ANGLOGOLDASHANTI

TROPICANA

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24 December 2015

Mr Kim Taylor
General Manager
Office of the Environmental Protection Authority
168 St Georges Terrace
PERTH WA 6000

Attention: Kim Taylor

Dear Kim,

Re: Submission of Tropicana Gold Mine (Ministerial Statement No. 839) 2014-2015 Annual Compliance Assessment Report

In accordance with Condition 4-6 of Ministerial Statement No. 839, please find enclosed the 2015 Annual Compliance Assessment Report for the Tropicana Gold Mine. The report has been prepared in accordance with the Tropicana Gold Mine Compliance Assessment Plan and covers the period 1st October 2014 – 30 September 2015.

This Compliance Assessment Report will be made publically available on the Tropicana JV website following acknowledgement from the Office of the Environmental Protection Authority that the report has been received and accepted.

We trust this report meets your requirements however should you have any queries regarding the information provided please contact me on (08) 9265 2215 or via TGMApprovals@anglogoldashanti.com.au

Yours sincerely

Rosemarie Lane
Environmental Superintendent
TROPICANA GOLD MINE
ANGLOGOLD ASHANTI AUSTRALIA

Encl: *Tropicana Gold Mine, Ministerial Statement No. 839, 2015 Annual Compliance Assessment Report*

Tropicana Joint Venture

Tropicana Gold Mine (TGM)

Ministerial Statement No 839

Annual Compliance Assessment Report

1 September 2014 to 30 September 2015

24 December 2015

Document Reference: CAR20151224

Tropicana Gold Project, Annual Compliance Assessment Report

Ministerial Statement No. 839

CAR20151224

This report has been developed by AngloGold Ashanti Australia on behalf of the Tropicana Joint Venture.

Revision	Author	Reviewer	Date
Draft - for internal review	M. Bolton	R. Lane	17th December 2014
Final – for review and release	M.Bolton R. Lane	D. Gibbs	

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1 Introduction

The Tropicana Gold Mine (TGM) (the Project) is an open cut gold mine located approximately 330 kilometres (km) east northeast of Kalgoorlie on the western edge of the Great Victoria Desert (GVD) (**Figure 1**). The operation is a joint venture (Tropicana JV) between AngloGold Ashanti Australia (70% stakeholder and manager) and Independence Group (30% stakeholder).

The Project was approved under the *Environmental Protection Act 1986* (EP Act) in September 2010 and issued with Ministerial Statement No. 839 (MS839). Condition M4.6 of MS839 requires the preparation and submission of an annual compliance assessment report for the preceding 12 months.
This report has been prepared to meet Condition M4.6 requirement and covers the period 24th September 2014 to 23rd September 2015. The TGM Ministerial Statement audit compliance table updated for the 2015 reporting period is provided in Appendix 1.

The TGM is comprised of:

- Operational area - containing the open pits, waste landforms, stockpiles, tailings storage facility, processing plant, mine village, aerodrome and other supporting infrastructure.
- Infrastructure corridor - including an access road and communications corridor linking the operational area to existing communications and road networks of the Goldfields regions. This corridor is referred to as the Pinjin Corridor.
- Process water supply area – containing the process water supply borefield (PWSB).

This is the fifth Compliance Assessment Report (CAR) prepared by AngloGold Ashanti Australia on behalf of the Tropicana JV for the project and has been prepared in accordance with the approved Compliance Assessment Plan (CAP) dated 13 December 2010 prepared and submitted to the Office of the EPA in 2010.

2 Current Status

During the reporting period the Project's key activities continued with some areas of expansion in the PWSB with the installation of additional production bores. Expansion of the PWSB was undertaken under a Section 45c amendment, mining proposal and 5C water abstraction licence.

Mining continued in the Tropicana and Havana Open Pits, and mining commenced in the Boston Shaker Open Pit during March 2015.

Construction of the stage three wall raising of the tailings storage facility (TSF) was completed during the reporting period and subsequently inspected during the Department of Environment and Regulation (DER) compliance inspection on the 29th of April 2015.

Table 1 below provides an overview of the Project's key characteristics and current status while the updated infrastructure footprint is shown on **Figure 2** and in **Plate 1** and **Plate 2**.

Table 1: Tropicana Gold Project Key Characteristics Table (updated December 2014) Status Report

Element	Description	Status / Comment
General		
Project Life	Approximately 15yr of mining; total project duration up to 25yr (including post closure monitoring)	Mining and Processing activities continued at a steady rate during the reporting period.
Mining and Processing		
Number of pits	Up to 4	3 separate pits currently envisaged
Open pit void/s	Not more than 400 hectares	Unchanged. Current open pit area 196.05Ha
Max. length of pit/s	6 kilometres (if pits combine)	Unchanged
Max width of pit/s	1.5 kilometres	Unchanged. Current maximum width of Havana pit is approx. 700m
Overburden & waste	Not more than 800 million tonnes **LOM**	Unchanged
Waste landform	Not more than 1,200ha, max height 375mRL, slope with max angle 15°	Unchanged
Water Supply	**Up to 9 gigalitres per annum**	Increased from 7 gigalitres per annum
Dewatering Rate	1,000 to 5,000 kilolitres per day	Dewatering within this range
Infrastructure		
Mine access road	Pinjin option ~210km of new road	Road construction was completed during the 2012 reporting period.
Aerodrome	All weather strip 2.4km long	Aerodrome completed and commissioned
Tailings Storage Facility (TSF)	Up to 7 million tonnes per annum, single celled tailings storage facility with possible in pit deposition. Approximate final footprint 292 ha and maximum height 372mL.	Approval to modify the TSF design to a single celled facility was obtained during 2012 via a Section 45C process.
Disturbance Areas		
Disturbance Area	Not more than 3,440ha comprising: • 2,570ha – operational area • 300ha* – water supply area • 670ha – infrastructure areas	Current disturbance footprint across project area is approximately 2,836Ha well within the approved 3,540ha.

NOTE * - PWSB disturbance area increased from 200 ha to 300 ha under a S45C (Approved 17 December 2014)

3 Compliance

The 2014-2105 reporting period represents the fifth reporting period for the TGM and the second full operating period for the TGM, with the processing plant commencing during September 2013.

During the 2015 reporting period the Tropicana JV was compliant with all ministerial conditions and a completed audit table providing further detail on compliance with conditions is included in Appendix 1.

A section 45c seeking approval to expand the TGM process water supply borefield was approved by the OEPA during the reporting period in December 2014. Key aspects of the expansion included installation of an additional 21 production bores with an additional 10 km of pumping infrastructure in the northern expansion area (**Figure 3**) and 20 km in the southern expansion area (**Figure 4**). During the expansion internal access tracks and pipelines between the bores, overhead powerlines, borrow pits for track maintenance and controlled release areas were also constructed. Approval was also granted to increase the abstraction rate from 7GL/annum to 9GL/annum and to increase the disturbance footprint within the process water supply area up to 300ha.

As construction activities within the operational area and process water supply borefields were only completed during 2013, opportunities for rehabilitation within these areas have been limited. Rehabilitation activities have however commenced along the Pinjin Corridor where a number of borrow pits, laydown areas, fly camps and turkey nests no longer required have been ripped and growth medium and cleared vegetation has been re-spread. Details of the Pinjin corridor rehabilitation was provided in the 2013 CAR. During 2015, although limited rehabilitation activities were undertaken due to limited availability of rehabilitation areas, a number of Research & Development projects were scoped and commenced. Rehabilitation trials commenced on available areas of waste landforms and seed collection was undertaken to commence building a seed bank with an extensive species list. A copy of the rehabilitation activities undertaken is provided in Appendix 2.

The Kalgoorlie Boulder Urban Landcare Group grew a number of seedlings from seed collected within the Tropicana project area as a trial for rehabilitation activities during the reporting period (**Plate 3**). These seedlings were planted during September/ October 2015 and rolled out as part of an Adopt-A-Tree programme on site.
In accordance with the CAP, this CAR for the 2015 reporting period will be made publicly available once the Tropicana JV has received acknowledgement from the OEPA that the report has been accepted. A copy of the CAR 2015 will then be placed on the Tropicana JV website.

No changes have been made to the previously approved CAP during this reporting period (Condition 4.1 of MS839).

4 Environmental Monitoring

During the 2015 reporting period dust, vegetation condition, fauna trench inspections and groundwater monitoring programs were undertaken, and the results from this monitoring analysed. Details of monitoring activities conducted throughout 2015 and further analysis on monitoring results is provided to the Department of Mines and Petroleum (DMP) and Department of Environment and Regulation (DER) in separate annual reports

Groundwater monitoring from the eight monitoring bores installed around the TSF and waste landform footprints (**Figure 5**) was undertaken throughout 2015. A summary of results from water samples taken are provided in Appendix 3. Results obtained from these monitoring bores were compared with baseline values and trigger values which have been established.

Surface water monitoring sites have been established around the TSF and waste landforms (**Figure 6**) as required by M8.2. Due to the absence of continuous standing surface water, samples from these locations have only been obtained following rainfall events where there is surface water runoff. Results from surface water sampling locations are provided in Appendix 4.

The vegetation condition monitoring program conducted to meet Ministerial condition 5-2 was undertaken by Eco Logical Australian Pty Ltd in October 2015. The 2015 monitoring program followed the same methodology as the 2014 program and involved assessment of high resolution digital multi-spectral imagery and field survey verification at 112 quadrats 20m by 20m in size. Four additional vegetation monitoring locations (comprised of two new impact sites and two new reference sites) were established within the process supply borefield during the 2014 survey. The locations of the vegetation monitoring sites are shown in **Figure 7**. Analysis of the data obtained during the 2015 survey is still being undertaken and results of the survey will be provided in the sites 2015 AER. To date, variations in vegetation condition due to environmental conditions, such as fire and rainfall, have been detected sporadically across the region; however no impacts associated with the mines operation have been observed.

Fauna monitoring conducted during the reporting period has included:

- daily wildlife inspections at the Tailings Storage Facility (TSF);
- photographic monitoring of Mallee fowl mound (**Plate 4** and **Plate 5**);
- photographic monitoring of artificial water sources (**Plate 6** to **Plate 15**); and
- ad-hoc fauna sightings recorded by staff via the fauna sighting report forms (**Table 2**).

A number of artificial water sources have been established around the TSF to provide an alternative water sources for wildlife and these are monitored via motion sensing cameras. Photographic monitoring has captured a number of fauna species utilising the artificial ponds including a variety of birds, marsupials, mammals and reptiles.

Table 2: Fauna Observation Records

Name/ Company	Date	Location	Species	Type	#	Threatened/ Feral
Frank & Craig	25/10/2014	Mine Village	Gwardar	Reptile	1	Native
Frank	26/10/2014	Airport/camp road intersection	Gwardar	Reptile	1	Native
Craig - AGAA	26/10/2014	PP 51	Mulga	Reptile	1	Native
Giles	7/11/2014	Mine Geology Yard	Kingfisher	Bird	1	Native
Eamon Darricott 360 Environmental	9/11/2014	Process water supply borefield	Australian Bustard	Bird	1	Native - P4
Rob Meyers - MWES	17/11/2014	Process water supply borefield	Cat	mammal	1	feral
Mark - Osiris	27/11/2014	Southern borefield	Australian Bustard	Bird	1	Native - P4
Harvey & Co	4/12/2014	Borefields access road	Thorny Devil	Reptile	1	Native
C. Harvey & Co	27/12/2014	Ch74	Australian Bustard	Bird	2	Native - P4
Steve Palliser - C. Harvey & Co	30/12/2014	Access Rd Ch88	Thorny Devil	Reptile	1	Native
Mick Richards - C. Harvey & Co	2/01/2015	Access Road - Ch79-81	Australian Bustard	Bird	2	Native - P4
Mich Richards - C. Harvey & Co	2/01/2015	Access Road - Ch98-100	Peregrine Falcon	Bird	1	Native - Specially Protected
Paddy - C. Harvey & Co	3/01/2015	Kamikaze Dom	Dingo	mammal	1	Native
Mich Richards - C. Harvey & Co	6/01/2015	Access Road - Ch26-27	Dingo	mammal	2	native
Mich Richards - C. Harvey & Co	6/01/2015	Access Road - Ch113-114	Australian Bustard	Bird	1	Native - P4
Mich Richards - C. Harvey & Co	7/01/2015	Access Road - Ch32-33	Camel	mammal	1	Feral
Mich Richards - C. Harvey & Co	8/01/2015	Access Road - Ch21-22	Australian Bustard	Bird	1	Native - P4
Clayton Burrow - C. Harvey & Co	10/01/2015	C. Harvey & Co Yard	Snake	Reptile	1	Native
Mich Richards - C. Harvey & Co	10/01/2015	Coast road	Eagle	Bird	1	Native
C. Harvey & Co	10/01/2015	Access Road - Ch10-11	Australian Bustard	Bird	2	Native - P4
Mich Richards - C. Harvey & Co	11/01/2015	Stand Pipe	Dingo	mammal	1	Native
C. Harvey & Co	18/01/2015	Access Road - Ch22	Grey Falcon	Bird	1	Native
Mich Richards - C. Harvey & Co	23/01/2015	Access Road - Ch55	Dingo	mammal	1	Native
Chris - Dyno Nobel	6/05/2015	Magazine	Camel	mammal	30	Feral
Chris - Dyno Nobel	6/05/2015	DNAP Depot gate on coast Rd	Ringneck Parrot	Bird	2	Native

Name/ Company	Date	Location	Species	Type	#	Threatened/ Feral
Brian Mills - C. Harvey & Co	20/05/2015	Access Road - Ch47	Red Kangaroo	mammal	2	Native
Brian Mills - C. Harvey & Co	21/05/2015	40Km Peg	Grey Kangaroo	mammal	1	Native
Brian Mills - C. Harvey & Co	9/06/2015	Access Road - Ch18	Camel	mammal	8	Feral
Brian Mills - C. Harvey & Co	12/06/2015	Access Road - Ch26	Wedge Tailed Eagle	Bird	2	Native
C. Harvey & Co	25/06/2015	Airport Road	Camel	mammal	2	Feral
C. Harvey & Co	27/06/2015	Village Road	Dingo	mammal	1	Native
Colin - C. Harvey & Co	20/08/2015	Access Road - Ch25	Dingo	mammal	1	Native
Colin - C. Harvey & Co	20/08/2015	Access Road - Ch22	Dingo	mammal	2	Native
Colin - C. Harvey & Co	20/08/2015	Access Road - Ch53	Echidna	mammal	1	Native
Colin - C. Harvey & Co	21/08/2015	Access Road - Ch22	Butcher Bird	Bird	1	Native
Colin - C. Harvey & Co	23/08/2015	Access Road - Ch19	Rainbow Bee Eater	Bird	1	Native
Colin - C. Harvey & Co	24/08/2015	Access Road - Ch13-14	Camel	mammal	1	Feral
Colin - C. Harvey & Co	24/08/2015	6Km from boom Gates	Dingo	mammal	1	Native
Colin - C. Harvey & Co	26/08/2015	Access Road - Ch37-38	Black faced Cuckoo Shrike	Bird	1	Native
Brian Mills - C. Harvey & Co	23/09/2015	Access Road - Ch47	Snake	Reptile	1	Native
Brian Mills - C. Harvey & Co	24/09/2015	Access Road - Ch20	Camel	mammal	5	Feral
Melissa Bolton - Environment	23/10/2015	Village near dry mess	Blind Snake (Thphlopidae)	Reptile	1	Native
Kay Serainidis - Macmahon	16/11/2015	Village road	Black faced Cuckoo Shrike	Bird	1	Native
Kay Serainidis - Macmahon	16/11/2015	Havana 02 Pit	Little Eagle	Bird	1	Native
Bradley Desmond - AGAA	10/12/2015	Intersection of Access Rd & Coast Rd	Black faced Cuckoo Shrike	Bird	1	Native
Sam Millgate	No Date	Process water supply borefield	Western Brown Snake	Reptile	1	Native

During the 2014 reporting period a review of the TGM Threatened species and communities management strategy (TSCMS) was undertaken and the strategy was amended. The strategy has now been updated to reflect DPaWs comments and the final updated version of the amended TSCMS has been uploaded to the TGM website. An audit of the TSCMS was undertaken on the 15th of December 2015. A summary of the audit findings are presented in Appendix 5.

Priority flora species identified during flora and vegetation surveys at Tropicana, have been referenced and incorporated into the GIS database. Prior to any clearing being undertaken outside the Active Mining Area (AMA), an Environmental and Heritage Inspection Notification (EIN) is undertaken to determine whether the proposed disturbance will impact on any Priority flora or conservation significant habitats and if so, whether disturbance can be mitigated. Typically the EIN process incorporates an initial desktop survey to determine known environmental values and avoidance areas within the proposed disturbance area. Following the desktop assessment, a field inspection is undertaken utilising a Global Positioning System (GPS) to identify the following:

- vegetation type;
- soil type;
- heritage considerations;
- environmental considerations; and
- safety considerations.

During the 2015 reporting period a total of five EINs were completed, the following environmental and heritage values were identified and entered in the Tropicana GIS database:

- *Olearia arida* (P4) was identified during the Long Island EIN;
- Potential artefact scatter was identified during the PWSB Additional Monitoring Bore EIN;
- *Dampiera eriantha* (P1), *Olearia arida* (P4) and *Dicrastylis cundeeleensis* (P4) was identified during the Seismic Survey Phase 1 EIN; and
- *Olearia arida* (P4) and *Acacia Eremophila* Sub sp. Numerous nerved variant (P3) was identified during the Seismic Survey Phase 2 EIN.

A review of the Tropicana Gold Project Environmental Monitoring Strategy was undertaken during the reporting period. A number of monitoring methods are being reassessed, with input being sought from technical experts, to improve the outcomes of the monitoring strategy. Once the Environmental Monitoring Strategy has been updated, a copy will be provided to the relevant agencies.

Trench inspections for trapped fauna were undertaken for minor pipeline installation projects conducted within the mining area, as part of dewatering infrastructure installation, and within the Kamikaze borefield, to connect additional bores to existing pipeline infrastructure. No fauna were observed or required relocation from within the trenches. A summary of the fauna trench inspection report is provided in Appendix 7.

During the reporting period, a consolidated mining lease was granted M39/1096 and consolidated mining proposal was approved for TGM.

5 Endorsement

This Report has been endorsed by:

Mr Duncan Gibbs

General Manager

Tropicana Gold Mine

AngloGold Ashanti Australia

I have reviewed this document and accept that the information provided is an accurate account of the activities undertaken during the current reporting period (24th September 2014 to 23rd September 2015)

Date: 24th December, 2015

Duncan Gibbs

General Manager

Tropicana Gold Mine

AngloGold Ashanti Australia

FIGURES

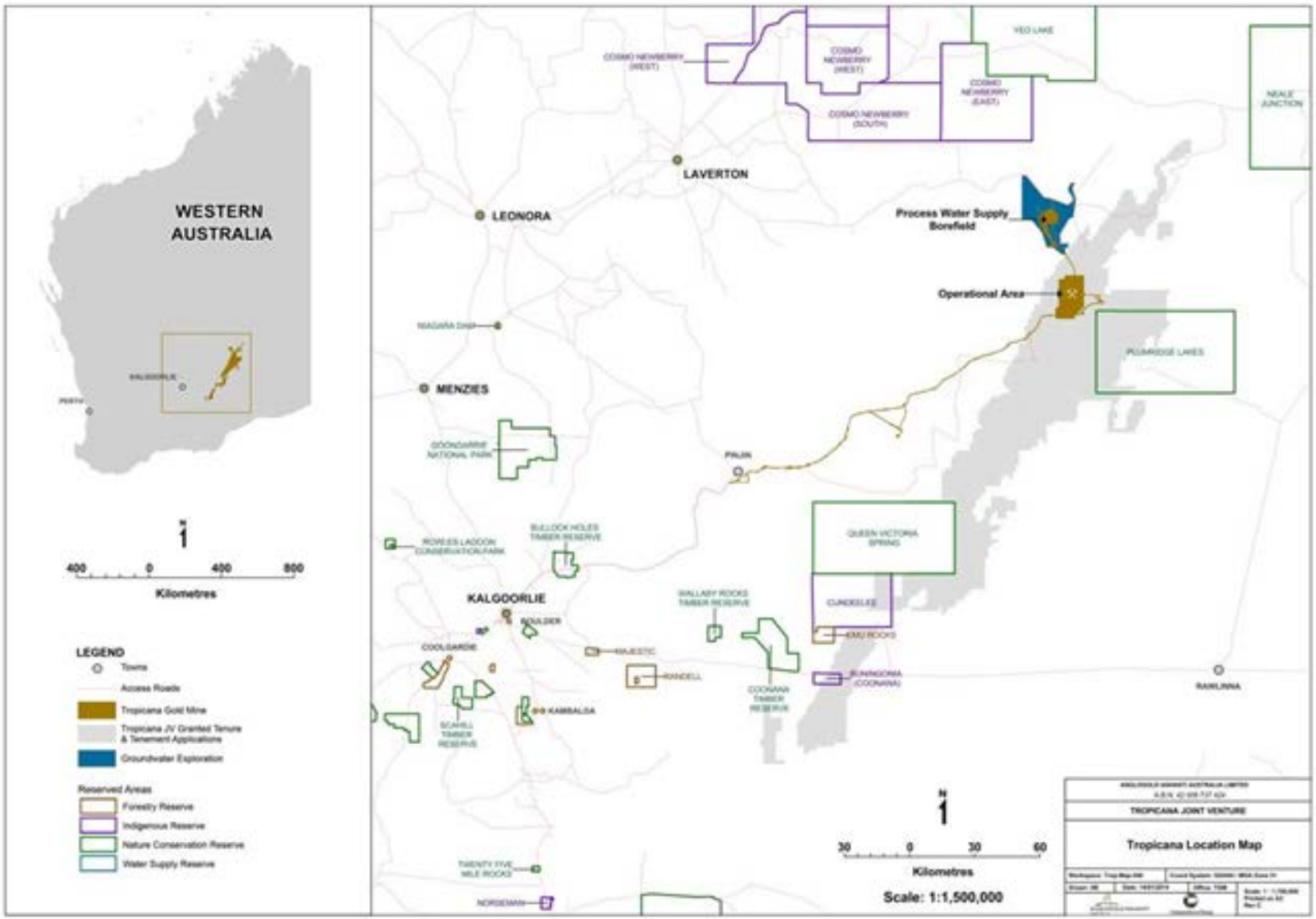

Figure 1: General Location of the Tropicana Gold Mine

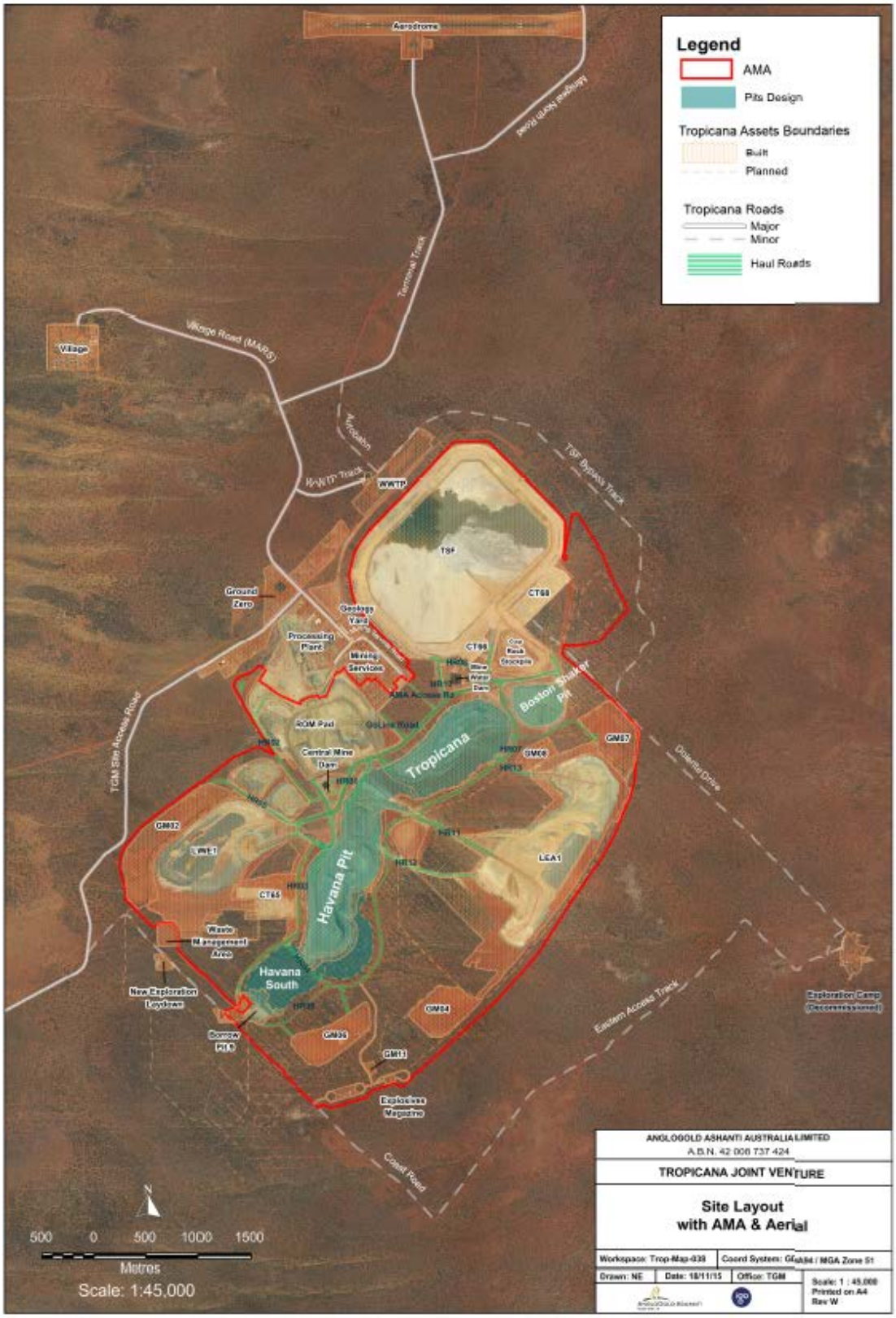

Figure 2: Operational Area infrastructure layout (aerial dated September 2015)

