

## Tropicana Joint Venture

### AUSTRALIA EXPLORATION GROUPS 2 AND 3 EPBC COMPLIANCE REPORT 2013

DOCUMENT NUMBER: ENV-8.1-REP-GFXA-Groups 2 and 3 EPBC Compliance 2013

**Sandhill Dunnart**



**Southern Marsupial Mole**



**Mallee Fowl**



Rev	Status Description	Date	Prepared by	Approved by
1	Internal – Issued for Comment	01-04-2014	TVanderStap	AKneeshaw
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*AngloGold Ashanti Australia Ltd is the Manager of the Tropicana Joint Venture and is acting as agent severally for each of the Joint Venturers in their respective percentage interests in the Joint Venture from time to time, with such interests currently being AngloGold Ashanti Australia Limited 70% and Independence Group NL 30%. The obligations and liabilities of the Joint Venturers are several only, in accordance with their respective percentage interests.*

## Table of Contents

List of Figures	3
List of Tables	3
1 Background	4
1.1 EPBC Referral and Approval	4
1.2 Location, Climate and Landscape	5
1.3 Tenement and POW Details	7
1.4 Environmental Management Systems	8
1.5 Definitions	8
2 EPBC Act Compliance	10
2.1 Condition 1	10
2.2 Condition 2	10
2.3 Condition 3	12
2.4 Condition 4	15
2.5 Condition 5	16
2.6 Condition 6	16
2.7 Condition 7	17
2.8 Condition 8	17
2.9 Condition 9	18
2.10 Condition 10	18
2.11 Condition 11	18
2.12 Condition 12	19
3 Conclusion	20
Attachment A	
Attachment B	

### List of Figures

Figure 1 Groups 2 & 3 Location.....	6
-------------------------------------	---

### List of Tables

Table 1 - Tropicana Group 2 Tenements .....	7
Table 2- Tropicana Group 3 Tenements .....	7

# 1 Background

<b>Project Name:</b>	Tropicana Joint Venture
<b>Exploration Tenements:</b>	Groups 2 and 3 Exploration Area
<b>POW Numbers:</b>	REG ID 33038 (POW_110831) Tropicana Group 2 REG ID 33041 (POW_110901) Tropicana Group 3 REG ID33606 (POW_111021) Tropicana West REG ID33605 (POW_112211) Tropicana Group 1
<b>Tenement Holder:</b>	AngloGold Ashanti Australia Ltd/Independence Group NL
<b>Report Period:</b>	1st January 2013 to 31st December 2013

## 1.1 EPBC Referral No: 2008/4463 and Approval

Exploration activities predominantly within the Groups 2 and 3 area were referred to the Federal Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC now Department of Environment DoE) in September 2008 as it was identified that the activities may significantly impact two matters of national environmental significance as listed in the Federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), these being; Listed Threatened Species and Ecological Communities and Listed Migratory Species. DSEWPaC determined the proposed activities to be a “Controlled Action” requiring Federal assessment via an instrument to be determined at a later date and depending on the status of the proposed activities under State Legislation.

In February 2010 the proposed activities were referred to the State Environmental Protection Authority (EPA) under Section 38 of the Environmental Protection Act 1986 to enable a level of assessment to be determined. The EPA set a level of assessment of “Not Assessed – Public Advice Given” with the recommendation that a Conservation and Environmental Management Plan (CEMP) be developed in consultation with then Western Australian Department of Environment and Conservation (DEC now Department of Environmental Regulation DER).

A CEMP was prepared for the proposed exploration activities in consultation with the DEC Environmental Management Branch. The plan identified the existing environmental values, potential impacts from the proposed exploration activities and the management and mitigation of those potential impacts. The CEMP, dated 17 December 2010, was approved by the WA Department of Environment and Conservation (DEC) and DSEWPC in January 2011. On the 27th of October 2011 approval was granted to AngloGold Ashanti Australia (AGAA) to begin exploration activities within the EPBC referral area subject to a number of conditions.

AGAA formally communicated the start of works in the area on the 10th of April 2012, however DSEWPaC informed the company of its requirements to have in place an approved Southern Marsupial Mole Monitoring Program. This led to a request for variations of the EPBC conditions, which were approved, together with the Monitoring Program, on 19 February 2013.

The planning of the drilling programs for the EPBC Referral area commenced thereafter, making 19 February 2013 the ‘commencement of the action’ under the EPBC conditions. After this date, works were conducted under current consolidated POW’s.

AGAA is committed to all conditions outlined and will continue to work with the DoE and the DER. This report is made available to the public as part of AGAA’s environmental values and in accordance with Condition 7 of the approved Variation to Conditions, which states:

*“Within three months of every 12 months anniversary of the commencement of the action, the person taking the action must make public a report on their website addressing compliance with the conditions of this approval over the previous 12 months. Including implementation of any management plans specified in the conditions.”*

## **1.2 Location, Climate and Landscape**

The EPBC Referral area lies approximately 220 km southeast of Laverton and 330 km northeast of Kalgoorlie on the western edge of the Great Victoria Desert as shown in Figure 1. The Plumridge Lakes Nature Reserve lies immediately to the northeast of the exploration area and the Queen Victoria Springs Nature Reserves lies to the southwest.

The EPBC Referral area is primarily situated within the Great Victoria Desert bioregion (GVD1) with the northern section entering the Central Subregion (GVD2) and the southern tip within the Coolgardie Eastern Goldfields bioregion. As such its climate can be described as arid, with hot summers and cool winters and an average rainfall of 200-300 mm annually. The area’s landforms consist of salt lakes, lake derived dunes, Aeolian sand dunes and sand plains, and redder soils occasionally with out-cropping rocks.

