). Major centres for biodiversity include Rowles lagoon, Banded Ironstone Formations, Fraser Range and Woodline Hills (CALM, 2002), none of which are located near this application.

Threats to the region include pastoral and mining activities, weeds, feral animals and inappropriate fire regimes (CALM, 2002). After a site visit to the area by an officer from the Department of Mines and Petroleum it is considered that this area has been subject to past exploration and mining activites, recreational activities and rubbish dumping that have led to a degredation of the existing vegetation such that its condition is considered to be ranked as 'Very Good' (Vegetation structure altered, obvious signs of disturbance) in accordence with the Keighery vegetation condition scale (Keighery, 1994).

The region is largely uncleared and a total of 1.8 million hectares (9.9%) of native vegetation is in conservation estate. Fifty six of the bioregion's 106 Beard Vegetation Associations are preserved within the conservation estate. Seventeen Beard Vegetation Associations considered to be at risk are not represented within the conservation estate (CALM, 2002). However, neither of the two Beard Vegetation Associations within the application area are considered to be at risk and both are represented in conservation estate.

All populations of vertebrate species of fauna are considered to be in degraded or fair condition, and are likely to decline further (CALM, 2002). More than 40% of the regions original mammalian fauna is regionally extinct (CALM, 2002). No species of conservation significance are likely to be impacted by the proposed clearing. A fauna assessment by ATA Environmental (2006) concluded that the proposed clearing area does not contain habitat that has high ecological significance.

Whilst the region can be considered to be biodiverse, there is no available evidence to show that the proposed clearing area has outstanding biodiversity values or is more biodiverse than other native vegetation in the region.

The following advice was received from the Biodiversity Coordination Section of the Department of Environment and Conservation (DEC) on 30 November 2006 in regards to this Principle (DEC, 2006a). The advice relates to a previous clearing permit (CPS 1490/1) that was granted over the current application area to Barrick Kanowna Pty Ltd on 29 December 2006. Barraik Kanowna Pty Ltd did not conduct any clearing under that permit. 'DEC notes that the Department of Industry and Resources (now known as Department of Mines and Petroleum) assessment report and the supporting documents supplied by the proponent have adequately demonstrated that the area under assessment does no represent an area of outstanding biodiversity or an area in need of special protection. Based on this information, DEC concurs with the findings on DoIR's [sic] assessment report for Principle A regarding biodiversity.'

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

ATA Environmental (2006)
CALM (2002)
DEC (2006a)
Jims Seeds, Weeds & Trees (2005)
Keighery (1994)
GIS Database:
Interim Biogeographic Regionalisation of Australia

(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.

Comments

Proposal is not likely to be at variance to this Principle

ATA Environmental (2006) undertook a Level 1 fauna assessment of the application area in January 2006. This involved a desktop analysis of available datasets and literature review as well as a site visit to verify the desktop survey and to delineate fauna values present in the area. This fauna assessment was conducted according to the Environmental Protection Authority's Position Statement No. 3; Terrestrial Biological Surveys as an Element of Biodiversity Protection (EPA, 2002).

ATA Environmental's desktop assessment involved searches of the Western Australian Museum's online database (Faunabase) and the Department of Conservation and Land Management's (now Department of Environment and Conservation) Threatened and Priority species database (ATA, 2006). This search identified 19 species that are of conservation significance that may potentially occur in the application area.

A site visit of the area by ATA Environmental was conducted in January 2006 to specifically look for evidence of, or suitable habitat for these species. ATA Environmental (2006) report that the only conservation significant species recored during a site visit were:

- Rainbow Bee-eater (*Merops ornatus)* (*Environment Protection and Biodiversity Conservation* Act 1999 - migratory species); and
- White-browed Babbler (*Pomatostomus superciliosus ashbyi*) (DEC Priority 4).

The following five fauna species could reasonably be expected to occur within the application area based on habitat type and previous distribution:

- Malleefowl (*Leipoa ocellata*) (Schedule 1 - fauna that is rare or likely to become extinct, *Wildlife Conservation (Specially Protected Fauna) Notice, 2008*);
- Western Rosella (*Platycercus icterotis xanthogenys*) (Schedule 1 – other specially protected fauna, *Wildlife Conservation (Specially Protected Fauna) Notice, 2008*);
- South West Carpet Python (*Morelia spilota imbricata*) (Schedule 4 – other specially protected fauna, *Wildlife Conservation (Specially Protected Fauna) Notice, 2008*);
- Australian Bustard (*Ardeotis australis)* (listed on DEC's own priority list as Priority 4); and
- Crested Bellbird (*Oreoica gutturalis gutturalis*) (listed on DEC's own priority list as Priority 4).