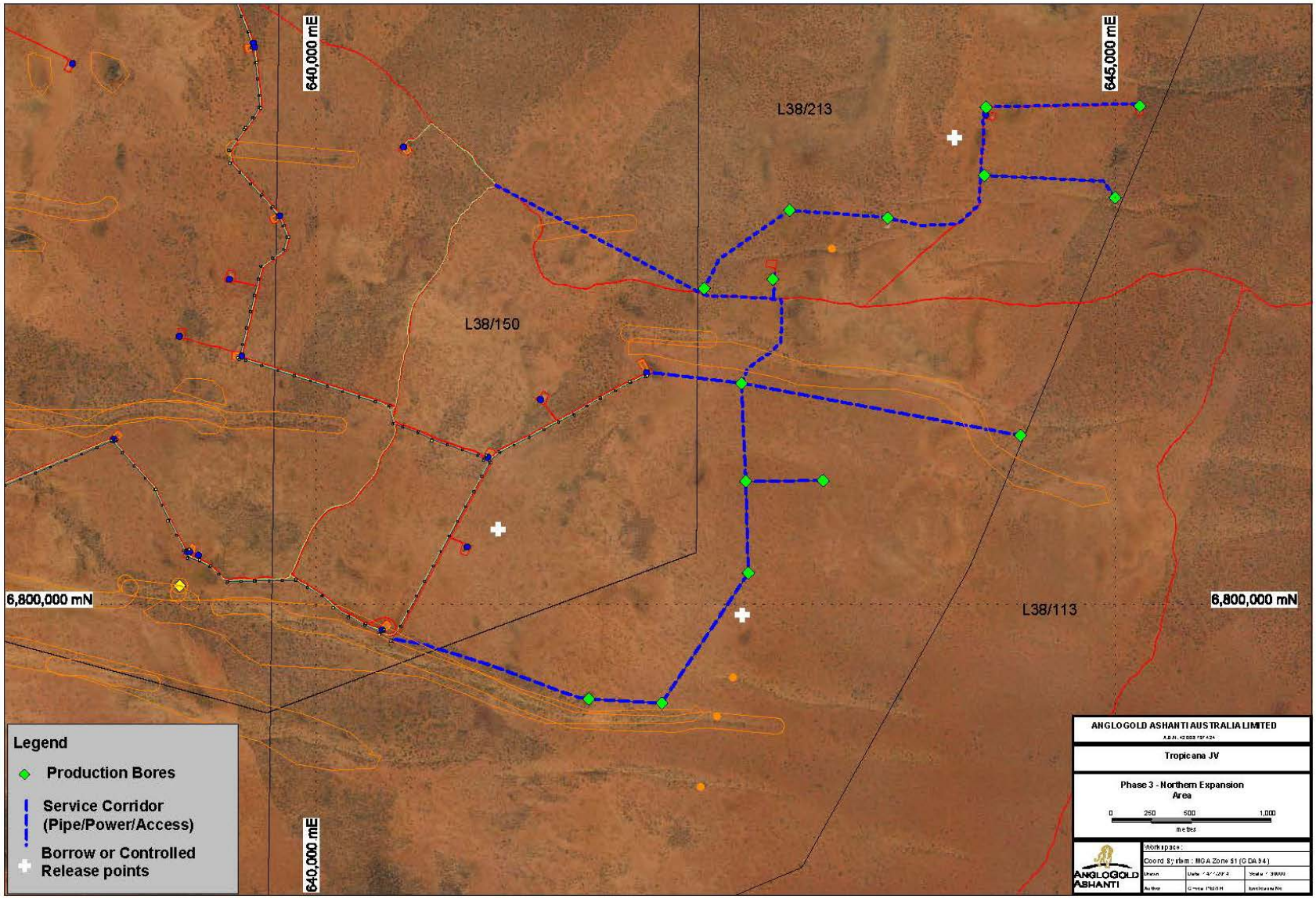

Figure 3: Process Water Supply Borefield Northern Expansion

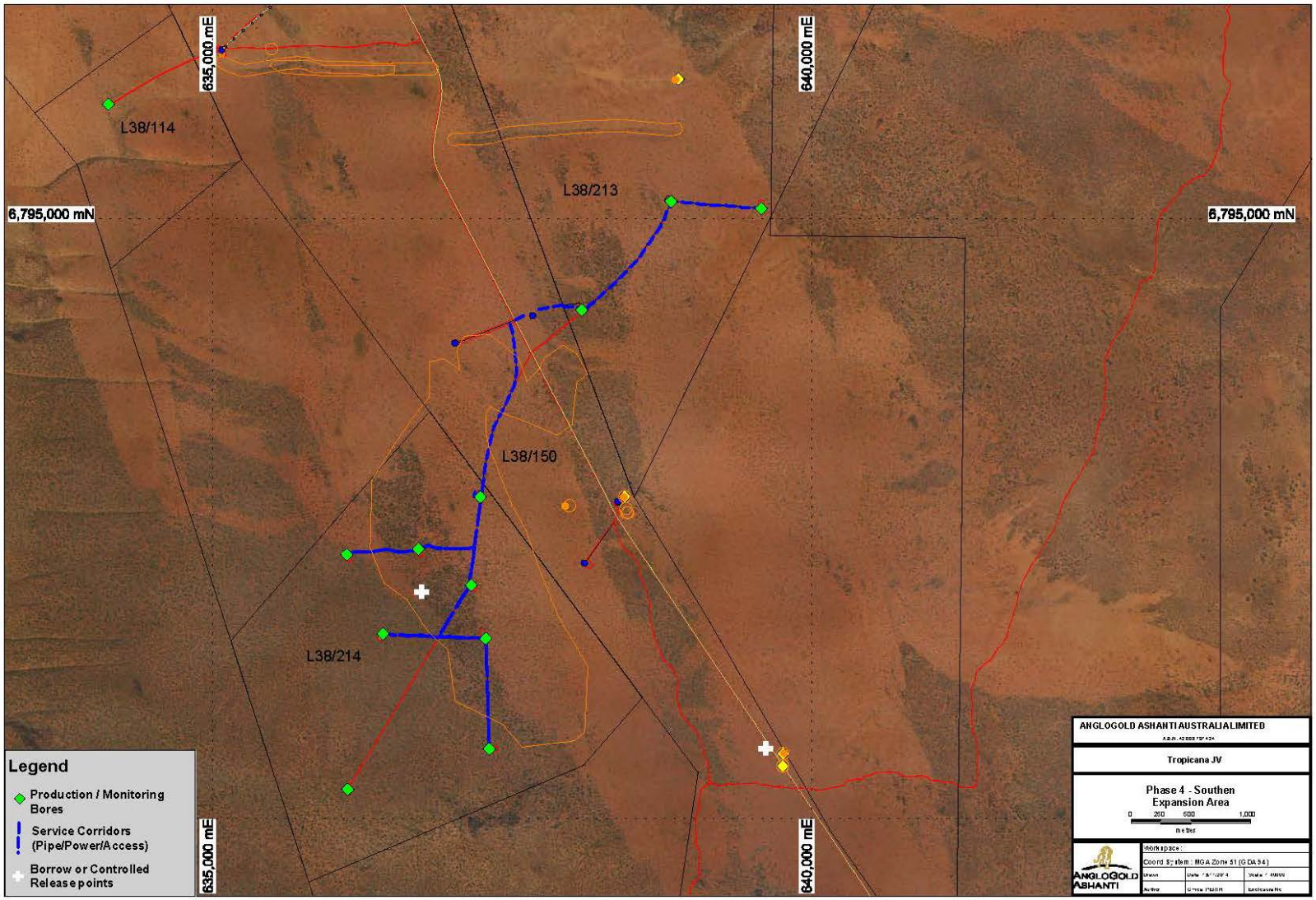

Figure 4: Process Water Supply Borefield Southern Expansion

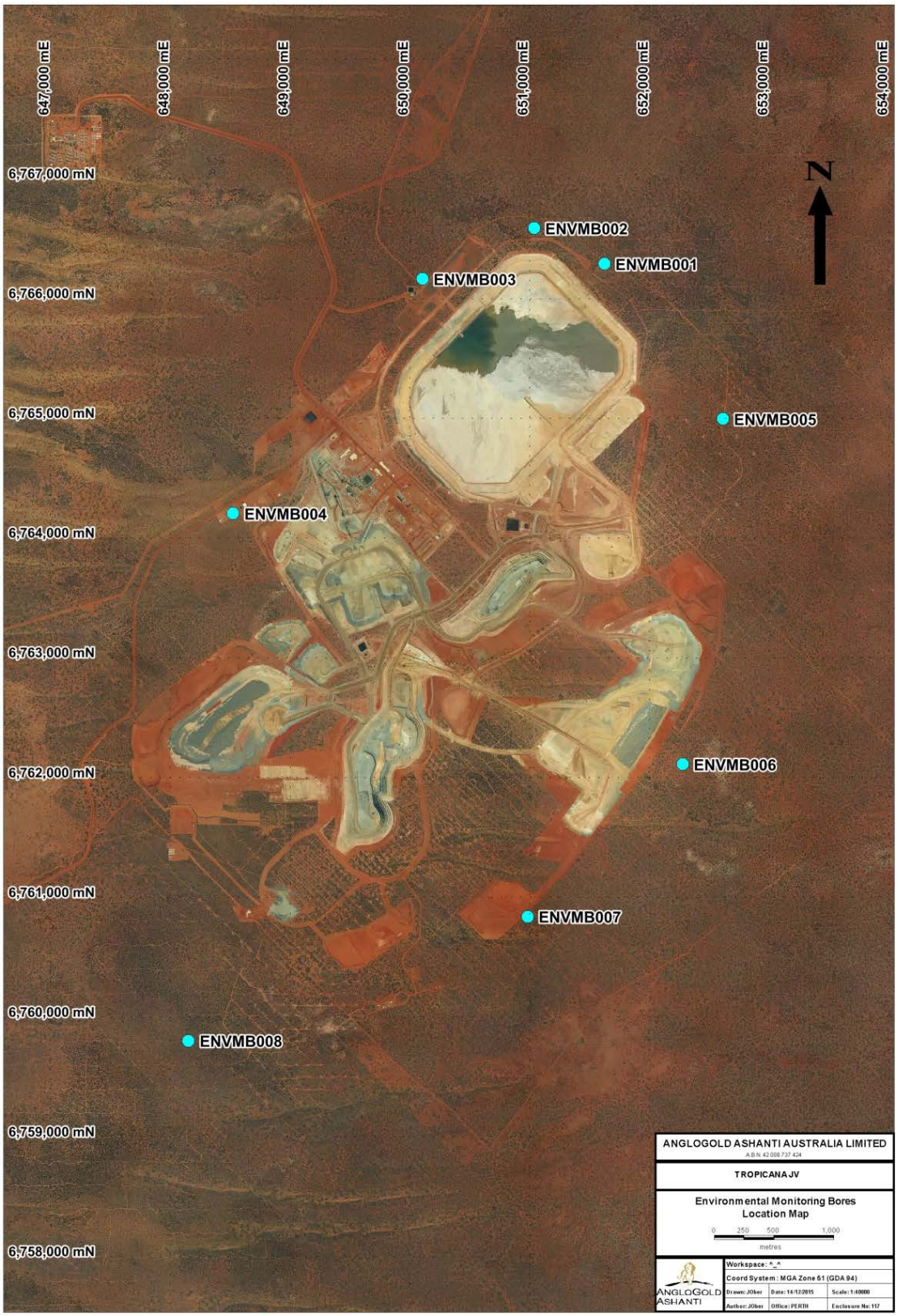

Figure 5: Ministerial Groundwater Monitoring Bore Locations

Figure 6: Surface Water Monitoring Locations

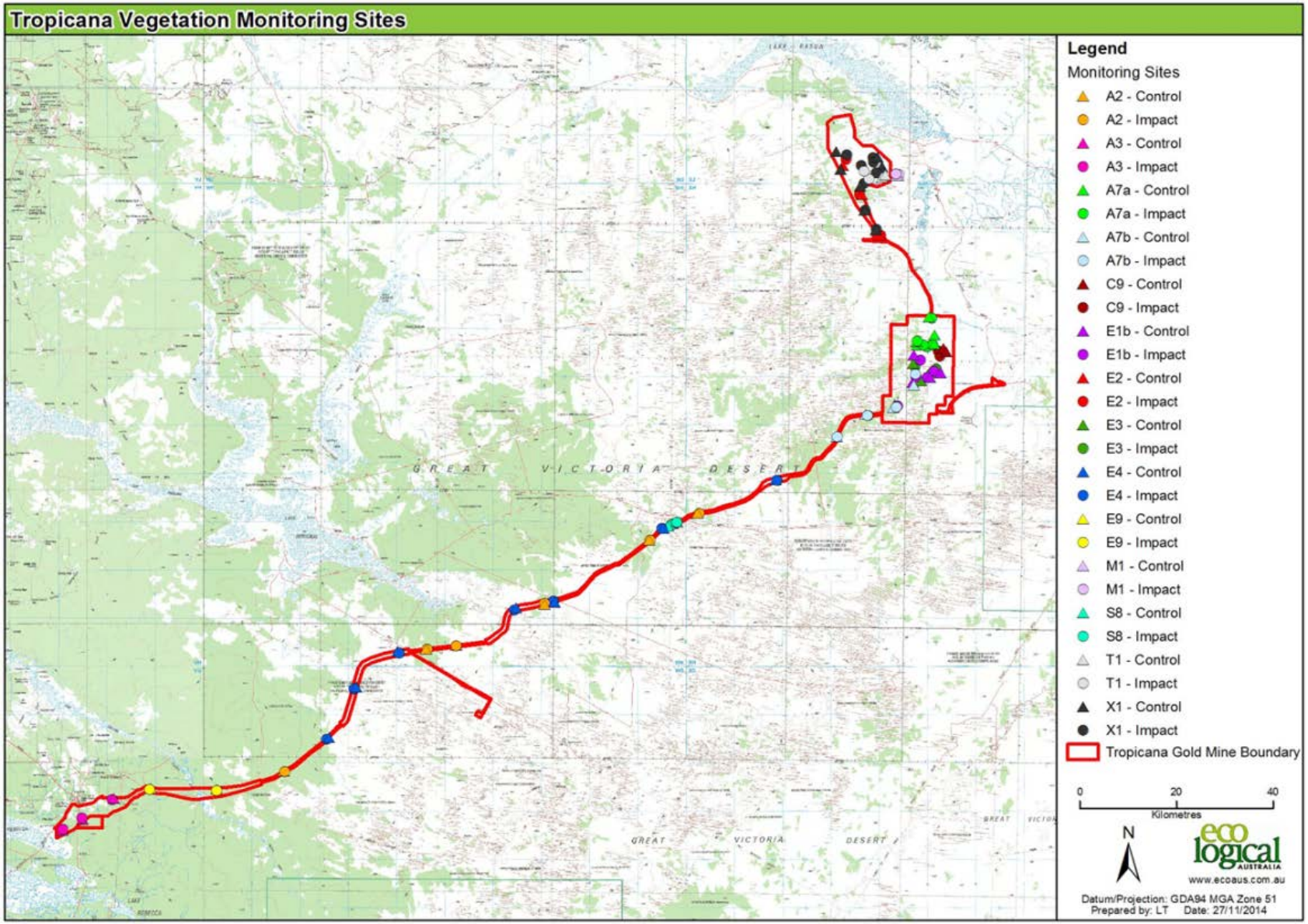

Figure 7: vegetation condition monitoring quadrat locations (2015)

SITE PHOTOGRAPHS

Plate 1: TGM Operational Area (October 2014 aerial) – Looking north

Plate 2: processing plant and power station (September 2013)

Plate 3: TGM seedlings grown at the Kalgoorlie Urban Landcare Group for rehabilitation activities

Plate 4: Photographic monitoring of active Mallee fowl mound.

Plate 5: Photographic monitoring of active Mallee fowl mound

Plate 6: Photographic monitoring of TSF artificial water sources [TSF ART 2] – Dingo's drinking

Plate 7: Photographic monitoring of TSF artificial water sources [TSF ART 3] – Wedge-Tailed Eagle

Plate 8: Photographic monitoring of TSF artificial water sources [TSF ART 3] – Western Grey Kangaroo

Plate 9: Photographic monitoring of TSF artificial water sources [TSF ART 4] – Dingo utilising pond

Plate 10: Photographic monitoring of TSF artificial water sources [TSF ART 4] – Wedge Tailed Eagle

Plate 11: Photographic monitoring of TSF artificial water sources [TSF ART 5] – Pink and Grey Galahs

Plate 12: Photographic monitoring of TSF artificial water sources [TSF ART 5] – Bronzewing Pigeons

Plate 13: Photographic monitoring of TSF artificial water sources [TSF ART 6B] – Parrots utilising pond.

Plate 14: Photographic monitoring of TSF artificial water sources [TSF ART 7B] – Red Kangaroo

Plate 15: Photographic monitoring of TSF artificial water sources [TSF ART 7B] – Emu utilising pond.

APPENDICES

Appendix 1 – Tropicana Gold Project Ministerial Statement No. 839 Audit Table

GOVERNMENT OF WESTERN AUSTRALIA

Office of the Environmental Protection Authority

AUDIT TABLE

Proposal Implementation Monitoring Section

PROJECT: Tropicana Gold Project, Shire of Menzies, Shire of Laverton and The City of Kalgoorlie-Boulder

Note:

- Phases that apply in this table = **Pre-Construction, Construction, Operation, Decommissioning, Overall (several phases)**
- This audit table is a summary and timetable of conditions and commitments applying to this project. Refer to the Minister's Statement for full detail/precise wording of individual elements.
- Code prefixes: M = Minister's condition; P = Proponent's commitment; A = Audit specification; N = Procedure.
- Any elements with status = "Audited by proponent only" are legally binding but are not required to be addressed specifically in compliance reports, if complied with.
- Acronyms list:- Minister for the Environment - Min for Env; Chief Executive Officer – CEO of the OEPA; Department of Environment – DoE (now DEC – Dept of Environment and Conservation); Evaluation Division - Part IV; Pollution Prevention Division - Part V; Waste Management Division - WMD; Department of Conservation and Land Management - CALM; Department of Minerals and Energy - DME; Environmental Protection Authority - EPA; Health Department of WA - HDWA; Water and Rivers Commission - WRC; Bush Fires Board - BFB.

Audit Code	Subject	Action	How	Evidence	Satisfy	Advice	Phase	When	Status 2015	Comment
839:M1.1	**Proposal Implementation**	The proponent shall implement the proposal as assessed by the Environmental Protection Authority and described in Schedule 1 of this statement subject to the condition and procedures of this statement.	As per Schedule 1, Statement 839	Compliance Report	Min for Env		Overall	Ongoing	Compliant	Activities undertaken during the reporting period were compliant with Schedule 1 of the Ministerial Statement. This CAR demonstrates that compliance.
839:M2.1	**Proponent Nomination and Contact Details**	The proponent for the time being nominated by the Minister for Environment under sections 38(6) or 38(7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal.	Notify in writing a letter that provides details of the name and address of the new proponent	Letter applying for a transfer of proponent and a copy of the Statement endorsed by the proposed replacement proponent	Min for Env		Overall	On going	Not required at this stage	The nominated proponents for the Project did not change during the reporting period.
839:M2.2	**Proponent Nomination and Contact Details**	The proponent shall notify the Chief Executive Officer of the Office of the Environmental Protection Authority of any change of the name and address of the proponent for the serving of notices or other correspondence within 30 days of such change	Notify in writing a letter that provides details of the name and address of the new proponent		CEO		Overall	Within 30 days of such change	Not required at this stage	There was no change to the contact name and or address of the nominated Proponent during the reporting period
839:M3.1	**Time Limit of Authorisation**	The authorisation to implement the proposal provided for in this statement shall lapse and be void five years after the date of this statement if the proposal to which this statement relates is not substantially commenced	Notify in Writing	Letter of notification	CEO		Overall	Before the 23 September 2015	Compliant	Since approval in 2010, the TGM project has progressed through construction and commissioning stages. Mining commenced in July 2012 and Gold production commenced in September 2013.
839:M3.2	**Time Limit of Authorisation**	The proponent shall provide the Chief Executive Officer of the Office of the Environmental Protection Authority with written evidence which demonstrates that the proposal has substantially commenced on or before the expiration of five years from the date of this statement	Notify in Writing	Letter of notification.	CEO		Overall	Before the 23 September 2015	Compliant	Written notification was submitted to the Office of the EPA 12th March 2011 advising of the proposed commencement of works
839:M4.1	**Compliance Reporting**	The proponent shall prepare and maintain a compliance assessment plan to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority	Correspondence with the OEPA Preparation of a Compliance Assessment Plan and an audit table in compliance with the requirements of the OEPA.	Approved Compliance Assessment Plan (CAP). A completed and approved Audit Table (this document). Compliance Report	CEO		Overall	Ongoing	Compliant	Compliance Assessment Plan was prepared and submitted on 13 Dec 2010. No updates have been made during the reporting period. Correspondence from General Manager OEPA on 14 February 2011 indicates OEPA is satisfied that the CAP addresses Condition M4.1
839:M4.2	**Compliance Reporting**	The proponent shall submit to the Chief Executive Officer of the Office of the Environmental Protection Authority, the compliance assessment plan required by condition 4-1 at least 6 months prior to the first compliance report required by condition 4-6, or prior to ground disturbing activity, whichever is sooner. The compliance assessment plan shall indicate: 1. the frequency of compliance reporting; 2. the approach and timing of compliance assessments; 3. the retention of compliance assessments; 4. the method of reporting of potential non-compliances and corrective actions taken; 5. the table of contents of compliance reports; and 6. public availability of compliance reports.	The compliance assessment plan shall indicate: 1. the frequency of compliance reporting; 2. the approach and timing of compliance assessments; 3. the retention of compliance assessments; 4. reporting of potential non-compliances and corrective actions taken;	Approved Compliance Assessment Plan Correspondence with OEPA	CEO		Pre-construction	By 24 June 2011 or prior to ground disturbing activities, whichever is sooner.	Compliant	Compliance Assessment Plan was prepared and submitted on 13 Dec 2010. No updates have been made during the reporting period. Correspondence from General Manager OEPA on 14 February 2011 indicates OEPA is satisfied that the CAP addresses Condition M4.1

AUDIT TABLE

Proposal Implementation Monitoring Section
PROJECT: Tropicana Gold Project, Shire of Menzies, Shire of Laverton and The City of Kalgoorlie-Boulder

Audit Code	Subject	Action	How	Evidence	Satisfy	Advice	Phase	When	Status 2015	Comment
			5. the table of contents of compliance reports; and 6. public availability of compliance reports.							
839:M4.3	**Compliance Reporting**	The proponent shall assess compliance with conditions in accordance with the compliance assessment plan required by condition 4-1.	As specified in CAP	Overview provided in Compliance Report	Min for Env		Overall	Compliance Report – Annually by 24 December	Compliant	Compliance assessment report prepared as per CAP and submitted prior to 24th December 2015 as required.
839:M4.4	**Compliance Reporting**	The proponent shall retain reports of all compliance assessments described in the compliance assessment plan required by condition 4-1 and shall make those reports available when requested by the Chief Executive Officer of the Office of the Environmental Protection Authority	Records and reports will be maintained in accordance with the Proponent's document management system requirements so that they can be retrieved if requested.	Availability at the request of the CEO	CEO		Overall	When requested by the CEO	Compliant	The CAP was submitted to the OEPA on 13th December 2010 and was approved by the OEPA on 14th February 2011. A CAR has been prepared annually since 2011. The 2015 CAR has been submitted prior to 24th December as required.
839:M4.5	**Compliance Reporting**	The proponent shall advise the Chief Executive Officer of the Office of the Environmental Protection Authority of any potential non-compliance within seven days of that non-compliance being known	Notify in writing	Correspondence to CEO of OEPA	CEO		Overall	Within 7 days of non-compliance being known	Compliant	No non-compliances, which were required to be reported to the OEPA in accordance with Condition 4.5 were observed during the reporting period.
839:M4.6	**Compliance Reporting**	The proponent shall submit to the Chief Executive Officer of the Office of the Environmental Protection Authority the first compliance assessment report fifteen months from the date of issue of this Statement addressing the twelve month period from the date of issue of this Statement and then annually from the date of submission of the first compliance assessment report. The compliance assessment report shall: 1. be endorsed by the proponent's Chief Executive Officer or a person delegated to sign on the Chief Executive Officer's behalf; 2. include a statement as to whether the proponent has complied with the conditions; 3. identify all potential non-compliances and describe corrective and preventative actions taken; 4. be made publicly available in accordance with the approved compliance assessment plan; and 5. indicate any proposed changes to the compliance assessment plan required by condition 4-1.	In accordance with CAP	1. Endorsement in Compliance Report. 2. Compliance Report. 3. Uploaded on to proponent's website and copies sent to DEC Library and PIMB (OEPA).	CEO		Overall	The First CAR submitted due by 24 December 2011. Then annually by 24 December	Compliant	The 2015 CAR will be the fifth annual compliance assessment report prepared in accordance with the CAP and has been submitted prior to 24th December as required.
839:M5.1	**Flora and Vegetation**	The proponent shall ensure that there is no loss of plants of Declared Rare Flora species due to construction or operational activities unless otherwise approved.	Implementation and internal audit of DRF management strategies in Section 13 of the Threatened Species and Community Management Strategy (TS&CMS). Implementation and internal audit of Environmental Monitoring Strategy Application for Licence to Take DRF (Regulation 17) where applicable	Species location records, design/location records and any incident reports/logs in monitoring report and summary in Compliance Report Approvals for license to take DRF	Min for Env		Overall	Ongoing	Compliant	The Threatened species and communities management strategy was updated during 2014. A number of species were removed to reflect changes in DRF and Priority Flora listings. The Department of Parks and Wildlife approved this version on the 30th December 2014. Pre clearing inspections are routinely conducted by the sites Environmental officers prior to any clearing activities and internal ground disturbance permits are issued for all ground disturbing activities. Records of significant flora and fauna identified in the field are uploaded into the sites GIS and are considered as "no go" areas. Data obtained is shared with DPaW annually. An internal audit of the TGM monitoring strategy has commenced. Should amendments to the monitoring strategy be required, the strategy will be updated, a copy provided to the relevant agencies and uploaded to the TGM

AUDIT TABLE

Proposal Implementation Monitoring Section
PROJECT: Tropicana Gold Project, Shire of Menzies, Shire of Laverton and The City of Kalgoorlie-Boulder

Audit Code	Subject	Action	How	Evidence	Satisfy	Advice	Phase	When	Status 2015	Comment
										website. Scientific licenses have been obtained by key personnel to collect specimens for verification purposes as and when required.
839:M5.2	**Flora and Vegetation**	The proponent shall undertake monitoring of the condition and abundance of vegetation and flora at reference and potential impact sites in accordance with the "Tropicana Gold Project Environmental Monitoring Strategy, Version: 1.0, Author: B Bastow, Issue Date: 18 February 2010" or subsequent revisions approved by the Chief Executive Officer of the Office of the Environmental Protection Authority. This monitoring is to be carried out to the requirements of the Chief Executive Officer of the Office of the Environmental Protection Authority on advice of the Department of Environment and Conservation	Implementation and internal audit of Environmental Monitoring Strategy Correspondence with OEPA (revisions) and DEC	Monitoring report included in Project Annual Environmental Report (AER) and summary in Compliance Report. Monitoring Records Maps and Photos Correspondence with OEPA (revisions) and DEC	CEO	DEC	Overall	Ongoing	Compliant	The annual vegetation monitoring project was conducted during October 2015. The report will be submitted with the annual environmental report due for submission at the end of January 2016. The analysis of data obtained during the monitoring project is currently being finalised. A brief overview of the draft report's findings is however provided in the 2015 CAR as required.
839:M5.3	**Flora and Vegetation**	Should the potential impact sites show a 25 per cent (or greater) decline in cover or productivity as compared to the reference sites, the proponent shall provide a report to the Chief Executive Officer of the Office of the Environmental Protection Authority within 21 days of the decline being identified which 1). describes the decline; 2). provides information which allows determination of the likely root cause of the decline; and 3). if likely to be caused by activities undertaken in implementing the proposal, states the actions and associated timelines proposed to remediate the decline.	Internal audit of monitoring records and analysis of monitoring data Notify in writing	Monitoring Records Report outlining decline, potential causes and corrective actions taken Report to CEO of OEPA	CEO		Overall	Within 21 days of the decline being identified	Compliant	The annual vegetation monitoring was conducted during October 2015. No deterioration in vegetation condition associated with the project activities was noted during the field assessment. Computer analysis of all data collected is yet to be finalised. A number of locations were identified as being affected by fire and changes in condition due to annual rainfall fluctuation were noted. Additional monitoring sites were installed to accommodate the borefield expansion infrastructure. A brief overview of the draft report's findings is provided in the 2015 CAR.
839:M5.4	**Flora and Vegetation**	The proponent shall, on approval of the Chief Executive Officer of the Office of the Environmental Protection Authority, implement the actions identified in 5-3 (3) and continue to implement such actions until the Chief Executive Officer of the Office of the Environmental Protection Authority determines that the remedial actions may cease.	Implement the actions identified in 5-3 (3)	Correspondence with the OEPA	CEO		Overall	On approval of the CEO	Not required at this stage	No decline in vegetation condition associated with the TGM operational activities has been detected to date and no remedial actions have been required.
839:M5.5	**Flora and Vegetation**	The proponent shall make the Environmental Monitoring Strategy referred to in 5-2 publically available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority	1. In accordance with Proposal Implementation Monitoring Section – Fact Sheet 1 – Draft - Making Documents Publicly Available, unless otherwise instructed by the CEO; 2. Adherence to a condition in a Statement requiring public availability of documents must occur within 14 days of submission of the documents to the CEO; and 3. 14 days from the date of making documents publicly available, proponents	Document available on website (and letter to CEO to confirm) Copy of Document to DEC Library and PIMB (OEPA)	CEO		Overall	Ongoing and within 14 days of submission and approval of any revisions	Compliant	The Environmental Monitoring strategy is available on the Tropicana JV website (www.tropicanajv.com.au/sustainability/document library) An internal audit of the TGM monitoring strategy has commenced. Should amendments to the monitoring strategy be required, the strategy will be updated, a copy provided to the relevant agencies and uploaded to the TGM website

AUDIT TABLE

Proposal Implementation Monitoring Section
PROJECT: Tropicana Gold Project, Shire of Menzies, Shire of Laverton and The City of Kalgoorlie-Boulder

Audit Code	Subject	Action	How	Evidence	Satisfy	Advice	Phase	When	Status 2015	Comment
			shall provide evidence to the CEO to confirm that advertising or lodgement on website has been completed.							
839:M6.1	**Threatened Species**	The proponent shall implement the "Tropicana Gold Project Threatened Species and Communities Management Strategy, Version 2.0, Author: B Bastow, Issue Date: July 2009", or subsequent revisions approved by the Chief Executive Officer of the Office of the Environmental Protection Authority. The objective of this strategy is to minimise adverse impacts to conservation significant species and communities.	Implementation and internal audit of DRF management strategies in Section 13 of the Threatened Species and Community Management Strategy (TS&CMS). Internal Audit Correspondence with OEPA (revisions)	Monitoring report included in Project Annual Environmental Report (AER) and summary in Compliance Report. Electronic Species location records Design/location records Site inductions Maps and Photos	CEO		Overall	Ongoing	Compliant	The Threatened species and communities management strategy was updated during 2014. A number of species were removed to reflect changes in DRF and Priority Flora listings. The Department of Parks and Wildlife approved this version on the 30th December 2014. Pre-clearing inspections are undertaken via internal Environmental inspection notifications (EIN) and Ground Disturbance Permit (GDP) processes. No go and minimal impact areas are identified in the sites GIS and are avoided when planning future activities. Updating knowledge of threatened species in the area through additional surveys is ongoing as and when required. An example includes the recent borefields expansion flora and fauna surveys. Annual reviews are undertaken to capture any de-listings and/or new listings of species under the EPBC Act. For example, the recent delisting of *Notoryctes typhlops* (itjaritjari, southern marsupial mole)
839:M6.2	**Threatened Species**	The proponent shall review and revise the Tropicana Gold Project Threatened Species and Communities Management Strategy referred to in 6-1, in consultation with the Department of Environment and Conservation, every three years to ensure that the mitigation and management techniques remain valid and incorporate any relevant new research.	Formal review by specialist advisers and DEC	Correspondence with DEC Revised Strategy Research records	Min for Env	DEC	Overall	Review and revise every 3 years with the first review due **24 September 2013.**	Compliant	The Threatened species and communities management strategy was updated during 2014. A number of species were removed to reflect changes in DRF and Priority Flora listings. The Department of Parks and Wildlife approved this version on the 30th December 2014. . An internal compliance audit against the updated strategy's requirements has been conducted and a copy of the audit findings is provided in the 2015 CAR.

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Proposal Implementation Monitoring Section
PROJECT: Tropicana Gold Project, Shire of Menzies, Shire of Laverton and The City of Kalgoorlie-Boulder

Audit Code	Subject	Action	How	Evidence	Satisfy	Advice	Phase	When	Status 2015	Comment
839:M6.3	**Threatened Species**	The proponent shall make the Tropicana Gold Project Threatened Species and Communities Management Strategy referred to in 6-1 publically available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority.	1. In accordance with Proposal Implementation Monitoring Section – Fact Sheet 1 – Draft - Making Documents Publicly Available, unless otherwise instructed by the CEO; 2. Adherence to a condition in a Statement requiring public availability of documents must occur within 14 days of submission of the documents to the CEO; and 3. 14 days from the date of making documents publicly available, proponents shall provide evidence to the CEO to confirm that advertising or lodgement on website has been completed.	Document available on website (and letter to CEO to confirm) Copy of Document to DEC Library and PIMB (OEPA)	CEO		Overall	Ongoing and within 14 days of submission and approval of revision	Compliant	The Threatened Species and Communities Management Strategy is available on the Tropicana JV website (www.tropicanajv.com.au/sustainability) and released with the Tropicana Gold Project EIA document. The Threatened species and communities management strategy was updated during 2014. A number of species were removed to reflect changes in DRF and Priority Flora listings. The Department of Parks and Wildlife approved this version on the 30th December 2014.
839:M7.1	**Trapped Fauna**	The proponent shall ensure that open trenches associated with construction of the water pipeline and the communications link are cleared of trapped fauna by fauna-rescue personnel at least twice daily. Details of all fauna recovered shall be recorded. The first daily clearing shall take place no later than three hours after sunrise and shall be repeated between the hours of 3:00 pm and 6:00 pm. The open trenches shall also be cleared, and fauna details recorded, by fauna-rescue personnel no more than one hour prior to backfilling of trenches. Note: “fauna-rescue personnel” means an employee of the proponent whose responsibility it is to walk the open trench to recover and record fauna found within the trench.	Internal audit of trench inspection records and procedures	Trench Inspection Fauna Report Trench inspection records Backfilling records Fauna removal and relocation records Fauna injury/mortality records Correspondence with the DEC	Min for Env		Construction	Duration of pipeline construction Trench inspection fauna report will be submitted no later than 21 day from the cessation of construction	Compliant	During the reporting period, only internal pipelines have been installed within the Process Water Supply Borefield as part of the borefield expansion project. A summary of the trench inspections undertaken is provided in the 2015 CAR
839:M7.2	**Trapped Fauna**	The fauna-rescue personnel shall be trained in the following, through a program that meets the requirements of the Chief Executive Officer of the Office of the Environmental Protection Authority: 1. fauna identification, capture and handling (including venomous snakes); 2. identification of tracks, scats, burrows and nests of conservation-significant species; 3. fauna vouchering (of deceased animals); 4. assessing injured fauna for suitability for release, rehabilitation or euthanasia; 5. familiarity with the ecology of the species which may be encountered in order to be able to appropriately translocate fauna encountered; and 6. performing euthanasia.	Training program approved by CEO of OEPA Internal audit of training records	Training Program records Correspondence with the OEPA	CEO		Construction	Program approved prior to the commencement of pipeline construction	Compliant	A training program was developed in conjunction with Polytech West and was submitted to the OEPA on 6th February 2012. The training program has been rolled out to 27 people to date involved in the trench inspections along the Pinjin corridor, borefield pipeline and pipeline trenches within the mining area. Snake handlers have been trained through dedicated snake handling training courses. Register of certified snake handlers kept on site. TGM has an arrangement with qualified wildlife carers based in Kalgoorlie and in Perth who rehabilitate fauna injured from site.
839:M7.3	**Trapped Fauna**	Open trench lengths shall not exceed a length capable of being inspected and cleared by the fauna-clearing	Internal audit of inspection records	Trench Inspection Fauna Report	Min for Env		Construction	During pipeline construction	Compliant	During the reporting period, only minor internal pipelines have been installed within the Process

AUDIT TABLE

Proposal Implementation Monitoring Section
PROJECT: Tropicana Gold Project, Shire of Menzies, Shire of Laverton and The City of Kalgoorlie-Boulder

Audit Code	Subject	Action	How	Evidence	Satisfy	Advice	Phase	When	Status 2015	Comment
		personnel within the required times as set out in condition 7-1.	Appropriate planning of pipeline construction	Trench inspection records						Water Supply Borefield. A trench inspection report for the pipeline installation is provided in the 2015 CAR
839:M7.4	**Trapped Fauna**	Ramps providing egress points and/or fauna refuges providing suitable shelter from the sun and predators for trapped fauna are to be placed in the trench at intervals not exceeding 50 meters.	Internal audit of inspection records and design drawings	Trench Inspection Fauna Report Trench inspection records Backfilling records Photographs	Min for Env		Construction	During pipeline construction	Compliant	The requirement to install fauna egress ramps at approximately 50m intervals along pipeline trenches has been included into the threatened species management strategy. Compliance is checked during the fauna trench inspections.
839:M7.5	**Trapped Fauna**	The proponent shall produce a report on fauna management within the water pipeline lateral easement and communication corridor at the completion of pipeline and communication link construction. The report shall include the following: 1. details of all fauna inspections; 2. the number of fauna cleared from trenches; 3. fauna mortalities; and 4. all actions taken. The report shall be provided to the Chief Executive Officer of the Office of the Environmental Protection Authority no later than 21 days after the completion of pipeline installation, and shall be made publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority	1. As per PIMB fact sheet 1 Making documents publicly available. Preparation of report as per criteria following finalisation of pipeline installation and submit to OEPA within 21 days. Report published in a manner approved by CEO of OEPA	Trench Inspection Fauna Report Document available on website (and letter to CEO to confirm) Copy of Document to DEC Library and PIMB (OEPA)	CEO		Overall	Trench inspection fauna report will be submitted no later than 21 days after the completion of pipeline installation	Compliant	Construction of the 50 km borefield pipeline was completed during the previous (2013) reporting period and a fauna inspection report was developed and submitted as required by Condition M7.1. As part of the borefield expansion, an additional 30km of pipeline was installed and an additional 21 production bores. During the pipelines installation, qualified personnel undertook daily inspections of open trenches (Appendix 7).
839:M8.1	**Groundwater and Surface Water Quality**	The proponent shall ensure that run-off and/or seepage from the tailings storage facility and waste material landforms does not impact the quality of surface water or groundwater within or adjacent to the proposal area to exceed the trigger values for a slightly to moderately disturbed ecosystem provided for in Table 3.4.2 of Chapter 3 of the Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, *Australian Water Quality Guidelines for Fresh and Marine Waters* and its updates, taking into consideration natural background water quality	Internal audit of water monitoring results against table 3.4.2 of Chapter 3 of *Australian Water Quality Guidelines for Fresh and Marine Waters (2000)* as updated	Monitoring Report included in Project AER and summary included as part of the Compliance Report	Min for Env		Overall	Ongoing	Compliant	Internal audit of water monitoring results against the Australia Guidelines has been conducted and findings are provided in the 2015 CAR. Groundwater monitoring bores around the TSF and waste landforms have been sampled throughout 2015. A summary of results is provided in Appendix 3.
839:M8.2	**Groundwater and Surface Water Quality**	The proponent shall monitor the quality of surface water and groundwater upstream and downstream of the tailings storage facility and waste material landforms to ensure that the requirements of condition 8-1 are met. This monitoring is to be carried out using methods consistent with Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, *Australian Guidelines for Water Quality Monitoring and Reporting* (and its updates) and to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority.	Implementation of Environmental Monitoring Strategy Internal audit of water monitoring methodology against *Australian Guidelines for Water Quality Monitoring and Reporting* (2000) and its updates	Monitoring report included in Project AER and Summary included in Compliance Report	CEO		Overall	Ongoing	Compliant	Groundwater monitoring bores around the TSF and waste land-forms have been sampled throughout 2015. Opportunistic surface water monitoring has been conducted following rainfall events A summary of results is provided in the 2015 CAR (Appendix 3 and Appendix 4). An internal audit of the monitoring methodology against the Australian Guidelines was undertaken as required and findings are provided in the 2015 CAR.
839:M8.3	**Groundwater and Surface Water Quality**	The proponent shall commence the water quality monitoring required by 8-2 before ground disturbing activities in order to collect baseline data	Implementation of Environmental Monitoring Strategy Internal audit of groundwater and surface water monitoring program	Monitoring report included in Project AER and Summary included in Compliance Report	CEO		Pre-construction	Before ground disturbing activities.	Compliant	Groundwater monitoring bores around the TSF and waste land-forms have been sampled throughout 2015. Opportunistic surface water monitoring has been conducted following rainfall events A summary of results is provided in the 2015 CAR (Appendix 3 and Appendix 4).
839:M8.4	**Groundwater and**	The proponent shall submit annually the results of	Written submission of	Correspondence	CEO		Overall	Compliance Report –	Compliant	A summary of results is provided in the 2015

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Proposal Implementation Monitoring Section
PROJECT: Tropicana Gold Project, Shire of Menzies, Shire of Laverton and The City of Kalgoorlie-Boulder