Spinifex (*Triodia spp*) and mallee (*Eucalyptus kingsmilli*, *E. youngiana*) with scattered marble gum (*E.gongylocarpa*) and native desert pines (*Callitris spp*) cover the sandy areas, while Mulga and Acacia woodlands occur through the red soils and outcrop areas. The salt lakes are dominated with salt bush (*Atriplex spp*), bluebush (*Kochia spp.*) and pearl bush (*Maireaina spp.*). The Priority Ecological Community (PEC) known as the “*Yellow Sandplain Communities of the Great Victoria Desert*” can also be found along the western edges of the Group 2 and 3 area.

**TROPICANA JOINT VENTURE AUSTRALIA EXPLORATION GROUPS 2 AND 3 EPBC COMPLIANCE REPORT 2013**  
**Doc No. ENV-8.1-REP-GFXA-Groups 2 and 3 EPBC Compliance 2013 (Rev 1)**

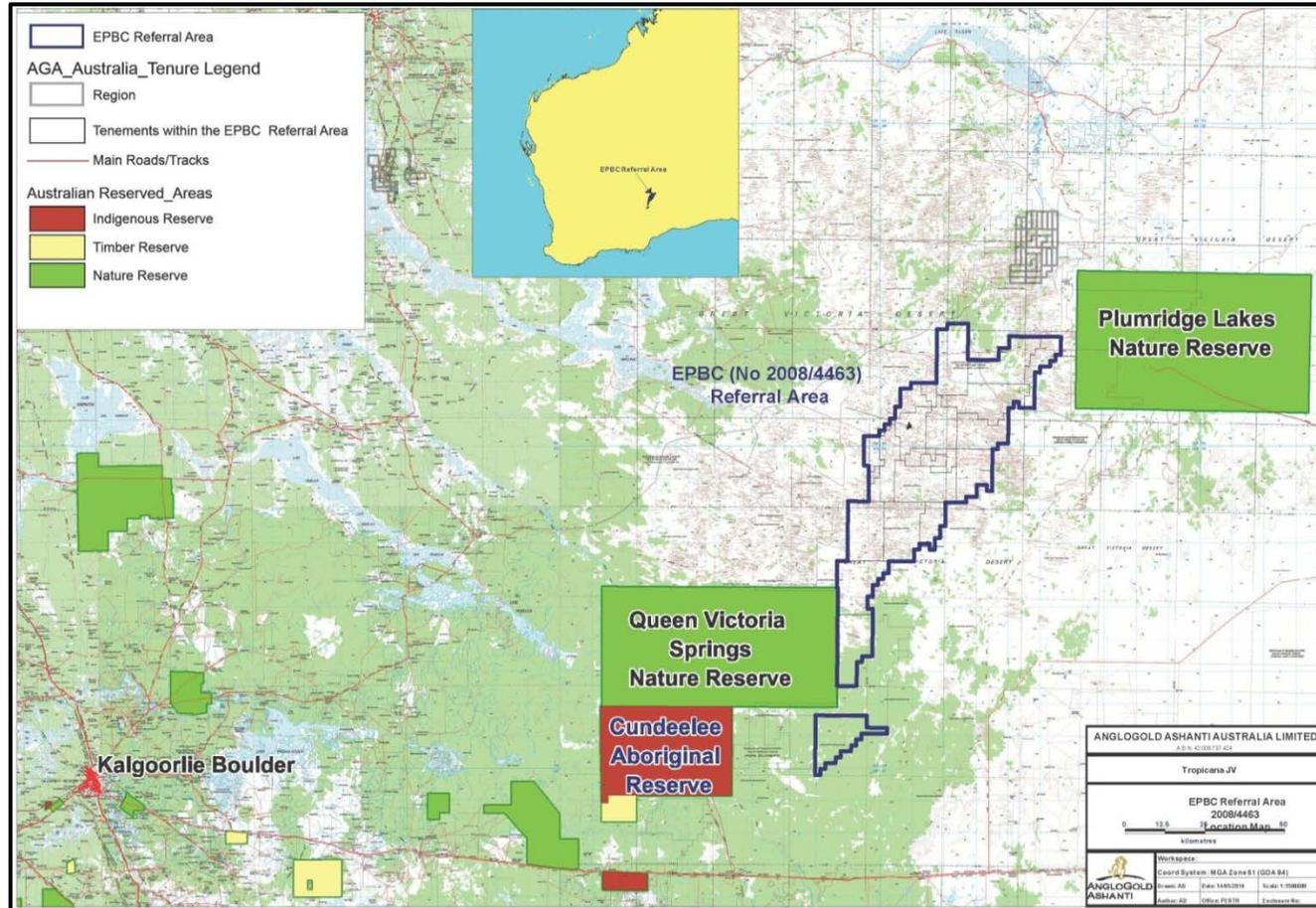


Figure 1 EPBC Referral

### 1.3 Tenement and POW Details

The tenements included in the Group 2 Consolidated Programme of Work (POW) are listed in Table 1 below.

Table 1 - Tropicana Group 2 Tenements

Tenements		
• E 39/1012	• E 39/1013	• E 39/1037
• E 39/1038	• E 39/1040	• E 39/1041
• E 39/1042	• E 39/1043	• E 39/1044
• E 39/1212	• E 39/1214	• E 39/1238
• E39/1759		

The tenements included in the Group 3 Consolidated POW are listed in Table 2.

Table 2- Tropicana Group 3 Tenements

Tenements		
• E 28/1364	• E 28/1366	• E 28/1367
• E 28/1502	• E 39/1028	• E 39/1029
• E 39/1030		

The tenements included in Group 1 and Tropicana West Consolidated POW's within the EPBC Referral area are listed in Table 3

Table 3 - Tropicana West and Group 1 Tenements within the EPBC Referral Area

Tenements
• E39/948 (Tropicana West)
• E39/1090 (Group 1)

Both Group 1 and Group 2 POW's were granted from the 10<sup>th</sup> of January 2012. Both Tropicana West and Group 1 POW's were granted in March 2012. All the consolidated POW's were granted for a period of 2.5 years. AGAA's standard practice for consolidated POW's is to begin the renewal process after 2 years to ensure all works or outstanding tracks are covered by an active POW at all times. All documentation regarding these POW's and past POW's on the tenure are recorded in AGAA's internal records system. Application for E39/1759 regains portion of E39/1214 that was formerly surrendered. When granted that ground must be considered as part of the referral process.