ATA Environmental (2006) recommended that an area of suitable habitat within the application area be grid searched for the presence of Malleefowl nesting mounds and that site staff involved in clearing activities be educated on the possible presence of Carpet Pythons so that any individuals observed can be relocated.

ATA Environmental conducted the grid search for Malleefowl nesting mounds within identified suitable habitat on 22 June 2006. This involved three people systematically moving through the habitat at eight - 12 metre intervals. No malleefowl mounds were located during this intensive search and it is therefore considered highly unlikely that Malleefowl would be significantly impacted upon by the proposed clearing.

South West Carpet Pythons inhabit woodland areas at low densities and it is possible that Carpet Pythons may occur within the proposed clearing area. Given the large amount of available habitat, the loss of 200 hectares is a very small percentage of the total habitat available for the species. It is not expected that the conservation of this species will be significantly impacted by the proposed clearing.

ATA Environmental (2006) reported the sighting of an Australian Bustard within the application area in February 2006, after their January 2006 site visit. The species has also been observed by mining operations staff north of the application area. However, the proposed clearing area presents a very small fraction of similar habitat in the general area and therefore it is highly unlikely that the proposed clearing will significantly impact the conservation of this species.

Rainbow Bee-eaters, White-browed Babbler's, Western Rosella, Australian Bustard and Crested Bellbird are mobile and will quickly move from the area upon the commencement of clearing. Consiquently, their conservation status is not likely to be impacted by the proposed clearing.

The proposed clearing will result in the loss of sedentary species of less conservation significance, however given the large amount of available habitat outside of the clearing area, the loss of habitat will not significantly effect the biodiversity of the region on a broad scale.

The following advice was received from the Biodiversity Coordination Section of the Department of Environment and Conservation (DEC) on 30 November 2006 in regards to this Principle (DEC, 2006a). The advice relates to a previous clearing permit (CPS 1490/1) that was granted over the current application area to Barrick Kanowna Pty Ltd on 29 December 2006. Barrick Kanowna Pty Ltd did not conduct any clearing under that permit. 'DEC notes that ATA Environmental found that there is no evidence to suggest that the application area contains an

ecosystem or ecosystem value that is of conservation significance from a faunal perspective (Barrick, 2006). Although a number of conservation significant fauna species may frequent the area as outlined in the supporting documents, the area is unlikely to be a significant habitat for these species. This is demonstrated adequately in the information supplied by ATA Environmental and site visit information provided by DoIR [sic]' (DEC, 2006a).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology ATA Environmental (2006)
Barrick (2006)
DEC (2006a)
EPA (2002)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments

Proposal is not likely to be at variance to this Principle

Available GIS databases do not identify any Declared Rare Flora (DRF) or Priority Flora species within the clearing permit application area. There are several records of the Priority 1 species *Eremophila praecox* occuring within a 10 kilometres radius of the application area (GIS Database).

A flora and vegetation survey was conducted by Jims Seeds, Weeds & Trees in September 2005, over a survey area of 979 hectares including the application area and surrounds. The initial report supplied by Jims Seeds, Weeds & Trees did not contain enough information to enable the assessing officer to adequately determine the proposal's impact to significant flora. Subsequently, Jims Seeds, Weeds & Trees included additional information to their report which was received on 27 October 2006. The final survey report was adequate to allow the assessing officer to complete the assessment.

The survey involved a desktop search of available databases to identify DRF and Priority Flora species that are known to occur within a radius of approximately 50 kilometres from the survey area as well as a field investigation that involved traversing the survey area via vehicle, motorbike and on foot (Jims Seeds, Weeds & Trees, 2006).

Jims Seeds, Weeds & Trees studied aerial photography to identify obvious differences in vegetation types within the survey area. Where these vegetation types were observed in the field, the area was searched within a 50 metre radius and flora visually identified, including dominant species in each strata. It is estimated that approximately 90% of flora species were observed during the survey (Jims Seeds, Weeds & Trees, 2006).

Jims Seeds, Weeds & Trees conducted a risk assessment of the likelihood of encountering DRF and Priority Flora species based on their known habitat. Where this habitat was observed in the field the vegetation was inspected specifically to identify any threatened flora that may be present. The survey did not identify any rare species as gazetted under the *Wildlife Conservation (Rare Flora) Notice 2008,* or Priority Flora species as listed by the Department of Environment and Conservation (Jims Seeds, Weeds & Trees, 2006).