Audit Code	Subject	Action	How	Evidence	Satisfy	Advice	Phase	When	Status 2015	Comment
	Surface Water Quality	monitoring required by condition 8-2 to the Chief Executive Officer of the Office of the Environmental Protection Authority	results within the annual compliance reports	with OEPA Monitoring report included in Project AER and Summary included in Compliance Report				Annually by 24 December		CAR (Appendix 3 and Appendix 4). Results of the water quality monitoring activities are also provided to the Department of Mines & Petroleum (DMP) and Department of Environment Regulation (DER) through the two Annual Environmental Reports (AER's) in January and March, respectively, each year
839:M8.5	**Groundwater and Surface Water Quality**	In the event that monitoring required by condition 8-2 indicates that the requirements of condition 8-1 are not being met, the proponent shall: 1. report such findings to the Chief Executive Officer of the Office of the Environmental Protection Authority within 21 days of the decline in water quality being identified; 2. provide evidence which allows determination of the root cause of the decline in water quality; and 3. if determined to be a result of activities undertaken in implementing the proposal, state the actions and associated timelines proposed to be taken to remediate the water quality.	Preparation of report as per criteria and submit to OEPA within 21 days. Internal review of monitoring results against criteria outlined in condition 8.1	Report outlining the water quality change, potential causes and corrective actions taken	CEO		Overall	No later than 21 days of the decline in water quality being identified.	Compliant	Baseline data compiled from water bores located within the resource area and sampled since 2008 was compared with the baseline data obtained from the TSF and waste landform monitoring bores from installation to December 2014. The 2015 water quality monitoring data was analysed against this baseline data and the trigger values established during 2014.
839:M8.6	**Groundwater and Surface Water Quality**	The proponent shall, on approval of the Chief Executive Officer of the Office of the Environmental Protection Authority, implement the actions identified in 8-5 (3) and continue to implement such actions until the Chief Executive Officer of the Office of the Environmental Protection Authority determines that the remedial actions may cease.	Implement the actions identified in 8-5 (3)	Correspondence with OEPA	CEO		Overall	On approval of the CEO	Compliant	Baseline data compiled from water bores located within the resource area and sampled since 2008 was compared with the baseline data obtained from the TSF and waste landform monitoring bores from installation to December 2014. The 2015 water quality monitoring data was analysed against this baseline data and the trigger values established during 2014.
839:M8.7	**Groundwater and Surface Water Quality**	The proponent shall make the monitoring reports required by condition 8-2 publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority	1. In accordance with Proposal Implementation Monitoring Section – Fact Sheet 1 – Draft - Making Documents Publicly Available, unless otherwise instructed by the CEO; 2. Adherence to a condition in a Statement requiring public availability of documents must occur within 14 days of submission of the documents to the CEO; and 3. 14 days from the date of making documents publicly available, proponents shall provide evidence to the CEO to confirm that advertising or lodgement on website has been completed. In accordance with CAP	Document available on website (and letter to CEO to confirm) Copy of Document to DEC Library and PIMB (OEPA)	CEO		Overall	Within 14 days of submission	Compliant	Results from water monitoring conducted throughout the year will be included in the sites AER due for submission at the end of January 2016. The annual report is submitted to the DMP electronically via their online submission process. Once submitted this information is publically available via the TJV website.
839:M9.1	**Rehabilitation**	The proponent shall undertake progressive rehabilitation over the life of the proposal to achieve the following outcomes: 1. The waste material landforms and tailings storage facility shall be non-polluting and shall be constructed so that their stability, surface drainage, resistance to erosion and ability to support local native vegetation are similar to undisturbed natural analogue landforms as demonstrated by Ecosystem Function Analysis or other methodology acceptable to the	Implementation of Operational Management Strategy, Tailings Environmental Management Strategy and Conceptual Closure and Rehabilitation Management Strategy (and approved future	Rehabilitation Records Annual Mine Plan Map and photos of rehabilitation Rehabilitation	CEO	DEC	Overall	Ongoing	Compliant	A mine closure plan was prepared in accordance with DMP requirements and was submitted with the 2013 AER. TGM is in early stage of operations and final landforms are not yet available for rehabilitation to commence. A rehabilitation plan will be developed in due course. Rehabilitation trials commenced on available

AUDIT TABLE

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PROJECT: Tropicana Gold Project, Shire of Menzies, Shire of Laverton and The City of Kalgoorlie-Boulder

Audit Code	Subject	Action	How	Evidence	Satisfy	Advice	Phase	When	Status 2015	Comment
		Chief Executive Officer of the Office of the Environmental Protection Authority. 2. Waste material landforms, tailings storage facility and other areas disturbed through implementation of the proposal (excluding mine pits), shall be progressively rehabilitated with vegetation composed of native plant species of local provenance (defined as seed or plant material collected within the Great Victoria Desert Bioregions 1 and 2). 3. The percentage cover and species diversity of living self-sustaining native vegetation in all rehabilitation areas shall be comparable to that of undisturbed natural analogue sites as demonstrated by Ecosystem Function Analysis or other methodology acceptable to the Chief Executive Officer of the Office of the Environmental Protection Authority. 4. No new species of weeds (including both declared weeds and environmental weeds) shall establish in the area as a result of the implementation of the proposal. 5. The coverage of weeds (including both declared weeds and environmental weeds) within rehabilitated areas shall be no greater than the average of three reference sites on nearby land, with the reference sites to be chosen in consultation with the Department of Environment and Conservation. Note: The methodology for Ecosystem Function Analysis is set out in Tongway DJ and Hindley 2004 *Landscape Function Analysis – Procedures for Monitoring and Assessing Landscapes*, Commonwealth Scientific and Industrial Research Organisation Sustainable Ecosystems, Canberra.	revisions) Internal audit of rehabilitation and closure activities and records Correspondence with OEPA and DEC on Monitoring Strategy Analysis of monitoring data	Monitoring Records						areas of waste landforms during the reporting period. A number of research and investigative tasks were commenced during the reporting period including seed collection, seed storage, and updating the financial provisioning for closure (Appendix 2).
839:M9.2	**Rehabilitation**	Rehabilitation activities shall continue until such time as the requirements of condition 9-1 are met, and are demonstrated by inspections and reports to be met, for a minimum of five years following mine completion to the satisfaction of the Chief Executive Officer of the Office of the Environmental Protection Authority, on advice of the Department of Mines and Petroleum	Activities will continue until the M9.1 requirements are met for a minimum of 5 years Seek advice from DMP following mine completion.	Rehabilitation records Rehabilitation Monitoring Records Correspondence with OEPA and DMP	CEO	DMP	Overall	Ongoing until the requirements of M9-1 are met for a minimum of 5 years	Compliant	TGM is in early stage of operations and final landforms are not yet available for rehabilitation to commence. Rehabilitation activities will be conducted progressively as and when areas become available.
839:M10.1	**Final Closure and Decommissioning Plan**	At least five years prior to mine completion, the proponent shall prepare and submit a Final Closure and Decommissioning Plan to the requirements of the Chief Executive Officer of the Office of the Environmental Protection Authority, on advice of the Department of Mines and Petroleum	Preparation of a Final Closure and Decommissioning Plan in accordance with criteria.	Correspondence with OEPA approving the Plan	CEO	DMP	Overall	At least five years prior to mine completion	Not required at this stage	A mine closure plan was prepared in accordance with DMP requirements and was submitted with the 2013 AER. TGM is in early stage of operations and has an expected mine life of 10-15 years. A final mine closure plan will be developed 5 years prior to mine completion as required.
839:M10.2	**Final Closure and Decommissioning Plan**	The Final Closure and Decommissioning Plan shall be prepared consistent with: 1. ANZMEC/MCA 2000, *Strategic Framework for Mine Closure Planning*; and 2. Department of Industry Tourism and Resources 2006 *Mine Closure and Completion* (Leading Practice Sustainable Development Program for the Mining Industry), Commonwealth Government, Canberra;	Preparation of a Final Closure and Decommissioning Plan in accordance with criteria.	Submit plan to CEO of OEPA and DMP Approval of Plan by OEPA.	CEO	DMP	Overall	At least five years prior to mine completion	Not required at this stage	A mine closure plan was prepared in accordance with DMP requirements and was submitted with the 2013 AER. TGM is in early stage of operations and has an expected mine life of 10-15 years. A final mine closure plan will be developed 5 years prior to mine completion as required.
839:M10.3	**Final Closure and**	The Final Closure and Decommissioning Plan shall provide	Preparation of a Final	Submit plan to	CEO	DMP	Overall	At least five years	Not required at	A mine closure plan was prepared in

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Proposal Implementation Monitoring Section
PROJECT: Tropicana Gold Project, Shire of Menzies, Shire of Laverton and The City of Kalgoorlie-Boulder

Audit Code	Subject	Action	How	Evidence	Satisfy	Advice	Phase	When	Status 2015	Comment
	Decommissioning Plan	detailed technical information on the following: 1. final closure of all areas disturbed through implementation of the proposal so that they are safe, stable and non-polluting; 2. decommissioning of all plant and equipment; 3. disposal of waste materials; 4. final rehabilitation of waste dumps; tailings storage facilities and other areas (outside the mine pit(s)); 5. Management and monitoring following mine completion; and 6.inventory of all contaminated sites and proposed management.	Closure and Decommissioning Plan in accordance with criteria.	CEO of OEPA and DMP. Approval of the plan by OEPA.				prior to mine completion	this stage	accordance with DMP requirements and was submitted with the 2014 AER. TGM is in early stage of operations and has an expected mine life of 10-15 years . A final mine closure plan will be developed 5 years prior to mine completion as required.
839:M10.4	**Final Closure and Decommissioning Plan**	The proponent shall close, decommission and rehabilitate the proposal in accordance with the approved Final Closure and Decommissioning Plan	Implementation of the Final Closure and Decommissioning Plan Internal and external audits (as required) of the Final Closure and Decommissioning Plan	Closure, rehabilitation and Decommissioning activities detailed in the Project AER and summary included in Compliance Report	Min for Env		Overall	Ongoing	Not required at this stage	TGM is in early stage of operations and has an expected mine life of 10-15 years.
839:M10.5	**Final Closure and Decommissioning Plan**	The proponent shall make the Final Closure and Decommissioning Plan required by conditions 10-1 and 10-2 publicly available in a manner approved by the Chief Executive Officer of the Office of the Environmental Protection Authority	1. In accordance with Proposal Implementation Monitoring Section – Fact Sheet 1 – Draft - Making Documents Publicly Available, unless otherwise instructed by the CEO; 2. Adherence to a condition in a Statement requiring public availability of documents must occur within 14 days of submission of the documents to the CEO; and 3. 14 days from the date of making documents publicly available, proponents shall provide evidence to the CEO to confirm that advertising or lodgement on website has been completed.	Document available on website (and letter to CEO to confirm) Copy of Document to DEC Library and PIMB (OEPA)	CEO		Overall	Within 14 days of submission	Not required at this stage.	TGM is in early stage of operations and has an expected mine life of 10-15 years.

Appendix 2: Summary of Rehabilitation Trials

MEMORANDUM

Date: 17th December 2015

To: Environment Team (Safety & Environment Department)

From: Melissa Bolton

Subject: Rehabilitation Summary

1 Rehabilitation Activities

During the reporting period, limited rehabilitation activities were undertaken due to the limited availability of rehabilitation areas. Although limited physical rehabilitation activities were undertaken during the reporting period, there was some focus on the development of research, investigations and trials. This summary details some of the rehabilitation planning and key activities undertaken during the reporting period including:

- Seed collection and storage; and
- Commencement of progressive rehabilitation of landforms.

1.1.1 Research, Investigations and Trials

The following research, investigations and trials were commenced during the reporting period:

- seed collection around Tropicana Gold Mine (TGM);
- collected seed is stored off site with an accredited seed collector in climate controlled facilities located in Mt Barker;
- regular survey of disturbance areas;
- annual data collation for updating the financial provisioning for closure;
- annual reconciliation of growth medium stockpile volumes; and
- seedlings propagated by the Kalgoorlie Boulder Urban Landcare Group (KBULG) utilising seed collected around TGM. .

1.1.2 Progressive Rehabilitation Tasks

The following progressive rehabilitation tasks were undertaken during the reporting period:

- propagated seedlings planted in work areas and around the village, rolled out to employees as an adopt a tree program.
- benchmarking site visit of Nifty to obtain a field understanding of rehabilitation techniques and possible outcomes;
- commencement of progressive rehabilitation trials on LWE1 and LEA1, including re-profiling waste landforms to 15 degrees and placement of growth medium up to one metre thick. .

Throughout 2016, it is anticipated rehabilitation planning and further development of research, investigation and trials will be undertaken. An updated Mine Closure Plan (MCP) is due for submission to the Department of Mines and Petroleum (DMP) in January 2017, which will detail progress on rehabilitation undertaken.

It is anticipated that the MCP review process will detail the knowledge gaps for each domain and or feature, and the risk associated with not having the information available. A list of research, investigations and trials required to close the knowledge gaps and the tasks prioritised based on the risk.

Appendix 3: Groundwater monitoring results

MEMORANDUM

Date: **15th December 2015**

To: Environment Team

From: Jesse Ober

Subject: Groundwater Monitoring Results against Baseline data and established Triggers

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Water Quality Results

An internal review of the groundwater monitoring data for the reporting period (1 October 2014 to 30 September 2015) was undertaken for Environmental Monitoring Bores (ENVMB001 to ENVMB008) against the baseline monitoring data which was compiled as part of the submission of the 2014 CAR. Monitoring data was collected monthly between October 2013 and November 2014 to provide a reasonable baseline dataset. Throughout the 2014 and 2015 reporting period, the Environmental Monitoring Bores were monitored quarterly (in accordance with current conditions). A Map of the Environmental Monitoring Bore locations is provided in **Figure 2** below.

The monitoring results obtained from the Environmental Monitoring Bores during the reporting period were assessed against the against the triggers (which was developed for each parameter to allow a 10% variation in baseline groundwater quality monitoring as stated in the Environmental Monitoring Strategy). There is no monitoring data for ENVMB006 in March due to complications with pumping equipment preventing the collection of samples.

Results for pH (**Figure 1**) were relatively stable across the reporting period with pH units ranging between 6.6 (ENVMB001) and 7.9 (ENVMB004). All pH values fit within the current range (6.5 to 8)

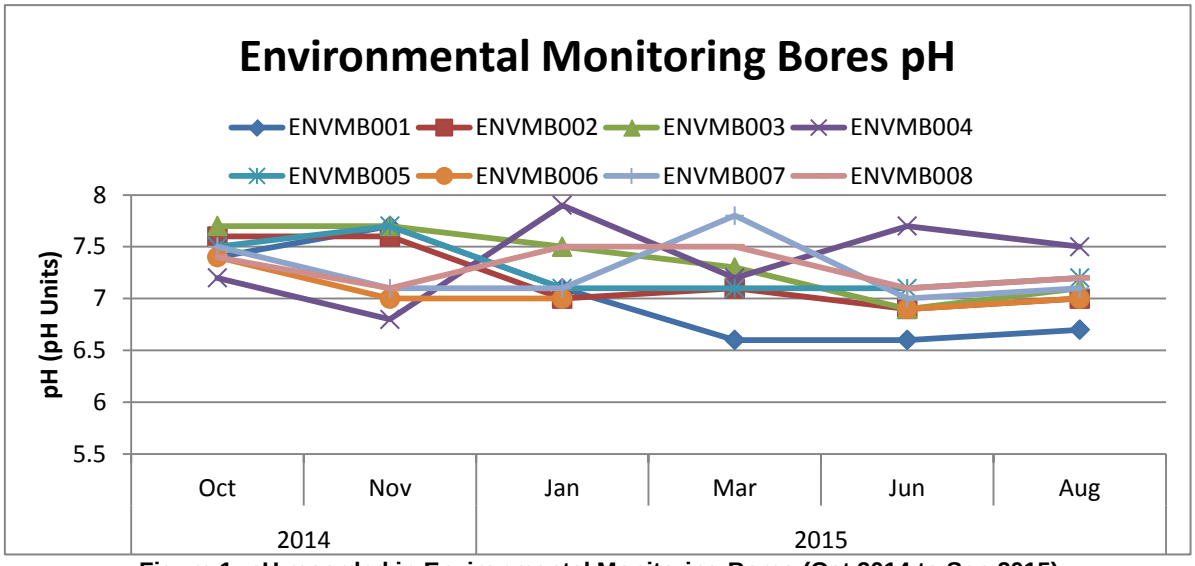

Figure 1: pH recorded in Environmental Monitoring Bores (Oct 2014 to Sep 2015)

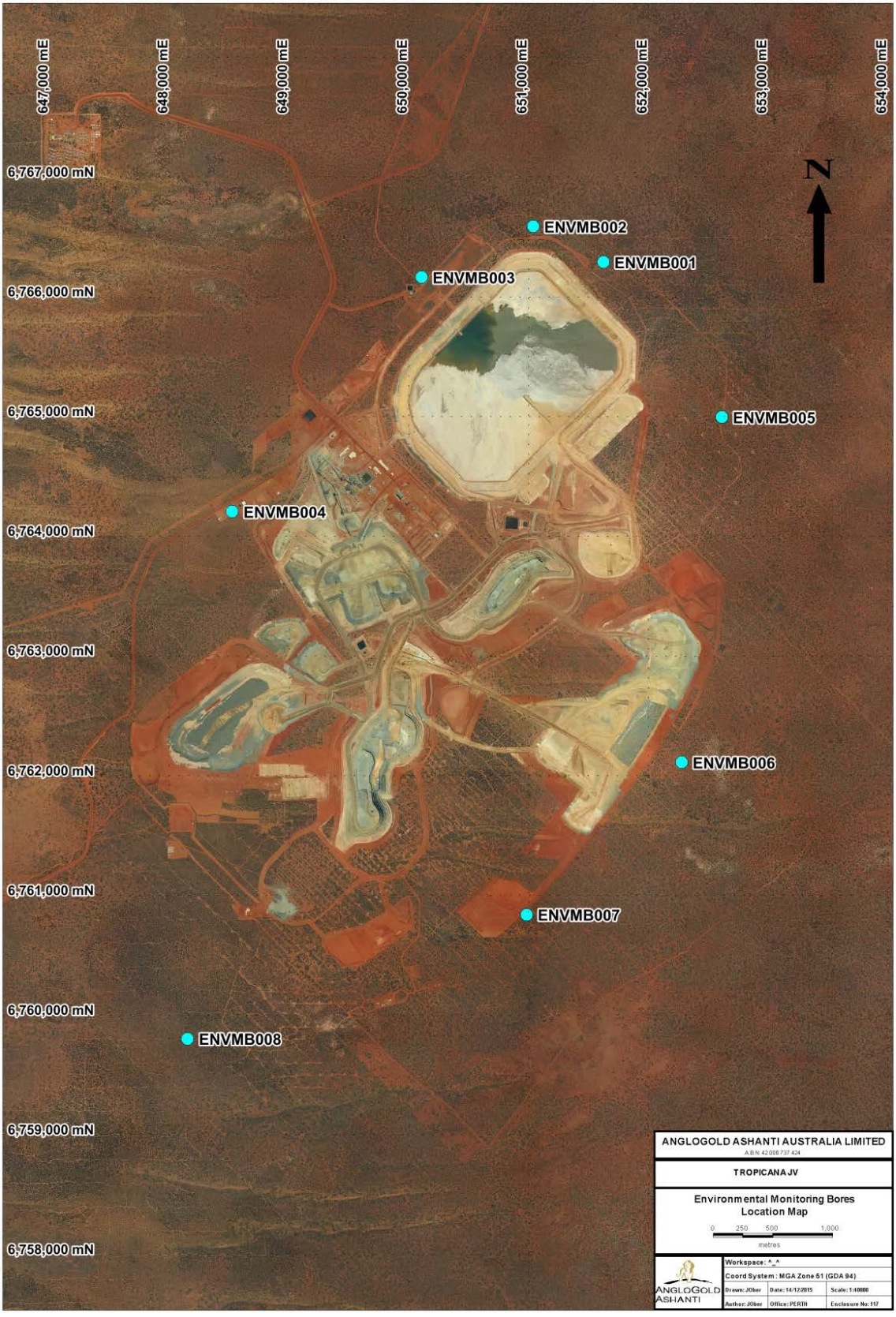

Figure 2: Location of environmental monitoring bores (ENVMB001 to ENVBMB008)

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Electrical conductivity (EC) (**Figure 3**) varies between the bores, with ranges recorded during the reporting period between 5060 µS/cm (recorded at ENVMB004) to 54800 µS/cm (recorded at ENVMB003). The previously recorded range at the Environmental Monitoring Bores for EC is between 5,600 µS/cm to 49,700 µS/cm. The Environmental Monitoring Strategy outlines triggers established for monitoring environmental impacts. The following trigger has been established for groundwater quality: A 10% variation of baseline groundwater quality monitoring. These triggers have been established following the development of baseline data developed and submitted as part of the 2014 CAR.

The range for EC values (baseline ranges +/- 10%) is between 5,040 µS/cm and 54,670 µS/cm. During the reporting period, there was a single exceedance outside this range recorded at ENVMB003 which recorded EC with a value of 54,800 µS/cm in October 2014. This value was a one off exceedance only detected once outside the 10% trigger value. The monitoring which occurred in the following months was all well within the ranges previously recorded, which would indicate this was an anomaly as a result of sample and/or analysis error.

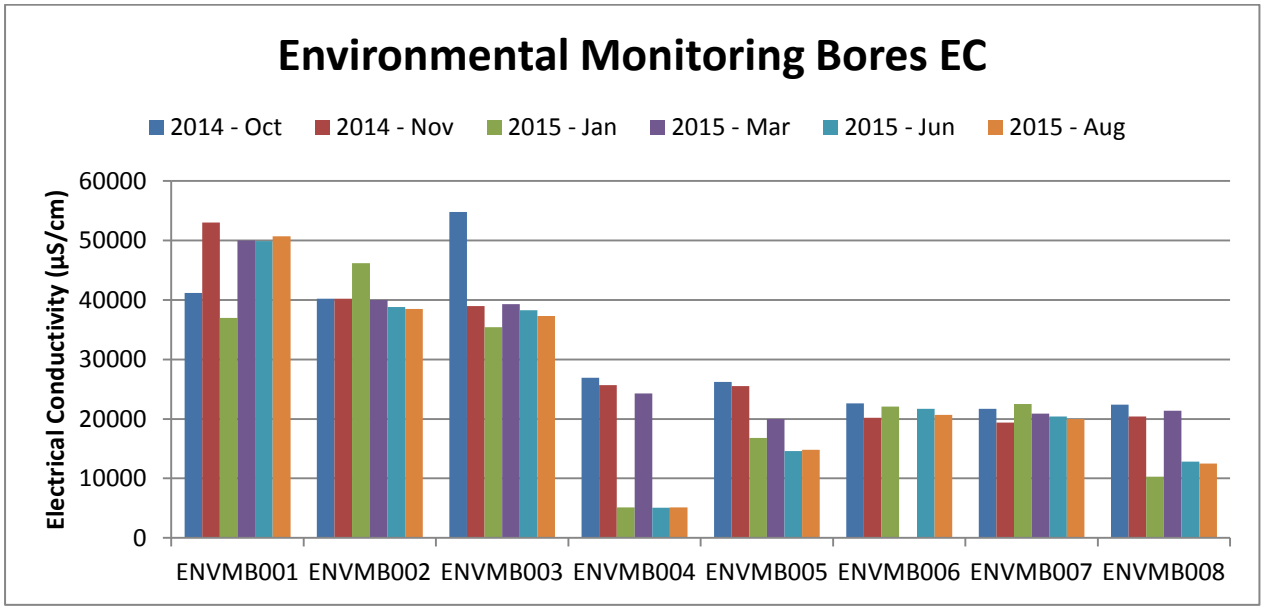

Figure 3: Electrical Conductivity recorded in the Environmental Monitoring Bores (Oct 2014 to Sep 2015)

Total dissolved solids recorded at the Environmental Monitoring Bores during the reporting period ranged between 3,030 mg/L (recorded at ENVMB004) and 40,000 mg/L (recorded at ENVMB001) (**Figure 4**). These results do not exceed the baseline range (3,270 to 41,100 mg/L), however a lower minimum was recorded at ENVMB004.

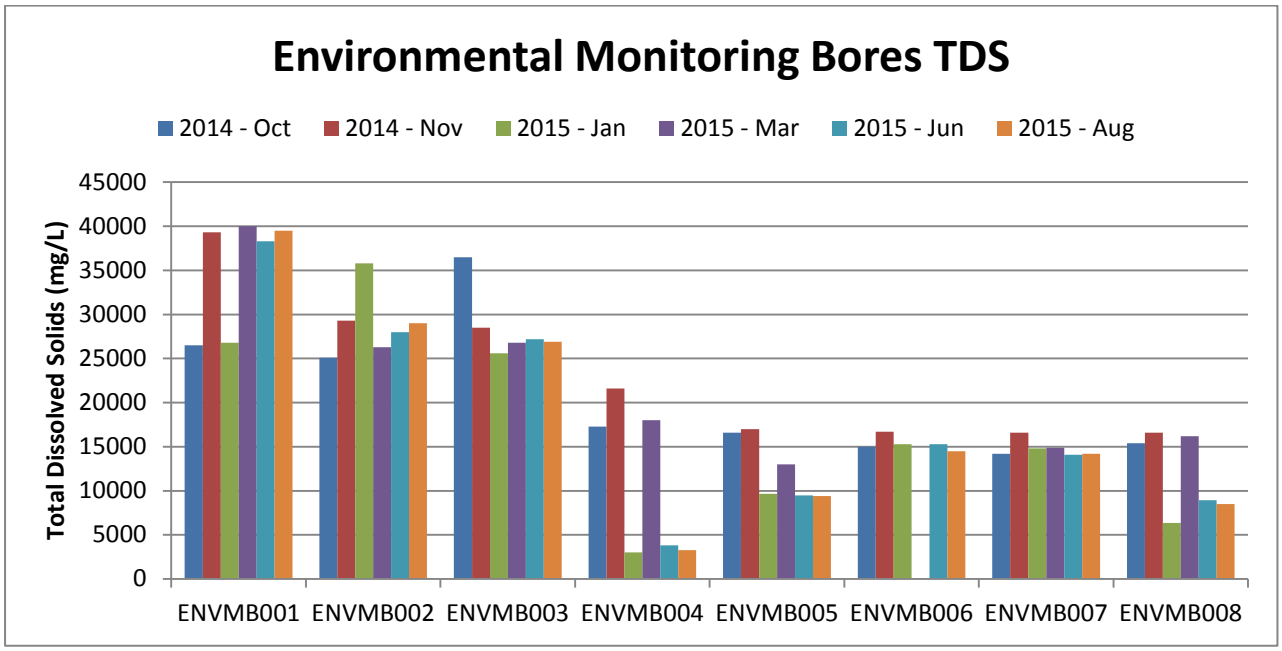

Figure 4: Total Dissolved Solids recorded in the Environmental Monitoring Bores (Oct 2014 to Sep 2015)

Total cyanide was detected at ENVMB001 (0.18 mg/L), ENVMB002 (0.004 mg/L), ENVMB003 (0.005 mg/L), ENVMB004 (0.016 mg/L) and ENVMB005 (0.005 mg/L) during the reporting period (**Figure 5**). Although total cyanide was detected, none of the bores consistently recorded total cyanide throughout the reporting period. The sampling procedure has since been updated so that a resample is to be taken immediately following detection of any cyanide species to confirm the result. There are no limits for total cyanide under the Prescribed Premises Licence.

Weak Acid Dissociable (WAD) cyanide was recorded on two occasions, one record at ENVMB001 and one at ENVMB005, which recorded 0.007 mg/L and 0.006 mg/L respectively (These levels are well below the levels permitted under the Prescribed Premises Licence of 0.5 mg/L.) Both results were one off and sample and/or analysis error is considered a potential cause of these anomalous results.

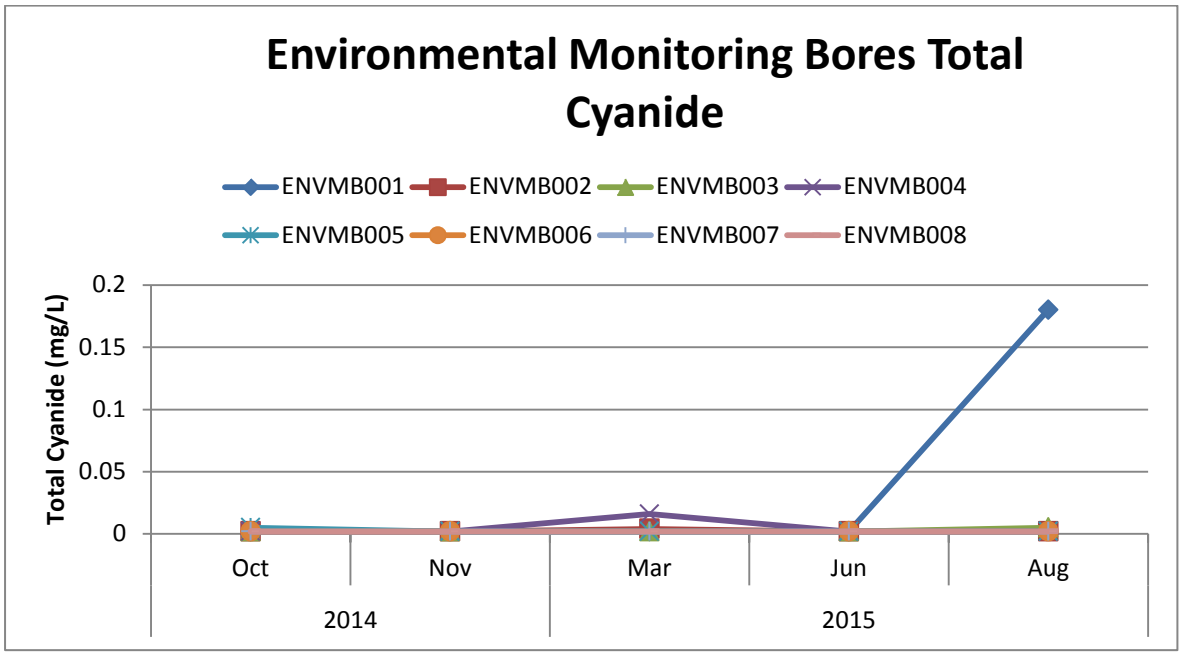

Figure 5: Environmental Monitoring Bores Total Cyanide values (Oct 2014 to Sep 2015)
***Values recorded at below the minimum detectable limit of 0.004mg/L are represented as 0.002mg/L**

Water Levels

The groundwater levels within Environmental Monitoring Bores ENVMB005 to ENVMB008 recorded no significant change (<0.2 m change from baseline levels). An increase in water levels was recorded in Environmental Monitoring Bores ENVMB001 to ENVMB004 (**Figure 6**). The greatest increase observed was recorded at ENVMB001, as groundwater levels have increased by 7.59 m (compared with baseline levels recorded in January 2013) from 18.142 m (recorded January 2013) below ground to 10.55 m below ground (recorded in September 2015). ENVMB002 and ENVMB003 recorded increases of 2.82 m and 2.88 m respectively (compared with January 2013 baseline levels). Water level increases were also observed in ENVMB004, which recorded a 1.5 m increase from 22.14 m below ground (recorded in January 2013) to 20.64 m below ground (recorded in September 2015). Environmental Monitoring Bores ENVMB001 to ENVMB004 are located closest to the Tailings Storage Facility (TSF) (see **Figure 2**).

The trend observed in the water levels recorded in the Environmental Monitoring Bores located closest to the TSF align with the trend of increasing water levels in the TSF Monitoring Bores, which were installed during construction of the facility. A hydrogeological review is currently underway to determine the potential causal factors for increasing water levels surrounding the facility, the potential for seepage and predicted rate of any seepage from the facility.

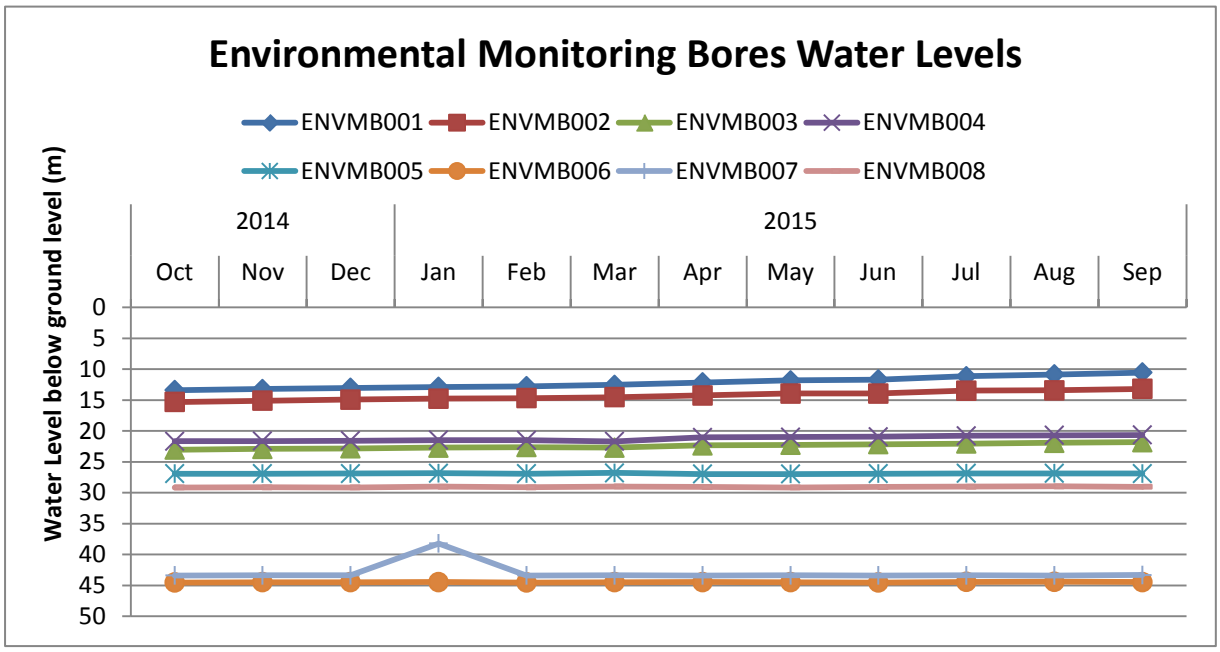

Figure 6: Water levels below ground recorded in the Environmental Monitoring Bores (Oct 2014 to Sep 2015)

The triggers (minimum and maximum) for a 10% deviation from baseline values have been developed and are outlined in **Table 1** for each parameter. A comparison has been undertaken against the baseline values and the triggers (baseline +/- 10%) against the current ranges recorded in the environmental monitoring bores during the reporting period. The ranges recorded within the environmental monitoring bores during the reporting period that are within the baseline values include the following parameters:

- pH;
- total dissolved solids;
- carbonate;
- bicarbonate;
- hydroxide;
- manganese;
- cadmium;
- iron;
- lead;
- chromium; and
- arsenic.