The land within the EPBC Referral Area is Vacant Crown Land. A joint venture exists between AGAA (70%) and Independence Group (30%) over the tenure, with AGAA the manager of the joint venture.

The AngloGold Ashanti (AGA) business unit undertaking exploration within EPBC Referral Area is referred to as 'Australia Exploration' (AusEx). Further reference within this report is to AusEx to clearly communicate accountabilities.

AusEx is led by the Vice President Australia Exploration who reports to the AGA Senior Vice President Global Greenfields Exploration.

## 1.4 Environmental Management Systems

The business unit was awarded ISO 14001 accreditation for its environment management system on 12 November 2007 by Lloyds Register Quality Assurance Limited. Reaccreditation has been maintained since and awarded again on 21 November 2013. Works in Groups 2 and 3 are undertaken through the implementation of the ISO 14001 accredited environmental management system.

## 1.5 Definitions

In reading this report, reference should be made to the following definitions contained within the EPBC Referral Approval and Variation to Conditions Attached to Approval enacted by DoE in relation to EPBC 2008/4463.

*The EPBC Act is the Environment Protection and Biodiversity Conservation Act 1999.*

*The Minister means the minister administering the Environment Protection and Biodiversity Conservation Act 1999 and includes a delegate of the minister.*

*The Department means the Australian Government Department administering the Environment Protection and Biodiversity Conservation Act 1999.*

*To commence the action means any preparatory work required to be undertaken including clearing vegetation, the erection of any onsite temporary structures and the use of heavy duty equipment for the purpose of breaking the ground for mining, buildings or infrastructure.*

*Disturbance includes the clearance of native vegetation, construction of access tracks, establishment of drillpads and sumps or any other supporting infrastructure for exploration activities.*

*Clearance of native vegetation includes the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of native vegetation.*

*Exploration drilling includes activities that require the clearing of vegetation to facilitate access prior to undertaking any work, such as Aircore Drilling, RC Drilling and Diamond drilling.*

*National Malleefowl Monitoring Database means that national database for the monitoring of Malleefowl available on the internet at <http://database.malleefowlvictoria.org.au/Start.aspx>*

*Adjacent: means any Malleefowl mounds immediately outside the 100 metre buffer area as identified in approval condition 2 (d) and Sandhill Dunnart habitat immediately outside the 50 metre buffer area as detailed in approval condition 4 (b) and located within Group 2 and Group 3 tenement areas as shown in figures at Attachments A and B.*

*Targeted exploration program: An area which, having been geologically assessed for prospectivity, warrants on ground exploration. Typical activities potentially include ground disturbing work such as drilling programs, and /or less invasive activities such as surface geochemical sampling and ground based geophysical surveys. Such programs will represent the location of any ground*



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**TROPICANA JOINT VENTURE AUSTRALIA EXPLORATION GROUPS 2 AND 3 EPBC COMPLIANCE REPORT 2013**

**Doc No. ENV-8.1-REP-GFXA-Groups 2 and 3 EPBC Compliance 2013 (Rev 1)**

*disturbance, such as drill lines, drill hole locations and associated works, and any required access/egress tracks.*

## 2 EPBC Act Compliance

This report presents the EPBC Act conditions under which AGAA Australia Exploration are permitted to conduct exploration activities on existing exploration tenements in the Great Victorian Desert bioregion, collectively known as the 'Group 2 and Group 3 tenements'.

The wording of the EPBC Act Conditions is provided below in italicized text. Against each condition, AusEx has provided an explanation regarding how this condition has been met. The explanation is provided in standard text.

### 2.1 Condition 1

Condition 1 reads:

*Within 14 Days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement.*

In a letter dated 10th of April 2012, the Department was informed of AusEx's proposed commencement of works, however as the Southern Marsupial Mole Monitoring Program had not been approved, AusEx then informed the Department works would not proceed in an email dated 23 July 2012.

In an email dated 14 December 2012, AGAA advised DoE representative that *"we would like to commence working in Group 2 and 3 tenements in early February 2013, subject to approval from DSEWPaC."*

The DoE were advised in a letter dated 25 February 2013 that proposed works for 2013 would be communicated through the Annual Environmental Report (AER) for 2012. A copy of the AER was supplied with such letter. (AERs are now referred to as Environmental Progress Reports in accordance with the Department of Mines and Petroleum WA requirements.)

AusEx has defined 'the actual date of commencement' as the date that the Southern Marsupial Mole Monitoring Program and the Variation of Conditions 2008/4463 were approved; specifically 19 February 2013. Thereafter, the planning of the drilling programs for Groups 2 and 3 was commenced.

### 2.2 Condition 2

Condition 2 reads:

*In order to protect the Malleefowl (Leipoa ocellata), the person undertaking the action must implement the following mitigation measures;*

- a. Undertake a monitoring program of Malleefowl mounds identified within the Malleefowl Preservation Group report dated November 2009, on an annual basis during the Malleefowl breeding season (September through to March), starting within the year exploration drilling commences. The monitoring program must be undertaken in accordance with the National Manual for the Malleefowl Monitoring System (2007)*

In November and December 2013 a targeted survey was conducted by AusEx Environmental Officers with data collected in accordance with the National Manual for the Malleefowl Monitoring System. The data has been collated and was submitted prior to 31 March 2014 for entry into the National Monitoring System Database.

In addition, all employees and contractors working within Groups 2 and 3 have been provided with instruction using the Environmental Group 2 and 3 EPBC Induction to identify and report sightings of Malleefowl and mounds. Such reports are included in the AGAA environmental database and also submitted to the National Malleefowl Monitoring System. AusEx will commence the next monitoring program by 31 November, 2014.