It was recognised by Jims Seeds, Weeds & Trees that the survey followed a particularly dry winter and therefore not all annual species would have been observed (Jims Seeds, Weeds & Trees, 2006). Several of the conservation significant species identified by Jims Seeds, Weeds & Trees in their desktop search of DEC's and Western Australian Herbariums threatened flora database are annual herbs. Therefore, it cannot be determined if these species are present within the application area due to the dry winter preceeding the flora survey.

The following advice was received from the Biodiversity Coordination Section of the Department of Environment and Conservation (DEC) on 30 November 2006 in regards to this Principle (DEC, 2006a). The advice relates to a previous clearing permit (CPS 1490/1) that was granted over the current application area to Barrack Kanowna Pty Ltd on 29 December 2006. Barrack Kanowna Pty Ltd did not conduct any clearing under that permit. 'Based on the available information provided by the applicant and the site assessment information provided by the Department of Industry and Resources it appears unlikely that this proposal will impact on Declared Rare Flora' (DEC, 2006a).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology DEC (2006a)
Jims Seeds, Weeds & Trees (2006)
GIS database:
Declared Rare and Priority Flora List

(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.

Comments

Proposal is not likely to be at variance to this Principle

A search of available databases by the Assessing Officer reveals that there are no Threatened Ecological Communities (TECs) within the application area (GIS database). The nearest TEC is located approximately 140 kilometres to the south-east (Woodline Communities).

A vegetation survey over the application area by Jims Seeds, Weeds & Trees conducted in September 2005 identified five vegetation communities (Jims Seeds, Weeds & Trees, 2006). None of these vegetation communities are considered to be threatened ecological communities or ecological communities of conservation signficance as outlined in 'A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions' (CALM, 2002).

The following advice was received from the Biodiversity Coordination Section of the Department of Environment and Conservation (DEC) on 30 November 2006 in regards to this Principle (DEC, 2006a). The advice relates to a previous clearing permit (CPS 1490/1) that was granted over the current application area to Barrick Kanowna Pty Ltd on 29 December 2006. Barrick Kanowna Pty Ltd did not conduct any clearing under that permit. 'Based on the available information provided by the applicant and the site assessment information provided by the Department of Industry and Resources, it appears unlikely that this proposal will impact on. Threatened Ecological Communities' (DEC, 2006a).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

CALM (2002)
DEC (2006a)
Jims Seeds, Weeds & Trees (2006)
GIS database:
Threatened Ecological Communities

(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.

Comments

Proposal is not at variance to this Principle

At a regional level, the Coolgardie Interim Biogeographic Regionalisation of Australia Bioregion remains at 98.5% of its pre-european vegetation extent. According to the 'Bioregional Conservation Status of Ecological Vegetation Classes' (Department of Natural Resources and Environment, 2002), these values give the region a conservation status of 'Least Concern'.

Statewide, the vegetation associations as described by Beard (9 and 468) both remain at approximately 100% of their pre-European vegetation extent. According to the 'Bioregional Conservation Status of Ecological Vegetation Classes' (Department of Natural Resources and Environment, 2002), these values give the vegetation type a conservation status of 'Least Concern'.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	% of Pre-European area in IUCN Class I-IV Reserves (and current %)
IBRA Bioregion – Coolgardie	12,912,208	12,707,623	~98.5	Least concern	9.7 (9.9)
Beard veg assoc. – State					
9	240,509	239,898	~99.7	Least concern	1.3 (1.3)
468	592,023	592,023	~100	Least concern	4.3 (4.3)
Beard veg assoc. – Bioregion					
9	240,442	239,835	~99.7	Least concern	1.3 (1.3)
468	583,361	583,361	~100	Least concern	4.3 (4.3)

* Shepherd et al. (2001) updated 2005
** Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology Department of Natural Resources (2002)
Shepherd et al. (2001) updated 2005
GIS database:
Local Government Authorities

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments

Proposal is not at variance to this Principle

There are no watercourses or wetlands within the application area (GIS database).

None of the vegetation types as described by Jims Seeds, Weeds & Trees (2006) within the application area are associated with riparian areas.

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology Jims Seeds, Weeds & Trees (2006)
GIS database:
Hydrography, linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments

Proposal is not likely to be at variance to this Principle

The application area experiences minor relief to the north (GIS database). During an inspection by an officer from Department of Mines and Petroleum on 27 October 2006, the application area was observed to be generally flat, and existing open areas, including areas disturbed for exploration, were not subject to erosion. The clearing is for mining purposes and includes an open pit, waste rock stockpile and ROM pad. Therefore most clearing will not be susceptible to wind erosion.