The ranges recorded within the environmental monitoring bores during the reporting period that exceeded the baseline values, but are within the trigger range of a 10% variation include the following parameters:

- nitrate;
- potassium;
- magnesium;
- nickel; and
- boron.

The following parameters exceeded trigger values within the environmental monitoring bores during the reporting period:

- EC;
- chloride;
- sodium;
- calcium;
- copper;
- nickel;
- zinc; and
- cobalt.

None of these exceedances are of concern at this stage. The exceedances in chloride, sodium and EC align with higher TDS results also recorded in these months.

A lower minimum was recorded within the environmental monitoring bores during the reporting period (compared with baseline data and trigger values) for the following parameters:

- EC;
- TDS;
- carbonate;
- chloride;
- sulphate;
- sodium;
- iron;
- boron;
- chromium;
- cobalt; and
- zinc.

The laboratory monitoring data collected from the Environmental Monitoring Bores during the reporting period is presented in Appendix 1. Recorded values that exceed triggers are highlighted red.

Table 1: Comparison of current groundwater quality data (reporting period September 2014 to September 2015) between baseline data and trigger range (baseline +/- 10%)

Parameter	Baseline Range	Trigger Range (Baseline +/- 10%)	Current Range (Recorded during reporting period)	Comments
EC (µS/cm)	5,600 to 49,700	5,040 to 54670	5,060 to 54,800	A single exceedance outside this range recorded at ENVMB003 which recorded EC with a value of 54800 µS/cm.
pH	6.5 to 8	5.85 to 8.8	6.6 to 7.9	Current range within 10% deviation of baseline values
Total Dissolved Solids (mg/L)	3,270 to 41,100	2,943 to 45,210	3,030 to 40,000	Current range within 10% deviation of baseline values
Carbonate (CO_3)	<5	<5 to <5	<2.5 to <5	Current range within 10% deviation of baseline values
Bicarbonate (HCO_3)	150 to 620	135 to 682	150 to 610	Current range within 10% deviation of baseline values
Hydroxide (OH)	2.5*	<5 to <5	2.5 to 2.5	Current range within 10% deviation of baseline values
Chloride (Cl)	2,500 to 17,000	2250 to 18,700	1,500 to 19,000	Current range exceeds 10% deviation of baseline values with a lower minimum and higher maximum. Exceedances were recorded at ENVMB001.
Sulphate (SO_4)	120 to 4,700	108 to 5070	100 to 4900	Current range does not exceed historical range, however there is a lower minimum in the current range.
Nitrate (NO_3)	2.5* to 160	<10 to 176	2.5 to 170	Current range within 10% deviation of baseline values
Sodium (Na)	549 to 9,700	494.1 to 10670	240 to 11,000	Current range exceeds 10% deviation of baseline values with a lower minimum and higher maximum. Exceedances were recorded at ENVMB001.
Potassium (K)	57 to 840	51.3 to 924	61 to 870	Current range within 10% deviation of baseline values
Calcium (Ca)	63 to 640	56.7 to 704	80 to 830	Current range exceeds 10% deviation of baseline values Exceedances were recorded at ENVMB001.
Magnesium (Mg)	130 to 1900	117 to 2090	150 to 2000	Current range within 10% deviation of baseline values

Parameter	Baseline Range	Trigger Range (Baseline +/- 10%)	Current Range (Recorded during reporting period)	Comments
Cadmium (Cd)	0.0001 to 0.005	<0.0001 to 0.0055	0.005 to 0.005	Current range within 10% deviation of baseline values
Copper (Cu)	0.001 to 0.1	<0.001 to 0.11	0.005 to 0.17	Current range exceeds 10% deviation of baseline values Exceedances were recorded at ENVMB004 and ENVMB005.
Manganese (Mn)	0.02 to 3.7	<0.005 to 4.07	0.01 to 3.1	Current range within 10% deviation of baseline values
Iron (Fe)	0.02 to 1.8	<0.02 to 1.98	0.01 to 0.1	Current range within 10% deviation of baseline values
Lead (Pb)	0.001 to 0.3	<0.001 to 0.33	0.015 to 0.15	Current range within 10% deviation of baseline values
Nickel (Ni)	0.009 to 0.02	<0.001 to 0.022	0.014 to 0.1	Current range exceeds 10% deviation of baseline values Exceedances were recorded at ENVMB003.
Boron (B)	3.9 to 11	3.51 to 12.1	3.1 to 12	Current range within 10% deviation of baseline values
Barium (Ba)	ID	ID	0.04 to 0.08	Baseline data not established due to insufficient data
Cobalt (Co)	0.001 to 0.012	<0.001 to 0.0132	0.005 to 0.05	Current range exceeds 10% deviation of baseline values A one off exceedance was recorded at ENVMB001.
Chromium (Cr)	0.01 to 0.1	<0.001 to 0.11	0.005 to 0.05	Current range within 10% deviation of baseline values
Zinc (Zn)	0.02 to 0.14	<0.001 to 0.154	0.01 to 0.23	Current range exceeds 10% deviation of baseline values Two exceedances were recorded at ENVMB004.
Arsenic (As)	0.001 to 0.025*	<0.001 to 0.55	0.025 to 0.25	Current range within 10% deviation of baseline values

APPENDIX 1 GROUNDWATER MONITORING RESULTS

Table 2: Groundwater Monitoring Results – ENVMB001

Parameter	10% Variation in Baseline Trigger		ENVMB001					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Aluminium - Dissolved (mg/L)			<1	<1	-	-	-	-
Antimony - Dissolved (mg/L)			-	<1.5	-	-	-	-
Arsenic - Dissolved (mg/L)	<0.001	0.55	<0.5	<0.5	-	<0.002	0.002	<0.002
Barium - Dissolved (mg/L)			-	<0.1	-	0.024	0.029	0.028
Beryllium - Dissolved (mg/L)			-	<0.1	-	-	-	-
Bicarbonate HCO3 as CaCO3 (mg/L)	135	682	270	260	-	250	250	280
Bismuth - Dissolved (mg/L)			-	<0.001	-	-	-	-
Boron - Dissolved (mg/L)	3.51	12.1	-	12	-	11	11	11
Cadmium - Dissolved (mg/L)	<0.0001	0.0055	<0.1	<0.1	-	0.0002	0.0005	0.0004
Calcium - Dissolved (mg/L)	56.7	704	520	610	-	570	590	830
Carbonate CO32- as CaCO3 (mg/L)	<5	<5	<5	<5	-	-	<5	<5
Chloride in water (mg/L)	2250	18700	-	17000	-	19000	19000	19000
Chromium - Dissolved (mg/L)			-	<0.1	-	-	-	-
Chromium III - Dissolved (mg/L)			-	<0.005	-	-	-	-
Chromium VI - Dissolved (mg/L)	<0.01	0.11	-	<0.005	-	<0.005	<0.005	<0.005
Cobalt - Dissolved (mg/L)	<0.001	0.0132	<0.1	<0.1	-	0.007	<0.001	0.054
Colour (True) (HZU)			<3	-	-	-	-	-
Copper - Dissolved (mg/L)	<0.001	0.11	<0.1	<0.1	-	<0.002	<0.001	<0.002
Cyanide - Total (mg/L)	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	0.18
Cyanide WAD (mg/L)	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	0.007
Electrical Conductivity (µS/cm)	5040	54670	41200	53000	37000	50000	49900	50700
Fluoride in water (mg/L)			-	<25	-	-	-	-
Free Cyanide (mg/L)	<0.004	<0.004	-	-	-	<0.004	<0.004	<0.004
Hardness as CaCO3 (mg/L)			7000	9300	-	-	9200	10000
Hydroxide OH- as CaCO3 (mg/L)	<5	<5	<5	<5	-	-	<5	<5
Ionic Balance (%)			-	6.7	-	-	-0.62	-0.46
Iron - Dissolved (mg/L)	<0.02	1.98	<0.2	<0.2	-	0.04	<0.01	0.06
Lead - Dissolved (mg/L)	<0.001	0.33	<0.3	<0.3	-	<0.002	<0.001	<0.002
Magnesium - Dissolved (mg/L)	117	2090	1400	1900	-	1800	1900	2000
Manganese - Dissolved (mg/L)	<0.005	4.07	0.82	<0.1	-	<0.01	<0.005	<0.01
Mercury - Dissolved (mg/L)	<0.00005	0.00093	-	<0.00005	-	0.00011	0.00026	0.00093
Molybdenum - Dissolved (mg/L)			-	<0.3	-	-	-	-
Nickel - Dissolved (mg/L)	<0.001	0.022	<0.2	<0.2	-	0.016	0.007	0.003
Nitrate as NO2 (mg/L)			<25	-	-	-	-	-
Nitrate as NO3 (mg/L)	<10	176	<25	<25	-	<25	<25	130
pH (pH units)	5.85	8.8	7.4	7.7	7.1	6.6	6.6	6.7
Potassium - Dissolved (mg/L)	51.3	924	500	790	-	720	870	830
Selenium - Dissolved (mg/L)			-	<1.2	-	-	-	-
Sodium - Dissolved (mg/L)	494.1	10670	7500	11000	-	10000	9600	9400
Sulfur - Dissolved (mg/L)			-	1700	-	-	-	-
Sulphate by HPLC (mg/L)	108	5170	3200	4700	-	5300	4900	4900
Tin - Dissolved (mg/L)			-	<0.5	-	-	-	-
Total Alkalinity as CaCO3 (mg/L)			270	260	-	-	250	280

Parameter	10% Variation in Baseline Trigger		ENVMB001					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Total Dissolved Solids (grav) (mg/L)	2943	45210	26500	39300	26800	40000	38300	39500
Total Suspended Solids (mg/L)			6	-	-	-	-	-
Turbidity (NTU)			53	-	-	-	-	-
Zinc - Dissolved (mg/L)	<0.001	0.154	<0.2	<0.2	-	0.006	0.003	0.009

Table 3: Groundwater Monitoring Results – ENVMB002

Parameter	10% Variation in Baseline Trigger		ENVMB002					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Aluminium - Dissolved (mg/L)			<1	<1	-	-	-	-
Antimony - Dissolved (mg/L)			-	<1.5	-	-	-	-
Arsenic - Dissolved (mg/L)	<0.001	0.55	<0.5	<0.5	-	<0.001	<0.001	<0.002
Barium - Dissolved (mg/L)			-	<0.1	-	0.03	0.034	0.031
Beryllium - Dissolved (mg/L)			-	<0.1	-	-	-	-
Bicarbonate HCO3 as CaCO3 (mg/L)	135	682	230	270	-	260	270	270
Bismuth - Dissolved (mg/L)			-	<0.001	-	-	-	-
Boron - Dissolved (mg/L)	3.51	12.1	-	8.2	-	7.6	8.1	8.7
Cadmium - Dissolved (mg/L)	<0.0001	0.0055	<0.1	<0.1	-	<0.0001	<0.0001	<0.0002
Calcium - Dissolved (mg/L)	56.7	704	470	490	-	490	490	530
Carbonate CO32- as CaCO3 (mg/L)	<5		<5	<5	-	<5	<5	<5
Chloride in water (mg/L)	2250	18700	-	13000	-	14000	14000	14000
Chromium - Dissolved (mg/L)			-	<0.1	-	-	-	-
Chromium III - Dissolved (mg/L)			-	<0.005	-	-	-	-
Chromium VI - Dissolved (mg/L)	<0.01	0.11	-	<0.005	-	<0.005	<0.005	<0.005
Cobalt - Dissolved (mg/L)	<0.001	0.0132	<0.1	<0.1	-	0.003	0.003	<0.002
Colour (True) (HZU)			<3	-	-	-	-	-
Copper - Dissolved (mg/L)	<0.001	0.11	<0.1	<0.1	-	<0.001	<0.001	<0.002
Cyanide - Total (mg/L)	<0.004	<0.004	<0.004	<0.004	-	0.004	<0.004	<0.004
Cyanide WAD (mg/L)	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004
Electrical Conductivity (µS/cm)	5040	54670	40200	40200	46200	40000	38800	38500
Fluoride in water (mg/L)			-	<25	-	-	-	-
Free Cyanide (mg/L)	<0.004	<0.004	-	-	-	<0.004	<0.004	<0.004
Hardness as CaCO3 (mg/L)			6400	6900	-	6700	7000	6900
Hydroxide OH- as CaCO3 (mg/L)	<5		<5	<5	-	<5	<5	<5
Ionic Balance (%)			-	4.9	-	-2	-0.28	-2.1
Iron - Dissolved (mg/L)	<0.02	1.98	<0.2	<0.2	-	3.9	3.7	3.3
Lead - Dissolved (mg/L)	<0.001	0.33	<0.3	<0.3	-	<0.001	<0.001	<0.002
Magnesium - Dissolved (mg/L)	117	2090	1300	1400	-	1300	1400	1400
Manganese - Dissolved (mg/L)	<0.005	4.07	0.22	0.81	-	0.59	0.8	0.75
Mercury - Dissolved (mg/L)	<0.00005	0.00093	-	<0.00005	-	<0.00005	<0.00005	<0.00005
Molybdenum - Dissolved (mg/L)			-	<0.3	-	-	-	-
Nickel - Dissolved (mg/L)	<0.001	0.022	<0.2	<0.2	-	0.009	0.008	0.007
Nitrate as NO2 (mg/L)			<25	-	-	-	-	-
Nitrate as NO3 (mg/L)	<10	176	31	<25	-	<25	<10	<10
pH (pH units)	5.85	8.8	7.6	7.6	7	7.1	6.9	7

Parameter	10% Variation in Baseline Trigger		ENVMB002					
			2014		2015			
Potassium - Dissolved (mg/L)	51.3	924	500	480	-	450	520	480
Selenium - Dissolved (mg/L)			-	<1.2	-	-	-	-
Sodium - Dissolved (mg/L)	494.1	10670	7500	7900	-	7200	7200	7000
Sulfur - Dissolved (mg/L)			-	1100	-	-	-	-
Sulphate by HPLC (mg/L)	108	5170	3000	3300	-	3700	3500	3500
Tin - Dissolved (mg/L)			-	<0.5	-	-	-	-
Total Alkalinity as CaCO3 (mg/L)			230	270	-	260	270	270
Total Dissolved Solids (grav) (mg/L)	2943	45210	25100	29300	35800	26300	28000	29000
Total Suspended Solids (mg/L)			56	-	-	-	-	-
Turbidity (NTU)			33	-	-	-	-	-
Zinc - Dissolved (mg/L)	<0.001	0.154	<0.2	<0.2	-	0.002	0.007	0.01

Table 4: Groundwater Monitoring Results – ENVMB003

Parameter	10% Variation in Baseline Trigger		ENVMB003					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Aluminium - Dissolved (mg/L)			<1	<1	-	-	-	-
Antimony - Dissolved (mg/L)			-	<1.5	-	-	-	-
Arsenic - Dissolved (mg/L)	<0.001	0.55	<0.5	<0.5	-	<0.001	<0.001	<0.001
Barium - Dissolved (mg/L)			-	<0.1	-	0.093	0.079	0.082
Beryllium - Dissolved (mg/L)			-	<0.1	-	-	-	-
Bicarbonate HCO3 as CaCO3 (mg/L)	135	682	260	200	-	210	200	200
Bismuth - Dissolved (mg/L)			-	<0.001	-	-	-	-
Boron - Dissolved (mg/L)	3.51	12.1	-	8.8	-	8.1	8.7	8.8
Cadmium - Dissolved (mg/L)	<0.0001	0.0055	<0.1	<0.1	-	0.0014	0.0013	0.0014
Calcium - Dissolved (mg/L)	56.7	704	630	420	-	410	400	430
Carbonate CO32- as CaCO3 (mg/L)	<5		<5	<5	-	<5	<5	<5
Chloride in water (mg/L)	2250	18700	-	11000	-	13000	13000	14000
Chromium - Dissolved (mg/L)			-	<0.1	-	-	-	-
Chromium III - Dissolved (mg/L)			-	<0.005	-	-	-	-
Chromium VI - Dissolved (mg/L)	<0.01	0.11	-	<0.005	-	<0.005	<0.005	<0.005
Cobalt - Dissolved (mg/L)	<0.001	0.0132	<0.1	<0.1	-	<0.001	<0.001	<0.001
Colour (True) (HZU)			<3	-	-	-	-	-
Copper - Dissolved (mg/L)	<0.001	0.11	<0.1	<0.1	-	<0.001	<0.001	0.002
Cyanide - Total (mg/L)	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	0.005
Cyanide WAD (mg/L)	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004
Electrical Conductivity (µS/cm)	5040	54670	54800	39000	35400	39300	38300	37300
Fluoride in water (mg/L)			-	<10	-	-	-	-
Free Cyanide (mg/L)	<0.004	<0.004	-	-	-	<0.004	<0.004	<0.004
Hardness as CaCO3 (mg/L)			9200	6300	-	6200	6000	6400
Hydroxide OH- as CaCO3 (mg/L)	<5		<5	<5	-	<5	<5	<5
Ionic Balance (%)			-	12	-	0.6	-1.6	0.15
Iron - Dissolved (mg/L)	<0.02	1.98	<0.2	<0.2	-	0.02	0.05	<0.01
Lead - Dissolved (mg/L)	<0.001	0.33	<0.3	<0.3	-	<0.001	<0.001	<0.001
Magnesium - Dissolved (mg/L)	117	2090	1900	1300	-	1300	1200	1300
Manganese - Dissolved (mg/L)	<0.005	4.07	<0.1	<0.1	-	0.088	0.068	0.06

Parameter	10% Variation in Baseline Trigger		ENVMB003					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Mercury - Dissolved (mg/L)	<0.00005	0.00093	-	<0.00005	-	0.00007	0.00023	0.00017
Molybdenum - Dissolved (mg/L)			-	<0.3	-	-	-	-
Nickel - Dissolved (mg/L)	<0.001	0.022	<0.2	<0.2	-	0.026	0.024	0.024
Nitrate as NO2 (mg/L)			<25	-	-	-	-	-
Nitrate as NO3 (mg/L)	<10	176	<25	57	-	60	66	57
pH (pH units)	5.85	8.8	7.7	7.7	7.5	7.3	6.9	7.1
Potassium - Dissolved (mg/L)	51.3	924	810	500	-	470	550	560
Selenium - Dissolved (mg/L)			-	<1.2	-	-	-	-
Sodium - Dissolved (mg/L)	494.1	10670	10000	8100	-	7400	7000	7300
Sulfur - Dissolved (mg/L)			-	1200	-	-	-	-
Sulphate by HPLC (mg/L)	108	5170	4600	3000	-	3700	3600	3500
Tin - Dissolved (mg/L)			-	<0.5	-	-	-	-
Total Alkalinity as CaCO3 (mg/L)			260	200	-	210	200	200
Total Dissolved Solids (grav) (mg/L)	2943	45210	36500	28500	25600	26800	27200	26900
Total Suspended Solids (mg/L)			13	-	-	-	-	-
Turbidity (NTU)			4.3	-	-	-	-	-
Zinc - Dissolved (mg/L)	<0.001	0.154	<0.2	<0.2	-	0.027	0.017	0.031

Table 5: Groundwater Monitoring Results – ENVMB004

Parameter	10% Variation in Baseline Trigger		ENVMB004					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Aluminium - Dissolved (mg/L)			<0.1	<0.1	-	-	-	-
Antimony - Dissolved (mg/L)			-	<0.15	-	-	-	-
Arsenic - Dissolved (mg/L)	<0.001	0.55	<0.05	<0.05	-	<0.05	<0.001	<0.001
Barium - Dissolved (mg/L)			-	0.08	-	0.08	0.29	0.28
Beryllium - Dissolved (mg/L)			-	<0.01	-	-	-	-
Bicarbonate HCO3 as CaCO3 (mg/L)	135	682	150	150	-	150	200	160
Bismuth - Dissolved (mg/L)			-	<0.001	-	-	-	-
Boron - Dissolved (mg/L)	3.51	12.1	-	3.7	-	3.5	1.4	1.4
Cadmium - Dissolved (mg/L)	<0.0001	0.0055	<0.01	<0.01	-	<0.01	<0.0001	<0.0001
Calcium - Dissolved (mg/L)	56.7	704	490	430	-	430	240	230
Carbonate CO32- as CaCO3 (mg/L)	<5		<5	-	-	<5	<5	<5
Chloride in water (mg/L)	2250	18700	-	8500	-	8500	1500	1600
Chromium - Dissolved (mg/L)			-	<0.01	-	-	-	-
Chromium III - Dissolved (mg/L)			-	<0.005	-	-	-	-
Chromium VI - Dissolved (mg/L)	<0.01	0.11	-	<0.005	-	<0.005	<0.005	<0.005
Cobalt - Dissolved (mg/L)	<0.001	0.0132	<0.01	<0.01	-	<0.01	<0.001	<0.001
Colour (True) (HZU)			<3	-	-	-	-	-
Copper - Dissolved (mg/L)	<0.001	0.11	0.14	0.17	-	0.05	<0.001	<0.001
Cyanide - Total (mg/L)	<0.004	<0.004	<0.004	<0.004	-	0.016	<0.004	<0.004
Cyanide WAD (mg/L)	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004
Electrical Conductivity (µS/cm)	5040	54670	26900	25700	5120	24300	5060	5150
Fluoride in water (mg/L)			-	<10	-	-	-	-
Free Cyanide (mg/L)	<0.004	<0.004	-	-	-	<0.004	<0.004	<0.004

Parameter	10% Variation in Baseline Trigger		ENVMB004					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Hardness as CaCO3 (mg/L)			6200	-	-	5400	1200	1200
Hydroxide OH- as CaCO3 (mg/L)	<5		<5	-	-	<5	<5	<5
Ionic Balance (%)			-	-	-	-3.6	1.1	-4
Iron - Dissolved (mg/L)	<0.02	1.98	<0.02	<0.02	-	<0.02	0.01	<0.01
Lead - Dissolved (mg/L)	<0.001	0.33	<0.03	<0.03	-	<0.03	<0.001	<0.001
Magnesium - Dissolved (mg/L)	117	2090	1200	1100	-	1000	150	140
Manganese - Dissolved (mg/L)	<0.005	4.07	0.06	0.06	-	0.05	<0.005	<0.005
Mercury - Dissolved (mg/L)	<0.00005	0.00093	-	0.00009	-	0.00013	<0.00005	<0.00005
Molybdenum - Dissolved (mg/L)			-	<0.03	-	-	-	-
Nickel - Dissolved (mg/L)	<0.001	0.022	<0.02	<0.02	-	<0.02	0.001	<0.001
Nitrate as NO2 (mg/L)			<10	-	-	-	-	-
Nitrate as NO3 (mg/L)	<10	176	<10	11	-	14	92	75
pH (pH units)	5.85	8.8	7.2	6.8	7.9	7.2	7.7	7.5
Potassium - Dissolved (mg/L)	51.3	924	300	260	-	270	68	55
Selenium - Dissolved (mg/L)			-	<0.12	-	-	-	-
Sodium - Dissolved (mg/L)	494.1	10670	3900	3800	-	3400	540	520
Sulfur - Dissolved (mg/L)			-	640	-	-	-	-
Sulphate by HPLC (mg/L)	108	5170	1900	1900	-	1900	73	90
Tin - Dissolved (mg/L)			-	<0.05	-	-	-	-
Total Alkalinity as CaCO3 (mg/L)			150	-	-	150	200	160
Total Dissolved Solids (grav) (mg/L)	2943	45210	17300	21600	3030	18000	3830	3280
Total Suspended Solids (mg/L)			59	-	-	-	-	-
Turbidity (NTU)			20	-	-	-	-	-
Zinc - Dissolved (mg/L)	<0.001	0.154	0.23	0.19	-	0.07	0.002	0.003

Table 6: Groundwater Monitoring Results – ENVMB005

Parameter	10% Variation in Baseline Trigger		ENVMB005					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Aluminium - Dissolved (mg/L)			<0.1	<1	-	-	-	-
Antimony - Dissolved (mg/L)			-	<1.5	-	-	-	-
Arsenic - Dissolved (mg/L)	<0.001	0.55	<0.05	<0.5	-	<0.001	<0.001	<0.001
Barium - Dissolved (mg/L)			-	<0.1	-	0.091	0.039	0.03
Beryllium - Dissolved (mg/L)			-	<0.1	-	-	-	-
Bicarbonate HCO3 as CaCO3 (mg/L)	135	682	540	530	-	560	610	610
Bismuth - Dissolved (mg/L)			-	<0.001	-	-	-	-
Boron - Dissolved (mg/L)	3.51	12.1	-	8.6	-	6.5	6.5	6.8
Cadmium - Dissolved (mg/L)	<0.0001	0.0055	<0.01	<0.1	-	0.0001	<0.0001	<0.0001
Calcium - Dissolved (mg/L)	56.7	704	190	190	-	110	80	83
Carbonate CO32- as CaCO3 (mg/L)	<5		<5	<5	-	-	<5	<5
Chloride in water (mg/L)	2250	18700	-	7400	-	6200	4200	4200
Chromium - Dissolved (mg/L)			-	<0.1	-	-	-	-
Chromium III - Dissolved (mg/L)			-	<0.005	-	-	-	-
Chromium VI - Dissolved (mg/L)	<0.01	0.11	-	<0.005	-	<0.005	<0.005	<0.005
Cobalt - Dissolved (mg/L)	<0.001	0.0132	<0.01	<0.1	-	<0.001	<0.001	<0.001

Parameter	10% Variation in Baseline Trigger		ENVMB005					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Colour (True) (HZU)			<3	-	-	-	-	-
Copper - Dissolved (mg/L)	<0.001	0.11	0.05	0.13	-	<0.001	<0.001	<0.001
Cyanide - Total (mg/L)	<0.004	<0.004	0.005	<0.004	-	<0.004	<0.004	<0.004
Cyanide WAD (mg/L)	<0.004	<0.004	0.006	<0.004	-	<0.004	<0.004	<0.004
Electrical Conductivity (µS/cm)	5040	54670	26200	25500	16800	20000	14600	14800
Fluoride in water (mg/L)			-	<10	-	-	-	-
Free Cyanide (mg/L)	<0.004	<0.004	-	-	-	<0.004	<0.004	<0.004
Hardness as CaCO3 (mg/L)			2700	2700	-	-	1100	1100
Hydroxide OH- as CaCO3 (mg/L)	<5		<5	<5	-	-	<5	<5
Ionic Balance (%)			-	6	-	-	-0.86	0.24
Iron - Dissolved (mg/L)	<0.02	1.98	<0.02	<0.2	-	<0.01	<0.01	<0.01
Lead - Dissolved (mg/L)	<0.001	0.33	<0.03	<0.3	-	<0.001	<0.001	<0.001
Magnesium - Dissolved (mg/L)	117	2090	550	540	-	340	230	220
Manganese - Dissolved (mg/L)	<0.005	4.07	0.13	0.12	-	0.12	0.01	<0.005
Mercury - Dissolved (mg/L)	<0.00005	0.00093	-	<0.00005	-	<0.00005	<0.00005	<0.00005
Molybdenum - Dissolved (mg/L)			-	<0.3	-	-	-	-
Nickel - Dissolved (mg/L)	<0.001	0.022	<0.02	<0.2	-	0.002	0.002	<0.001
Nitrate as NO2 (mg/L)			<10	-	-	-	-	-
Nitrate as NO3 (mg/L)	<10	176	64	78	-	130	170	170
pH (pH units)	5.85	8.8	7.5	7.7	7.1	7.1	7.1	7.2
Potassium - Dissolved (mg/L)	51.3	924	280	270	-	210	180	180
Selenium - Dissolved (mg/L)			-	<1.2	-	-	-	-
Sodium - Dissolved (mg/L)	494.1	10670	5300	5600	-	3700	2900	3000
Sulfur - Dissolved (mg/L)			-	860	-	-	-	-
Sulphate by HPLC (mg/L)	108	5170	2400	2400	-	2100	1300	1300
Tin - Dissolved (mg/L)			-	<0.5	-	-	-	-
Total Alkalinity as CaCO3 (mg/L)			540	530	-	-	610	610
Total Dissolved Solids (grav) (mg/L)	2943	45210	16600	17000	9680	13000	9470	9420
Total Suspended Solids (mg/L)			<5	-	-	-	-	-
Turbidity (NTU)			0.4	-	-	-	-	-
Zinc - Dissolved (mg/L)	<0.001	0.154	0.091	<0.2	-	0.006	0.004	0.005

Table 7: Groundwater Monitoring Results – ENVMB006

Parameter	10% Variation in Baseline Trigger		ENVMB006					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Aluminium - Dissolved (mg/L)			<0.1	<0.1	-	-	-	-
Antimony - Dissolved (mg/L)			-	<0.15	-	-	-	-
Arsenic - Dissolved (mg/L)	<0.001	0.55	<0.05	<0.05	-	-	<0.001	<0.001
Barium - Dissolved (mg/L)			-	0.04	-	-	0.031	0.042
Beryllium - Dissolved (mg/L)			-	<0.01	-	-	-	-
Bicarbonate HCO3 as CaCO3 (mg/L)	135	682	430	390	-	-	410	430
Bismuth - Dissolved (mg/L)			-	<0.001	-	-	-	-
Boron - Dissolved (mg/L)	3.51	12.1	-	3.6	-	-	4.5	4.2
Cadmium - Dissolved (mg/L)	<0.0001	0.0055	<0.01	<0.01	-	-	0.0004	0.0004

Parameter	10% Variation in Baseline Trigger		ENVMB006					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Calcium - Dissolved (mg/L)	56.7	704	470	310	-	-	420	410
Carbonate CO32- as CaCO3 (mg/L)	<5		<5	-	-	-	<5	<5
Chloride in water (mg/L)	2250	18700	-	3000	-	-	7000	6900
Chromium - Dissolved (mg/L)			-	<0.01	-	-	-	-
Chromium III - Dissolved (mg/L)			-	<0.005	-	-	-	-
Chromium VI - Dissolved (mg/L)	<0.01	0.11	-	<0.005	-	-	<0.005	<0.005
Cobalt - Dissolved (mg/L)	<0.001	0.0132	<0.01	<0.01	-	-	0.001	<0.001
Colour (True) (HZU)			<3	-	-	-	-	-
Copper - Dissolved (mg/L)	<0.001	0.11	0.05	0.05	-	-	<0.001	<0.001
Cyanide - Total (mg/L)	<0.004	<0.004	<0.004	<0.004	-	-	<0.004	<0.004
Cyanide WAD (mg/L)	<0.004	<0.004	<0.004	<0.004	-	-	<0.004	<0.004
Electrical Conductivity (µS/cm)	5040	54670	22600	20200	22100	-	21700	20700
Fluoride in water (mg/L)			-	<10	-	-	-	-
Free Cyanide (mg/L)	<0.004	<0.004	-	-	-	-	<0.004	<0.004
Hardness as CaCO3 (mg/L)			4600	-	-	-	4400	4400
Hydroxide OH- as CaCO3 (mg/L)	<5		<5	-	-	-	<5	<5
Ionic Balance (%)			-	-	-	-	-0.96	0.01
Iron - Dissolved (mg/L)	<0.02	1.98	<0.02	<0.02	-	-	0.01	<0.01
Lead - Dissolved (mg/L)	<0.001	0.33	<0.03	<0.03	-	-	<0.001	<0.001
Magnesium - Dissolved (mg/L)	117	2090	840	550	-	-	800	810
Manganese - Dissolved (mg/L)	<0.005	4.07	0.97	0.66	-	-	0.18	0.13
Mercury - Dissolved (mg/L)	<0.00005	0.00093	-	<0.00005	-	-	<0.00005	<0.00005
Molybdenum - Dissolved (mg/L)			-	0.03	-	-	-	-
Nickel - Dissolved (mg/L)	<0.001	0.022	<0.02	<0.02	-	-	0.003	0.002
Nitrate as NO2 (mg/L)			<10	-	-	-	-	-
Nitrate as NO3 (mg/L)	<10	176	<10	<10	-	-	<10	<10
pH (pH units)	5.85	8.8	7.4	7	7	-	6.9	7
Potassium - Dissolved (mg/L)	51.3	924	180	120	-	-	210	200
Selenium - Dissolved (mg/L)			-	<0.12	-	-	-	-
Sodium - Dissolved (mg/L)	494.1	10670	3700	2600	-	-	3500	3500
Sulfur - Dissolved (mg/L)			-	520	-	-	-	-
Sulphate by HPLC (mg/L)	108	5170	2100	1100	-	-	2200	2100
Tin - Dissolved (mg/L)			-	<0.05	-	-	-	-
Total Alkalinity as CaCO3 (mg/L)			430	-	-	-	410	430
Total Dissolved Solids (grav) (mg/L)	2943	45210	15000	16700	15300	-	15300	14500
Total Suspended Solids (mg/L)			130	-	-	-	-	-
Turbidity (NTU)			35	-	-	-	-	-
Zinc - Dissolved (mg/L)	<0.001	0.154	0.1	0.08	-	-	0.004	0.009

Table 8: Groundwater Monitoring Results – ENVMB007

Parameter	10% Variation in Baseline Trigger		ENVMB007					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Aluminium - Dissolved (mg/L)			<0.1	<0.1	-	-	-	-
Antimony - Dissolved (mg/L)			-	<0.15	-	-	-	-