- b. Prior to the commencement of each targeted exploration program, undertake inspection for evidence of Malleefowl mounds. Where evidence is observed, undertake a further targeted survey for Malleefowl's and mounds within the area of observations and surrounding suitable habitat within one month of the initial inspection, in accordance with the Department's Survey Guidelines for Australia's Threatened Birds (DEWGA 2010).*

AusEx's standard practice as documented in the Environmental and Heritage Notification Procedure is to conduct an Environmental Inspection of the proposed drilling and associated activities area, for the presence of flora and fauna of environmental value, including Malleefowl. The inspection is undertaken prior to any works taking place on the ground. An Environmental Inspection Notification (EIN) Report is prepared for each proposed drilling program. The drill program is modified to minimise environmental impact and to ensure the required buffers are implemented.

AusEx has a multi-level reporting system which is part of the ISO 14001 accredited environmental management system. The system includes incident reporting and environmental observation reporting. All AusEx employees and contractors are trained to report sightings of Malleefowl and Malleefowl mounds. Reporting is mandated and therefore monitoring is continuous for the duration of each drilling program that is undertaken in Groups 2 and 3.

- c. Submit the results of the inspection, monitoring program and targeted surveys to the National Malleefowl Monitoring Database within two months of completion of each activity.*

In determining the timing of the submission of survey results to the National Malleefowl Monitoring Database, due consideration was given to the completion of the drilling program for Groups 2 and 3, which is undertaken by calendar year. Consideration was also given to the duration of the breeding season which runs approximately from October to January.

Accordingly, the survey results were submitted by 31 March 2014 for entry into the database in accordance with the required timeframe for completion.

- d. Prior to the commencement of any targeted exploration activities, establish a buffer zone of a minimum of 100 metres around any identified mounds, including those identified in the targeted survey in condition 2(b) that occur adjacent to each targeted exploration area, as identified in Attachment A. No disturbance must occur within the buffer zone.*

AusEx records all threatened fauna sightings and the locations of both active and inactive Malleefowl mounds, using positional data, and records this in the Geographic Information System (GIS). This system allows a 100 metre buffer to be automatically added around any malleefowl mound identified within the Group 2 and 3 areas and prevents any works being planned or undertaken within the buffered area.

The field crew who carry out clearing works to prepare for the drill program and associated activities are provided with the positional data and maps with required buffers delineated. Digital positioning data is also collected by the field crew during clearing activities which allows AGAA to verify compliance to buffer zone requirements.

A copy of Attachment A is provided in Appendix 1. This identifies those malleefowl mounds documented in the Malleefowl Preservation Group's Report dated November 2009.

## 2.3 Condition 3

Condition 3 reads:

*In order to protect the Southern Marsupial Mole (SMM), the person undertaking the action must implement the following mitigation measures:*

- a. *installation of access tracks along sand dunes must be avoided;*

AusEx used aerial photography to identify sand dunes within the Fraser Region and purchased GIS data of their locations. This information is projected into the AGAA GIS system and all tracks are planned to avoid these areas.

The Environmental Inspection Notification process described in 2.2b is also used to identify sand dunes within the proposed drilling program area. An Environmental Officer undertakes an on ground inspection of the proposed area by light vehicle or all terrain vehicle. Dune positional data is mapped and the required buffer zone/s established digitally.

AusEx avoids the installation of any tracks upon sand dunes due to their environmental significance and also the impracticality for traversing exploration equipment because of the safety risk of vehicle and rig rollover.

- b. *Access tracks must be designed and installed to minimise impacts on SMM habitat including minimising the use of soft-sandy uplands, and position tracks in areas between dunes;*

AusEx engaged the services of Dr Joe Benshemesh to provide environmental expertise in relation to the habitat and behaviours of the Southern Marsupial Mole. The advice given as documented in the Southern Marsupial Mole Program approved by DoE is that prime habitat is located in the upper crest of the sand dunes. Specifically, section 4.4 of the Program reads:

*"Defining prime habitat for marsupial moles*

*As indicated above, every survey undertaken in every region of central Australia has shown that marsupial mole underground signs are substantially higher on the main body of the dune (i.e. crests and slopes) than at the base of dunes or in interdune swales. This relationship has been highly significant in each of these surveys (Benshemesh 1998, 1999, 2001; Benshemesh 2005b, c, d, e, 2006; Benshemesh and Mann 2009; Benshemesh and Schulz 2008, 2009, 2010a, b) attesting to the generality of the finding. This knowledge is not new: Aboriginal people primarily associate marsupial moles with dunefields (Ginger Wikilyiri pers. comm.; Robin Kankanpakantja pers. comm.), and in some areas of the central deserts (e.g. Kiwikurra) marsupial moles are sometimes called 'tali-tali', which literally means 'dune-dune'. Likewise, the importance of dunefields as habitat for marsupial mole has been stated by some of the earliest commentators (Marlow 1962; Parker 1973; Ride 1970; Spencer 1896; Stirling 1888, 1891; Wood Jones 1923), as well as recent scientific authors apart from myself (Pearson and Turner 2000).*

*While some of these authors have suggested that sand flats may also be suitable habitat for marsupial moles, the importance of dune habitat is incontestable. On the other hand, the finding that distribution of marsupial moles depends on the connectivity of dunes (Benshemesh and Schulz 2008, 2010b), suggests that the sandplains and sandflats between dunes may be regarded as barriers rather than prime habitat, and that marsupial moles may only occur in off-dune habitats if there are dunes and dunefields nearby.*