The following advice was received from the Department of Agriculture and Food (DAFWA) on 19 December 2006 in regards to this Principle (DAFWA, 2006). The advice relates to a previous clearing permit (CPS 1490/1) that was granted over the current application area to Barrick Kanowna Pty Ltd on 29 December 2006. Barrick Kanowna Pty Ltd did not conduct any clearing under that permit. DAFWA (2006) state; 'Provided adequate provision is made for the occasional surface flows, soil erosion is unlikely to occur as a result of the proposed clearing and mine development. Therefore it is unlikely that the proposed clearing will be at variance with Principle (g) for soil erosion. Hypersaline groundwater may be encountered as pit depth increases. Should pit dewatering be required, safe disposal, possibly to the salt lakes to the north will need to be considered.'

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology DAFWA (2006)
GIS database:
Topographic Countours, Statewide

(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.

Comments

Proposal is not likely to be at variance to this Principle

The proposed clearing area is located approximately 3.1 kilometres north-east of Kurrawang Nature Reserve. This nature reserve features regrowth woodland following on from timber harvesting carried out in the early part of the 20th century (CALM, 2002). The reserve has been subject to previous mining disturbance in the past and is more likely to be at risk of degredation from recreational activities. The reserves management standard is described in 'A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions' in 2002 (CALM, 2002) as Fair to Good (Fair: Biodiversity values and or management issues are poorly identified; resource degradation is occurring though retrievable – Good: major biodiversity issues effectively managed). It is not expected that the proposed clearing will impact on the reserve at such a distance.

The following advice was received from the Biodiversity Coordination Section of the Department of Environment and Conservation (DEC) on 30 November 2006 in regards to this Principle (DEC, 2006a). The advice relates to a previous clearing permit (CPS 1490/1) that was granted over the current application area to Barrick Kanowna Pty Ltd on 29 December 2006. Barrick Kanowna Pty Ltd did not conduct any clearing under that permit. 'Based on the available information provided by the applicant and the site assessment information provided by the Department of Industry and Resources [sic] it appears unlikely that this proposal will impact on DEC Managed Conservation areas' (DEC, 2006a).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology CALM (2002)
DEC (2006a)
Keighery (1994)

(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.

Comments

Proposal is not likely to be at variance to this Principle

The proposed clearing area does not fall within a Public Drinking Water Source Area (GIS database) and will therefore not affect the quality of drinking water in any such areas.

The area receives approximately 268 millimetres rainfall per year, mostly in the winter months, although tropical summer patterns can bring heavy but brief rainfall events during the late summer months (BOM, 2006). The area is also subject to a pan evaporation rate of 2600 - 3000 millimetres rainfall per year (Luke et al., 1987) and has a gently undulating topography. There are no watercourses or waterbodies on site, or in the immediate surrounds. For these reasons, there is little likelihood of surface run off during normal rainfall events and it is unlikely that the proposed clearing will lead to turbidity or sedimentation of waterbodies off site. In addition, recharge to groundwater tables will be minimal.

According to information provided by Barrick Kanowna Ltd (2006) (the previous tenement holders), the groundwater in the proposed area is hypersaline, with a concentration of 90,000 to 200,000 milligrams per litre of Total Dessolved Solids. This is extremely poor quality groundwater and the loss of vegetation is not likely to cause the quality of the water to deteriorate further.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Barrick Kanowna Ltd (2006)
BOM (2006)
Luke et al. (1987)
GIS databases:
Public Drinking Water Source Areas

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments

Proposal is not likely to be at variance to this Principle

Given low annual rainfall of 268 millimetres rainfall per year (BOM, 2006), high evaporation rates of 2600 - 3000 millimetres rainfall per year (Luke et al., 2006), gently undulating topography and lack of standing waterbodies or watercourses (GIS databases), the area is highly unlikely to be subject to flooding.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology BOM (2006)
Luke et al. (1987)
GIS databases:
Hydrography, linear
Topographic Contours, Statewide

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments

The clearing permit application was advertised on 6 April 2009 by the Department of Mines and Petroleum, inviting submissions from the public. One public submission was received by a direct interest party acting on behalf of a native title claimant group. The submission raises concerns regarding the aboriginal heritage surveys over the application area.

There are two Native Title Claims over the application area (WC98/027 and WC98/029). These claims have been registered with the National Native Title Tribunal on behalf of the claimant group (GIS Database). 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 known sites of Aboriginal Significance within the proposed clearing area (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 and Conservation and the Department of Water to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

A purpose permit (CPS 1490/1) to clear native vegetation was originally granted over the current application area to Barrick Kanowna Pty Ltd on 29 December 2006. Barrick Kanowna Pty Ltd did not conduct any clearing under that permit. In August 2007, Paddington Gold purchased the mining Lease 26/446 from Barrick Kanowna Pty Ltd which related to this clearing permit (CPS 1490/1). As the permit which was granted to Barrick Kanowna Pty Ltd was a purpose permit in accordece with s51N of the *Environmental Protection Act 1986* the ownership of the clearing permit could not be transferred to Paddington Gold and therefore the clearing permit became void. Consiquently, Paddington Gold have applied for a new clearing permit over the same area as the original clearing permit was granted.