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Parameter	10% Variation in Baseline Trigger		ENVMB007					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Arsenic - Dissolved (mg/L)	<0.001	0.55	<0.05	<0.05	-	<0.05	0.002	<0.001
Barium - Dissolved (mg/L)			-	0.05	-	0.06	0.097	0.057
Beryllium - Dissolved (mg/L)			-	<0.01	-	-	-	-
Bicarbonate HCO3 as CaCO3 (mg/L)	135	682	480	430	-	460	470	460
Bismuth - Dissolved (mg/L)			-	<0.001	-	-	-	-
Boron - Dissolved (mg/L)	3.51	12.1	-	3.7	-	4.8	4.4	4.4
Cadmium - Dissolved (mg/L)	<0.0001	0.0055	<0.01	<0.01	-	<0.01	0.0003	0.0002
Calcium - Dissolved (mg/L)	56.7	704	460	310	-	430	440	420
Carbonate CO32- as CaCO3 (mg/L)	<5		<5	-	-	<5	<5	<5
Chloride in water (mg/L)	2250	18700	-	4700	-	6600	6700	6800
Chromium - Dissolved (mg/L)			-	<0.01	-	-	-	-
Chromium III - Dissolved (mg/L)			-	<0.005	-	-	-	-
Chromium VI - Dissolved (mg/L)	<0.01	0.11	-	<0.005	-	<0.005	<0.005	<0.005
Cobalt - Dissolved (mg/L)	<0.001	0.0132	<0.01	<0.01	-	<0.01	0.004	0.002
Colour (True) (HZU)			<3	-	-	-	-	-
Copper - Dissolved (mg/L)	<0.001	0.11	0.04	0.08	-	0.02	0.006	0.003
Cyanide - Total (mg/L)	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004
Cyanide WAD (mg/L)	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004
Electrical Conductivity (µS/cm)	5040	54670	21700	19400	22500	20900	20400	20000
Fluoride in water (mg/L)			-	<5	-	-	-	-
Free Cyanide (mg/L)	<0.004	<0.004	-	-	-	<0.004	<0.004	<0.004
Hardness as CaCO3 (mg/L)			4000	-	-	3700	4000	3900
Hydroxide OH- as CaCO3 (mg/L)	<5		<5	-	-	<5	<5	<5
Ionic Balance (%)			-	-	-	-3.2	-1.7	-1.7
Iron - Dissolved (mg/L)	<0.02	1.98	<0.02	<0.02	-	<0.02	<0.01	<0.01
Lead - Dissolved (mg/L)	<0.001	0.33	<0.03	<0.03	-	<0.03	<0.001	<0.001
Magnesium - Dissolved (mg/L)	117	2090	700	480	-	650	720	700
Manganese - Dissolved (mg/L)	<0.005	4.07	1.9	0.67	-	0.43	1	0.43
Mercury - Dissolved (mg/L)	<0.00005	0.00093	-	<0.00005	-	<0.00005	<0.00005	<0.00005
Molybdenum - Dissolved (mg/L)			-	<0.03	-	-	-	-
Nickel - Dissolved (mg/L)	<0.001	0.022	<0.02	<0.02	-	<0.02	0.009	0.005
Nitrate as NO2 (mg/L)			<10	-	-	-	-	-
Nitrate as NO3 (mg/L)	<10	176	<10	<5	-	<10	<10	<10
pH (pH units)	5.85	8.8	7.5	7.1	7.1	7.8	7	7.1
Potassium - Dissolved (mg/L)	51.3	924	160	110	-	150	190	180
Selenium - Dissolved (mg/L)			-	<0.12	-	-	-	-
Sodium - Dissolved (mg/L)	494.1	10670	3600	2600	-	3400	3400	3600
Sulfur - Dissolved (mg/L)			-	510	-	-	-	-
Sulphate by HPLC (mg/L)	108	5170	2200	1500	-	2200	2200	2200
Tin - Dissolved (mg/L)			-	<0.05	-	-	-	-
Total Alkalinity as CaCO3 (mg/L)			480	-	-	460	470	460
Total Dissolved Solids (grav) (mg/L)	2943	45210	14200	16600	14800	14900	14100	14200
Total Suspended Solids (mg/L)			920	-	-	-	-	-
Turbidity (NTU)			200	-	-	-	-	-
Zinc - Dissolved (mg/L)	<0.001	0.154	0.12	0.13	-	0.02	0.024	0.013

Table 9: Groundwater Monitoring Results – ENVMB008

Parameter	10% Variation in Baseline Trigger		ENVMB008					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Aluminium - Dissolved (mg/L)			<0.1	<0.1	-	-	-	-
Antimony - Dissolved (mg/L)			-	<0.15	-	-	-	-
Arsenic - Dissolved (mg/L)	<0.001	0.55	<0.05	<0.05	-	<0.05	<0.001	<0.001
Barium - Dissolved (mg/L)			-	0.07	-	0.08	0.082	0.083
Beryllium - Dissolved (mg/L)			-	<0.01	-	-	-	-
Bicarbonate HCO3 as CaCO3 (mg/L)	135	682	240	240	-	240	200	200
Bismuth - Dissolved (mg/L)			-	<0.001	-	-	-	-
Boron - Dissolved (mg/L)	3.51	12.1	-	3.1	-	3.5	2.2	2.4
Cadmium - Dissolved (mg/L)	<0.0001	0.0055	<0.01	<0.01	-	<0.01	0.0001	0.0001
Calcium - Dissolved (mg/L)	56.7	704	590	490	-	500	390	390
Carbonate CO32- as CaCO3 (mg/L)	<5		<5	-	-	<5	<5	<5
Chloride in water (mg/L)	2250	18700	-	4800	-	7000	3800	3900
Chromium - Dissolved (mg/L)			-	<0.01	-	-	-	-
Chromium III - Dissolved (mg/L)			-	<0.005	-	-	-	-
Chromium VI - Dissolved (mg/L)	<0.01	0.11	-	<0.005	-	<0.005	<0.005	<0.005
Cobalt - Dissolved (mg/L)	<0.001	0.0132	<0.01	<0.01	-	<0.01	<0.001	<0.001
Colour (True) (HZU)			<3	-	-	-	-	-
Copper - Dissolved (mg/L)	<0.001	0.11	0.1	0.1	-	0.04	<0.001	<0.001
Cyanide - Total (mg/L)	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004
Cyanide WAD (mg/L)	<0.004	<0.004	<0.004	<0.004	-	<0.004	<0.004	<0.004
Electrical Conductivity (µS/cm)	5040	54670	22400	20400	10300	21400	12800	12500
Fluoride in water (mg/L)			-	<10	-	-	-	-
Free Cyanide (mg/L)	<0.004	<0.004	-	-	-	<0.004	<0.004	<0.004
Hardness as CaCO3 (mg/L)			5400	-	-	4800	3000	3000
Hydroxide OH- as CaCO3 (mg/L)	<5		<5	-	-	<5	<5	<5
Ionic Balance (%)			-	-	-	-3.3	1.3	0.33
Iron - Dissolved (mg/L)	<0.02	1.98	<0.02	<0.02	-	<0.02	<0.01	0.02
Lead - Dissolved (mg/L)	<0.001	0.33	<0.03	<0.03	-	<0.03	<0.001	<0.001
Magnesium - Dissolved (mg/L)	117	2090	950	800	-	870	490	490
Manganese - Dissolved (mg/L)	<0.005	4.07	0.01	0.01	-	0.01	<0.005	0.009
Mercury - Dissolved (mg/L)	<0.00005	0.00093	-	<0.00005	-	<0.00005	<0.00005	<0.00005
Molybdenum - Dissolved (mg/L)			-	<0.03	-	-	-	-
Nickel - Dissolved (mg/L)	<0.001	0.022	<0.02	<0.02	-	<0.02	0.002	0.004
Nitrate as NO2 (mg/L)			<10	-	-	-	-	-
Nitrate as NO3 (mg/L)	<10	176	20	23	-	25	47	41
pH (pH units)	5.85	8.8	7.4	7.1	7.5	7.5	7.1	7.2
Potassium - Dissolved (mg/L)	51.3	924	130	110	-	120	110	90
Selenium - Dissolved (mg/L)			-	<0.12	-	-	-	-
Sodium - Dissolved (mg/L)	494.1	10670	3200	2800	-	3000	1800	1800
Sulfur - Dissolved (mg/L)			-	630	-	-	-	-
Sulphate by HPLC (mg/L)	108	5170	2100	1500	-	2100	1200	1200
Tin - Dissolved (mg/L)			-	<0.05	-	-	-	-
Total Alkalinity as CaCO3 (mg/L)			240	-	-	240	200	200

Parameter	10% Variation in Baseline Trigger		ENVMB008					
			2014		2015			
	Min	Max	Oct	Nov	Jan	Mar	Jun	Aug
Total Dissolved Solids (grav) (mg/L)	2943	45210	15400	16600	6350	16200	8920	8490
Total Suspended Solids (mg/L)			<5	-	-	-	-	-
Turbidity (NTU)			0.4	-	-	-	-	-
Zinc - Dissolved (mg/L)	<0.001	0.154	0.15	0.12	-	0.04	0.006	0.01

Appendix 4: Surface Water monitoring results

MEMORANDUM

Date: **10 December 2015**

To: Environment Team

From: Melissa Bolton

Subject: Surface Water Monitoring Results

Surface water quality monitoring is undertaken in accordance with the Tropicana Gold Mine Environmental Monitoring Strategy, with samples collected following rain events of over 20 millimetres (mm) in 24 hours or when surface water is observed in collection ponds.

Surface water sampling locations have been established in and around the operational area however no permanent surface water sites occur. Therefore surface water sampling is only able to be collected following large rainfall events. Additional surface water sample locations have been established progressively as the project has transitioned from construction to operational phases.

Event sampling was undertaken during the reporting period following a significant rainfall event that occurred in March 2015. The following locations were sampled:

- Plant drain;
- Downstream LWE1;
- ROM drain;
- ROM sump;
- TSF North east ENV;
- TSF North east
- TSF North west;
- TSF South west;
- Aerodrome Dam; and
- Upstream Drain.

The locations of these sampling sites are shown in **Figure 1**.

Figure 1: Surface Water Sampling Locations (March 2015)

Surface Water Monitoring Results

Results obtained from surface water sampling conducted during the reporting period are provided in Appendix 1 and discussed briefly below.

The pH of samples collected across the surface water sampling locations ranged between 6.9 and 8 pH units with levels typically ranging between 7 and 8 pH units (**Figure 2**).

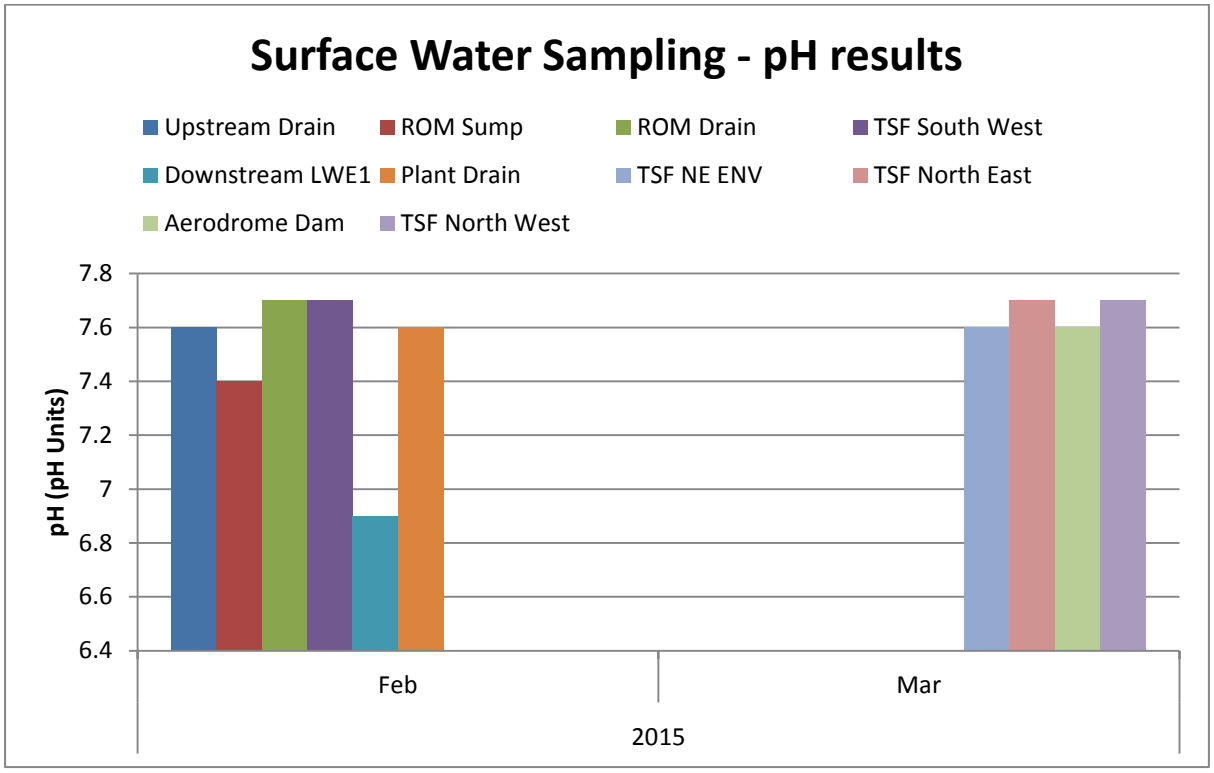

Figure 2: pH Recorded during Surface Water Monitoring (Oct 2014 to Sep 2015)

Electrical Conductivity (EC) recorded across the surface water sampling locations typically ranged between 200 µS/cm to 2000 µS/cm and Total Dissolved Solids (TDS) values typically ranged from 100 mg/L to 1,200 mg/L (**Figure 3** and **Figure 4**). One exception where higher EC and TDS were recorded was the ROM Sump with TDS recorded at 2,090 mg/L and EC recorded at 3,430 µS/cm. This is likely to be due to the use of hypersaline water in the processing plant. The surface water sampling is expected to have picked up salts contained in the ROM Pad resulting in these higher readings. This sampling location is not specifically a drain, but rather an area where water ponds due to the altered surface hydrology. These results indicate the importance of the toe drains at the base of landforms to contain sediment laden water.

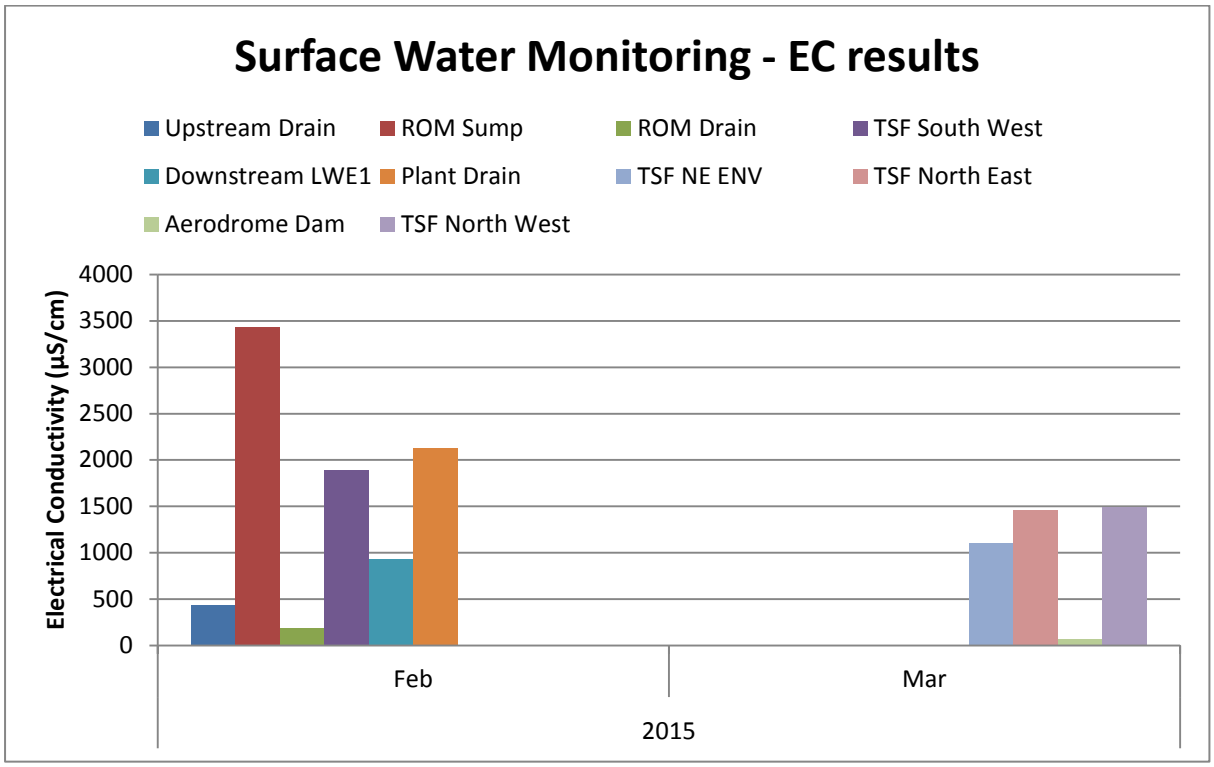

Figure 3: Electrical Conductivity Recorded during Surface Water Monitoring (Oct 2014 to Sep 2015)

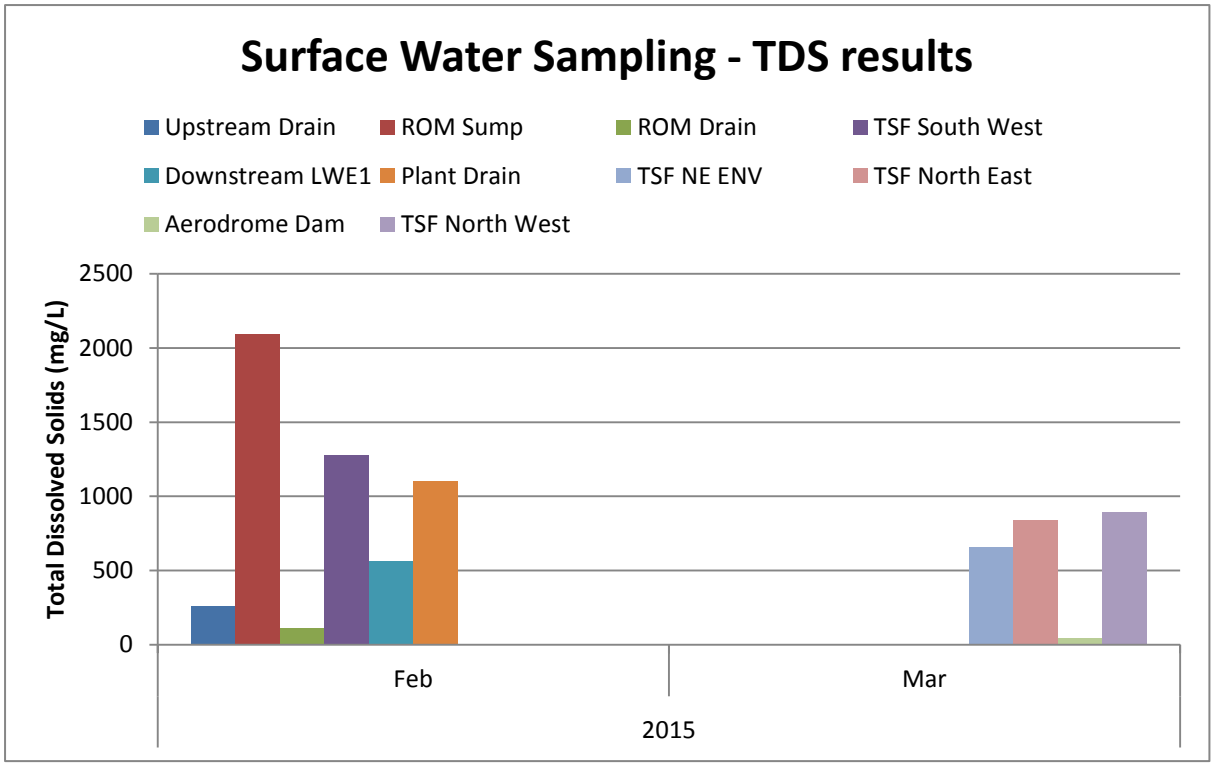

Figure 4: Total Dissolved Solids Recorded during Surface Water Monitoring (Oct 2014 to Sep 2015)

Total cyanide (mg/L) was only analysed from one of the sampling locations (TSF SW) which was below the trigger value (0.07 mg/L) within the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality.* This result is not unexpected from this location. This surface water is contained in the Project area, and does not flow off site. This cyanide value is below the trigger value identified within the Sites Prescribed Premises Licence of 0.5 mg/L

Appendix 1: Surface Water Results

Parameter	Aerodrome Dam	Downstream LWE1	Plant Drain	ROM Drain	ROM Sump	TSF NE ENV	TSF North East	TSF North West	TSF South West	Upstream Drain
	Feb-15	Feb-15	Feb-15	Feb-15	Feb-15	Mar-15	Mar-15	Mar-15	Mar-15	Mar-15
Aluminium (mg/L)	-	<0.1	-	-	-	<0.1	<0.1	-	-	-
Arsenic (mg/L)	-	<0.05	-	-	-	<0.05	<0.05	-	-	-
Barium (mg/L)	-	0.04	-	-	-	0.05	0.07	-	-	-
Benzene (µg/l)	<1	-	<1	<1	<1	-	-	<1	-	-
Bicarbonate HCO3 as CaCO3 (mg/L)	-	8	-	-	-	27	29	-	-	-
Boron (mg/L)	-	<0.2	-	-	-	0.2	0.2	-	-	-
Cadmium (mg/L)	-	<0.01	-	-	-	<0.01	<0.01	-	-	-
Calcium (mg/L)	-	18	-	-	-	29	42	-	-	-
Carbonate CO32- as CaCO3 (mg/L)	-	<5	-	-	-	<5	<5	-	-	-
Chloride in water (mg/L)	-	250	-	-	-	280	380	-	-	-
Chromium VI - Dissolved (mg/L)	-	<0.005	-	-	-	<0.005	<0.005	-	-	-
Cobalt (mg/L)	-	<0.01	-	-	-	<0.01	<0.01	-	-	-
Copper (mg/L)	-	<0.01	-	-	-	<0.01	<0.01	-	-	-
Cyanide - Total (mg/L)	-	-	-	-	-	-	-	-	0.007	-
Cyanide WAD (mg/L)	-	-	-	-	-	-	-	-	<0.004	-
Electrical Conductivity (µS/cm)	70.3	934	2130	190	3430	1100	1460	1490	1890	434
Ethylbenzene (µg/l)	<1	-	<1	<1	<1	-	-	<1	-	-
Hardness as CaCO3 (mg/L)	-	100	-	-	-	130	180	-	-	-
Hydroxide OH- as CaCO3 (mg/L)	-	<5	-	-	-	<5	<5	-	-	-
Ionic Balance (%)	-	0.23	-	-	-	-2.2	0.42	-	-	-
Iron (mg/L)	-	<0.02	-	-	-	<0.02	<0.02	-	-	-
Lead (mg/L)	-	<0.03	-	-	-	<0.03	<0.03	-	-	-
m+p-xylene (µg/l)	<2	-	<2	<2	<2	-	-	<2	-	-

Parameter	Aerodrome Dam	Downstream LWE1	Plant Drain	ROM Drain	ROM Sump	TSF NE ENV	TSF North East	TSF North West	TSF South West	Upstream Drain
	Feb-15	Feb-15	Feb-15	Feb-15	Feb-15	Mar-15	Mar-15	Mar-15	Mar-15	Mar-15
Magnesium (mg/L)	-	14	-	-	-	13	19	-	-	-
Manganese (mg/L)	-	0.13	-	-	-	0.03	0.02	-	-	-
Mercury (mg/L)	-	<0.00005	-	-	-	<0.00005	<0.00005	-	-	-
MTBE (µg/l)	<1	-	<1	<1	<1	-	-	<1	-	-
Naphthalene (µg/l)	<1	-	<1	<1	<1	-	-	<1	-	-
Nickel (mg/L)	-	<0.02	-	-	-	<0.02	<0.02	-	-	-
Nitrate as NO3 (mg/L)	-	2.6	-	-	-	3.4	3.1	-	-	-
o-xylene (µg/l)	<1	-	<1	<1	<1	-	-	<1	-	-
pH (pH units)	7.6	6.9	7.6	7.7	7.4	7.6	7.7	7.7	7.7	7.6
Potassium (mg/L)	-	9.4	-	-	-	11	13	-	-	-
Sodium (mg/L)	-	160	-	-	-	160	220	-	-	-
Sulphate by HPLC (mg/L)	-	94	-	-	-	81	100	-	-	-
Surrogate (%) (%)	-	-	99	-	-	-	-	-	-	-
Surrogate 4-BFB (%)	94	-	98	95	97	-	-	98	-	-
Surrogate Dibromofluoromethane (%)	101	-	100	100	102	-	-	102	-	-
Surrogate toluene-d8 (%)	100	-	99	101	102	-	-	100	-	-
Toluene (µg/l)	<1	-	<1	<1	<1	-	-	<1	-	-
Total Alkalinity as CaCO3 (mg/L)	-	8	-	-	-	27	29	-	-	-
Total Dissolved Solids (grav) (mg/L)	42	560	1100	114	2090	656	838	896	1280	260
Total Suspended Solids (mg/L)	71	-	-	-	-	320	240	-	-	-
TRH >C10 - C16 (µg/l)	<50	-	<50	110	<50	-	-	<50	-	-
TRH >C10-C16 less N (F2) (µg/l)	<50	-	<50	110	<50	-	-	<50	-	-
TRH >C16 - C34 (µg/l)	<100	-	<100	540	<100	-	-	<100	-	-
TRH >C34 - C40 (µg/l)	<100	-	<100	<100	<100	-	-	<100	-	-
TRH C10 - C14 (µg/l)	<50	-	<50	80	<50	-	-	<50	-	-

Parameter	Aerodrome Dam	Downstream LWE1	Plant Drain	ROM Drain	ROM Sump	TSF NE ENV	TSF North East	TSF North West	TSF South West	Upstream Drain
	Feb-15	Feb-15	Feb-15	Feb-15	Feb-15	Mar-15	Mar-15	Mar-15	Mar-15	Mar-15
TRH C15 - C28 (µg/l)	<100	-	<100	500	<100	-	-	<100	-	-
TRH C29 - C36 (µg/l)	<100	-	<100	100	<100	-	-	<100	-	-
TRH C6 - C10 (µg/l)	<10	-	<10	<10	<10	-	-	<10	-	-
TRH C6 - C9 (µg/l)	<10	-	<10	<10	<10	-	-	<10	-	-
TRH C6-C10 less BTEX (F1) (µg/l)	<10	-	<10	<10	<10	-	-	<10	-	-
Zinc (mg/L)	-	<0.02	-	-	-	<0.02	<0.02	-	-	-

Appendix 5:Internal Audit of the Threatened Species Management Strategy

MEMORANDUM

Date: **14th December 2015**

To: Environment Team

From: Melissa Bolton

Subject: Threatened Species Management Strategy Internal Audit

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An internal audit of the Threatened Species and Communities Management Strategy was undertaken between on the 14th of December 2015. The audit template covered all aspects detailed in Section 13 Threats and Mitigations of the Threatened Species and Communities Management Strategy. The audit was developed around 13 key aspects including:

1. Clearing/ earthworks;
2. Environmentally hazardous substances;
3. General waste;
4. Tailings;
5. Dust;
6. Noise/ vibration;
7. Water sources/ storages;
8. Erosion/ sedimentation;
9. Terrestrial ecosystems – fire regimes;
10. Terrestrial ecosystems – invasive flora;
11. Terrestrial ecosystems – invasive fauna;
12. Terrestrial ecosystems – traffic; and
13. Terrestrial ecosystems – increase use of region nature reserves.

This audit determined a high level of compliance with the Threatened Species and Communities Management Strategy, with an overall score of 99%. **Table 1** below outlines the scores for each of the aspects and **Table 2** summarises the actions required to be undertaken. The completed audit table is provided in Appendix 1.

Table 1: Audit scores of key aspects

Aspect	Score
Clearing/ earthworks	100%
Environmentally hazardous substances	100%
General waste	100%
Tailings	100%
Dust	100%
Noise/ vibration	100%

Aspect	Score
Water sources/ storages	75%
Erosion/ sedimentation	100%
Terrestrial ecosystems – fire regimes	100%
Terrestrial ecosystems – invasive flora	100%
Terrestrial ecosystems – invasive fauna	100%
Terrestrial ecosystems – traffic	75%
Terrestrial ecosystems – increase use of region nature reserves	100%
Total	**99%**

Table 2: Actions assigned following audit

Actions
Ensure leak detection systems are installed on all pipelines
Develop and roll out spill kit awareness training
Undertake ongoing and additional workforce awareness training on waste management and recycling protocols
Verify that sediment catchment mechanisms (eg. Toe Drains) are installed as construction of the outer embankment of the TSF is completed in 2016.
Ensure all fauna egress points are fastened to the bottom of water storage facilities to ensure they are effective.
Install additional storm water drains around site
Identify locations along roadsides where threatened fauna habitat occurs and identify requirements for signs.

Appendix 1: Completed Audit Table

ANGLOGOLD ASHANTI AUSTRALIA

TGM Threatened Species and Commmunities Management Strategy
Internal Audit - Environmental Compliance

Audit undertaken by:	Mel Bolton	**Date of Audit:**	17/12/2015
Supervisor:	Rosemarie Lane	**Communicated:**	

1	Clearing/ Earthworks	Compliance (place x in applicable box)			Observations/Findings/Comments
		Yes	No	N/A	
1.1	Disturbance to native vegetation is minimised with clearing confined to the minimum area practicable.	X			All clearing undertaken is approved through GDP boundaries to minimise disturbance to native vegetation.
1.2	All areas requiring clearing are clearing delineated.	X			All clearing is clearly delineated within GDP application form.
1.3	Declared Rare Flora (DRF) within 50 m of disturbance areas are visibly demarcated.			X	During construction, DRF were demarcated, since this time, the DRF were delisted. No current DRF in the Operational Area.
1.4	Infrastructure and access roads has been designed and located to avoid impacts on all known populations of DRF and priority flora.	X			Prior to clearing being undertaken, a GDP is required. The GDP requires specific details of the proposed disturbance. During the GDP assessment process, a desktop assessment is undertaken to determine if there will be any impacts to DRF or priority flora and whether the proposed disturbance can be relocated to avoid the DRF or priority flora. A site inspection (pre clearing inspection) may also be undertaken in areas outside the PER boundary to ensure disturbance to DRF and Priority Flora is avoided.
1.5	No evidence of vegetation disturbances outside authorised areas (Inc. significant species)	X			Following approved ground disturbance activities, the area disturbed is verified through survey. Additionally, annual aerial surveys assist in the identification of any unauthorised disturbance. Induction includes material on unauthorised clearing.
1.6	No evidence of vegetation death in adjacent uncleared vegetation	X			Photographic dust vegetation monitoring is undertaken to monitor impacts from the Project to surrounding vegetation. Monitoring has not identified any loss of vegetation in uncleared areas.
1.7	Surface water diversion systems have been incorporated into road corridors to prevent interference with sheet flow	X			Roads located on high points, culverts installed on site access roads to allow water to flow underneath the road to prevent interference with sheet flow. Re-evaluate current design of the borefield access road to determine whether culverts or additional surface water management measures are required.
1.8	The operational area layout has been designed to minimise impacts to surface water flow	X			Surface water diversions in place around site to intercept surface water and prevent offsite impacts. Waste Rock Landforms have been designed with a toe drain and collection point to prevent sedimentation down stream.
1.9	Infrastructure has been located to minimise fragmentation of important habitat	X			Environmental values were taken into consideration during project footprint design. Minimising impacts to avoidance areas. TSF was re-evaluated, original TSF design comprised of valley fill utilising the nearby sand dunes as containment walls. The sand dunes however were subsequently recognised as significant habitat, and the TSF design was re-evaluated to prevent impact to the sand dunes.
1.10	Fire protocols have been implemented to reduce the risk of fire	X			Tropicana works activity with and regularly collaborates with the Department of Fire and Emergency Services (DFES) to determine suitable fire regimes.
1.11	Fire breaks have been established adjacent to high risk areas	X			Fire breaks located in the following locations: Village, explosives magazine and exploration camp. Considering installing additional firebreaks - determining where these may be required. Firebreaks will be installed if there is an imminent risk of fire.
1.12	No extensions to the pit or amendments have been undertaken without further troglobiotic surveys			X	No extensions or amendments to the pit has been undertaken beyond the current approval.
1.13	Disturbance to critical habitat has been avoided (sand dune systems suitable for Marsupial Moles, Sandhill Dunnarts and the Mulgara).	X			Key habitats have been avoided. One Priority Ecological Community (PEC) could not be avoided - positioned to be minimised. The Environmental and Heritage Inspection (EIN) and ground disturbance permitting (GDP) processes aim to minimise impacts to environmentally sensitive areas.