*There are a number of reasons why the main body of dunes provide sand habitat that is likely to be ideal for marsupial moles. The dunes that comprise the dunefields of the central Australian deserts are aeolian in origin (Bowler 1976), deposited grain by grain by the action of wind. As a result of the physical sorting provided by the wind (Pye and Tsoar 2009), grain size is relatively uniform on Australian dunes (Buckley 1989; Buckley 1982), providing void spaces that are filled with air. These void spaces are important for extreme fossorial animals such as marsupial moles by providing a relatively high aeration and gas flow underground (Seymour and Seely 1996). The void spaces also provide excellent drainage, so that water that fills the void spaces and replaces air does so for only a relatively short period of time. Aboriginal people often state that marsupial moles come to the surface more commonly following rain (e.g. Bolam 1927; Johnson 1995; Pearson and Turner 2000), and this may well be a response of the animals essentially suffocating due to water replacing air in the void spaces. Waterlogged soils are more likely to occur in poorly sorted soils in sandplains than on dunes (Tsoar 2005) where drainage is enhanced by both the relatively even grain size (increased void spaces) and by elevation. Finally, the relatively even grain size of sand on dunes results in fewer contacts between grains than occurs between poorly sorted substrates. Fine clay particles are sucked into these contacts during wet/dry cycles, resulting in bonding between grains and providing the light cementation that is characteristic of the Australian dunefields (Hesse 2011; Hesse 2010). An important consequence of the fewer bonds in well-sorted sands is that the soil is less hard than in poorly sorted sand, making tunnelling easier for subterranean animals (Jackson et al. 2008). There is, in fact, a very strong and highly significant relationship between the abundance of marsupial mole signs underground and soil hardness, and this has been reported in each of the survey reports referred to above.*

*In summary, dune environments have been shown to represent prime habitat for marsupial mole in terms of the species' abundance, and this is understandable in terms of improved aeration, drainage and ease of tunnelling. Off the main body of the dune, including the base of the dune, the physical environment is generally less suitable for marsupial moles and underground signs are less common. Off dune areas may thus be regarded as sub-prime: marsupial moles may still occur in such areas, albeit at lower densities than on dunes, and the physical environment is less than ideal. Moreover, it has yet to be established whether marsupial mole populations can maintain themselves in areas where dunes are not close by."*

Accordingly, AusEx has determined prime SMM habitat to be within 40 m of the crest of sand dunes. Using AusEx's internal GIS system a 40 m buffer has been placed around all sand dunes ensuring no work is planned or conducted within this area. The process is managed in accordance with the Environmental Inspection Notification Procedure described in 2b.

- c. *By the end of October 2012, submit a SMM monitoring program to the Minister for approval. The program must include details of a progressive monitoring strategy to monitor the potential impacts from exploration drilling on prime SMM habitat and evidence of the SMM population, and details of targeted surveys within suitable SMM habitat areas adjacent to the proposed exploration program;*

The Southern Marsupial Mole Monitoring Program was developed in liaison with Dr Joe Benshemesh and submitted to DoE for approval on 14 December 2012. The program was approved by DoE on 19 February 2013.

In the interim, as a result of discussions with DoE, AusEx, in liaison with Tropicana Gold Mine (TGM) Sustainability, undertook a survey for SMM in the TGM area which is bounded by the mining lease. The survey was undertaken under the guidance, training and instruction of Dr Joe Benshemesh. The analysis and findings provided background information for the SMM monitoring program developed by AusEx for Groups 2 and 3. The report on the survey completed at TGM was written by Dr Benshemesh on behalf of AusEx, and submitted to DoE in June 2013.

In May 2013, AusEx completed the Southern Marsupial Mole (*Notoryctes Typhlops*) Benchmark Survey Plan for Tropicana Groups 2 and 3. The plan was developed in liaison between the AusEx Environmental Management Team and Dr Joe Benshemesh.

The proposed scope was for:

- The surveying of 200 trenches within two years of the approval of the SMM Monitoring Program ie by February 2015.
- Surveying in two phases split over 2013 and 2014 with equivalent number of trenches, subject to suitable weather conditions, logistics and personnel availability.

AusEx undertook the first phase of a SMM monitoring program in November 2013 completing 100 monitoring trenches. The program was completed by AusEx environmental team members, after being deemed competent by Dr. Joe Benshemesh. A further 100 trenches are planned for June/July 2014.

- d. *The approved SMM Monitoring Program must be implemented,*

The Southern Marsupial Mole Monitoring Program was implemented in 2013, as described in 3c. The Program stipulates that a baseline survey of 200 monitoring trenches must be completed within 2 years. The first stage of the monitoring program was undertaken in November 2013 with 100 trenches completed. AusEx wishes to conduct the second stage mid-year 2014.

- e. *Areas identified as prime Southern Marsupial Mole (SMM) habitat, including those identified through the targeted surveys and monitoring programs required under condition 3 (c), must be avoided, including through establishment of a buffer zone of a minimum of 40 metres around any SMM habitat. The buffer zones must be established and managed in accordance with the approved SMM monitoring program.*

The Environmental Inspection Notification process described in 2.2b is used to identify sand dunes within the proposed drilling program area. Positional data is gathered and entered into the AGAA internal GIS system. A 40m buffer is added. As described in 2.2d, the field crew utilise the positional data to ensure that tracks or other areas are not cleared within the buffer area. Accordingly, prime SMM habitat remains undisturbed.

## 2.4 Condition 4

Condition 4 reads:

*In order to protect the Sandhill Dunnart, the person undertaking the action must implement the following mitigation measures;*

- a. Implement the avoidance measures detailed in Section 6 of the Tropicana Joint Venture Group 2 and Group 3 Exploration Areas Conservation and Environmental Management Plan (CEMP) dated 14 December 2010, as relevant to the Sandhill Dunnart. Where these measures cannot be implemented, the person undertaking the action must undertake a detailed monitoring program and follow up monitoring for the duration of the exploration activities. The monitoring program must target those Sandhill Dunnart habitats identified in the Sandhill Dunnart habitat assessment undertaken by GHD in 2009 (reported in GHD report, Sandhill Dunnart habitat assessment, Group 2 & 3 tenements, dated July 2010) and are located adjacent to areas of exploration activities within Group 2 and Group 3 tenements as identified at Attachment B.*

The Tropicana Joint Venture Group 2 and Group 3 Exploration Areas Conservation and Environmental Management Plan (CEMP) dated 14 December 2010 was submitted to DEC (WA) and approved in January 2011.