Methodology GIS Database:
-Aboriginal Sites of Significance
-Native Title Claims

Officer Chris HEARY

4. Assessor's comments

Comment

The proposal has been assessed against the Clearing Principles and is not at variance to Principles (e) and (f), and is not likely to be at variance to Principles (a), (b), (c), (d), (g), (h), (i) and (j).

Should the permit be granted, it is recommended that conditions be imposed on the permit for the purposes of record keeping, permit reporting, rehabilitation, and weed management.

5. References

ATA Environmental (2006) Fauna Assessment, Proposed Clearing Around the Janet Ivy Site, Version 1. Unpublished Report prepared for Placer Dome Pty Ltd. Perth, Western Australia.

Barrick Kanowna Ltd (2006) Purpose Permit Application Janet Ivy Project. July 2006. Unpublished document supporting Purpose Permit Application.

BOM (2006) Averages for KALGOORLIE. http://www.bom.gov.au/climate/averages/tables/cw_012038.shtml Bureau of Meteorology, Australian Government.

DEC (2006a) Biodiversity advice for land clearing application. Advice to Assessing Officer, Native Vegetation Assessment Branch, Department of Industry and Resources (DoIR), received 30/11/06. Biodiversity Coordination Section, Department of Environment and Conservation, Western Australia.

DAFWA (2006) Land degradation assessment report. Advice to Assessing Officer, Native Vegetation Assessment Branch, Department of Industry and Resources (DoIR), received 19/12/06. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia.

Department of Conservation and Land Management (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions.

Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.

EPA (2002) Terrestrial Biological Surveys as an element of biodiversity protection. Position Statement No. 3. March 2002. Environmental Protection Authority.

Jims Seeds, Weeds & Trees (2006) Vegetation Survey of the Janet Ivy Area (M26/447, M26/446, P26/2574, P26/2484, M26/629 & P26/2485), For Paddington Gold Pty Ltd (including addendum additions), October 2006. Prepared for Barrick Kanowna (formerly known as Paddington Gold Pty Ltd.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
Luke G.J, Burke K.L, O'Brien T.M. (1987) Evaporation Data for Western Australia. Department of Agriculture, Western Australia
Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249, updated 2005. Department of Agriculture, Western Australia.

6. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government.
CALM	Department of Conservation and Land Management, Western Australia.
DAFWA	Department of Agriculture and Food, Western Australia.
DA	Department of Agriculture, Western Australia.
DEC	Department of Environment and Conservation
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DoE), Western Australia.
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia.
DoE	Department of Environment, Western Australia.
DoIR	Department of Industry and Resources, Western Australia.
DOLA	Department of Land Administration, Western Australia.
DoW	Department of Water
EP Act	Environment Protection Act 1986, Western Australia.
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System.
IBRA	Interim Biogeographic Regionalisation for Australia.
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
RIWI	Rights in Water and Irrigation Act 1914, Western Australia.
s.17	Section 17 of the Environment Protection Act 1986, Western Australia.
TECs	Threatened Ecological Communities.

Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia} :-

P1 **Priority One - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.

P2 **Priority Two - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.

P3 **Priority Three - Poorly Known taxa**: taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.

P4 **Priority Four – Rare taxa**: taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.

R **Declared Rare Flora – Extant taxa** *(= Threatened Flora = Endangered + Vulnerable)*: taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

X **Declared Rare Flora - Presumed Extinct taxa**: taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

Schedule 1 **Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.

Schedule 2 **Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are

declared to be fauna that is need of special protection.

Schedule 3 **Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.

Schedule 4 **Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia} :-

P1 **Priority One: Taxa with few, poorly known populations on threatened lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P2 **Priority Two: Taxa with few, poorly known populations on conservation lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P3 **Priority Three: Taxa with several, poorly known populations, some on conservation lands**: Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P4 **Priority Four: Taxa in need of monitoring**: Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.

P5 **Priority Five: Taxa in need of monitoring**: Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999)*

EX **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.

EX(W) **Extinct in the wild:** A native species which:
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

CR **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.

EN **Endangered:** A native species which:
(a) is not critically endangered; and
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.

VU **Vulnerable:** A native species which:
(a) is not critically endangered or endangered; and
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

CD **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.