1.14	Disturbance to possible Mallee fowl and Sandhill Dunnart habitats has been minimised where practicable (including areas of spinifex unburnt between eight and 38 years.	X			Infrastructure locations and project footprint has been placed to avoid and minimise disturbance to significant habitats including sand dunes and areas of unburnt spinifex).
1.15	Locations of critical threatened fauna habitat have been avoided (including Mallee fowl mounds, Bustard nests and sand dunes).	X			Infrastructure locations and project footprint has been placed to avoid and minimise disturbance to significant habitats including sand dunes and areas of unburnt spinifex).
1.16	Locations of Priority Ecological Communities (PEC) have been avoided.	X			One Priority Ecological Community (PEC) could not be avoided - positioned to be minimised. The Environmental and Heritage Inspection (EIN) and ground disturbance permitting (GDP) processes aim to minimise impacts to environmentally sensitive areas through the identification of PEC locations in relation to proposed disturbances.
1.17	Removal of large mature habitat trees has been avoided (particularly Marble Gum).	X			The project footprint was placed to avoid the removal of mature habitat trees. During clearing, areas marked in the field further minimised the impact to large trees.
1.18	Rehabilitation is undertaken as soon as is practicable.	X			Borrow pits along the access road have been rehabilitated. Ground Zero area has been rehabilitated. A rehabilitation plan will be developed for the mining area to enable and plan progressive rehabilitation of landforms.
1.19	Rehabilitation areas are monitored for presence of weeds			X	Currently limited rehabilitation areas in place. Following the commencement of progressive rehabilitation, a rehabilitation plan including monitoring for weeds will be implemented.
1.20	Information on current flora and fauna conservation status is maintained	X			The Threatened Species and Community Management Plan was updated to reflect changes in listings in 2014.
1.21	Site induction includes information on conservation significant flora, vegetation, fauna and habitat.	X			Site induction covers content on flora and fauna in the region. All employees are provided with a handbook which outlines provides information on threatened species (flora and fauna).
1.22	Open trenches are cleared and inspected for fauna at sunrise and sunset.	X			Suitably qualified fauna clearing personnel (360 Environmental) inspecting borefield trenches from pipeline activities.
1.23	Trenches do not exceed a length capable of being inspected by fauna clearing person.	X			Trenches to be inspected are to be of a length appropriate that the fauna clearing person can get to the trenches within the required timeframes (three hours after sunrise and three hours after sunset). Additional fauna clearing personnel to be placed on the project or trenching to reduce to enable this to occur
1.24	Fauna refuges and/or egress ramps are placed in the trench at 50 m intervals	X			Currently borefield expansion and pipeline laying trenches have adequate fauna egress.
1.25	Report on fauna management following trenching activities has been produced.	X			Upon completion of the borefield expansion trenching activities, a report will be produced by the fauna clearing personnel (360 Environmental).
		22	0	3	
		22	/	22	100%

2	Environmentally Hazardous Substances	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
2.1	The placement of storage, re-fuelling, handling and disposal facilities avoids critical habitat	X			The project footprint was placed to avoid critical habitat
2.2	All pipelines are buried or bunded, have leak detection systems and automatic cut off systems	X			Pipelines are buried. Not all pipelines have leak detection systems in place. Leak detection systems will be installed on all pipelines where a risk to enviornment is present (currently in progress)
2.3	The pipeline corridor to the Minigwal borefield avoids threatened or conservation significant species	X			Designed to avoid critical habitat - minimise impact zones.
2.4	Hydrocarbons and chemicals are stored as per site procedures and Australian Standard 1940	X			Facility inspections and audits are undertaken regularly to ensure hydrocarbons and chemicals are stored appropriately. Refer to the Audit Schedule.
2.5	Dangerous Goods licensing covers all hazardous materials on site	X			Chemical request process ensure that the Dangerous Goods Licence is considered prior to the chemical being approved for use on site.
2.6	Evidence of appropriate spill containment at refuelling bays and bulk storage facilities	X			Spill kits are located at refuelling bays and at bulk storage facilities
2.7	Evidence of implementation of Emergency Response Procedures for hydrocarbon spills	X			Emergency response team have attended significant hydrocarbon spill incidents as required.
2.8	Evidence of spill kit training records for relevant staff.	X			Spill training is delivered as part of the TGM General Induction and provdes information on spill kits with a specific question in the assessment. The ERT are trained to a higher level and these modules are part of a National Certification. Records are held by ERT.
		8	0	0	
		8	/	8	100%

3	General Waste	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
3.1	Housekeeping and strict waste management practices	X			Waste management practices are in place, although further education of the workforce may be required.
3.2	All domestic waste is disposed within the licensed waste management facility	X			Yes - prescribed premises license includes this facility
3.3	All domestic rubbish bins have lids	X			Yes - wheelie bins with lids are utilised for domestic waste.
3.4	Waste stations are labelled for the appropriate segregation of waste (e.g. recyclables, general waste, hydrocarbon waste)	X			Yes - however there is some need for improvement with respect to workforce training to ensure employees are aware of appropriate disposal.
3.5	Putrescible and inert waste is disposed of and covered within the licensed waste management facility.	X			Yes - the landfill is regularly maintained and contains putrescible and inert waste only.
		5	0	0	
		5	/	5	100%

4	Tailings	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
4.1	The TSF design contains any potentially contaminated runoff, preventing uncontrolled discharge.	X			The TSF design allows for an operational freeboard of 500mm. The current stage of construction is such that there is 2.5-5m freeboard due the C Zone material placement of the embankment wall.
4.2	WAD CN levels in free water on the TSF do not exceed 50 mg/L	X			Monthly decant pond water sampling undertaken since March 2014, the monthly data indicates that the WAD CN level has not exceeded 50 mg/L. The WAD CN levels are also measured daily from the TSF Decant pond. These results indicate that there has been two spikes in WAD CN levels, one recorded on the 9th of July recording 90 mg/L and 58.10 mg/L on the 19th of August 2014.
4.3	Compliance with the International Cyanide Management Code			X	Cyanide Code Certification is scheduled for March 2017.
4.4	Animal access is restricted	X			The TSF is fenced. Freshwater fauna ponds have been placed in locations outside of the TSF to attract fauna to these ponds over the TSF.
4.5	The TSF Management Strategy has been implemented,	X			Tailings Storage Facility Monitoring and Maintenance Manual.
4.6	TSF design limits seepage through the installation of a basin liner, seepage recovery system and water recovery.	X			Seepage Recovery System installed. Compacted clay liner and HDPE liner underlying the decant. (300 mm liner).
4.7	Operation of TSF limits volume of water stored on the TSF at any one time (through re-use)	X			Water recycled on site. Second line installed to increase water recovery.
		6	0	1	
		6	/	6	100%

5	Dust	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
5.1	Evidence of implementation of the CEMS and OEMS	X			Dust suppression - including water carts and dust monitoring program in place
5.2	Pollution control devices (e.g. dust suppressants) operational and maintained in accordance with manufacturer's instructions	X			Dust suppression - including water carts
5.3	No excessive water pooling from dust suppression	X			Occasional salt crust build up on sides of roads as a result of dust suppression, but no evidence of ponding.
5.4	Disturbance is minimised and progressive rehabilitation undertaken to reduce the potential for dust generation from cleared areas.	X			Disturbance is undertaken progressively to minimise dust generation. Progressive rehabilitation will be undertaken.
5.5	Growth medium stripping and clearing activities are undertaken in appropriate weather conditions	X			Yes growth medium is stripped in dry conditions only.
5.6	Road speeds are limited to reduce dust generation.	X			The road speeds on site do not exceed 60 km/hr., the access road permits speed up to 80 km/ hr. All employees are required to drive to the conditions.
		6	0	0	
		6	/	6	100%

6	Noise/ Vibration	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
6.1	Noise levels acceptable	X			Noise surveys are undertaken every 5 years. Impacts of noise are very localised.
6.2	Vibration is being controlled	X			Modifications have been undertaken on the processing plant to reduce the impact of vibration.
		2	0	0	
		2	/	2	100%

7	Water Sources/ Storage	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
7.1	Water storage areas are fenced	X			Twin turkeys, Kamikaze Turkeys nest, WWTP ponds and Process Water Ponds are fenced with lockable gates
7.2	Fauna egress and/or nets have been incorporated into permanent water storage sites	X			Nets are located in ponds, however some nets are not fastened to the base of the pond - which may compromise the integrity and accessibility to fauna to utilise.
7.3	Evidence of fauna deterrent methods	X			Fencing in place, egress and artificial water ponds in place to attract fauna to these ponds in lieu of the TSF. There is also a gas cannon to deter birds from the TSF.
7.4	No animals trapped/ caught in fence, water storage facility or tailings.		X		Although water storages are fenced, one kangaroo was caught in the mine water dam which resulted in a fatality. Continue to inspect facilities to ensure fencing is adequate and there is suitable fauna egress.
		3	1	0	
		3	/	4	75%

8	Erosion/ Sedimentation	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
8.1	Evidence of routine inspections of erosion and sediment control structures	X			Facility audits and inspections are undertaken which include aspects of erosion and sediment control. A separate inspection of site diversions and drains and sediment traps on landforms is undertaken post rainfall.
8.2	Evidence of stormwater drains within the operational area.	X			Large diversion drain around site
8.3	Installation of an effective diversion system to separate clean and dirty water	X			Large diversion drain around site.
8.4	Evidence of dust control measures	X			Dust suppression measures in place - water carts, sprinklers on stockpiles
		4	0	0	
		4	/	4	100%

9	Terrestrial Ecosystems - Fire Regimes	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
9.1	Flammable liquids are stored appropriately	X			Flammable Liquids are stored as per Dangerous Goods License requirements.
9.2	Fire protocols have been implemented to reduce the risk of fire	X			Tropicana works activity with and regularly collaborates with the Department of Fire and Emergency Services (DFES). Fire activity is monitored by the Emergency Response Team.
9.3	Fire breaks have been established adjacent to high risk areas	X			Fire breaks located in the following locations: Village, explosives magazine and exploration camp. Considering installing additional firebreaks - determining where these may be required. Firebreaks will be installed if there is an imminent risk of fire.
9.4	Designated smoking areas and provision of appropriate cigarette disposal.	X			Designated smoking areas established on site. Cigarette Butt disposal pockets available to all employees on site.
9.5	Collaboration with regulators to reduce the risk of fires	X			Data collation undertaken by Department of Fire and Emergency Services to gather fuel load information.
		5	0	0	
		5	/	5	100%

10	Terrestrial Ecosystems - Invasive Flora	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
10.1	Invasive flora management procedures have been implemented	X			Weed Hygiene Certificate process has been successfully implemented. Additional procedures to be implemented, to increase workforce awareness, and cover other foreign objects brought to site with the risk of contamination such as timbers.
10.2	Strict Vehicle hygiene practices implemented	X			All new vehicles/ equipment mobilised to site, require a notification form which provides details of the last service, location utilised and last clean. Upon arrival to site, the Environment team will inspect all equipment in order to grant approval for use.
10.3	Inductions and training promote awareness of weeds	X			Induction includes content on weeds and the strict vehicle mobilisation protocols. Following the recent infestation of the prickly lettuce weed, site wide posters and tool box training was implemented around site.
10.4	Inspections are undertaken to record invasive flora infestation or changes in invasive flora.	X			Following the recent prickly lettuce infestation and removal, a monitoring programme was established to prevent regeneration of the species.
10.5	All soil brought to site is certified weed free.	X			Only certified weed free soil can be brought to site.
10.6	Control and treatment measures for weeds are developed in consultation with DPaW where appropriate			X	Although one weed species has been brought to site, the management of this weed could be determined internally (manual removal of plants). In the case a significant weed was introduced on site, DPaW would be consulted regarding management, control measures and treatment programs
10.7	Clean seed and local seed only to be harvested for use in rehabilitation			X	Seed harvesting has not yet commenced. The local Tjuntunrtjarra community have recently had training in seed collection and will be utilised for seed collection for the purposes of rehabilitation.
		5	0	2	
		5	/	5	100%

11	Terrestrial Ecosystems - Invasive Fauna	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
11.1	No pets on site	X			There is no evidence of pets on site.
11.2	Putrescible waste is disposed of in the licensed waste management facility	X			Waste landfill is managed and utilised in accordance with the PPL conditions and requirements.
11.3	Water storage facilities are Fenced	X			Except for the freshwater fauna ponds outside the TSF (designed and strategically placed to attract fauna to the ponds over the TSF).
11.4	Stormwater management around site minimises ponding	X			Surface hydrologist to be engaged to review the requirements - improvement plan in progress.
11.5	Taps are maintained to prevent leaks	X			360 Maintain ace tool established on site, any maintenance items including fixing leaking taps on site is undertaken through this process.
		5	0	0	
		5	/	5	100%

12	Terrestrial Ecosystems - Traffic	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
12.1	Speed limits consider interaction with and impacts to threatened fauna	X			Site awareness on driving to conditions, dawn and dusk.
12.2	Infrastructure corridors have avoided bisecting critical habitats	X			The project footprint placement considered the locations of critical habitats, and aimed to minimise the impact of disturbance to these habitats and bisecting of these habitats.
12.3	Evidence of signs present in areas of threatened fauna habitat along roadsides		X		Signs have not been installed.
12.4	No evidence of unauthorised off road driving	X			Aerial survey, survey and reconciliation against approved ground disturbance activities is undertaken to verify there is no unauthorised off road driving.
		3	1	0	
		3	/	4	75%

13	Terrestrial Ecosystems - Increase Use of Region Nature Reserves	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
13.1	Restrict vehicle movement and unauthorised use of the mine access road.	X			DIDO forms required to drive to site - requiring GM approval.
		1	0	0	
		1	/	1	100%

Audit Score	**75**	**/**	**76**
		99%	

Actions to be added to In Control			
Ref	**Action**	**Accountability**	**Due Date**
2.2	Ensure leak detection systems are installed on all pipelines where there is risk of harm to the environmen	ALL Dept's	31-Dec-16
2.8	Develop and roll out spill kit awareness training	Environment Dep't	31-Mar-16
3.1 and 3.4	Undertake ongoing and additional workforce awareness training on waste management and recycling protocols	Environment Dep't	ongoing
4.1	Verify that sediment catchment mechanisms (eg. Toe Drains) are installed as construction of the outer embankment is completed.	Mining	30-Jun-16
7.4	Ensure all fauna egress points are fastened to the bottom of water storage facilities to ensure they are effective.	ALL Dept's	ongoing
8.2 and 8.3	Install additional storm water drains around site (pending approval of Mining Proposal)	ALL Dept's	ongoing
12.3	Identify locations along roadsides where threatened fauna habitat occurs and identify requirements for signs.	Environment Dep't	31-Mar-16

Sign off

Role/Name	Name	Signature	Date
Environmental Coordinator:	Melissa Bolton		17/12/2015
Environmental Superintendent:	Rosemarie Lane		**23/12/2015**

Bamforth, Emma

From: Futter, Julie <Julie.Futter@DPaW.wa.gov.au>
Sent: Tuesday, 30 December 2014 10:52 AM
To: Bamforth, Emma
Cc: (G) AGA TGM Sustainability Environment Compliance
Subject: RE: Tropicana Gold Mine - Threatened Species and Community Management Strategy

Hi Emma,

Thank you for providing the updated Threatened Species and Communities Management Strategy. The Department of Parks and Wildlife acknowledges the comments have been addressed and has no further comments.

If you have any future queries please do not hesitate to contact me.

Kind regards,

Julie

Julie Futter
Environmental Impact Assessment Project Co-ordinator
Department of Parks and Wildlife - Goldfields Region

32 Brookman St Kalgoorlie - PO Box 10173 Kalgoorlie WA 6433
Phone: (08) 9080 5555 Fax: (08) 9021 7831
Email: julie.futter@dpaw.wa.gov.au

From: Bamforth, Emma [mailto:EBamforth@AngloGoldAshanti.com]
Sent: Wednesday, 17 December 2014 7:04 AM
To: Futter, Julie
Cc: (G) AGA TGM Sustainability Environment Compliance
Subject: RE: Tropicana Gold Mine - Threatened Species and Community Management Strategy

Hi Julie,
Thank you for your comments on the TGM Threatened Species and Communities Management Strategy. Your comments have been incorporated into the amended version of the strategy (December 2014) and a copy is attached for your information. I have also attached a table which summarises how we have addressed your comments and maps our response to the section of the strategy that has been updated.

Should you require any additional information please feel free to contact me on 9265 2213.
Kind regards
Emma

Emma Bamforth
Senior Environmental Coordinator - Approvals
Sustainability

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Cell: 0419919196
Email: ebamforth@anglogoldashanti.com

From: Futter, Julie [mailto:Julie.Futter@DPaW.wa.gov.au]
Sent: Monday, 1 December 2014 10:36 AM
To: Bastow, Belinda
Subject: RE: Tropicana Gold Mine - Threatened Species and Community Management Strategy

Hi Belinda,

Thank you for your time to talk through my comments last week it was most helpful. Please find attached the Department's comment sheet in relation to the updated Tropicana Gold Mine - Threatened Species and Community Management Strategy. If you have any queries please do not hesitate to contact me – I am out in the field over night but will be back in the office from Wednesday.

I hope the Trust Launch went great.

Kind regards,

Julie

Julie Futter
Environmental Impact Assessment Project Co-ordinator
Department of Parks and Wildlife - Goldfields Region

32 Brookman St Kalgoorlie - PO Box 10173 Kalgoorlie WA 6433
Phone: (08) 9080 5555 Fax: (08) 9021 7831
Email: julie.futter@dpaw.wa.gov.au

From: Bastow, Belinda [mailto:BBastow@AngloGoldAshanti.com]
Sent: Wednesday, 2 July 2014 5:07 AM
To: Futter, Julie
Subject: RE: Tropicana Gold Mine - Threatened Species and Community Management Strategy

Hi Julie,

Any feedback on our threatened species and community management strategy post our meeting?

Regards,

Belinda Bastow
Manager: Approvals/Compliance/Sustainability

Sustainability

Dept Assistant: +61 8 9265 2201 Direct Line: +61 8 9265 2200
Mobile: +61 (0) 418 950 678 Email: bbastow@anglogoldashanti.com.au

"Please consider the environment before printing this email"

From: Futter, Julie [mailto:Julie.Futter@DPaW.wa.gov.au]
Sent: Friday, 16 May 2014 5:45 PM
To: Bastow, Belinda
Subject: RE: Tropicana Gold Mine - Threatened Species and Community Management Strategy

Hi Belinda,

Sorry I have not been able to reach you on the phone.

Thank you for referring through the management strategy, the department will have a response within 20 working days.

It would be great to discuss Anglo's findings during the review process.

Speak to you soon.

Julie

Julie Futter
Environmental Impact Assessment Project Co-ordinator
Department of Parks and Wildlife - Goldfields Region

32 Brookman St Kalgoorlie - PO Box 10173 Kalgoorlie WA 6433
Phone: (08) 9080 5555 Fax: (08) 9021 7831
Email: julie.futter@dpaw.wa.gov.au

From: Bastow, Belinda [mailto:BBastow@AngloGoldAshanti.com.au]
Sent: Thursday, 15 May 2014 10:36 AM
To: Futter, Julie; Jackson, Jennifer
Cc: (G) AGA TGM Approvals; Kalgoorlie DER
Subject: Tropicana Gold Mine - Threatened Species and Community Management Strategy

Hi Julie and Jennifer,

In accordance with the Tropicana Gold Mine Ministerial Statement Condition 6.2, the Tropicana Gold Project Threatened Species and Community Management Strategy shall be reviewed every three year in consultation with the Dept of Environment and Conservation (or equivalent authority) to ensure the mitigation and management techniques remain valid and incorporates any relevant new research.

Please find attached an update version of the strategy for you review.

AGA needs to provide an update version of this strategy to the OEPA in the near future, please advise when the department is able to provide feedback.

Thanks in advance.

Regards,

Belinda Bastow
Manager: Approvals/Compliance/Sustainability
Sustainability

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Appendix 6: Internal audit of groundwater monitoring methodology and results

MEMORANDUM

Date: 5th December 2015

To: Environment Team (Safety & Environment Department)

From: Melissa Bolton

Subject: Monitoring Strategy Internal Audit

Groundwater and Surface Water

An internal audit of the water quality monitoring methodology outlined in the TGM Monitoring Strategy was undertaken against the *Australian Guidelines for Water Quality Monitoring and Reporting* (2000) in December 2015. The audit covered seven key aspects including:

1. monitoring preparation;
2. contamination prevention;
3. sample collection;
4. quality control and quality assurance;
5. sample storage and transport;
6. record management; and
7. laboratory analysis.

Table 1 below provides the actions to be undertaken following the audit and a summary of the audit findings for each of the key aspects. The completed audit table is provided in Appendix 1.

Table 1: Audit actions to be undertaken

Action	Accountability	Due
Formalise current protocols in place in the form of written procedures and work instructions which detail field sampling, transport and storage	Mel Bolton	1-June-16
Formalise current protocols in place in the form of detailed descriptions for collecting, labelling, transporting and storing samples and the necessary ancillary field data.	Mel Bolton	1-June-16
Develop specific procedures which specify the sample collection device, type of storage container, preservation procedures, type and numbers of quality control samples to be taken.	Mel Bolton	1-June-16
Formalise current protocols in place in the form of written procedures detailing handling, tracking and correcting data	Mel Bolton	28-Feb-15
QA/QC process to be implemented which includes sample blanks for contamination from the field, containers, equipment and transport as well as duplicate and replicate sampling.	Mel Bolton/ Jesse Ober	28-Feb-15

Monitoring Preparation

Monitoring preparation overall is undertaken well. Although sampling protocols are in place, these protocols have not yet been documented as work instructions or procedures. It is the intention that

these protocols will be formalised into procedures in the near future. Monitoring Preparation achieved 60% compliance in the audit.

Contamination Prevention

Contamination prevention is currently a very high standard. An area for improvement is for sampling staff to utilise disposable gloves during sampling. The use of disposable gloves can be impractical for the nature of some the sampling work, so it will be used where possible. Sampling is undertaken with care and with clean hands. Contamination prevention achieved 83% compliance in the audit.

Sample Collection

Sample collection is undertaken well, although it is recognised there is some room for improvement. The measurement of water levels and sampling of water which is representative of the aquifer is undertaken to a high standard. Sample collection achieved 92% compliance in the audit.

Quality Control and Quality Assurance

Quality Control and Quality Assurance (QAQC) has undergone significant improvement in the last 12 months. Quality control and quality assurance achieved 50% compliance in the audit, compared with 0% in 2014.

Sample Storage and Transport

Sample storage and transport is undertaken to a very high standard, and is the one aspect which is currently 100% compliant. Every effort is made to align sampling with available transport, to ensure samples meet holding times, and are received by the laboratory appropriately. Sample storage and transport scored 100% in the audit.

Record Management

Records are currently maintained to a very high standard. Record management achieved 100% compliance in the audit.

Laboratory Analysis

Laboratory analysis covered aspects pertaining to the external laboratory. Some areas could be completed based on the laboratory's NATA accreditation; however more specific requirements were not incorporated into this audit, as they were outside the scope. Laboratory analysis scored 100% in the audit (not including audit components which were not applicable). NOTE: as from the 1st of January 2016, SGS Laboratories will be the external laboratory for all environmental analysis. An aspect of the contract focuses on QAQC and we anticipate a much better quality service.

Appendix 1: Completed Audit Table

Audited by:	Melissa Bolton	**Date of Audit:**	5/12/2015
Supervisor:	Rosemarie Lane		

1	Monitoring Preparation	Compliance (place x in applicable box)			Observations/Findings/Comments
		Yes	No	N/A	
1.1	Is there a record of the sampling site locations	X			Map available of the environmental monitoring bores and the surface water collection points (sampling locations).
1.2	Sampling device is calibrated prior to each monitoring event	X			Water quality parameter meter is calibrated. Service history of the pump is maintained.
1.3	Water quality parameter meter is calibrated prior to each monitoring event	X			Water quality parameter meter is calibrated.
1.4	Field staff have had sufficient training and experience to undertake the sampling	X			Field staff were trained in the use of the Grundfos groundwater sampling unit (pump).
1.5	All equipment and field instruments are kept clean and in good working order	X			Stored within an air-conditioned sea container, in storage containers, away from exposed sunlight and dust.
1.6	Sampling protocols and procedures in place for field sampling, transport and storage		X		Protocols in place, however this is not currently formalised within a documented procedure.
1.7	Procedures provide detailed descriptions for collecting, labelling, transporting and storing samples and the necessary ancillary field data.		X		Protocols in place, however this is not currently formalised within a documented procedure.
1.8	Specific procedures and protocols have been developed and specify the sample collection device, type of storage container, preservation procedures, type and numbers of quality control samples to be taken.		X		Protocols in place, however this is not currently formalised within a documented procedure. Although these requirements and details are not documented within a procedure, the field data sheet does include this information.
1.9	Exact locations of sampling sites and any sub sites are recorded in the sampling protocol.	X			Sampling locations including maps, map info files and gpx files of monitoring locations and the tracks to the monitoring locations.
1.10	Procedures are in place for handling, tracking and correcting data		X		Protocols in place, however this is not currently documented in a procedure.

		6	4	0	
		6	/	10	60%
2	**Contamination Prevention**	**Compliance (place x in applicable box)**			**Observations/Findings/Comments**
		Yes	**No**	**N/A**	
2.1	Field measurements are made on separate sub-samples of water (not in the laboratory samples)	X			Bypass valve enables in field sampling, and separate hose to take lab sample
2.2	Only sample containers supplied by the analytical laboratory are utilised	X			Containers supplied by MPL laboratory
2.3	The insides of containers do not come into contact with hands or objects	X			There is no direct contact with the insides of containers.
2.4	Sample containers are kept in a clear environment away from dust and dirt	X			Samples are stored in containers within a sea container.
2.5	Sampling staff use plastic disposable gloves when handling sample containers at every stage during sampling.		X		Disposable gloves are currently not utilised when handling sample containers.
2.6	Sampling equipment including containers, water quality parameter probes, pumps and bailers are rinsed with deionised water in between samples to prevent cross contamination.	X			Sampling jug is rinsed.
		5	1	0	
		5	/	6	83%
3	**Sample Collection**	**Compliance**			**Observations/Findings/Comments**
		Yes	**No**	**N/A**	
3.1	Samples are collected in the appropriate bottles for the analyte being tested	X			Yes the bottles required for each sampling event are detailed within the field record sheet.
3.2	The depth below ground level at which the sample is taken is always recorded	X			Standing Water Level meter is utilised to record this information.
3.3	Water levels are measured before prior to pumping	X			Water levels are always recorded prior to pumping.
3.4	Sampling device ensures representative sample of the aquifer is obtained (sample is derived from the aquifer itself and not from stagnant water in the bore).	X			The sampling devices, pumps three times the bore volume, and then once the field measurements stability (pH, TDS and EC), a sample is taken.
3.5	Sampling containers are clearly marked in a durable manner, enabling clear identification of all samples in the laboratory	X			Investigating potential use of stickers for clearer labelling, although no problems

					encountered with current system.
3.6	Onsite analysis and field records are included in a report with the sample to the laboratory		X		CoC or field report to be provided to the lab with the samples
3.7	Are field notes recorded on the field data sheet including weather conditions (wind speed, cloud cover and temperature) and water sample (odour, colour, floating material etc.)	X			Comments box allows for any unusual items to be noted, however does not specifically require comments on the weather or water sample. Field sheet to be updated to incorporate this.
3.8	All field records are documented before leaving a sampling location	X			All field records are documented before leaving a sampling location.
3.9	Observations or information on the conditions at the time of sampling that may assist in interpretation of the data are noted on the field record sheet or field notebook.	X			Unusual observations are noted
3.10	Field Sampling: Field record sheet includes field register of sample number, site, time, date, type/technique, technician, field data sheet	X			Field data sheet details this information.
3.11	Field data sheet describes the samples taken, the labels and details.	X			Field data sheet details this information.
3.12	The volume of sample collected is sufficient for the required analyses, including any repeat analyses.	X			Only containers provided by the laboratory are utilised.
3.13	A sampling report is prepared with the following information: - location (and name) of sampling site, with coordinates and any other relevant locational information - details of sampling point - date of sampling - method of sampling - time of sampling - name of sampler - general environmental and climatic conditions - nature of pre-treatment - preservation procedure - data gathered in the field - any information which may affect the results of the analysis.	X			This information is included in the field record sheet.
		12	1	0	
		12	/	13	92%

4	Quality Control and Quality Assurance	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
4.1	QAQC process has been implemented	X			QA/QC process has been implemented, although has not yet been detailed within a procedure.
4.2	Sample blanks are prepared to test for contamination from the field, containers, equipment and transport.		X		No QA/QC is currently integrated into the sampling program
4.3	Duplicate and replicate samples are taken as part of the sampling QA/QC	X			Duplicate samples are taken on every sampling day and a minimum of one duplicate for every 10 samples.
4.4	Protocols specify how sampling staff are to be trained to use sampling equipment		X		No QA/QC is currently integrated into the sampling program
		2	2	0	
		2	/	4	50%

5	Sample storage and transport	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
5.1	Samples are delivered to the laboratory to meet the holding times (within 24 hours)	X			Sampling is undertaken with the aim to provide to the lab within 24 hours.
5.2	Samples are stored in an esky in the field and then refrigerated to cool to 4 degrees Celsius	X			Samples are always stored in an esky with ice bricks in the field
5.3	Sample storage and transport Register of transport container number and sample numbers, date and time	X			Detailed within the Chain of Custody
		3	0	0	
		3	/	3	100%

6	Record Management	Compliance			Observations/Findings/Comments
		Yes	No	N/A	
6.1	Calibrations and preventative maintenance are recorded carefully	X			Service records of the pump are maintained.
6.2	All repairs to equipment and instruments are recorded as well as any incidents that could affect the reliability of the equipment.	X			Grundfos pump has service history log.
6.3	Laboratory results and data is backed up in case of system or file failure.	X			SharePoint system backs up laboratory data.
6.4	Chain of custody documentation in place	X			Chain of custody forms in place for each sampling event.
6.5	Chain of custody records maintained	X			Chain of custody records are maintained

					in hard copy and electronic.
		5	0	0	
		5	/	5	100%
7	**Laboratory Analysis**	**Compliance**			**Observations/Findings/Comments**
		Yes	**No**	**N/A**	
7.1	Analytical lab is NATA accredited			X	Not Applicable - associated with an offsite laboratory, which is outside the scope of the audit undertaken.
7.2	Laboratory Receipt of Samples: Laboratory register or transport container number and sample numbers, date and time			X	Not Applicable - associated with an offsite laboratory, which is outside the scope of the audit undertaken.
7.3	Laboratory storage of samples: Laboratory register of storage location, type, temperature, time and date			X	Not Applicable - associated with an offsite laboratory, which is outside the scope of the audit undertaken.
7.4	Sample Preparation: Analysis register of sample (laboratory number), pre-treatment, date, technician			X	Not Applicable - associated with an offsite laboratory, which is outside the scope of the audit undertaken.
7.5	Sample Analysis: Analysis register of instrument, calibration, technician, standard method, date, result			X	Not Applicable - associated with an offsite laboratory, which is outside the scope of the audit undertaken.
7.6	Analytes are clearly stated	X			Not Applicable - associated with an offsite laboratory, which is outside the scope of the audit undertaken.
7.7	Appropriate analytical methods identified	X			The Analytes were recently reviewed and updated on all COCs going forward.
7.8	Analytical methods cover the range of concentrations expected	X			NATA accredited laboratory
7.9	Analytical methods detect the minimum concentration of interest	X			NATA accredited laboratory
7.10	Analytical methods have sufficient accuracy and precision	X			NATA accredited laboratory
7.11	Samples are processed within the samples storage life	X			NATA accredited laboratory
7.12	Laboratory has appropriate equipment to undertake the analytical method chosen	X			NATA accredited laboratory
7.13	Laboratory facilities are suitable for planned analyses	X			NATA accredited laboratory
7.14	Laboratory staff have the expertise, training and competence to undertake the planned analyses	X			NATA accredited laboratory

7.15	Laboratory has a data management system including: - track samples and data (chain of custody) - have written data entry protocols to ensure correct entry of data - enable associated data to be retrieved (e.g. nutrient concentration and flows to calculate nutrient loads) - have validation procedures to check accuracy of data - have appropriate storage and retrieval facilities to prevent loss of data and enable retrieval (for at least three years) based on current and expected information needs). - Procedures are in place to ensure information reaches the user			X	Not Applicable - associated with an offsite laboratory, which is outside the scope of the audit undertaken.
7.16	From documentation, the following information is available: - how the results were obtained? - samples unique identification - who the analyst was? - what test equipment was used? - the original observations and calculations? - how data transfers occur? - how standards were prepared? - the certified calibration solutions used, their stability and storage?			X	Not Applicable - associated with an offsite laboratory, which is outside the scope of the audit undertaken.
		9	0	7	
		9	/	9	100%
Audit Score		**42**	**/**	**50**	
				84%	

Actions to be added to In Control			
Ref	**Action**	**Accountability**	**Due Date**
1.6	Formalise current protocols in place in the form of written procedures and work instructions which detail field sampling, transport and storage	Mel Bolton	1/06/2016
1.7	Formalise current protocols in place in the forms of detailed descriptions for collecting, labelling, transporting and storing samples and the necessary ancillary field data.	Mel Bolton	1/06/2016
1.8	Develop specific procedures which specify the sample collection device, type of storage container, preservation procedures, type and numbers of quality control samples to be taken.	Mel Bolton	1/06/2016
1.10	Formalise current protocols in place in the form of written procedures detailing handling, tracking and correcting data	Mel Bolton	1/06/2016
4.1, 4.2, 4.3, 4.4	QA/QC process to be formalised into a document procedure which includes sample blanks for contamination from the field, containers, equipment and transport as well as duplicate and replicate sampling.	Mel Bolton/ Jesse Ober	1/06/2016

Appendix 7: Fauna Trench Inspections

MEMORANDUM

Date: **14th December 2015**

To: Environment Team

From: Melissa Bolton

Subject: Fauna Trench Inspections – Ministerial Statement Report summary

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During the 2014/15 reporting year, additional production bores and associated pipelines were installed in the Process Water Supply Borefield (PWSB). Prior to the commencement of trenching and construction activities, a Workplace Risk Assessment and Controls (WRACs) were completed. The WRACs detail environmental hazards and their controls relevant to the scope of works, including fauna egress requirements and trapped fauna trench inspections.

All trenches had fauna egress ramps installed every 50 m as required, in form of an earthen ramp or similar. In addition, all pipe ends were capped with sample bags to prevent fauna entrapment. Photos from trench inspections conducted are provided in Plates 1 to 3.
The open trenches were inspected twice daily (within 3 hours after sunrise, and within the 3 hours before sunset), and recorded on the TGM Trench Inspection Form. A daily report detailing the areas of pipeline construction and any fauna rescues was compiled and submitted. A summary of the fauna rescues (compiled daily) is included in Table 1.

During the 28th of October 2014 and 14th of April 2015, open trenches were inspected daily. The trenching occurred on a campaign basis however inspections occurred whenever trenches were open. During this timeframe, a total of 217 animals were removed from the open trenches comprised of 52 deceased animals (of which 51 were reptiles and 1 mammal). The 165 alive animals found within trenches, were captured and relocated to the bush.

Plate 1: Overview of Open Trench PWSB

Plate 2: Gwardar within open trench

Plate 3: Backfilled Trench

Plate 4: Night Skink rescued from trench

Plate 5: Knob tailed Gecko released from trench

Plate 6: Western Nettled Dragon

Table 1: Register of Trench Inspections and Fauna Rescues

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
28/10/2014	1530 - 1645	E. Dorricott	B73 track	Nil					
28/10/2014	1610 - 1615	E. Dorricott	B18 track	Nil					
28/10/2014	1655 - 1715	E. Dorricott	Pipeline A1-A2	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Monitor exited trench via ramp nr A2.	20m	
29/10/2014	0640 - 0700	E. Dorricott	Pipeline A1-A2	Nil					
29/10/2014	0730 - 0735	E. Dorricott	B18 track	Nil					
29/10/2014	0810 - 0825	E. Dorricott	B73 track	Nil					
29/10/2014	1500 - 1510	E. Dorricott	B73 track	Nil					
29/10/2014	1530 - 1535	E. Dorricott	B18 track	Nil					
29/10/2014	1600 - 1645	E. Dorricott	Pipeline A1-A3	Nil					
30/10/2014	0630 - 0715	E. Dorricott	Pipeline A1-A3	Nil					
30/10/2014	0740 - 0745	E. Dorricott	B18 track	Nil					
30/10/2014	0810 - 0820	E. Dorricott	B73 track	Nil					
30/10/2014	1545 - 1555	E. Dorricott	B73 track	Nil					
30/10/2014	1615 - 1620	E. Dorricott	B18 track	Nil					
30/10/2014	1650 - 1750	E. Dorricott	Pipeline A1-A4	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Monitor exited trench via ramp.	12m	
30/10/2014	1650 - 1750	E. Dorricott	Pipeline A1-A4	Simoselaps bertholdi (Jan's Banded Snake)	Snake	Deceased	Removed from trench (150m Nth A1) and placed into bush.	5m	
31/10/2014	0715 - 0815	E. Dorricott	Pipeline A1-A4	Nil					Tyres damaged required replacing that morning.
31/10/2014	0825 - 0835	E. Dorricott	B73 track	Nil					
31/10/2014	0855 - 0900	E. Dorricott	B18 track	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
31/10/2014	1530 - 1535	E. Dorricott	B18 track	Nil					
31/10/2014	1605 - 1620	E. Dorricott	B73 track	Nil					
31/10/2014	1630 - 1730	E. Dorricott	Pipeline A1-A5	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Chased away from top edge of trench into bush.		
1/11/2014	0625 - 0720	E. Dorricott	Pipeline A1-A5	Nil					
1/11/2014	0810 - 0815	E. Dorricott	B18 track	Nil					
1/11/2014	1540 - 1550	E. Dorricott	B73 track	Nil					
1/11/2014	1600 - 1700	E. Dorricott	Pipeline A1-A5	Ctenophorus nuchalis (Central Netted Dragon)	Dragon	Deceased	Crushed by pipe near welders and placed into bush.	NA	
1/11/2014	1600 - 1700	E. Dorricott	Pipeline A1-A5	Ctenophorus nuchalis (Central Netted Dragon)	Dragon	Alive	Rescued from location near welders and released in the bush.	NA	
1/11/2014	1645	Mark (Osiris) Eamon Dorricott	Pipeline A1-A5	Emu	Bird	Alive	Emu observed exiting via ramp and walked into bush.		Checked area for tracks, Emu entered trench at egress ramp, proceeded 10m along trench and returned to exit from same ramp. (ED)
2/11/2014	0620 - 0730	E. Dorricott	Pipeline A1-A5	Nil					
2/11/2014	0750 - 0805	E. Dorricott	B73 track	Nil					
2/11/2014	0825 - 0830	E. Dorricott	B18 track	Nil					
2/11/2014	1535 - 1540	E. Dorricott	B18 track	Nil					
2/11/2014	1605 - 1615	E. Dorricott	B73 track	Nil					
2/11/2014	1625 - 1730	E. Dorricott	Pipeline A1-A5	Nil					
3/11/2014	0620 - 0630	E. Dorricott	B73 track	Nil					
3/11/2014	0655 - 0700	E. Dorricott	B18 track	Nil					
3/11/2014	0725 - 0830	E. Dorricott	Pipeline A1-A5	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
3/11/2014	1545 - 1550	E. Dorricott	B73 track	Nil					Backfill complete.
3/11/2014	1610 - 1615	E. Dorricott	B18 track	Nil					
3/11/2014	1635 - 1720	E. Dorricott	Pipeline A1-A6	Nil					
3/11/2014	1720 - 1725	E. Dorricott	Pipeline A8 (40m section)	Nil					
4/11/2014	0615 - 0620	E. Dorricott	Pipeline A8 (40m section)	Nil					
4/11/2014	0620 - 0725	E. Dorricott	Pipeline A1-A6	Nil					
4/11/2014	0745 - 0750	E. Dorricott	B18 track	Nil					
4/11/2014	1615 - 1620	E. Dorricott	B18 track	Nil					
4/11/2014	1640 - 1730	E. Dorricott	Pipeline A1-A7	Nil					
4/11/2014	1730 - 1735	E. Dorricott	Pipeline A8 (70m section)	Nil					
5/11/2014	0625 - 0630	E. Dorricott	Pipeline A8 (70m section)	Nil					
5/11/2014	0630 - 0730	E. Dorricott	Pipeline A1-A7	Nil					Kangaroo tracks in trench, no sightings.
5/11/2014	0750 - 0755	E. Dorricott	B18 track	Nil					
5/11/2014	1605 - 1610	E. Dorricott	B18 track	Nil					
5/11/2014	1630 - 1730	E. Dorricott	Pipeline A1-A8	Nil					
6/11/2014	0625 - 0725	E. Dorricott	Pipeline A1-A8	Nil					
6/11/2014	0745 - 0750	E. Dorricott	B18 track	Nil					
6/11/2014	1550 - 1555	E. Dorricott	B18 track	Nil					
6/11/2014	1620 - 1725	E. Dorricott	Pipeline A1-A8	Ctenophorus nuchalis (Central Netted Dragon)	Dragon	Alive	Chased out of trench via ramp and into bush.	5m	
7/11/2014	0610 - 0715	E. Dorricott	Pipeline A1-A8	Nil					
7/11/2014	1530 - 1535	E. Dorricott	B18 track	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
7/11/2014	1550 - 1715	E. Dorricott	Pipeline A1-A9	Nil					
8/11/2014	0610 - 0745	E. Dorricott	Pipeline A1-A9	Nil					Cat tracks in trench.
8/11/2014	0815 - 0820	E. Dorricott	B18 track	Nil					
8/11/2014	1555 - 1600	E. Dorricott	B18 track	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Chased away from top edge of trench into bush.		NA
8/11/2014	1620 - 1745	E. Dorricott	Pipeline A1-A9	Nil					
9/11/2014	0620 - 0745	E. Dorricott	Pipeline A1-A9	Nil					
9/11/2014	0805 - 0810	E. Dorricott	B18 track	Nil					
9/11/2014	1545 - 1550	E. Dorricott	B18 track	Nil					
9/11/2014	1610 - 1740	E. Dorricott	Pipeline A1-A9	Nil					
10/11/2014	0610 - 0735	E. Dorricott	Pipeline A1-A9	Nil					
10/11/2014	0755 - 0800	E. Dorricott	B18 track	Nil					
10/11/2014	1540 - 1545	E. Dorricott	B18 track	Nil					
10/11/2014	1615 - 1800	E. Dorricott	Pipeline A1-A9	Nil					
11/11/2014	0615 - 0800	E. Dorricott; L.Centa	Pipeline A1-A9	Nil					Snake tracks in trench no sighting.
11/11/2014	0800 - 0805	E. Dorricott; L.Centa	Pipeline A9-A10	Nil					New trench opened.
11/11/2014	0915 - 0920	E. Dorricott; L.Centa	B18 track	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Chased away from top edge of pipe trench into bush.	NA	
11/11/2014	1520 - 1710	L.Centa	Pipeline A1-A12	Nil					New trench opened.
12/11/2014	0605 - 0755	L.Centa	Pipeline A1-A13	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Rescued from trench near A12 and released in the bush.		New trench opened.
12/11/2014	0825 - 0830	L.Centa	B18 track	Nil					
12/11/2014	1500 - 1710	L.Centa	Pipeline A1-A14	Nil					New trench opened. Dingo tracks along top of trench. Snake tracks seen exiting and entering via ramp at A8.

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
13/11/2014	0550 - 0810	L.Centa	Pipeline A1-A15	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Rescued from top edge of open trench near A12.	NA	New trench opened.
13/11/2014	0935 - 0840	L.Centa	B18 track	Nil					
13/11/2014	1500 - 1710	L.Centa	Pipeline A1-A16	Demansia psammophis (Yellow-faced Whipsnake)	snake	Alive	Rescued from trench near A12 and released in the bush.	20m	Trench complete north.
14/11/2014	0600 - 0820	L.Centa	Pipeline A1-A16	Nil					Cold night and cold morning, little fauna activity.
14/11/2014	0845 - 0850	L.Centa	B18 track	Nil					
14/11/2014	1500 - 1700	L.Centa	Pipeline A1-A16	Diplodactylus conspicillatus (Fat-tailed gecko)	Gecko	Alive	Hiding in the wall cavity, rescued from trench near A14 and released in the bush.	20m	
14/11/2014	1500 - 1700	L.Centa	Pipeline A1-A16	Ctenotus atlas (Southern Mallee Skink)	Skink	Alive	Rescued from trench near A16 and released in the bush.	2m	
14/11/2014	1700 - 1715	L.Centa	Pipeline B1-B4	Nil					New trench opened.
15/11/2014	0550 - 0610	L.Centa	Pipeline B1-B4	Nil					
15/11/2014	0620 - 0820	L.Centa	Pipeline A1-A16	Nil					
15/11/2014	0835 - 0840	L.Centa	B18 track	Nil					
15/11/2014	1500 - 1700	L.Centa	Pipeline A1-A16	Delma butleri (Unbanded Delma)	Pygopod	Alive	Rescued from trench near A16 and released in the bush.	10m	Sand Monitor tracks and scats in trench not sighted.
15/11/2014	1700 - 1720	L.Centa	Pipeline B1-B5	Nil					
16/11/2014	0545 - 0600	L.Centa	Pipeline B1-B5	Nil					Lots of small rodent tracks in trench.
16/11/2014	0615 - 0700	L.Centa	Pipeline A16-A10	Nil					
16/11/2014	0710 - 0820	L.Centa	Pipeline A10-A1	Nil					
16/11/2014	0840 - 0845	L.Centa	B18 track	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
16/11/2014	1500 - 1545	L.Centa	Pipeline A16-A10	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Chased out of trench via ramp and into bush.	25m	
16/11/2014	1545 - 1645	L.Centa	Pipeline A10-A1	Nil					
16/11/2014	1650 - 1705	L.Centa	Pipeline B1-B6	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Rescued from trench near B5 and released in the bush.	10m	New trench opened. Sand Monitor tracks in trench out via ramp, not sighted.
17/11/2014	0545 - 0620	L.Centa	Pipeline B1-B6	Egernia striata (Night Skink)	Skink	Alive	Rescued from trench near B6 and released in the bush.	5m	
17/11/2014	0630 - 0710	L.Centa	Pipeline A16-A10	Nil					
17/11/2014	0720 - 0820	L.Centa	Pipeline A10-A1	Nil					
17/11/2014	0845 - 0850	L.Centa	B18 track	Nil					
17/11/2014	1500 - 1530	E. Dorricott; L.Centa	Pipeline A16-A10	Nil					
17/11/2014	1530 - 1620	E. Dorricott; L.Centa	Pipeline A10-A1	Nil					
17/11/2014	1625 - 1700	E. Dorricott; L.Centa	Pipeline B1-B7	Nil					New trench opened.
18/11/2014	0610 - 0700	E. Dorricott; L.Centa	Pipeline B1-B7	Pogona minor (Western Bearded Dragon)	Dragon	Alive	Rescued from trench near B6 and released in the bush.	10m	
18/11/2014	0610 - 0700	E. Dorricott; L.Centa	Pipeline B1-B7	Diplodactylus conspicillatus (Fat-tailed gecko)	Gecko	Alive	Rescued from trench near B5. Covered in ants so cleaned and released in the bush unharmed.	20m	
18/11/2014	0705 - 0725	E. Dorricott; L.Centa	Pipeline A16-A10	Nil					
18/11/2014	0725 - 0805	E. Dorricott; L.Centa	Pipeline A10-A1	Pseudechis butleri (Spotted Mulga Snake)	Snake	Alive	Chased away from top edge of pipe trench into bush.	NA	
18/11/2014	0835 - 0840	E. Dorricott; L.Centa	B18 track	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
18/11/2014	1500 - 1610	E. Dorricott; L.Centa	Pipeline A16-A1	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Found at top edge of trench resting under pipe in shade. Tried to chase away from edge, jumped into trench and climbed out via trench wall.	NA	
18/11/2014	1615 - 1645	E. Dorricott; L.Centa	Pipeline B1-B7	Nil					
19/11/2014	0605 - 0635	E. Dorricott; L.Centa	Pipeline B1-B7	Skink Unknown	Skink	Alive	Chased out of trench via ramp and into bush.	15m	
19/11/2014	0605 - 0635	E. Dorricott; L.Centa	Pipeline B1-B7	Pogona minor (Western Bearded Dragon)	Dragon	Deceased	Found half buried in trench most likely wall collapsed, unable to escape and then eated by ants.	25m	
19/11/2014	0610 - 0620	E. Dorricott; L.Centa	Pipeline C1-C2	Nil					
19/11/2014	0640 - 0700	E. Dorricott; L.Centa	Pipeline A16-A10	Nil					
19/11/2014	0700 - 0745	E. Dorricott; L.Centa	Pipeline A10-A1	Nil					
19/11/2014	0830 - 0835	E. Dorricott; L.Centa	B18 track	Nil					
19/11/2014	1500 - 1520	E. Dorricott; L.Centa	Pipeline A16-A10	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Rescued from trench near A14 and released in the bush.	15m	
19/11/2014	1520 - 1555	E. Dorricott; L.Centa	Pipeline A10-A1	Nil					
19/11/2014	1600 - 1610	L.Centa	Pipeline C1-C3	Nil					
19/11/2014	1600 - 1630	E. Dorricott; L.Centa	Pipeline B1-B8	Lialis burtonis (Burton's Legless Lizard)	Pygopod	Deceased	Found dead in trench, likely suffocated from wet sand blocking up snout	3m	
20/11/2014	0545 - 0615	E. Dorricott	Pipeline B1-B8	Nil					
20/11/2014	0615 - 0625	E. Dorricott	Pipeline C1-C3	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
20/11/2014	0705 - 0740	E. Dorricott	Pipeline A16-A10	Nephrurus laevissimus (Pale Knob-tailed Gecko)	Gecko	Alive	Rescued from trench near A12 and released in the bush.	10m	
20/11/2014	0705 - 0740	E. Dorricott	Pipeline A16-A10	Ctenotus mimetes (Checker-sided Skink)	Skink	Alive	Rescued from trench edge near A16 and released in the bush.	5m	
20/11/2014	0740 - 0830	E. Dorricott	Pipeline A10-A1	Nil					
20/11/2014	0850 - 0855	E. Dorricott	B18 track	Nil					
20/11/2014	1510 - 1630	E. Dorricott	Pipeline A16-A1	Nil					
20/11/2014	1635 - 1650	E. Dorricott	Pipeline C1-C3	Nil					
20/11/2014	1650 - 1725	E. Dorricott	Pipeline B1-B9	Varanus tristis (Black-headed Monitor)	Monitor	Alive	Rescued from trench near B5 and released in the bush.	3m	
20/11/2014	1650 - 1725	E. Dorricott	Pipeline B1-B9	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Deceased	Collected as voucher specimen	5m	
20/11/2014	1725 - 1740	E. Dorricott	Pipeline D1-D3	Nil					
21/11/2014	0515 - 0525	E. Dorricott	Pipeline D1-D3	Nil					
21/11/2014	0535 - 0550	E. Dorricott	Pipeline C1-C3	Nil					
21/11/2014	0555 - 0645	E. Dorricott	Pipeline A16-A10	Nil					
21/11/2014	0645 - 0720	E. Dorricott	Pipeline A10-A1	Nil					
21/11/2014	0730 - 0805	E. Dorricott	Pipeline B1-B9	Diplodactylus stenodactylus (Pale-snouted Ground Gecko)	Gecko	Alive	Rescued from trench near B6 and released in the bush.	5m	
21/11/2014	1505 - 1515	E. Dorricott	PipelineD1-D3	Nil					
21/11/2014	1530 - 1545	E. Dorricott	Pipeline C1-C3	Nil					
21/11/2014	1550 - 1645	E. Dorricott	Pipeline B1-B9	Ctenotus atlas (Southern Mallee Skink)	Skink	Deceased	Collected as voucher specimen	15m	

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
21/11/2014	1550 - 1645	E. Dorricott	Pipeline B1-B9	Gecko Unknown	Gecko	Deceased	Removed from trench near B7 and placed into bush.	10m	
21/11/2014	1550 - 1645	E. Dorricott	Pipeline B1-B9	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Deceased	Collected as voucher specimen	15m	
21/11/2014	1550 - 1645	E. Dorricott	Pipeline B1-B9	Ctenotus atlas (Southern Mallee Skink)	Skink	Alive	Rescued from trench near B5 and released in the bush.	15m	
21/11/2014	1655 - 1735	E. Dorricott	Pipeline A16-A1	Egernia striata (Night Skink)	Skink	Deceased	Collected as voucher specimen	20m	
22/11/2014	0515 - 0540	E. Dorricott	Pipeline D1-D3	Lialis burtonis (Burton's Legless Lizard)	Pygopod	Alive	Rescued from trench near D1 and released in the bush.	25m	
22/11/2014	0515 - 0540	E. Dorricott	Pipeline D1-D3	Pygopus lepidopodus (Common Scaly-foot)	Pygopod	Deceased	Removed from trench near D2 and placed into bush.	20m	
22/11/2014	0545 - 0555	E. Dorricott	Pipeline C1-C3	Nil					
22/11/2014	0605 - 0650	E. Dorricott	Pipeline A16-A10	Nil					
22/11/2014	0715 - 0740	E. Dorricott	Pipeline A10-A1	Nil					
22/11/2014	0750 - 0830	E. Dorricott	Pipeline B1-B9	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Rescued from trench near B7 and released in the bush.	5m	
22/11/2014	0750 - 0830	E. Dorricott	Pipeline B1-B9	Diplodactylus stenodactylus (Pale-snouted Ground Gecko)	Gecko	Alive	Rescued from trench near B6 and released in the bush.	0.5m	
22/11/2014	1540 - 1600	E. Dorricott	Pipeline D1-D3	Skink Unknown	Skink	Alive		10m	
22/11/2014	1600 - 1655	E. Dorricott	Pipeline B1-B9	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Chased from trench near B9	15m	
22/11/2014	1600 - 1655	E. Dorricott	Pipeline B1-B9	Ctenotus atlas (Southern Mallee Skink)	Skink	Alive	Rescued from trench near B7 and released in the bush.	10m	

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
22/11/2014	1600 - 1655	E. Dorricott	Pipeline B1-B9	Ctenotus atlas (Southern Mallee Skink)	Skink	Alive	Rescued from trench near B7 and released in the bush.	5m	
22/11/2014	1600 - 1655	E. Dorricott	Pipeline B1-B9	Ctenotus atlas (Southern Mallee Skink)	Skink	Alive	Rescued from trench near B5 and released in the bush.	20m	
22/11/2014	1600 - 1655	E. Dorricott	Pipeline B1-B9	Diplodactylus stenodactylus (Pale-snouted Ground Gecko)	Gecko	Deceased	Removed from trench near B5 and placed into bush.	15m	
22/11/2014	1700 - 1710	E. Dorricott	Pipeline C1-C3	Nil					
22/11/2014	1715 - 1800	E. Dorricott	Pipeline A16-A1	Nil					
23/11/2014	0520 - 0540	E. Dorricott	Pipeline D1-D3	Nil					
23/11/2014	0550 - 0605	E. Dorricott	Pipeline C1-C3	Nil					
23/11/2014	0620 - 0715	E. Dorricott	Pipeline B1-B9	Strophurus elderi (Jewelled Gecko)	Gecko	Alive	Rescued from trench near B6 and released in the bush.	8m	
23/11/2014	0620 - 0715	E. Dorricott	Pipeline B1-B9	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Rescued from trench near B6 and released in the bush.	15m	
23/11/2014	0620 - 0715	E. Dorricott	Pipeline B1-B9	Ctenotus grandis (Grand Skink)	Skink	Alive	Rescued from trench near B2 and released in the bush.	10m	
23/11/2014	0725 - 0815	E. Dorricott	Pipeline A16-A1	Nil					
23/11/2014	1505 - 1515	E. Dorricott	Pipeline D1-D3	Nil					
23/11/2014	1520 - 1530	E. Dorricott	Pipeline C1-C3	Nil					
23/11/2014	1535 - 1650	E. Dorricott	Pipeline A16-A1	Nil					
23/11/2014	1700 - 1730	E. Dorricott	Pipeline B1-B9	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Deceased	Removed from trench near B6 and placed into bush.	10m	
24/11/2014	0520 - 0530	E. Dorricott	Pipeline D1-D3	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
24/11/2014	0535 - 0545	E. Dorricott	Pipeline C1-C2	Nil					
24/11/2014	0555 - 0630	E. Dorricott	Pipeline B1-B9	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Rescued from trench near B8 and released in the bush.	15m	
24/11/2014	0700 - 0740	E. Dorricott	Pipeline A16-A1	Nil					
24/11/2014	1500 - 1510	E. Dorricott	Pipeline D1-D3	Nil					
24/11/2014	1515 - 1620	E. Dorricott	Pipeline B1-B9	Furina ornata (Moon Snake)	Snake	Alive	Sheltering under hessian bag near B8, rescued from trench and released in bush.	10m	
24/11/2014	1515 - 1620	E. Dorricott	Pipeline B1-B9	Furina ornata (Moon Snake)	Snake	Deceased	Removed from trench near B7 and placed into bush.	10m	
24/11/2014	1515 - 1620	E. Dorricott	Pipeline B1-B9	Furina ornata (Moon Snake)	Snake	Deceased	Found entwined in sparely leafy branch in trench near B6, possibly seeking shelter from sun. Removed from trench and placed into bush.	5m	
24/11/2014	1515 - 1620	E. Dorricott	Pipeline B1-B9	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Deceased	Removed from trench near B6 and placed into bush.	15m	
24/11/2014	1515 - 1620	E. Dorricott	Pipeline B1-B9	Ctenophorus nuchalis (Central Netted Dragon)	Dragon	Alive	Chased from edge of trench near B5	NA	
24/11/2014	1515 - 1620	E. Dorricott	Pipeline B1-B9	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Left alone, as it was carrying a snake it had captured and killed	10m	
24/11/2014	1515 - 1620	E. Dorricott	Pipeline B1-B9	Demansia psammophis (Yellow-faced Whipsnake)	Snake	Deceased	Predated on by Varanus gouldii	unknown	
24/11/2014	1625 - 1635	E. Dorricott	Pipeline C1-C2	Nil					
24/11/2014	1650 - 1730	E. Dorricott	Pipeline A16-A1	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
25/11/2014	0520 - 0530	E. Dorricott	Pipeline D1-D3	Nil					
25/11/2014	0535 - 0645	E. Dorricott	Pipeline B1-B9	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Rescued from trench near B4 and released in the bush.	8m	
25/11/2014	0535 - 0645	E. Dorricott	Pipeline B1-B9	Strophurus elderi (Jewelled Gecko)	Gecko	Alive	Rescued from trench near B5 and released in the bush.	15m	
25/11/2014	0535 - 0645	E. Dorricott	Pipeline B1-B9	Strophurus elderi (Jewelled Gecko)	Gecko	Deceased	Removed from trench near B5 and placed into bush.	10m	
25/11/2014	0535 - 0645	E. Dorricott	Pipeline B1-B9	Ctenotus atlas (Southern Mallee Skink)	Skink	Alive	Skink disappeared into burrow in trench wall near B7	25m	
25/11/2014	0535 - 0645	E. Dorricott	Pipeline B1-B9	Pogona minor (Western Bearded Dragon)	Dragon	Alive	Rescued from trench near B8 and released in the bush.	6m	
25/11/2014	0650 - 0700	E. Dorricott	Pipeline C1-C2	Nil					
25/11/2014	0705 - 0755	E. Dorricott	Pipeline A16-A1	Nil					
25/11/2014	1500 - 1535	E. Dorricott	Pipeline B1-B9	Nil					
25/11/2014	1545 - 1555	E. Dorricott	Pipeline C1-C2	Nil					
25/11/2014	1605 - 1700	E. Dorricott	Pipeline A16-A1	Nil					
25/11/2014	1710 - 1725	E. Dorricott	Pipeline D1-D3	Nil					
26/11/2014	0515 - 0525	E. Dorricott	Pipeline D1-D3	Nil					
26/11/2014	0535 - 0615	E. Dorricott	Pipeline B1-B9	Nil					
26/11/2014	0630 - 0640	E. Dorricott	Pipeline C1-C2	Nil					
26/11/2014	0645 - 0715	E. Dorricott	Pipeline A16-A10	Nil					
26/11/2014	0725 - 0740	E. Dorricott	Pipeline A10-A1	Nil					
26/11/2014	1505 - 1515	E. Dorricott	Pipeline D1-D3	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
26/11/2014	1525 - 1615	E. Dorricott	Pipeline B1-B9	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Rescued from trench near B2 and released in the bush.	10m	
26/11/2014	1525 - 1615	E. Dorricott	Pipeline B1-B9	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Chased from trench near B3	20m	
26/11/2014	1625 - 1635	E. Dorricott	Pipeline C1-C2	Nil					
26/11/2014	1640 - 1725	E. Dorricott	Pipeline A17-A1	Nil					
27/11/2014	0515 - 0525	E. Dorricott	Pipeline D1-D3	Nil					
27/11/2014	0535 - 0615	E. Dorricott	Pipeline B1-B9	Lialis burtonis (Burton's Legless Lizard)	Pygopod	Alive	Captured from edge of trench near B5 and relocated to bush.	NA	
27/11/2014	0625 - 0635	E. Dorricott	Pipeline C1-C2	Nil					
27/11/2014	0640 - 0750	E. Dorricott	Pipeline A17-A1	Nil					
27/11/2014	1500-1510	E. Dorricott	Pipeline D1-D3	Nil					
27/11/2014	1515-1545	E. Dorricott	Pipeline B1-B9	Nil					
27/11/2014	1545-1555	E. Dorricott	Pipeline C1-C2	Nil					
27/11/2014	1610-1710	E. Dorricott	Pipeline A17-A1	Nil					
28/11/2014	0545-0600	E. Dorricott; L.Centa	Pipeline D1-D3	Nil					Ramps required after new pipe installed.
28/11/2014	0550-0620	E. Dorricott; L.Centa	Pipeline B3-B9	Egernia striata (Night Skink)	Skink	Alive	Rescued from trench near B7 and released in the bush.	6m	
28/11/2014	0620-0635	E. Dorricott; L.Centa	Pipeline B1-B2	Nephrurus laevissimus (Pale Knob-tailed Gecko)	Gecko	Alive	Rescued from trench near B2 and released in the bush.	3m	
28/11/2014	0620-0635	E. Dorricott; L.Centa	Pipeline C1-C2	Nil					
28/11/2014	0620-0630	E. Dorricott; L.Centa	Pipeline E1-E2	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Rescued from trench near E1 and released in the bush.	No ramp	New trench, no ramps installed.

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
28/11/2014	0645-0725	E. Dorricott; L.Centa	Pipeline A17-A8	Ctenotus atlas (Southern Mallee Skink)	Skink	Deceased	Removed from trench near A15 and released in the bush.	10m	
28/11/2014	0645-0725	E. Dorricott; L.Centa	Pipeline A17-A8	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Chased out of trench near A15 via wall.	5m	
28/11/2014	0645-0725	E. Dorricott; L.Centa	Pipeline A17-A8	Ctenotus dux (Narrow-lined Ctenotus)	Skink	Alive	Rescued from trench near A15 and released in the bush.	5m	
28/11/2014	0645-0725	E. Dorricott; L.Centa	Pipeline A17-A8	Rhynchoedura ornata (Beaked Gecko)	Gecko	Alive	Rescued from trench near A15 and released in the bush.	5m	
28/11/2014	0645-0725	E. Dorricott; L.Centa	Pipeline A17-A8	Ctenotus mimetes (Checker-sided Skink)	Skink	Alive	Rescued from trench near A16 and released in the bush.	3m	
28/11/2014	0645-0725	E. Dorricott; L.Centa	Pipeline A8-A1	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Chased out of trench via ramp near A3.	5m	
28/11/2014	1500-1510	E. Dorricott; L.Centa	Pipeline D1-D3	Nil					
28/11/2014	1505-1530	E. Dorricott; L.Centa	Pipeline B1-B9	Delma butleri (Unbanded Delma)	Pygopod	Deceased	Removed from trench near B8 and released in the bush.	3m	
28/11/2014	1535-1545	E. Dorricott; L.Centa	Pipeline C1-C2	Nil					
28/11/2014	1545-1555	E. Dorricott; L.Centa	Pipeline E1-E2	Nil					
28/11/2014	1600-1640	E. Dorricott; L.Centa	Pipeline A17-A6	Nil					Unable to safely access A1-A6
29/11/2014	0540-0550	E. Dorricott; L.Centa	Pipeline D1-D3	Nil					
29/11/2014	0545-0620	E. Dorricott; L.Centa	Pipeline B1-B9	Ctenotus atlas (Southern Mallee Skink)	Skink	Alive	Rescued from trench near B8 and released in the bush.	20m	

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
29/11/2014	0545-0620	E. Dorricott; L.Centa	Pipeline B1-B9	Lialis burtonis (Burton's Legless Lizard)	Pygopod	Alive	Rescued from trench near B4, face covered in wet sand, cleaned before released in the bush.	10m	
29/11/2014	0605-0615	E. Dorricott; L.Centa	Pipeline E1-E2	Nil					
29/11/2014	0615-0625	E. Dorricott; L.Centa	Pipeline C1-C2	Nil					
29/11/2014	0635-0720	E. Dorricott; L.Centa	Pipeline A17-A6	Nil					Unable to safely access A1-A6
29/11/2014	1500-1535	E. Dorricott; L.Centa	Pipeline B1-B9	Lerista bipes (North-western Sandslider)	Skink	Deceased	Removed from trench near B3 and kept for voucher specimen.	10m	
29/11/2014	1500-1535	E. Dorricott; L.Centa	Pipeline B1-B9	Lerista bipes (North-western Sandslider)	Skink	Deceased	Removed from trench near B2 and kept for voucher specimen.	15m	
29/11/2014	1530-1540	E. Dorricott; L.Centa	Pipeline E1-E3	Nil					
29/11/2014	1540-1550	E. Dorricott; L.Centa	Pipeline C1-C3	Nil					
29/11/2014	1600-1645	E. Dorricott; L.Centa	Pipeline A17-A1	Nil					Access way created.
29/11/2014	1650-1700	E. Dorricott; L.Centa	Pipeline D1-D4	Nil					
30/11/2014	0545-0555	E. Dorricott; L.Centa	Pipeline D1-D4	Nil					
30/11/2014	0550-0620	E. Dorricott; L.Centa	Pipeline B1-B9	Furina ornata (Moon Snake)	Snake	Alive	Rescued from trench near B8 and released in the bush.	10m	
30/11/2014	0550-0620	E. Dorricott; L.Centa	Pipeline B1-B9	Moloch horridus (Thorny Devil)	Dragon	Alive	Rescued from trench near B5 and released in the bush.	25m	
30/11/2014	0610-0620	E. Dorricott; L.Centa	Pipeline C1-C3	Nil					
30/11/2014	0625-0635	E. Dorricott; L.Centa	Pipeline E1-E3	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
30/11/2014	0640-0815	E. Dorricott; L.Centa	Pipeline A17-A1	Planigale maculata (Common Planigale)	Marsupial	Deceased	Rescued from trench near A11, covered in ants, cleaned but very sticky and still covered. Placed in bag and held in care. Planigale passed away in the afternoon.	15m	
30/11/2014	0640-0815	E. Dorricott; L.Centa	Pipeline A17-A1	Lerista bipes (North-western Sandslider)	Skink	Deceased	Found at top of egress ramp near A8 removed to bush.	NA	
30/11/2014	1500-1510	E. Dorricott; L.Centa	Pipeline D1-D4	Nil					
30/11/2014	1500-1540	E. Dorricott; L.Centa	Pipeline B1-B9	Gehyra variegata (Variagated dtella)	Gecko	Alive	Rescued from trench near B5 and released in the bush.	15m	
30/11/2014	1500-1540	E. Dorricott; L.Centa	Pipeline B1-B9	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Rescued from trench near B2 and released in the bush.	10m	
30/11/2014	1515-1525	E. Dorricott; L.Centa	Pipeline E1-E3	Nil					
30/11/2014	1525-1535	E. Dorricott; L.Centa	Pipeline C1-C4	Nil					
30/11/2014	1550-1700	E. Dorricott; L.Centa	Pipeline A17-A1	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Chased out of trench near A2 and into the bush.	5m	
1/12/2014	0545-0600	E. Dorricott; L.Centa	Pipeline D1-D4	Nil					
1/12/2014	0550-0630	E. Dorricott; L.Centa	Pipeline B1-B9	Gehyra unknown	Gecko	Deceased	Removed from trench near B8 and released in the bush.	20m	
1/12/2014	0550-0630	E. Dorricott; L.Centa	Pipeline B1-B9	Gehyra variegata (Variagated dtella)	Gecko	Alive	Found under shelter, rescued from trench near B8 and released in the bush.	5m	

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
1/12/2014	0550-0630	E. Dorricott; L.Centa	Pipeline B1-B9	Lialis burtonis (Burton's Legless Lizard)	Pygopod	Alive	Rescued from trench near B7 and released in the bush.	20m	
1/12/2014	0550-0630	E. Dorricott; L.Centa	Pipeline B1-B9	Furina ornata (Moon Snake)	Snake	Alive	Rescued from trench near B3 and released in the bush.	15m	
1/12/2014	0630-0635	E. Dorricott; L.Centa	Pipeline E1-E3	Nil					
1/12/2014	0630-0640	E. Dorricott; L.Centa	Pipeline C1-C4	Nil					
1/12/2014	0645-0800	E. Dorricott; L.Centa	Pipeline A17-A1	Nil					
1/12/2014	1500-1515	E. Dorricott; L.Centa	Pipeline D1-D4	Nil					
1/12/2014	1505-1535	E. Dorricott; L.Centa	Pipeline B5-B9	Pygopus nigriceps (Hooded-scaly Foot)	Pygopod	Deceased	Removed from trench near B7 and released in the bush.	8m	
1/12/2014	1505-1535	E. Dorricott; L.Centa	Pipeline B5-B9	Rhynchoedura ornata (Beaked Gecko)	Gecko	Deceased	Removed from trench near B6 and released in the bush.	15m	
1/12/2014	1505-1535	E. Dorricott; L.Centa	Pipeline B5-B9	Pygopus nigriceps (Hooded-scaly Foot)	Pygopod	Deceased	Removed from trench near B5 and released in the bush.	15m	
1/12/2014	1505-1535	E. Dorricott; L.Centa	Pipeline B1-B4	Nil					
1/12/2014	1535-1545	E. Dorricott; L.Centa	Pipeline E1-E3	Nil					
1/12/2014	1535-1545	E. Dorricott; L.Centa	Pipeline C1-C4	Nil					
1/12/2014	1555-1705	E. Dorricott; L.Centa	Pipeline A17-A1	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Rescued from trench near A15 and released in the bush. Juvenile.	10m	
1/12/2014	1555-1705	E. Dorricott; L.Centa	Pipeline A17-A1	Ctenophorus nuchalis (Central Netted Dragon)	Dragon	Alive	Observed in trench near A12 unable to rescue.	25m	
2/12/2014	0545-0555	E. Dorricott; L.Centa	Pipeline D1-D4	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
2/12/2014	0550-0615	E. Dorricott; L.Centa	Pipeline B5-B9	Gehyra variegata (Variagated dtella)	Gecko	Alive	Found under shelter, rescued from trench near B8 and released in the bush.	5m	
2/12/2014	0615-0625	E. Dorricott; L.Centa	Pipeline B0-B3	Nil					
2/12/2014	0615-0625	E. Dorricott; L.Centa	Pipeline E1-E3	Nil					
2/12/2014	0625-0635	E. Dorricott; L.Centa	Pipeline C1-C4	Nil					
2/12/2014	0640-0750	E. Dorricott; L.Centa	Pipeline A17-A1	Nephrurus levis (Three Line Knobtail Gecko)	Gecko	Alive	Rescued from trench near A15 and released in the bush.	20m	
2/12/2014	1500-1510	L.Centa	Pipeline D1-D4	Nil					
2/12/2014	1505-1515	L.Centa	Pipeline B6-B9	Gehyra variegata (Variagated dtella)	Gecko	Alive	Found under shelter, rescued from trench near B6 and released in the bush.	15m	
2/12/2014	1515-1525	L.Centa	Pipeline B0-B3	Nil					
2/12/2014	1515-1525	L.Centa	Pipeline E1-E3	Nil					
2/12/2014	1525-1535	L.Centa	Pipeline C1-C4	Nil					
2/12/2014	1540-1700	L.Centa	Pipeline A17-A1	Egernia striata (Night Skink)	Skink	Deceased	Removed from trench near A15 and released in the bush.	15m	
2/12/2014	1540-1700	L.Centa	Pipeline A17-A1	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Observed near trench edge at top of ramp near A3, ran into trench were tried to capture, then ran into burrow, possibly living in trench.	NA	
3/12/2014	0545-0555	L.Centa	Pipeline D1-D4	Nil					

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
3/12/2014	0555-0618	L.Centa	Pipeline B6-B9	Gehyra variegata (Variagated dtella)	Gecko	Alive	Found under shelter, rescued from trench near B6 and released in the bush.	10m	
3/12/2014	0620-0630	L.Centa	Pipeline B0-B3	Nil					
3/12/2014	0635-0645	L.Centa	Pipeline E1-E3	Nil					
3/12/2014	0635-0645	L.Centa	Pipeline C1-C4	Nil					
3/12/2014	0650-0810	L.Centa	Pipeline A17-A1	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Rescued from trench near A3 trying to get into dragon burrow found yesterday in same location, caught and released in the bush.	2m	
3/12/2014	1500-1510	L.Centa	Pipeline D1-D4	Nil					
3/12/2014	1500-1510	L.Centa	Pipeline B8-B9	Nil					
3/12/2014	1515-1525	L.Centa	Pipeline B0-B3	Nil					
3/12/2014	1525-1535	L.Centa	Pipeline E1-E3	Nil					
3/12/2014	1525-1535	L.Centa	Pipeline C1-C4	Nil					
3/12/2014	1540-1635	L.Centa	Pipeline A17-A1	Nil					
4/12/2014	0545-0555	L.Centa	Pipeline D1-D4	Nil					
4/12/2014	0545-0555	L.Centa	Pipeline B8-B9	Nil					
4/12/2014	0600-0610	L.Centa	Pipeline B0-B3	Nil					
4/12/2014	0605-0615	L.Centa	Pipeline E1-E3	Nil					
4/12/2014	0610-0620	L.Centa	Pipeline C1-C4	Nil					
4/12/2014	0630-0730	L.Centa	Pipeline A17-A1	Nephrurus laevissimus (Pale Knob-tailed Gecko)	Gecko	Alive	Rescued from trench near A14, observed face under pipe, released in the	15m	

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
							bush.		
4/12/2014	1500-1510	L.Centa	Pipeline D1-D4	Nil					
4/12/2014	1505-1510	L.Centa	Pipeline B8-B9	Nil					
4/12/2014	1515-1520	L.Centa	Pipeline B0-B3	Nil					
4/12/2014	1515-1525	L.Centa	Pipeline E1-E3	Nil					
4/12/2014	1525-1535	L.Centa	Pipeline C1-C4	Nil					
4/12/2014	1540-1630	L.Centa	Pipeline A17-A3	Nil					
5/12/2014	0545-0555	L.Centa	Pipeline D1-D4	Nil					
5/12/2014	0550-0555	L.Centa	Pipeline B8-B9	Nil					
5/12/2014	0555-0605	L.Centa	Pipeline B0-B3	Nil					
5/12/2014	0555-0605	L.Centa	Pipeline E1-E3	Nil					
5/12/2014	0605-0615	L.Centa	Pipeline C1-C4	Nil					
5/12/2014	0620-0710	L.Centa	Pipeline A17-A3	Nil					
5/12/2014	1500-1510	M.Hamilton	Pipeline D1-D4	Nil					
5/12/2014	1500-1505	L.Centa	Pipeline B8-B9	Nil					
5/12/2014	1510-1520	L.Centa	Pipeline B0-B3	Nil					
5/12/2014	1520-1525	L.Centa	Pipeline E1-E3	Nil					
5/12/2014	1510-1525	M.Hamilton	Pipeline C1-C4	Nil					
5/12/2014	1530-1610	L.Centa	Pipeline A17-A7	Nil					
6/12/2014	0545-0555	M.Hamilton	Pipeline D1-D4	Nil					
6/12/2014	0550-0555	L.Centa	Pipeline B8-B9	Nil					
6/12/2014	0555-0605	L.Centa	Pipeline B0-B3	Nil					
6/12/2014	0600-0610	L.Centa	Pipeline E1-E3	Nil					
6/12/2014	0605-0610	M.Hamilton	Pipeline C1-C4	Nil					

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Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
6/12/2014	0620-0650	L.Centa	Pipeline A17-A7	Nil					
6/12/2014	1530-1540	M.Hamilton	Pipeline D1-D3	Nil					
6/12/2014	1540-1545	L.Centa	Pipeline B9-B8	Nil					
6/12/2014	1545-1555	L.Centa	Pipeline B0-B3	Nil					
6/12/2014	1555-1605	M.Hamilton	Pipeline C1-C3	Nil					
6/12/2014	1605-1610	L.Centa	Pipeline E1-E3	Nil					
6/12/2014	1600-1630	L.Centa	Pipeline A17-A8	Nil					
7/12/2014	0550-0600	M.Hamilton	Pipeline D1-D3	Nil					
7/12/2014	0555-0600	L.Centa	Pipeline B8-B9	Nil					
7/12/2014	0600-0610	L.Centa	Pipeline B3-B0	Nil					
7/12/2014	0600-0610	M.Hamilton	Pipeline C1-C4	Nil					
7/12/2014	0610-0615	M.Hamilton	Pipeline E1-E3	Nil					
7/12/2014	0615-0700	L.Centa	Pipeline A17-A8	Nil					
7/12/2014	1520-1530	M.Hamilton	Pipeline D1-D3	Nil					
7/12/2014	1520-1530	L.Centa	Pipeline B8-B9	Nil					
7/12/2014	1530-1545	L.Centa	Pipeline C2-C4	Nil					
7/12/2014	1530-1545	M.Hamilton	Pipeline E1-E3	Nil					
7/12/2014	1545-1615	M.Hamilton	Pipeline A14-A17	Nil					
8/12/2014	0550-0600	M.Hamilton	Pipeline D1-D2	Nil					
8/12/2014	0600-0605	M.Hamilton	Pipeline B8-B9	Nil					
8/12/2014	0610-0625	M.Hamilton	Pipeline C2-C4	Nil					
8/12/2014	0645-0715	M.Hamilton	Pipeline A14-A17	Nil					
8/12/2014	1530	M.Hamilton	Pipeline D - backfilled	Nil					
8/12/2014	1540	M.Hamilton	Pipeline C - backfilled	Nil					
8/12/2014	1545	M.Hamilton	Pipeline B -	Nil					

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
			backfilled						
8/12/2014	1550-1630	M.Hamilton	Pipeline A14-A17	Nil					
9/12/2014	0550-0630	M.Hamilton	Pipeline A14-A17	Nil					
9/12/2014	1600-1615	M.Hamilton	Pipeline A14-A17	Nil					
10/12/2014	550	M.Hamilton	Pipeline A - backfilled	Nil					
19/12/2014	0550-0600	M.Hamilton	E78-E79	Nil					
19/12/2014	1545-1600	M.Hamilton	E78-E79	Nil					
20/12/2014	0550-0600	M.Hamilton	E78-E79	Nil					
20/12/2014	1545-1600	M.Hamilton	E78-E79	Nil					
21/12/2014	0550-0600	M.Hamilton	E78-E79	Nil					
22/01/2015	1530-1630	M.Hamilton	Bore 79-84	Desicated elapid	Elapid	Deceased	Removed to surrounding scrub	None in place	
22/01/2015	1530-1630	M.Hamilton	Bore 79-84	Desicated gecko	Gecko	Deceased	Removed to surrounding scrub	None in place	
22/01/2015	1530-1630	M.Hamilton	Bore 79-84	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Deceased	Removed to surrounding scrub	None in place	
22/01/2015	1530-1630	M.Hamilton	Bore 79-84	Desicated Ctenotus skink	Skink	Deceased	Removed to surrounding scrub	None in place	
22/01/2015	1530-1630	M.Hamilton	Bore 79-84	Desicated gecko	Gecko	Deceased	Removed to surrounding scrub	None in place	
22/01/2015	1530-1630	M.Hamilton	Bore 79-84	Desicated gecko	Gecko	Deceased	Removed to surrounding scrub	None in place	
22/01/2015	1530-1630	M.Hamilton	Bore 79-84	Desicated gecko	Gecko	Deceased	Removed to surrounding scrub	None in place	
22/01/2015	1530-1630	M.Hamilton	Bore 79-84	Desicated egernia	Skink	Deceased	Removed to surrounding scrub	None in place	
22/01/2015	1530-1630	M.Hamilton	Bore 79-84	Desicated Nephrurus	Gecko	Deceased	Removed to surrounding scrub	None in place	

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
23/01/2015	0550-0700	M.Hamilton	Bore 79-84	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Captured from trench and relocated to bush.	None in place	
23/01/2015	0550-0700	M.Hamilton	Bore 79-84	Pseudonaja nuchalis (Gwarder)	Elapid	Alive		None in place	Exited trench on own accord up vertical wall
23/01/2015	0550-0700	M.Hamilton	Bore 79-84	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Captured from trench and relocated to bush.	None in place	
23/01/2015	1530-1630	M.Hamilton	Bore 79-84	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Captured from trench and relocated to bush.	None in place	
24/01/2015	0550-0700	M.Hamilton	Bore 79-84	Egernia striata (Night Skink)	Skink	Alive	Captured from trench and relocated to bush.	None in place	
24/01/2015	1530-1630	M.Hamilton	Bore 79-84	Ctenophorus isoleps (Military Dragon)	Gecko	Alive	Captured from trench and relocated to bush.	None in place	
24/01/2015	1530-1630	M.Hamilton	Bore 79-84	Ctenophorus fordi (mallee dragon)	Dragon	Deceased	Removed to surrounding scrub	None in place	
24/01/2015	1530-1630	M.Hamilton	Bore 79-84	Lerista sp	Skink	Deceased	Removed to surrounding scrub	None in place	
25/01/2015	0550-0700	M.Hamilton	Bore 79-84	Egernia striata (Night Skink)	Skink	Alive	Captured from trench and relocated to bush.	None in place	
25/01/2015	0550-0700	M.Hamilton	Bore 79-84	Simoselaps bertholdi (Jan's Banded Snake)	Elapid	Deceased	Removed to surrounding scrub	None in place	
25/01/2015	0550-0700	M.Hamilton	Bore 79-84	Lialis burtonis (Burton's Legless Lizard)	Pygopod	Deceased	Removed to surrounding scrub	None in place	
25/01/2015	1530-1630	M.Hamilton	Bore 79-84	Lerista bipes (North-western Sandslider)	Skink	Deceased	Removed to surrounding scrub	None in place	
25/01/2015	1530-1630	M.Hamilton	Bore 79-84	Strophurus elderi (Jewelled Gecko)	Gecko	Deceased	Removed to surrounding scrub	None in place	
25/01/2015	1530-1630	M.Hamilton	Bore 79-84	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Captured from trench and relocated to bush.	None in place	

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
25/01/2015	1530-1630	M.Hamilton	Bore 79-84	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Captured from trench and relocated to bush.	None in place	
26/01/2015	0550-0730	M.Hamilton	Bore 79-84	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Captured from trench and relocated to bush.	None in place	
26/01/2015	0550-0730	M.Hamilton	Bore 79-84	Egernia striata (Night Skink)	Skink	Alive	Captured from trench and relocated to bush.	None in place	
26/01/2015	0550-0730	M.Hamilton	Bore 79-84	Pygopus nigriceps (Hooded-scaly Foot)	Pygopod	Alive	Captured from trench and relocated to bush.	None in place	
26/01/2015	0550-0730	M.Hamilton	Bore 79-84	Aspidites ramsayi (woma python)	python	Alive	Captured from trench and relocated to bush.	None in place	
26/01/2015	1530-1630	M.Hamilton	Bore 79-84	Lerista sp.	Skink	Deceased	Removed to surrounding scrub	None in place	
27/01/2015	0550-0700	M.Hamilton	Bore 79-84	Egernia striata (Night Skink)	Skink	Alive	Captured from trench and relocated to bush.	None in place	
27/01/2015	1530-1630	M.Hamilton	Bore 79-84	Simoselaps bertholdi (Jan's Banded Snake)	Elapid	Deceased	Removed to surrounding scrub	None in place	
28/01/2015	0550-0730	M.Hamilton	Bore 79-84	Lerista bipes (North-western Sandslider)	Skink	Deceased	Removed to surrounding scrub	None in place	
28/01/2015	0550-0730	M.Hamilton	Bore 79-84	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	None in place	
28/01/2015	0550-0730	M.Hamilton	Bore 79-84	Pygopus nigriceps (Hooded-scaly Foot)	Pygopod	Alive	Captured from trench and relocated to bush.	None in place	
28/01/2015	0550-0730	M.Hamilton	Bore 79-84	Gehyra purpurascens	Gecko	Alive	Captured from trench and relocated to bush.	None in place	
28/01/2015	1530-1630	M.Hamilton	Bore 79-84	Nil					
29/01/2015	0550-1630	M.Hamilton	Bore 79-84	*Diplodactylus maini*	Gecko	Alive	Captured from trench and relocated to bush.	None in place	

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
29/01/2015	1530-1630	M.Hamilton	Bore 79-84	Ctenotus atlas (Southern Mallee Skink)	Skink	Alive	Captured from trench and relocated to bush.	None in place	
30/01/2015	0550-0700	M.Hamilton	Bore 79-84	Nil					
30/01/2015	1530-1630	M.Hamilton	Bore 79-84	Nil					
31/01/2015	0550-0700	M.Hamilton	Bore 79-84	Egernia inornata (Desert Skink)	Skink	Alive	Captured from trench and relocated to bush.	None in place	
31/01/2015	0550-0700	M.Hamilton	Bore 79-84	Pygopus nigriceps (Hooded-scaly Foot)	Pygopod	Alive	Captured from trench and relocated to bush.	None in place	
31/01/2015	1530-1630	M.Hamilton	Bore 79-84	Nil					
1/02/2015	0550-0730	M.Hamilton	Bore 79-84	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Captured from trench and relocated to bush.	None in place	
1/02/2015	1530-1630	M.Hamilton	Bore 79-84	Nil					
2/02/2015	0550-0700	M.Hamilton	Bore 79-84	Nil					
2/02/2015	1530-1630	M.Hamilton	Bore 79-84	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Ran up side of trench on its own accord	None in place	
3/02/2015	0550-0700	M.Hamilton	Bore 79-84	Egernia inornata (Desert Skink)	Skink	Alive	Captured from trench and relocated to bush.	None in place	
3/02/2015	1530-1630	M.Hamilton	Bore 79-84	Nil					
4/02/2015	0550-0700	M.Hamilton	Bore 79-84	Nil					
4/02/2015	1530-1630	M.Hamilton	Bore 79-84	Nil					
5/02/2015	0550-700	M.Hamilton	Bore 79-84	Nil					
5/02/2015	1530-1630	M.Hamilton	Bore 79-84	Nil					
6/02/2015	0550-0700	M.Hamilton	Bore 79-84	Nil					
6/02/2015	1530-1630	M.Hamilton	Bore 79-84	Nil					
7/02/2015	0550-0610	M.Hamilton	Bore 79-84	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
7/02/2015	0610-0700	M.Hamilton	Bore 97-98	Egernia inornata (Desert Skink)	Skink	Alive	Captured from trench and relocated to bush.	10m	Juvenile
7/02/2015	1530-1550	M.Hamilton	Bore 79-84	Nil					
7/02/2015	1550-1630	M.Hamilton	Bore 97-98	Nil					
8/02/2015	0550-0610	M.Hamilton	Bore 79-84	Nil					
8/02/2015	0610-0620	M.Hamilton	Bore 97-98	Nil					
8/02/2015	0620-0710	M.Hamilton	Bore 98 - South line	Delma nasuta (Long Nosed Delma)	Pygopod	Alive	Captured from trench and relocated to bush.	15m	
8/02/2015	1530-1550	M.Hamilton	Bore 79-84	Nil					
8/02/2015	1550-1630	M.Hamilton	Bore 97-98	Nil					
8/02/2015	1630-1650	M.Hamilton	Bore 98 - South line	Nil					
9/02/2015	0550-0610	M.Hamilton	Bore 79-84	Nil					
9/02/2015	0610-0700	M.Hamilton	Bore 97-98	Lialis burtonis (Burton's Legless Lizard)	Pygopod	Alive	Captured from trench and relocated to bush.	10m	
9/02/2015	0610-0700	M.Hamilton	Bore 97-98	Lialis burtonis (Burton's Legless Lizard)	Pygopod	Alive	Captured from trench and relocated to bush.	10m	
9/02/2015	0700-0730	M.Hamilton	Bore 98 - South line	Nil					
9/02/2015	1500-1520	M.Hamilton	Bore 79-84	Nil					
9/02/2015	1520-1600	M.Hamilton	Bore 98 - South line	Nil					
9/02/2015	1600-1620	M.Hamilton	Bore 97-98	Nil					
10/02/2015	0550-0610	M.Hamilton	Bore 79-84	Nil					
10/02/2015	0610-0630	M.Hamilton	Bore 98 - South line	Nil					
10/02/2015	0630-0720	M.Hamilton	Bore 97-98	Nil					
10/02/2015	1500-1520	M.Hamilton	Bore 79-84	Nil					
10/02/2015	1520-1600	M.Hamilton	Bore 98 - South line	Nil					
10/02/2015	1600-1620	M.Hamilton	Bore 97-98	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
11/02/2015	0550-0610	M.Hamilton	Bore 79-84	Nil					
11/02/2015	0610-0630	M.Hamilton	Bore 98 - South line	Nil					
11/02/2015	0630-0720	M.Hamilton	Bore 97-98	Lerista sp.	Skink	Deceased	Removed to surrounding scrub	5m	
11/02/2015	0630-0720	M.Hamilton	Bore 97-98	Moloch horridus (Thorny Devil)	Dragon	Deceased	Removed to surrounding scrub	3m	
11/02/2015	1500-1520	M.Hamilton	Bore 98 - South line	Nil					
11/02/2015	1520-1600	M.Hamilton	Bore 97-98	Simoselaps bertholdi (Jan's Banded Snake)	Elapid	Deceased	Removed to surrounding scrub	2m	
12/02/2015	0550-0610	M.Hamilton	Bore 98 - South line						
12/02/2015	0610-0700	M.Hamilton	Bore 97-98	Lerista sp.	Skink	Deceased	Removed to surrounding scrub	3m	
12/02/2015	0610-0700	M.Hamilton	Bore 97-98	Pygopus nigriceps (Hooded-scaly Foot)	Pygopod	Alive	Captured from trench and relocated to bush.	8m	
12/02/2015	0610-0700	M.Hamilton	Bore 97-98	Diplodactylus conspicillatus (Fat-tailed Gecko)	Gecko	Alive	Captured from trench and relocated to bush.	5m	
12/02/2015	0610-0700	M.Hamilton	Bore 97-98	Pygopus nigriceps (Hooded-scaly Foot)	Pygopod	Alive	Captured from trench and relocated to bush.	22m	
5/03/2015	1530-1540	M.Hamilton	TN - PB36	Nil					
6/03/2015	0630-0640	M.Hamilton	TN - PB36	Nil					
6/03/2015	1530-1540	M.Hamilton	TN - PB36	Nil					
7/03/2015	0620-0630	M.Hamilton	TN - PB36	Nil					
7/03/2015	1530-1550	M.Hamilton	TN - PB36	Nil					
8/03/2015	0620-0640	M.Hamilton	TN - PB36	Nil					
8/03/2015	1530-1600	M.Hamilton	TN - PB36	Ctenophorus nuchalis (Central Netted Dragon)	Dragon	Alive	Captured from trench and relocated to bush.	20m	
9/03/2015	0620-0700	M.Hamilton	TN - PB36	Nil					
9/03/2015	1500-1600	M.Hamilton	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	12m	

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
10/03/2015	0600-0700	M.Hamilton	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	10m	
10/03/2015	0600-0700	M.Hamilton	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	8m	
10/03/2015	1500-1600	M.Hamilton	TN - PB36	Ctenophorus nuchalis (Central Netted Dragon)	Dragon	Alive	Captured from trench and relocated to bush.	12m	
11/03/2015	0600-0700	M.Hamilton	TN - PB36	Neobatrachus centralis (Trilling Frog)	Frog	Alive	Captured from trench and relocated to bush.	15m	
11/03/2015	0600-0700	M.Hamilton	TN - PB36	Egernia inornata (Desert Skink)	Skink	Alive	Captured from trench and relocated to bush.	12m	
11/03/2015	1500-1600	M.Hamilton	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	4m	
11/03/2015	1500-1600	M.Hamilton	TN - PB36	Egernia striata (Night Skink)	Skink	Alive	Captured from trench and relocated to bush.	20m	The skink was trapped in an underwater part of the trech, clinging to a small "island"
11/03/2015	1500-1600	M.Hamilton	TN - PB36	Varanus gouldii (Gould's Sand Monitor)	Monitor	Alive	Exited trench by scrambling up side wall	10m	
12/03/2015	0600-0700	M.Hamilton	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	12m	
12/03/2015	0600-0700	M.Hamilton	TN - PB36	Egernia inornata (Desert Skink)	Skink	Alive	Captured from trench and relocated to bush.	8m	
13/03/2015	1500-1630	G. Murray	TN - PB36	Ctenophorus reticulatus (Western Netted Dragon)	Dragon	Alive	Captured from trench and relocated to bush.	25m	
14/03/2015	0600-0730	G. Murray	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	N/A	
14/03/2015	0600-0730	G. Murray	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	10m	

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
14/03/2015	0600-0730	G. Murray	TN - PB36	Ctenotus atlas (Southern Mallee skink)	Skink	Alive	Ushered away from open trench line, was not in the open trench but nearby.	15m	
14/03/2015	0600-0730	G. Murray	TN - PB36	Gehyra purpurascens	Gecko	Alive	Captured from trench and relocated to bush.	1m	
14/03/2015	1500-1730	G. Murray	TN - PB36	Varanus gilleni (Pygmy Mulga Monitor)	Monitor	Alive	Captured from trench and relocated to bush.	2m	
14/03/2015	1500-1730	G. Murray	TN - PB36	Pseudechis australis	Snake	Alive	Captured form the side of trench and relocated into nearbuy bushland.	N/A	
15/03/2015	0600-0730	G. Murray	TN - PB36	Ctenotus sp.	Skink	Alive	Attempted to rescue, crawled under pipe and did not come out with encouragement.	0m	Unable to rescue.
15/03/2015	1530-1550	G. Murray	TN - PB36	Nil					
16/03/2015	0600-0730	G. Murray	TN - PB36	Nil					
16/03/2015	1500-1730	G. Murray	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	5m	
16/03/2015	1500-1730	G. Murray	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	2m	
16/03/2015	1500-1730	G. Murray	TN - PB36	Ctenotus atlas (Southern Mallee skink)	Skink	Alive	Captured from trench and relocated to bush.	10m	
17/03/2015	0600-0730	G. Murray	TN - PB36	Nil					
17/03/2015	16:00-17:00	G. Murray	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	5m	
18/03/2015	0600-0730	G. Murray	TN - PB36	Nil					
18/03/2015	16:00-17:00	G. Murray	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	1m	

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
18/03/2015	16:00-17:00	G. Murray	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	3m	
19/03/2015	06:00-07:00	G. Murray	TN - PB36	Nil					
19/03/2015	16:00-17:00	G. Murray	TN - PB36	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	3m	
20/03/2015	0600-0700	G. Murray	TN - PB36	Nil					
20/03/2015	16:00-17:00	G. Murray	TN - PB36	Nil					
21/03/2015	0600-0700	G. Murray	TN - PB36	Nil					
21/03/2015	16:00-17:00	G. Murray	TN - PB36	Nil					
22/03/2015	07:00-08:00	G. Murray	TN - PB36	Nil					
22/03/2015	16:00-17:00	G. Murray	TN - PB36 - TWB 017	Nil					
23/03/2015	07:00-07:45	G. Murray	TN - PB36 - TWB 017	Nil					
23/03/2015	16:00-17:00	G. Murray	TN - PB36 - TWB 017	Nil					
24/03/2015	07:00-07:45	G. Murray	TN - PB36 - TWB 017	Nil					
24/03/2015	16:00-17:00	G. Murray	TN - PB36 - TWB 017	Nil					
25/03/2015	07:00-07:45	G. Murray	TN - PB36 - TWB 017	Nil					
25/03/2015	16:00-17:00	G. Murray	TN - PB36 - TWB 017	Nil					
26/03/2015	07:00-07:45	G. Murray	TN - PB36 - TWB 017	Nil					
26/03/2015	16:00-17:00	G. Murray	TN - PB36 - TWB 056	Nil					
27/03/2015	07:00-07:45	G. Murray	TN - PB36 - TWB 056	Nil					
27/03/2015	16:00-17:00	G. Murray	TWB 051 - TWB 102	Nil					
28/03/2015	07:00-07:45	G. Murray	TWB 051 - TWB 102	Nil					
28/03/2015	16:00-17:00	G. Murray	TWB 051 - TWB 102	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
29/03/2015	07:00-07:45	G. Murray	TWB 051 - TWB 102	Nil					
29/03/2015	16:00-17:00	G. Murray	TWB 051 - TWB 102	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	0	
29/03/2015	16:00-17:00	G. Murray	TWB 051 - TWB 102	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	20	
29/03/2015	16:00-17:00	G. Murray	TWB 051 - TWB 102	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	5	
30/03/2015	07:00-07:45	G. Murray	TWB 051 - TWB 102	Demansia psammophis (Yellow-faced Whipsnake)	Snake	Alive	Captured from trench and relocated to bush.	20	
30/03/2015	16:00-17:00	G. Murray	TWB 051 - TWB 102	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	20	
30/03/2015	16:00-17:00	G. Murray	TWB 051 - TWB 102	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	5	
30/03/2015	16:00-17:00	G. Murray	TWB 051 - TWB 102	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	0	
30/03/2015	16:00-17:00	G. Murray	TWB 051 - TWB 102	Pygopus nigriceps (Hooded-scaly Foot)	Pygopod	Deceased	Taken off tenure.	15	Found belly up, possibly died due to dehydration.
31/03/2015	06:30-07:30	G. Murray	TWB 051 - TWB 102	Liopholis striata (Night Skink)	Skink	Alive	Captured from trench and relocated to bush.	8	
31/03/2015	06:30-07:30	G. Murray	TWB 051 - TWB 102	Strophurus strophurus (Western spiny-tailed gecko)	Gecko	Alive	Captured from trench and relocated to bush.	5	
31/03/2015	06:30-07:30	G. Murray	TWB 051 - TWB 102	Gehyra purpurascens	Gecko	Alive	Captured from trench and relocated to bush.	1	
31/03/2015	06:30-07:30	G. Murray	TWB 051 - TWB 102	Lialis burtonis (Burton's Legless Lizard)	Pygopod	Alive	Captured from trench and relocated to bush.	6	
31/03/2015	15:00-16:40	J. Ober	TWB 051 - TWB 102	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	3	

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
31/03/2015	15:00-16:40	J. Ober	TWB 051 - TWB 102	Gehyra purpurascens	Gecko	Alive	Captured from trench and relocated to bush.	10	
1/04/2015	07:00-08:30	R. Huit	North-east Trunkline	Nil					
1/04/2015	15:00-17:15	R. Huit	North-east Trunkline	Nil					
2/04/2015	07:00-08:30	A. Palezza	TWB 051 - TWB 93	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	Unknown	
2/04/2015	15:00-17:15	A. Palezza	TWB 051 - TWB 93	Nil					
3/04/2015	07:00-08:30	A. Palezza	TWB 051 - TWB 93	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	Unknown	
3/04/2015	07:00-08:30	A. Palezza	TWB 051 - TWB 93	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	Unknown	
3/04/2015	07:00-08:30	A. Palezza	TWB 051 - TWB 93	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	Unknown	
3/04/2015	07:00-08:30	A. Palezza	TWB 051 - TWB 93	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	Unknown	
3/04/2015	07:00-08:30	A. Palezza	TWB 051 - TWB 93	Unidentified snake	Snake	Alive	Earthen ramp was utilised by the snake to exit the trench	Unknown	
3/04/2015	15:00-17:15	A. Palezza	TWB 051 - TWB 93	Nil					
4/04/2015	07:00-08:30	A. Palezza	TWB 051 - TWB 93	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	Unknown	
4/04/2015	15:00-17:15	A. Palezza	TWB 051 - TWB 93	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	Unknown	
4/04/2015	15:00-17:15	A. Palezza	TWB 051 - TWB 93	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	Unknown	
5/04/2015	07:00-08:30	A. Palezza	TWB 051 - TWB 93	Nil					
5/04/2015	15:00-17:15	A. Palezza	TWB 051 - TWB 83	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and	Unknown	

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
							relocated to bush.		
6/04/2015	07:00-08:30	A. Palezza	TWB 051 - TWB 83	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	Unknown	
6/04/2015	07:00-08:30	A. Palezza	TWB 051 - TWB 83	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	Unknown	
6/04/2015	15:00-17:15	A. Palezza	TWB 051 - TWB 83	Nil					
7/04/2015	07:00-08:30	A. Palezza	TWB 051 - TWB 83	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	Unknown	
7/04/2015	15:45-17:30	A. Palezza; G. Murray	TWB 051 - TWB 83	Nil					
8/04/2015	07:20-08:50	A. Palezza; G. Murray	TWB 051 - TWB 83	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	5	
8/04/2015	15:00-17:00	A. Palezza; G. Murray	TWB 051 - TWB 83	Moloch horridus (Thorny Devil)	Dragon	Alive	Captured from trench and relocated to bush.	25	
8/04/2015	15:00-17:00	A. Palezza; G. Murray	TWB 051 - TWB 83	Pseudechis australis (Mulga Snake)	Snake	Alive	Captured from trench and relocated to bush.	8	
9/04/2015	07:00-08:30	A. Palezza; G. Murray	TWB 051 - TWB 83	Nil					
9/04/2015	15:00-17:15	A. Palezza; G. Murray	TWB 051 - TWB 83	Nil					
10/04/2015	07:00-08:30	A. Palezza; G. Murray	TWB 91 - TWB 83	Nil					
10/04/2015	15:00-17:15	A. Palezza; G. Murray	TWB 91 - TWB 83	Nil					
11/04/2015	07:00-08:30	A. Palezza; G. Murray	TWB 91 - TWB 83	Nephrurus laevissimus (Pale Knob-tailed Gecko)	Gecko	Deceased	Removed deceased animal from the trench and placed off tenure.	7	
11/04/2015	15:00-17:15	A. Palezza; R. Lane	TWB 91 - TWB 83	Nil					
12/04/2015	07:00-08:30	G. Murray	TWB 91 - TWB 83	Nil					
12/04/2015	15:00-17:15	G. Murray	TWB 96 - TWB 93	Nil					
13/04/2015	07:00-08:30	G. Murray	TWB 96 - TWB 93	Nil					

Fauna Trench Inspection

Date	Time	Observer	Pipe Section Inspected	Animal Sighted	Family	Status	Action Taken	Distance from Egress Ramp (m)	Comments
13/04/2015	15:00-17:15	G. Murray	TWB 96 - TWB 93	Lialis burtonis (Burton's Legless Lizard)	Pygopod	Alive	Captured from trench and relocated to bush.	3	
14/04/2015	07:00-08:30	G. Murray	TWB 96 - TWB 93	Nil					
14/04/2015	15:00-17:15	J. Ober	TWB 96 - TWB 93						