The key process for identifying habitat is the Environmental Inspection Notification process which was described in 2.2b. The assessment includes consideration of the age, condition and population density of the spinifex within the proposed works areas. The Environmental Team responsible for conducting these inspections have been trained to recognize Sandhill dunnart habitat by Glen Gaikhorst of GHD, a specialist in the species. Due to the relative complexity of assessing areas for sandhill dunnart habitat, AusEx and GHD developed a specialised template to gather the required information. This is referred to as the Sandhill Dunnart Habitat Assessment EIN Form. Where potential habitats are identified, the drilling and clearing proposal is modified to avoid the area. Required buffer zones are also established.

To date, identified and potential habitats have been avoided and therefore the 'detailed monitoring program' has not been required.

Sandhill Dunnart habitats identified in the Sandhill Dunnart habitat assessment undertaken by GHD in 2009 have been put into the AGAA MapInfo layer so they are clearly identified. Only 18 of the 24 habitats identified by GHD are within Groups 2 and 3. These have been avoided and buffers assigned appropriately. A copy of Attachment B showing locations of habitats in the 2009 GHD Report is provided as Appendix 2.

- b. Prior to the commencement of any targeted exploration activities, establish a buffer zone of a minimum of 50 metres around any identified Sandhill Dunnart habitat and 100 metres around all confirmed habitat based on the results of the monitoring program in condition 4(a). No disturbance must occur within the buffer zones.*

AusEx has implemented the required 100 metre buffers around those Sandhill Dunnart habitats identified by GHD that are within the Groups 2 and 3 tenements using the internal GIS system.

Outputs of the Sandhill Dunnart Habitat Assessment EINS are also entered into the internal GIS System to establish the 50 metre plus buffer around potential habitats. AusEx's practice is to apply a risk based approach such that where there is uncertainty regarding the status of the area in relation to dunnart habitat, an avoidance strategy is applied. All field crew operating in areas near any potential habitat are made aware of the location and advised to avoid contact with the area.

## 2.5 Condition 5

Condition 5 reads:

*The results of the inspections, targeted surveys and monitoring programs in conditions 2, 3 and 4 must be made available publically on the Tropicana JV website in accordance with condition 7.*

Results of the inspection, monitoring program and targeted surveys for Malleefowl were submitted to the National Malleefowl Monitoring Database by 31 March 2014. Reference to the relevant website is provided within this report.

After the completion of the Southern Marsupial Mole survey, the results will be sent to Dr Joe Benshemesh for analysis and preparation of the report. The key findings of such report will be made available to the public via the TJV website, however, confidential information regarding the exact locations of the surveys will not be provided. Information of scientific value will be shared for the greater public benefit. The report finding will be available in approximately June 2015 after phase 2 of the survey is completed and the data is professionally analysed and reported on.

AusEx can advise of the number of Sandhill Dunnart habitats identified through the EIN process as a percentage of the total number of EINs completed in Groups 2 and 3. The actual location of habitats identified by AusEx cannot be provided due to the confidential nature of drill program locations.

As per the CEMP and POW conditions an Environmental Progress Report for the Groups 2 and 3 areas has been supplied to the Department of Mines and Petroleum, The Department of Environmental Regulation and the Federal Department of Environment.

AusEx may consider periodically throughout the duration of the work undertaken in Groups 2 and 3 how information gathered on threatened species may be presented in a manner that is of public benefit.

## 2.6 Condition 6

Condition 6 reads:

*The person taking action must, within 12 months of the commencement of the action, complete and submit to the Minister for approval a detailed Rehabilitation Plan for the progressive rehabilitation and revegetation of the project area.*

*This Rehabilitation Plan must include, at a minimum, the following information:*

- a. the desired outcomes/objectives of implementing the plan;*

**TROPICANA JOINT VENTURE AUSTRALIA EXPLORATION GROUPS 2 AND 3 EPBC COMPLIANCE REPORT 2013**

**Doc No. ENV-8.1-REP-GFXA-Groups 2 and 3 EPBC Compliance 2013 (Rev 1)**

- b. details of the vegetation communities to be re-established and the timing of progressive rehabilitation;*
- c. criteria to determine success of re-establishment of vegetation communities;*
- d. a process to progressively report to the Department the rehabilitation management actions undertaken and the outcomes of those actions, and the mechanisms to be used to identify the need for improved management;*
- e. a description of the potential risks to successful management and rehabilitation on the project site, and a description of the contingency measures that would be implemented to mitigate these risks; and*
- f. details of parties responsible for reviewing and implementing the Plan.*

*The approved Rehabilitation Plan must be implemented.*

AusEx has forwarded a cover letter, dated 19 February 2014, with the Group 2 and 3 Rehabilitation Management Plan to the Minister for approval.

## **2.7 Condition 7**

Condition 7 reads:

*Within three months of every 12 months anniversary of the commencement of the action, the person taking the action must publish a report on their website addressing compliance with the conditions of this approval over the previous 12 months, including implementation of any management and monitoring programs as specified in the conditions. Non-compliance with any of the conditions of this approval must be reported to the Department at the same time as the compliance report is published.*

This report serves to fulfil this condition.

AusEx has determined the 'commence of the action' being 19 February 2013; specifically, the date that DoE approved the Variation to Conditions EPBC 2008/4463. The anniversary is therefore 19 February 2014. Adding the three months indicates that the date of publication of this report on the TJV website is prior to 19 May 2014.

Next year's report will be published prior to 19 May 2015.

Should further information be required please contact the AusEx's Environmental Management Team directly through [explorationapprovals@anglogoldashanti.com.au](mailto:explorationapprovals@anglogoldashanti.com.au)

## **2.8 Condition 8**

Condition 8 reads:

*Upon the direction of the Minister, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the minister and the audit report must address the criteria to the satisfaction of the Minister.*

Should such direction be issued by the Minister, AusEx will arrange an independent audit.

## 2.9 Condition 9

Condition 9 reads:

*If the person taking the action wishes to carry out any activity otherwise than in accordance with the condition 7, 1 the person taking the action must submit for the Minister's written approval a revised version of any such plan. The varied activity shall not commence until the Minister has approved the varied plan in writing. If the Minister approves such a revised plan, that plan must be implemented in place of the plan originally approved. Unless the Minister has approved the revised plan, then the person taking the action must continue to implement the plan originally approved.*

Condition 9 is subject to condition 8 being undertaken by the Minister.

## 2.10 Condition 10

Condition 10 reads:

*If the Minister believes that is necessary or convenient for the better protection of the listed threatened species and communities to do so, the Minister may request the person taking the action make specified revisions to the plans approved pursuant to these conditions and submit the revised plan for the Minister's written approval. The person taking the action must comply with any such request. The revised approved plan must be implemented. Unless the Minister has approved the revised plan then the person taking the action must continue to implement the plan originally approved.*

Condition 10 is subject to condition 8 being undertaken by the Minister.

## 2.11 Condition 11

Condition 11 reads:

*If, at any time after 5 years from the date of this approval, the person taking the action has not commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister.*

Work formally commenced after approval was granted to the EPBC Condition Variation in February 2013, however should AusEx stop works within the area for 5 years, the Minister shall be informed before work re-commences.

## **2.12 Condition 12**

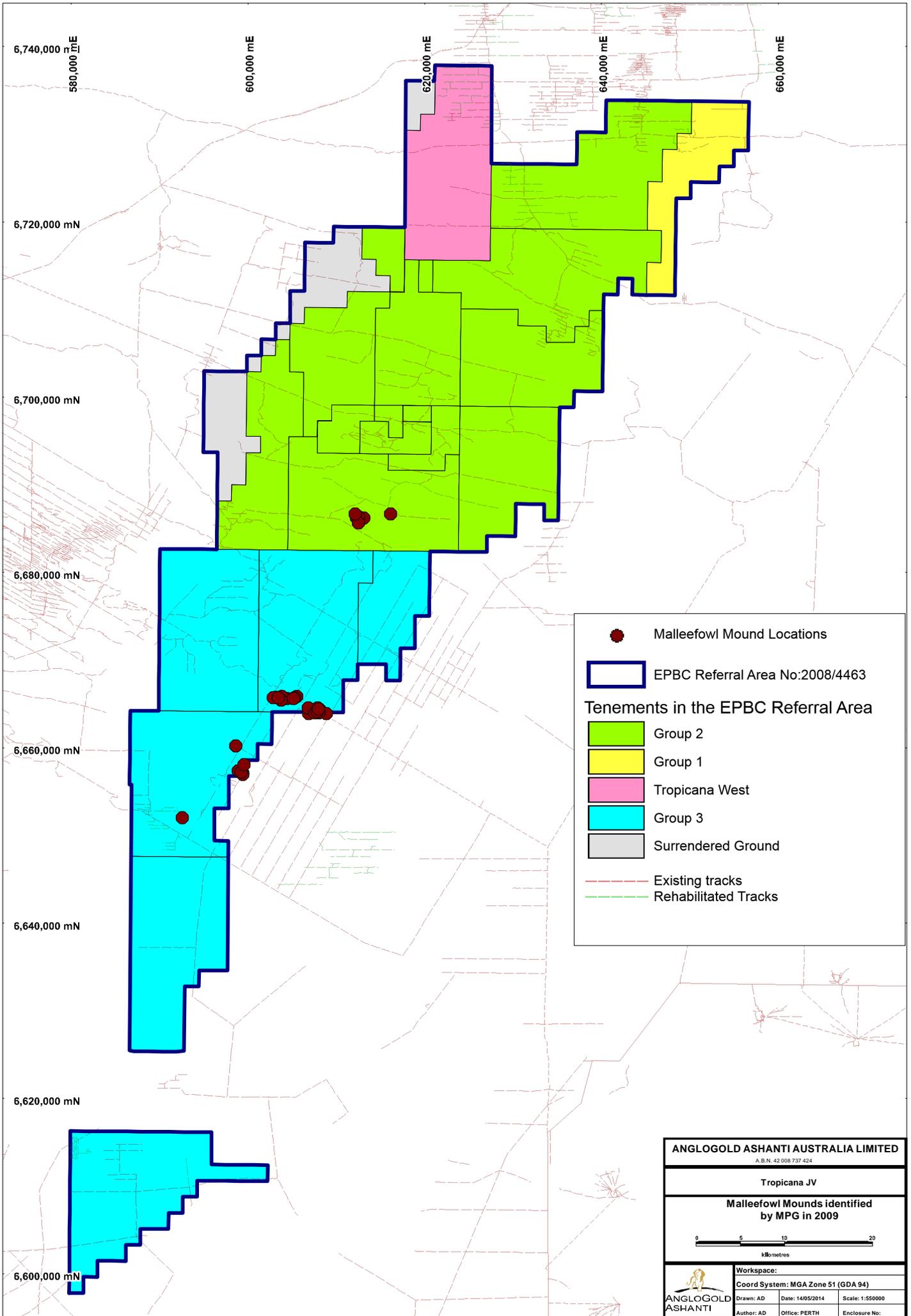
Condition 12 reads:

*The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.*

AGAA's internal GIS system and record keeping system was successfully audited in 2013 to maintain the companies ISO14001 standard. Should any records be required by the Department, AusEx is able to provide them.

### **3 Conclusion**

This report serves to provide an update on AGA AusEx's commitment to meeting the conditions outlined EPBC 2008/4463. As mentioned above an environmental progress report (EPR) has been supplied to the WA Department of Mines and Petroleum (DMP), the WA Department of Environmental Regulation (DER) and the DOE as per a condition of AngloGold Ashanti Australia's consolidated POW\_110831 (REG ID 33038) and consolidated POW\_110901 (REG ID 33041) and the Conservation and Environmental Management Plan for Group 2 and Group 3.



**Malleefowl Mound Locations**

**EPBC Referral Area No.2008/4463**

**Tenements in the EPBC Referral Area**

- Group 2
- Group 1
- Tropicana West
- Group 3
- Surrendered Ground

Existing tracks  
Rehabilitated Tracks

**ANGLOGOLD ASHANTI AUSTRALIA LIMITED**  
A.B.N. 42 008 737 424

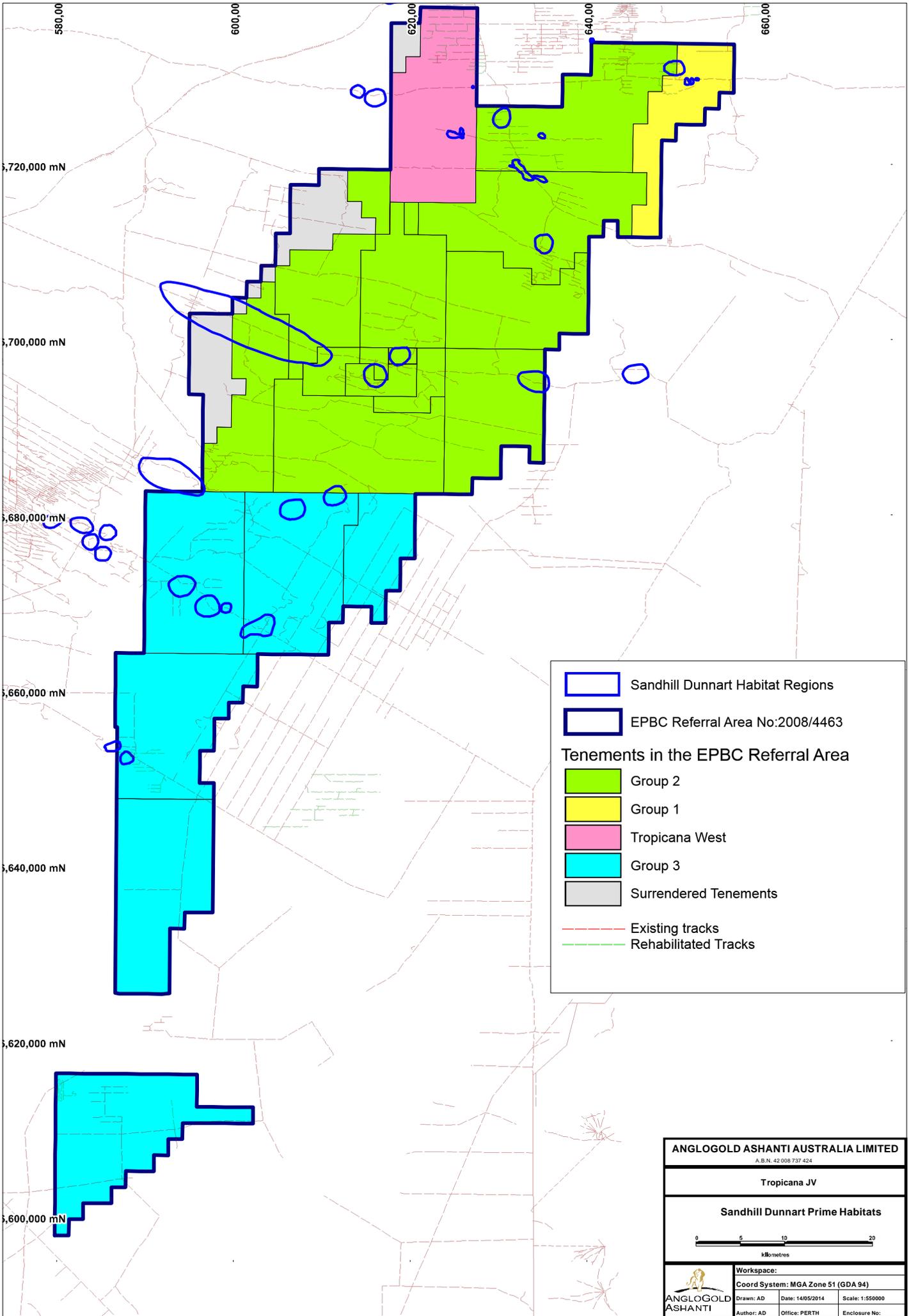
**Tropicana JV**

**Malleefowl Mounds identified by MPG in 2009**

0 5 10 20  
Kilometres

Workspace:  
Coord System: MGA Zone 51 (GDA 94)

**ANGLOGOLD ASHANTI**  
Drawn: AD Date: 14/05/2014 Scale: 1:550000  
Author: AD Office: PERTH Enclosure No:



Sandhill Dunnart Habitat Regions  
 EPBC Referral Area No:2008/4463  
**Tenements in the EPBC Referral Area**  
 Group 2  
 Group 1  
 Tropicana West  
 Group 3  
 Surrendered Tenements  
 Existing tracks  
 Rehabilitated Tracks

<b>ANGLOGOLD ASHANTI AUSTRALIA LIMITED</b>		
A.B.N. 42 008 737 424		
<b>Tropicana JV</b>		
<b>Sandhill Dunnart Prime Habitats</b>		
Workspace:		
Coord System: MGA Zone 51 (GDA 94)		
Drawn: AD	Date: 14/05/2014	Scale: 1:550000
Author: AD	Office: PERTH	Enclosure No:

