



# Amendment Notice 3

**Licence Number** L4496/1988/11

**Licence Holder** Big Bell Gold Operations Pty Ltd

**ACN** 090 642 809

**File Number:** 2010/003418-1

**Premises** Blue Bird Gold Mine  
Mining Tenements; G51/9, L20/75, L51/18, L51/78, M20/12, M20/45, M20/68, M20/70, M20/71, M20/73, M20/77,, M20/107, M20/214, M20/219, M20/249, M20/421, M51/6, M51/12, M51/31, M51/33, M51/35, M51/39, M51/62, M51/75, M51/92, M51/96, M51/132, M51/190, M51/199, M51/200, M51/203, M51/209; M51/211, M51/233, M51/236, M51/237, M51/254, M51/321, M51/393, M51/437, M51/438, M51/439, M51/440, M51/455 M51/459, M51/462, M51/463, M51/483, M51/485, M51/486, M51/491, M51/492, M51/493, M51/494, M51/495, M51/523, M51/539, M51/569, M51/572, M51/581, M51/564, M51/666, M51/671, M51/672, M51/757, M51/762, M51/781; M51/784, M51/788, M51/793, M51/794, M51/795, M51/800, M51/801, M51/820, M51/824, M51/834; E51/1484  
MEEKATHARRA WA 6642

**Date of Amendment** 11 December 2018

## Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act) as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

**Steve Checker**

**MANAGER, WASTE INDUSTRIES  
REGULATORY SERVICES**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

# Definitions and interpretation

## Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

**Table 1: Definitions**

Term	Definition
ACN	Australian Company Number
AER	Annual Environment Report
Amendment Notice	refers to this document
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 <a href="mailto:info@dwer.wa.gov.au">info@dwer.wa.gov.au</a>
Delegated Officer	an officer under section 20 of the EP Act
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)
Existing Licence	The Licence issued under Part V, Division 3 of the EP Act and in force prior to the commencement of and during this amendment
Licence Holder Licensee	Big Bell Gold Operations Pty Ltd
m <sup>3</sup>	cubic metres

Noise Regulations	<i>Environmental Protection (Noise) Regulations 1997 (WA)</i>
Occupier	has the same meaning given to that term under the EP Act.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Amendment Notice applies, as specified at the front of this Amendment Notice.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>

## Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

This notice is limited only to an amendment to increase the Category 63 approved throughput as the result of the construction of two new landfills and addition tyre disposal areas, the addition of new mining tenements and the removal of surrendered tenements from the premises boundary and to fix some administrative errors. No changes to any other aspects of the licence have been requested by the Licence Holder.

The following guidance statements have informed the decision made on this amendment

- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessment (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

## Amendment background

The Licence Holder operates the Bluebird Mine (Premises) through Licence L4496/1988/11. The Premises is located in a 60 km stretch along the Great Northern Highway, with the processing facilities and tailings storage facilities located 12 km south of Meekatharra.

The processing facility at the Premises is a traditional crush-grind carbon-in-leach (CIL) circuit. Chemicals associated with the processing operations include cyanide, hydrochloric acid, sodium hydroxide (caustic) and lime. Tailings produced at the Premises are currently deposited into the Bassett's West In-pit TSF (BWTSF) and the Bluebird East in-pit TSF (Bluebird TSF).

**Table 2: Prescribed activities at the Premises**

Category	Current throughput capacity	Current throughput capacity	Proposed throughput capacity
5	Processing or beneficiation of metallic or non-metallic ore	2,500,000 tonnes per annual period	2,500,000 tonnes per annual period
6	Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore	3,056,000 tonnes per annual period	3,056,000 tonnes per annual period
85	Sewage facility	99 cubic metres per day	99 cubic metres per day
63	Class I inert landfill site	500 tonnes per annual period	3000 tonnes per annual period

## Amendment Description

The Licence Holder submitted an application to amend Licence L4496/1988/11 on 18 April 2018. The Licence Holders proposed changes are described below.

### Category 63 –new tyre burial locations

The Existing Licence currently allows for the burial of used tyres in locations set out in Schedule 1 of the licence. The Licence Holder is seeking approval to add additional new tyre burial locations to schedule 1 as the existing specified locations are no longer accessible. The Licence Holder has requested that the existing tyre burial locations are also removed from Schedule 1. It is proposed that tyre burial locations be updated to include the following waste

rock landforms (WRLs);

- Aladdin WRL – 2 tyre disposal locations
- Romsey WRL – 1 tyre disposal location
- Mickey Doolan WRLs – 4 tyre disposal locations
- Five Mile Well WRL – 1 tyre disposal location

The locations of the new tyre burial locations are shown in Schedule 1 of the amended licence.

#### Category 63- Increase in approved throughput and two new inert landfills

The Existing Licence currently allows for the disposal of 500 tonnes of Class I Inert waste per annual period. The Licence Holder is seeking to increase the approved throughput to 3000 tonnes per annual period. This increase is as a result of two new Class I landfills to be constructed, one located at Paddy's Flat (Mining tenement M51/440) and the other at the Reedy project area (mining tenement M20/45) and the increase need for tyre disposal within the WRLs (see above)..

Each of the new landfills (Paddy's Flat and Reedy project area) will consist of a system of trenches, excavated one at a time, for the deposition of waste. Each trench will be approximately 3m deep, 5m wide and 20-40 metres in length. Earthen bunds will be constructed around the facility to control windblown waste and divert stormwater away from the waste.

It is expected that waste types such as wood, plastics, poly pipe and other typical inert wastes generated from mining activities will be disposed of at the two new landfills. The Licensee has requested that the landfills be approved to accept Inert Waste Type 1 and Type 2 (Plastics) and Inert Waste Type 2 (tyres). It also has been requested that the Reedy project area landfill be approved to accept Special Waste Type 1 (asbestos). The location of the two new landfills and the existing landfill is shown in Schedule1 of the amended licence.

#### Premises boundary

As part of this amendment application the Licence Holder is seeking to add the following mining tenements to the prescribed premises boundary; M51/820, G51/9, M51/200 and M51/671 and have the following surrendered tenements removed; M51/455, M51/781 and E51/1484.

DWER undertook a review of the mining tenements listed as the premises boundary on the Issued licence and found that the boundary was not contiguous. This was brought to the Licence Holders attention and as a result they undertook their own review and provided a new list of mining tenements to define the premises boundary. This resulted in the following tenements being removed from the boundary; M51/209, M51/455 M51/781, E51/1484. And the following tenements to be added to the boundary; G51/9, L20/75, L51/18, L51/78, M20/219, M51/6, M51/12, M51/31, M51/33, M51/39, M51/62, M51/75, M51/92, M51/96, M51/199, M51/200, M51/203, M51/233, M51/321, M51/393, M51/437, M51/485, M51/486, M51/539, M51/569, M51/581, M51/564, M51/793, M51/794, M51/795, M51/800, M51/801, M51/820.

#### Administrative changes

Condition number 1.3.3 on the original licence issued in 2016 was duplicated. As a result the condition relating to the inspection of infrastructure (see below) was renumbered as 1.3.12 in amendment notice 2 issued in March 2018. However a new condition was added as part of the March 2018 amendment notice that was also numbered as 1.3.12 resulting in another duplication of condition numbers. The Licence Holder has requested that the numbering be corrected under this licence amendment. The below condition will be renumbered as 1.3.15.

*The Licensee shall:*

*(a) undertake inspections as detailed in Table 1.3.3;*

*(b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and*

*(c) maintain a record of all inspections undertaken.*

## Amendment history

Table 3 provides the amendment history for L4496/1988/11.

**Table 3: Licence amendments**

Instrument	Issued	Amendment
L4496/1988/11	21/01/2016	Dewatering of the Reedy mining area with discharge to Lake Annean (Category 6) and a new Class I landfill (Category 63)
L4496/1988/11	12/05/2016	Include Bluebird East as an Inpit tailings storage area
L4496/1988/11	23/05/2017	Amendment Notice 1 to include dewatering of the pit lake and groundwater at the Aladdin Pit with the dewatering effluent being discharged to Lake Annean, and the inclusion of additional mining tenements to the Premises description to identify the additional prescribed activities.
L4496/1988/11	28/03/2018	Amendment Notice 2 to include the Surprise Pit as an in-pit tailings storage facility, construction of a new Class II landfill to replace the existing landfill and dewater the Five Mile Well pit.
L4496/1988/11	11/12/2018	Amendment Notice 3 – this amendment

## Location and receptors

Table 4 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

**Table 4: Receptors and distance from activity boundary**

Residential and sensitive premises	Distance from Prescribed Premises
Meekatharra Town	15 km from the Premises.
Great Northern Highway (Highway) Major inland highway frequently used by tourists, local mining companies and for transportation of goods and services.	<p>The Yaloginda Landfill is approximately 700m away from the Highway.</p> <p>New Paddy's Flat Landfill is approximately 1.2km away from the Highway.</p> <p>New Reedy Project landfill is approximately 12km away from the Highway.</p> <p>Tyre disposal areas are approximately between 600m – 1.4km away from the Highway.</p>

Table 5 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

**Table 5: Environmental receptors and distance from activity boundary**

Environmental receptors	Distance from Prescribed Premises
Surface water	<p>There are no nearby permanent surface water bodies however a major tributary passes through the Premises which has been diverted around pits, waste rock dumps and infrastructure. The tributary eventually discharges into Lake Annean (non-perennial). Flow is ephemeral following heavy rainfall events.</p> <p>Lake Annean is located approximately 6 kilometers (km) south west of the Aladdin WRL.</p>
Groundwater	<p>Groundwater depth varies across the premises. In some areas it is 6 to 18 meters below ground level (mbgl) (DWER WIR GIS database) and in others 20-60 mbgl.</p> <p>Livestock watering bores</p> <ul style="list-style-type: none"> <li>- Borwick Well – Approximately 4.0 km east of the Premises.</li> <li>- Town Well – Approximately 1.0 km south west of the Premises.</li> <li>- Racecourse Well – Approximately 2.7 km north east of the Premises.</li> </ul>
Threatened and Priority Flora	<p>One broad vegetation type was identified as occurring across the premises – Mulga Scrublands on wash plains of hardpan clay with rills, gutters and channels which form part of a wider drainage system and catchment for Lake Annean.</p> <p>No threatened flora species or priority species have been recorded within the premises boundary area. (DWER Threatened and Priority Flora GIS database).</p>
Threatened Fauna	<p>There are three broad fauna habitat types identified in the Premises area. However these broad fauna habitats were not considered regionally significant to vertebrate fauna as they are all widespread, well-connected and typical of this region.</p> <p>There has been some threatened fauna sightings within the prescribed premises boundary near Paddy's flat project area (birds) and the Reedy project area (mainly reptiles) (DWER threatened fauna GIS database).</p>
Threatened Ecological Communities (TEC)	<p>The edge of a TEC buffer overlaps the south-east side of the premises boundary near the Reedy project area. This buffer is for a groundwater TEC</p>

	called 'Polelle calcrete groundwater assemblage type on Murchison palaeodrainage on Polelle Station.' (DWER Threatened Ecological Communities (buffers) GIS database).
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## Risk assessment

Tables 6 and 7 below describe the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. Both tables identify whether the emissions present a material risk to public health or the environment, requiring regulatory controls.



**Table 6: Risk assessment for proposed amendments during construction**

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
<b>Category 63 Class I Inert landfill</b>	Earthworks and construction of new tyre burial locations and new landfills	Dust	Air / wind dispersion	Amenity	Slight	Rare	Low	<p>For the new tyre disposal areas the nearest receptor is the Great Northern Hwy. Distances from the hwy range from 600m to 1.4km. At this distance the impact from noise and dust is not expected to be significant due to the small scale and short term nature of the emissions during construction. The disposal areas are also within active WRL and therefore dust and noise emissions are not expected to be greater than those that are already being emitted during operation of the WRL.</p> <p>The new paddy's Flat landfill will be located approximately 1.2km from the nearest sensitive receptor (Great Northern Hwy). Impact from noise and dust during construction is not expected to be significant due to the distance to the receptor and the small scale and short term nature of the emissions.</p> <p>The new Reedy Project landfill is located approximately 12km from the nearest sensitive receptor (Great Northern Hwy). Due to the distance to the nearest sensitive receptor no real pathway exists and therefore no impact from noise and dust emissions are expected during construction.</p>
	Noise	<u>Great Northern HWY</u> New Paddy's Flat Landfill – 1.2km away, New Reedy Project landfill - ~12km away, Tyre disposal areas – between ~600m – 1.4km away.  <u>Town of Meekatharra</u> 15km away						

**Table 7: Risk assessment for proposed amendments during operation**

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning	
Source/Activities		Potential emissions	Potential receptors	Potential pathway					Potential adverse impacts
Category 63 Class I Inert landfill	Acceptance of inert waste for burial at New landfills – Paddy Flat and Reedy Project area and within WRLs tyre disposal areas (tyres)	Dust: Earthmoving activities when waste is covered, dust lift off from cover stockpiles and from vehicle movements on unsealed roads	<u>Great Northern HWY</u> New Paddy's Flat Landfill – 1.2km away, New Reedy Project landfill - ~12km away, Tyre disposal areas – between ~600m – 1.4km away.  <u>Town of Meekatharra</u> 15km away	Air / wind dispersion	Amenity	Slight	Rare	Low	Earthmoving activities for burial of waste and tyres and vehicle movement will occur in short intervals minimizing emissions. The Licence Holder has stated that a water cart will also be used to suppress dust as required.  As minimal dust emissions are expected and due to the distance to the nearest sensitive receptors the risk of dust impacting the environment has been determined to be 'low'.
		Noise: Operation of earthmoving equipment and movement of vehicles	<u>Great Northern HWY</u> New Paddy's Flat Landfill – 1.2km away, New Reedy Project landfill - ~12km away, Tyre disposal areas –	Air / wind dispersion	Amenity	Slight	Rare	Low	Operation of earthmoving equipment and vehicle movement activities will occur on an intermittent basis and will occur within a large mining operation. The likelihood of noise emissions from landfilling activities impacting the offsite environment is considered to be rare due to the distances to the nearest sensitive receptor.  The risk of noise emissions generated from landfilling activities impacting the offsite environment is considered to be low.

			between ~600m – 1.4km away.  <u>Town of Meekatharra</u> 15km away						
		Leachate	Groundwater used for livestock watering	Migration through soils	Contamination of groundwater	Slight	Rare	Low	<p>The depth to groundwater at the site is greater than 6mbgl. The existing licence has conditions requiring the base of landfill to be no less than 3 m from the highest groundwater level.</p> <p>Waste will be covered monthly for the two new landfills as per existing licence conditions.</p> <p>The likelihood of leachate being generated by inert waste and tyres is rare. Putrescible waste and hazardous waste will be prohibited from being disposed of in the two new landfills and tyre burial locations, however there is potential for the inadvertent disposal of non-inert waste. The Licence Holder has stated that signage and awareness training will be provided. Putrescible waste will be collected and transported to Meekatharra town for burial.</p> <p>Tyre disposal areas will be constructed within raised WRLs</p> <p>Landfill trenches will be bunded to prevent storm water entry and therefore excess build-up of water within trenches.</p> <p>Noting the Licence Holder's controls and the inert nature of the waste the risk of impact of leachate seepage is considered to be Low. No additional regulatory controls other than the existing licence conditions will be required to mitigate risk.</p>

		Discharge of contaminated stormwater	Soils and surface water	<p>Direct discharge to surrounding soils</p> <p>Discharge to surface waters through sheet flow</p>	Slight	Rare	Low	Slight	<p>There are no nearby permanent surface water bodies however a major tributary passes through the Premises which has been diverted around pits, waste rock dumps and infrastructure. The tributary eventually discharges into Lake Annean (non- perennial). Flow is ephemeral following heavy rainfall events.</p> <p>The Existing Licence has a condition requiring a minimum distance of 100m is maintained between a landfill and any surface body. This condition will also apply to the two new landfills.</p> <p>The landfill trenches will also be bunded to prevent storm water entry.</p> <p>Noting the licence Holders controls and existing licence conditions the risk of impact from contaminated storm water is considered to be low. No additional regulatory controls other than the existing license conditions will be require to mitigate risk.</p>
		Windblown waste	Surrounding land and vegetation	Air/wind dispersion	Loss of amenity and nuisance impacts	Slight	Possible	Low	<p>Minimal windblown waste is expected from the operation of the two new landfills and new tyre disposal locations.</p> <p>Waste will be disposed of below ground level within trenches and earthen bunding surrounding the trenches will assist with minimizing waste lift off.</p> <p>Existing licence conditions require the Licence Holder to collect windblown waste on a weekly bases and to make all reasonable and practical measures to ensure no windblown waste escapes from the landfill area.</p> <p>Noting the licence holder's controls and existing licence conditions the risk of</p>

									impact from windblown waste is considered to be low. No additional regulatory controls are required to mitigate risk.
	Acceptance of Special Waste Type 1 at Reedy Project Area landfill	Discharge of airborne asbestos fibres	Great Northern Hwy – 12km NW from proposed landfill  Town of Meekatharra – 15km away	Air emission	Effects on human health by asbestos related diseases	Slight	Rare	Low	<p>No pathway to receptors exist due to the separation distance (12km).</p> <p>It is expected that less than 20 tonnes per annum of asbestos contaminated material will be disposed of at the new Reedy Project Area landfill.</p> <p>The Licence Holder has stated within the application that all asbestos contaminated material will be wrapped in heavy duty plastic prior to burial and will be immediately covered with 1000m of clean fill following disposal.</p> <p>The area used for disposal will be surveyed to ensure its position is recorded to limit inadvertent future interaction.</p> <p>The Existing Licence already has conditions requiring the Licence Holder to wrap special waste type 1 in heavy duty plastic prior to acceptance and to immediately cover with clean fill after disposal.</p> <p>Noting the distance to sensitive receptors, the Licence Holders controls and existing licence conditions the risk of impact from burial of Special Waste Type 1 is considered to be very low. No additional regulatory controls are required to mitigate risk.</p>

## Decision

### Category 63 - Tyre disposal areas

Based on the application supporting documentation, the Delegated Officer has determined that the burial of tyres in eight new tyre disposal areas within the premises waste rock landforms (WRL) presents a low risk to the environment.

The Existing Licence already contain conditions (1.3.5 and 1.3.8) relating to the management of tyre disposal within the premises WRLs. No additional conditions are required to mitigate risk.

Schedule 1 tyre burial location map has been replaced with four maps outlining the location of the new tyre burial locations.

### Category 63- Increase in approved throughput and two new inert landfills

Based on the application supporting documentation, the Delegated Officer has determined that the construction and operation of two new inert landfills at Paddy's Flat and the Reedy project area presents a low risk to the environment.

The Existing Licence already contains conditions relating to the management of inert waste (and Special Waste Type 1) on the premises (conditions 1.3.5 and 1.3.8). No changes to these conditions are required to mitigate risk. The landfill location map in Schedule 1 has been updated to include the location of the two new landfills.

Condition 1.3.10 has been updated to include the increase in Category 63 throughput from 500 tonnes per annual period to 3000 tonnes per annual period.

Conditions 1.3.11 has been updated to include the construction requirements for the two new landfills and tyre disposal areas.

Schedule 1 has been updated with two additional maps showing the location of the two new landfills.

### Administrative changes

The Licence Holder has requested that the wording of the emissions to land discharge points are updated on the Licence as it is unclear what location is to be monitored as there is no corresponding map. The Licence Holder has requested that the wording within table 3.3.1 is changed from;

- South Emu, Triton, Jack Ryan and Rand Pits flow meter (one meter)
- to
- North of Reedy Drainage Channel
- South of Reedy Drainage Channel

These two discharge points are also outlined on the Map of emission points within the Existing Licence. The Delegated Officer has determined that this request is acceptable and as a result the Licence has been updated. The requirement for the measuring of volume in table 3.3.1 has also been removed as this requirement has been duplicated in condition 3.2.1.

DWER undertook a review of the mining tenements listed as the premises boundary on the Issued licence and found that the boundary was not contiguous. This was brought to the Licence Holders attention and as a result they undertook their own review and provided a new list of mining tenements to define the premises boundary. This resulted in the following tenements being removed from the boundary; M51/209, M51/455 M51/781, E51/1484 and the following tenements to be added to the boundary; G51/9, L20/75, L51/18, L51/78, M20/219,

M51/6, M51/12, M51/31, M51/33, M51/39, M51/62, M51/75, M51/92, M51/96, M51/199, M51/200, M51/203, M51/233, M51/321, M51/393, M51/437, M51/485, M51/486, M51/539, M51/569, M51/581, M51/564, M51/793, M51/794, M51/795, M51/800, M51/801, M51/820.

Condition number 1.3.3 on the original licence issued in 2016 was duplicated. As a result the condition relating to the inspection of infrastructure was renumbered as 1.3.12 in amendment notice 2 issued in March 2018. However a new condition was added as part of the March 2018 amendment notice that was also numbered as 1.3.12 resulting in another duplication of condition numbers. The Licence Holder has requested that the numbering be corrected under this licence amendment. The below condition will be renumbered as 1.2.15.

1.2.12 The Licensee shall:

- (a) undertake inspections as detailed in Table 1.3.3;
- (b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and
- (c) maintain a record of all inspections undertaken.

Table 1.3.3: Inspection of infrastructure		
Scope of inspection	Type of inspection	Frequency of inspection
Tailings pipelines	Visual integrity	Daily
Return water lines	Visual integrity	Daily
Embankment freeboard	Visual to confirm required freeboard capacity is available	Daily
Dewatering discharge pipelines	Visual integrity	Daily

## Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 22/11/2018. No comments were received and the comment period was waived on 22/11/2018.

## Amendment

- The Premises address has been amended by the deletion of the text shown in strikethrough below and the insertion of the bold text shown in underline below.

Blue Bird Gold Mine

Mining Tenements; ~~G51/9, L20/75, L51/18, L51/78~~, M20/12, M20/45, M20/68, M20/70, M20/71, M20/73, M20/77,, M20/107, M20/214, ~~M20/219~~, M20/249, M20/421, ~~M51/6, M51/12, M51/31, M51/33~~, M51/35, ~~M51/39, M51/62, M51/75, M51/92, M51/96~~, M51/132, M51/190, ~~M51/199, M51/200, M51/203~~, ~~M51/209~~, M51/211, ~~M51/233~~, M51/236, M51/237, M51/254, ~~M51/321~~, M51/393, ~~M51/437~~, M51/438, M51/439, M51/440, ~~M51/455~~, M51/459, M51/462, M51/463, M51/483, ~~M51/485, M51/486~~, M51/491, M51/492, M51/493, M51/494, M51/495, M51/523, ~~M51/539, M51/569~~, M51/572, ~~M51/581, M51/564~~, M51/666, M51/671, M51/672, M51/757, M51/762, ~~M51/784~~, M51/784, M51/788, ~~M51/793, M51/794, M51/795, M51/800, M51/801, M51/820~~, M51/824, M51/834; ~~E51/1484~~ MEEKATHARRA WA 6642

- Table 1.3.6 of Condition 1.3.10 is amended by the insertion of the bold text in underline and the deletion of the text in strikethrough shown below:

1.3.10 The Licensee shall ensure the limits specified in Table 1.3.6 are not exceeded.

<b>Table 1.3.6 Production or design capacity limits</b>		
<b>Category1</b>	<b>Category description1</b>	<b>Premises production or design capacity limit</b>
5	Processing or beneficiation of metallic or non-metallic ore	2,500,000 tonnes per annual period
6	Mine dewatering	3 056 000 tonnes per annual period
63	Class I inert landfill site	<del>500</del> <b>3000</b> tonnes per annual period
85	Sewage facility	99 cubic metres per day

3. Table 1.3.7 of Condition 1.3.11 is amended by the insertion of the bold text shown in underline below:

1.3.11 The Licensee must install and undertake the Works for the infrastructure and equipment:

(a) specified in Column 1; and

(b) to the requirements specified in Column 2 of Table 1.3.7 below:

<b>Table 1.3.7: Construction Requirements</b>	
<b>Column 1</b>	<b>Column 2</b>
Infrastructure/Equipment	Requirements (design and construction)
Surprise in-pit TSF	Tailings discharge and return pipelines are located within earthen bunded areas; and The decant infrastructure is positioned at the truncated end of the porphyry unit within the pit.
Five Mile Well Pit evaporation pond	Pond is constructed to provide a minimum freeboard of 0.5 m to allow for a 1 in 100 year 72 hour rainfall event;  The in-situ clays used for the pond wall construction are conditioned to achieve a permeability of 10 <sup>-9</sup> m/s or better; and  Discharge pipeline is located within an earthen bunded area.
Class I inert landfill	To be constructed at the Surprise Waste Rock Dump;  Each trench (cell) is constructed so the separation distance between the base of the landfill and the highest groundwater level shall not be less than 3 m; and  Earthen bunds are constructed around the facility to divert stormwater away from the waste.
<b><u>Paddy's Flat Class I inert landfill</u></b>	<b><u>To be constructed at the location specified on the landfill map Schedule 1;</u></b>  <b><u>Each trench (cell) is constructed so the separation distance between the base of the landfill and the highest groundwater level shall not be less than 3 m; and</u></b>  <b><u>Earthen bunds are constructed around the facility to divert</u></b>



	<u>stormwater away from the waste.</u>
<u>Reedy Project Area Class 1 landfill</u>	<p><u>To be constructed at the location specified on the landfill map in Schedule 1.</u></p> <p><u>Each trench (cell) is constructed so the separation distance between the base of the landfill and the highest groundwater level shall not be less than 3 m; and</u></p> <p><u>Earthen bunds are constructed around the facility to divert stormwater away from the waste.</u></p>
<u>WRL tyre disposal areas</u>	<p><u>To be constructed at the locations specified on the WRL tyre disposal maps outlined in Schedule 1.</u></p> <p><u>Each trench (cell) is constructed so the separation distance between the base of the landfill and the highest groundwater level shall not be less than 3 m; and</u></p> <p><u>Earthen bunds are constructed around the facility to divert stormwater away from the waste.</u></p>

4. Duplicate condition number 1.2.12 of the Licence has been renumbered as Condition 1.2.15

~~1.2.12~~ **1.2.15** The Licensee shall:

- (a) undertake inspections as detailed in Table 1.3.3;
- (b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and
- (c) maintain a record of all inspections undertaken.

<b>Table 1.3.3: Inspection of infrastructure</b>		
<b>Scope of inspection</b>	<b>Type of inspection</b>	<b>Frequency of inspection</b>
Tailings pipelines	Visual integrity	Daily
Return water lines	Visual integrity	Daily
Embankment freeboard	Visual to confirm required freeboard capacity is available	Daily
Dewatering discharge pipelines	Visual integrity	Daily

5. Table 1.3.4 of Condition 1.3.5 is amended by the insertion of the bold text shown in underline below:

<b>Table 1.3.4: Management of waste,1, 2</b>		
<b>Waste type</b>	<b>Management strategy</b>	<b>Requirements</b>
Inert Waste Type 1 and Type 2 (other than tyres)	Receipt, handling and disposal of waste by landfilling	<p>Disposal of waste by landfilling shall only take place within the landfill areas shown on the landfill location map in Schedule 1.</p> <p>Waste shall be placed in a defined trench or within an area enclosed by earthen or rock bunds.</p> <p>Only one trench shall be open for deposition at any one time.</p> <p>The separation distance between the base of the landfill and the highest groundwater level shall not be less than 3 m.</p> <p>Maintain a minimum distance of at least 100 m between the previously filled areas of the landfill and the active tipping area and any surface water body.</p>
Inert Waste Type 2 (Tyres)		<p>Disposal of tyres shall only take place within the tyre burial areas shown on the tyre burial location maps in Schedule 1.</p> <p>Ensure that fire-fighting equipment is stored at the premises that is capable of controlling and/or abating a used tyre fire at the premises.</p>
Special Waste Type 1		<p>Must be wrapped in heavy duty plastic prior to acceptance</p>

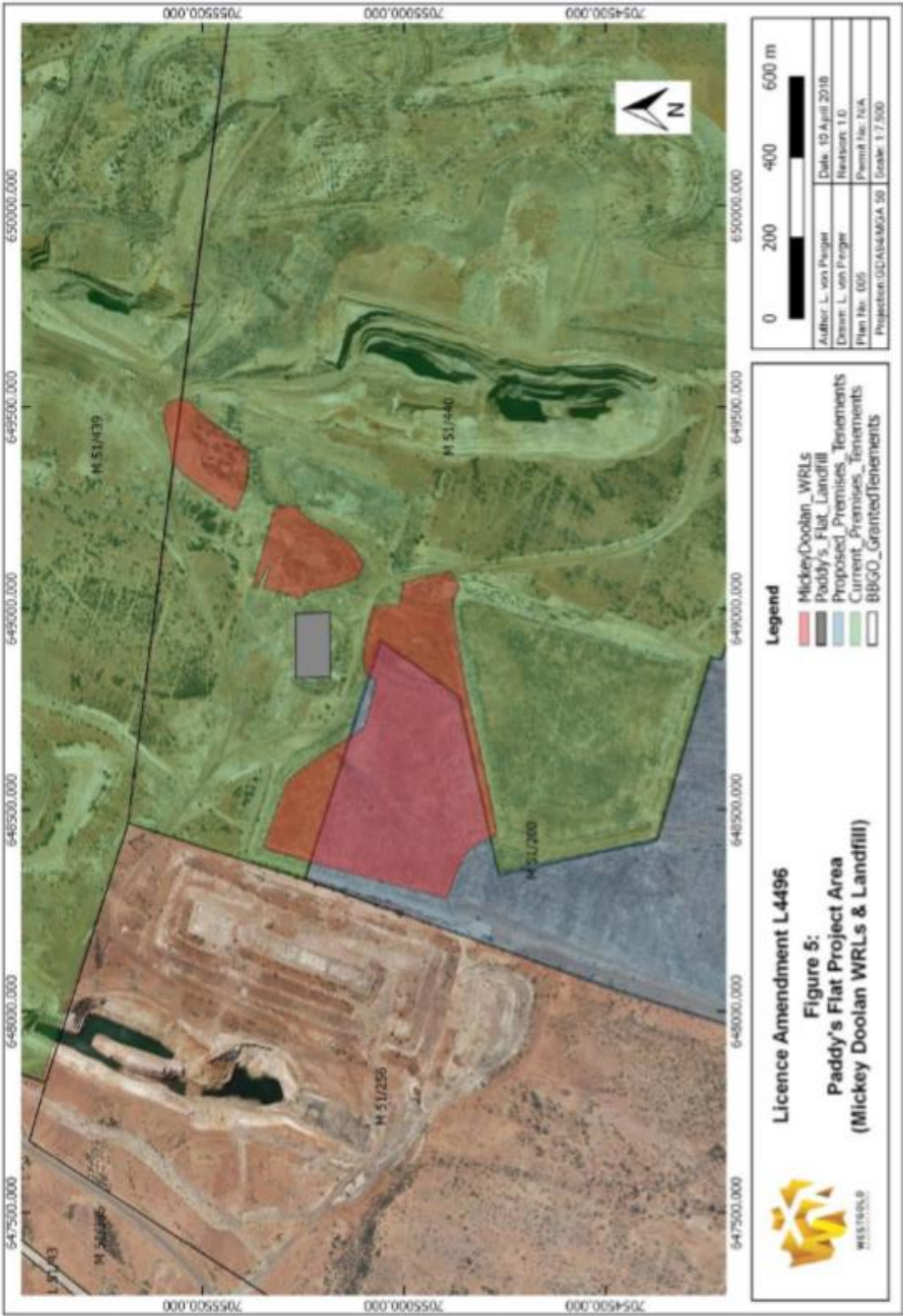
6. Table 3.3.1 of Condition 3.3.1 is amended by the insertion of the bold text shown in underline and the deletion of the text in strikethrough shown below:

3.3.1 The Licensee shall undertake the monitoring in Table 3.3.1 according to the specifications in that table

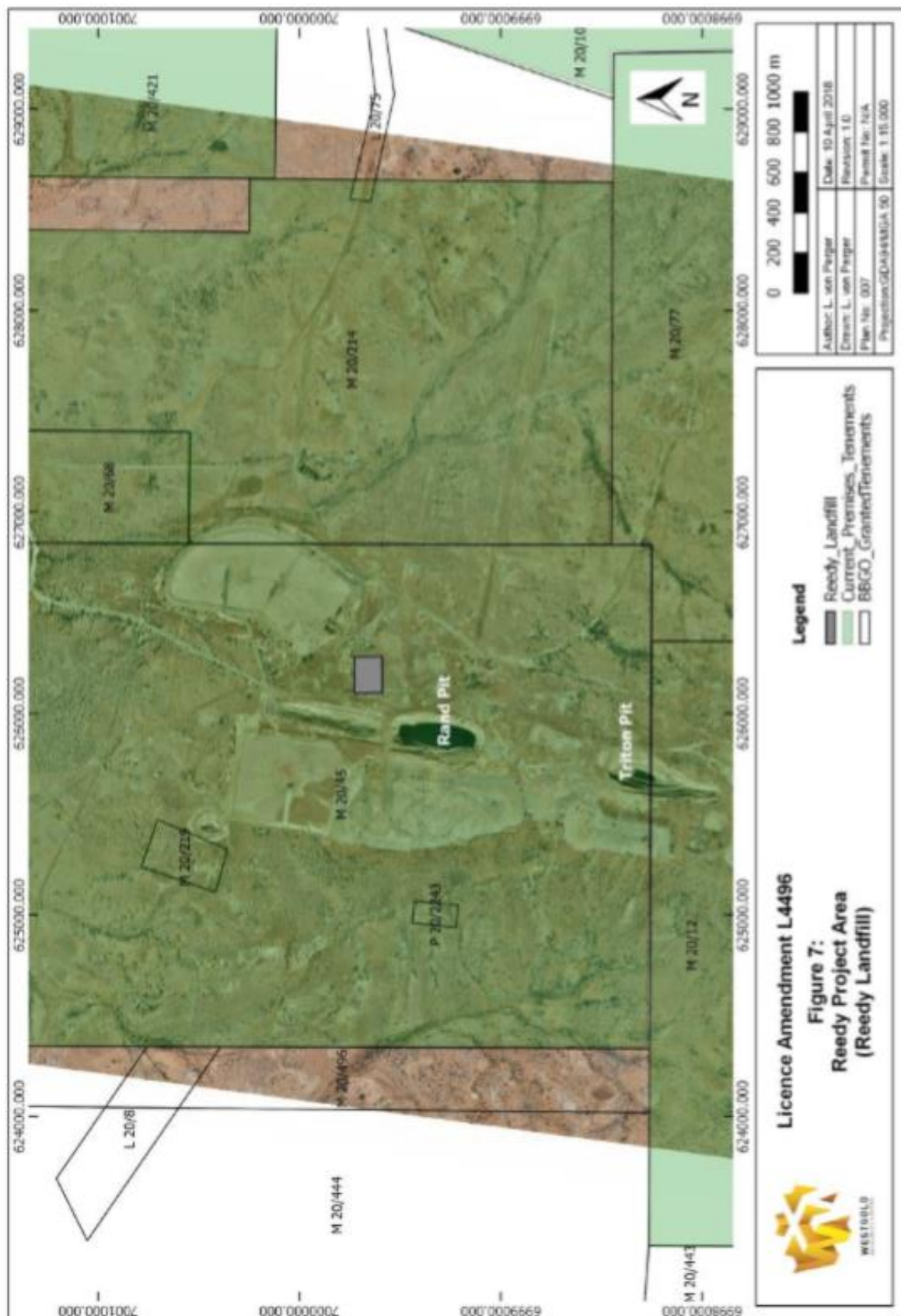
Table 3.3.1: Monitoring of emissions to land				
Monitoring point reference	Parameter	Units	Averaging period	Frequency
South Emu, Triton, Jack Ryan and Rand Pits flow meter (one meter).  - <u>North of Reedy Drainage Channel outflow pipe</u>  - <u>South of Reedy Drainage Channel outflow pipe</u>	Volume	m <sup>3</sup>	Continuous	Cumulative-monthly total
	pH1	pH units	Spot sample	Monthly
	Al	mg/L		
	As			
	Cd			
	Cr			
	Cu			
	Pb			
	Mn			
	Hg			
	Ni			
	Se			
	Zn			
	TRH			
	TDS			
	TSS			

7. The Licence is amended by the insertion of two maps (shown below) in Schedule 1 under the heading Maps of landfill locations;

Paddy's Flat landfill

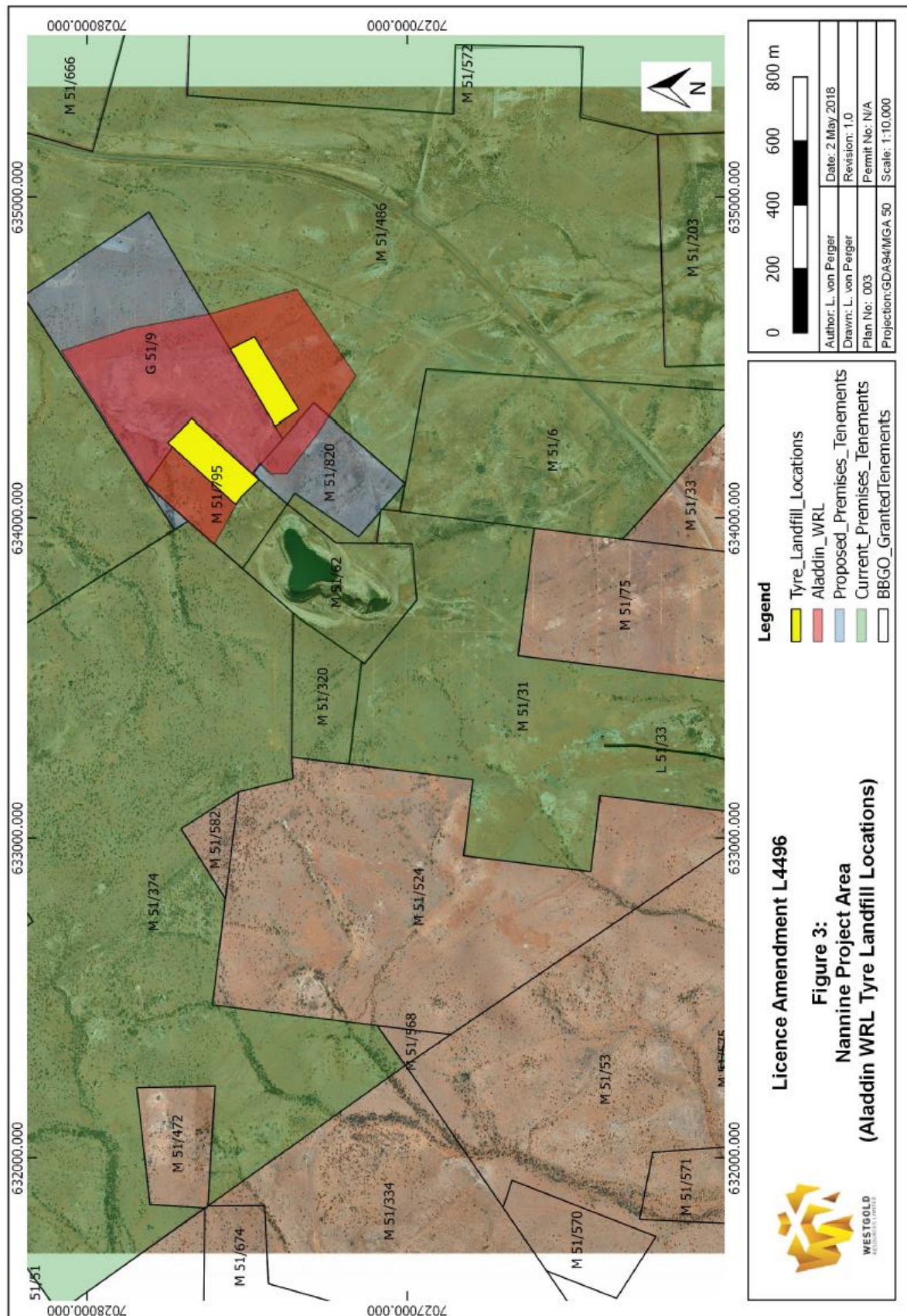


# Reedy's Project Area landfill

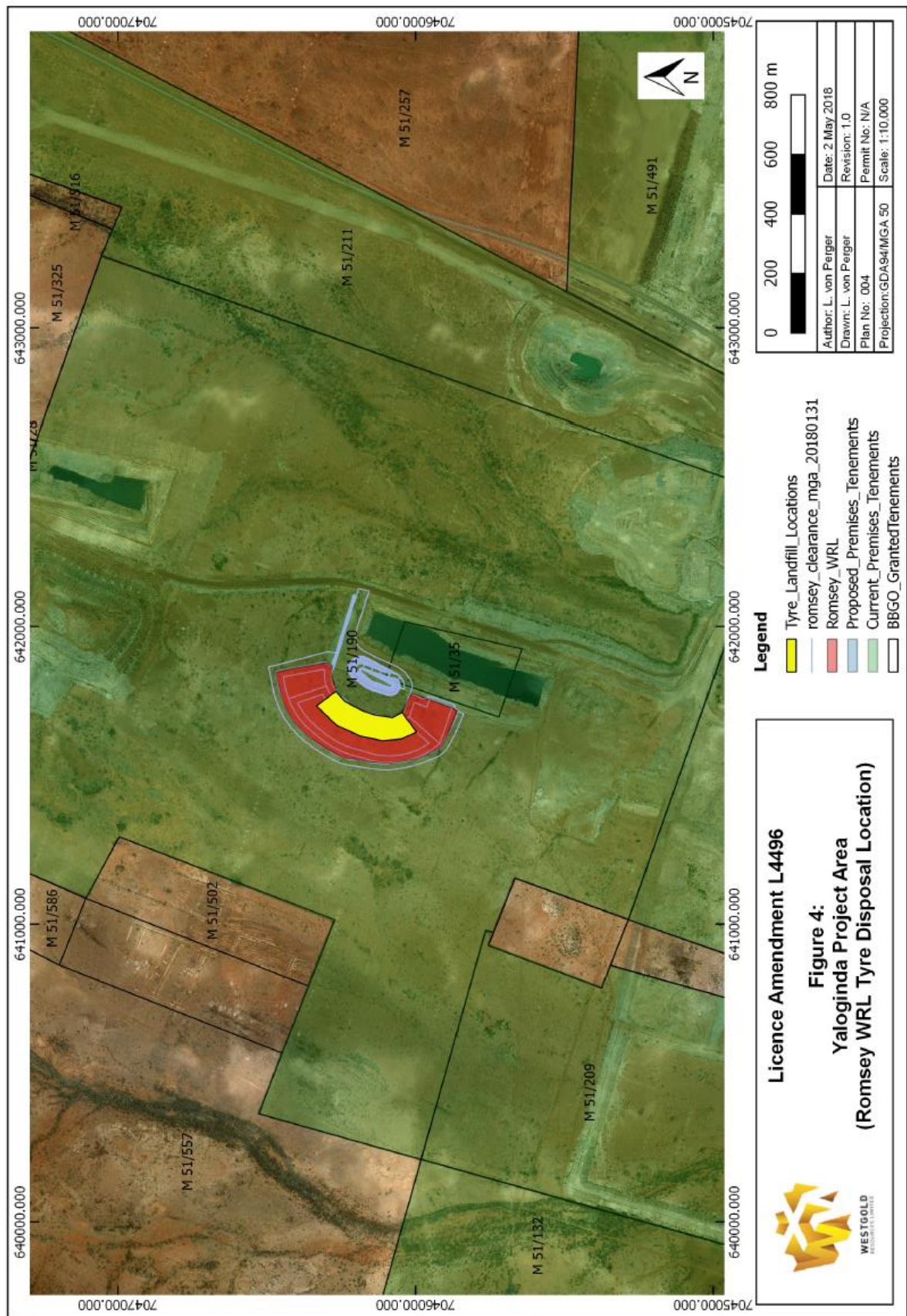




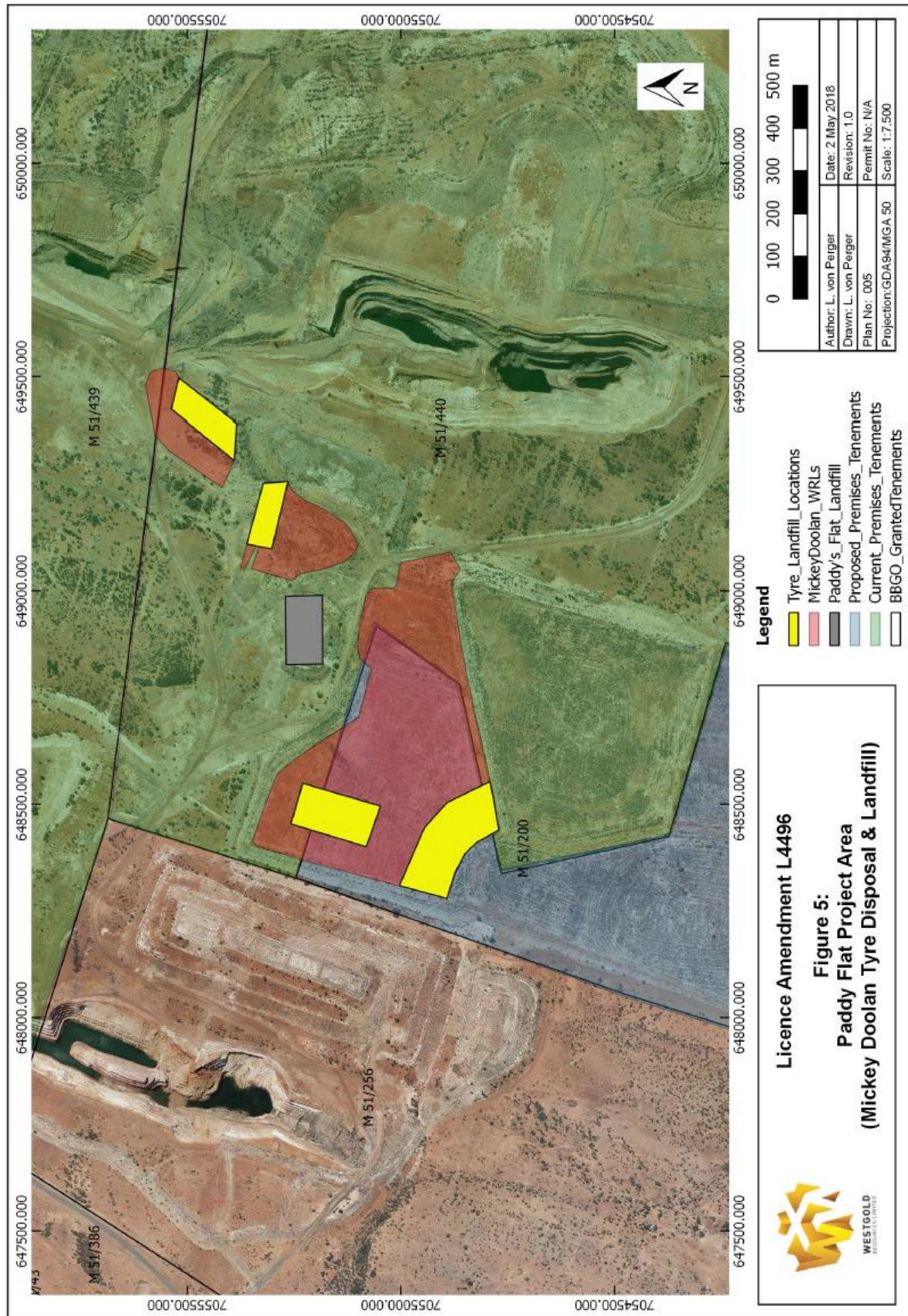
8. The Licence is amended by removing the map in Schedule 1 Map of tyre disposal locations and insertion of the maps below;



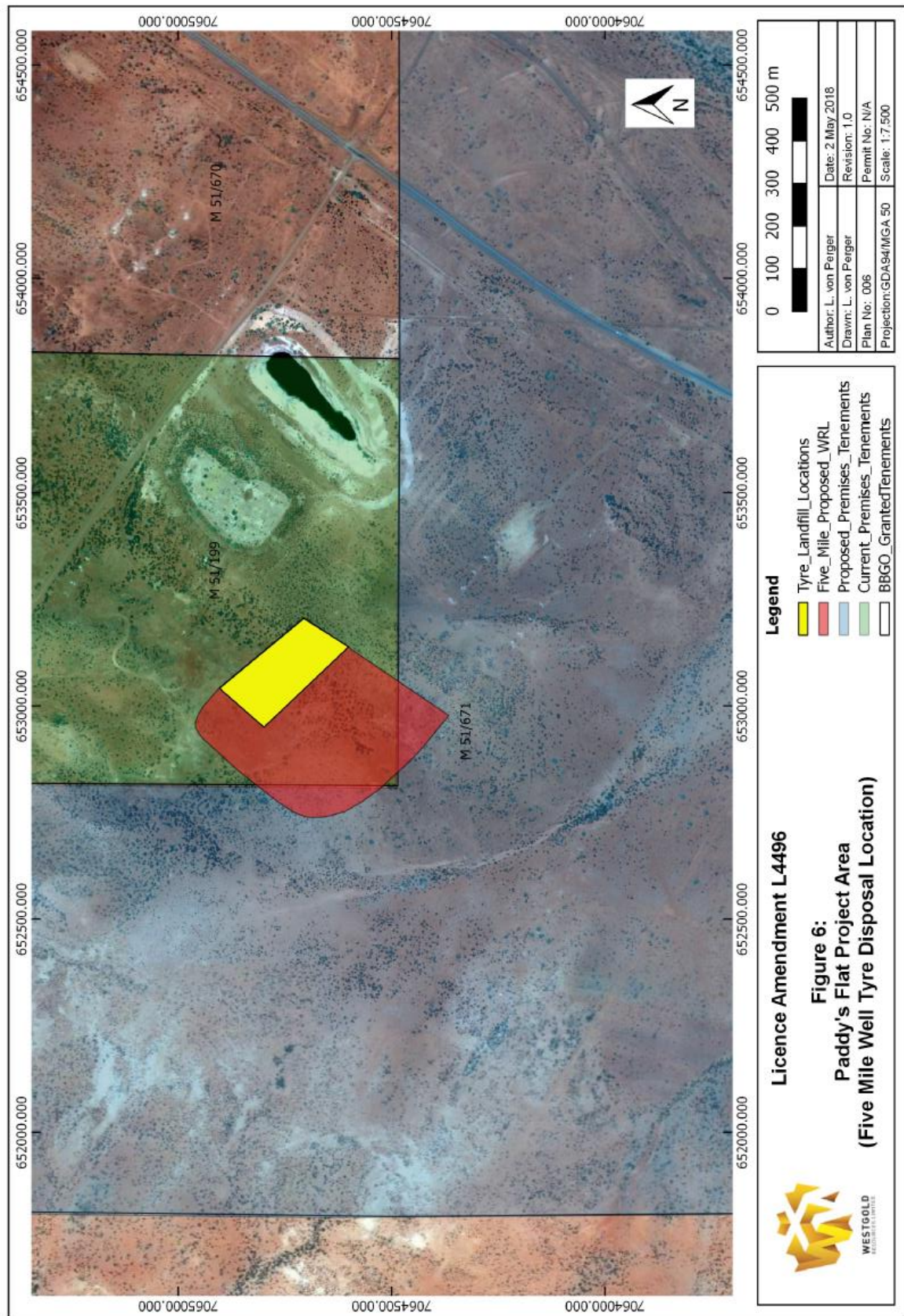






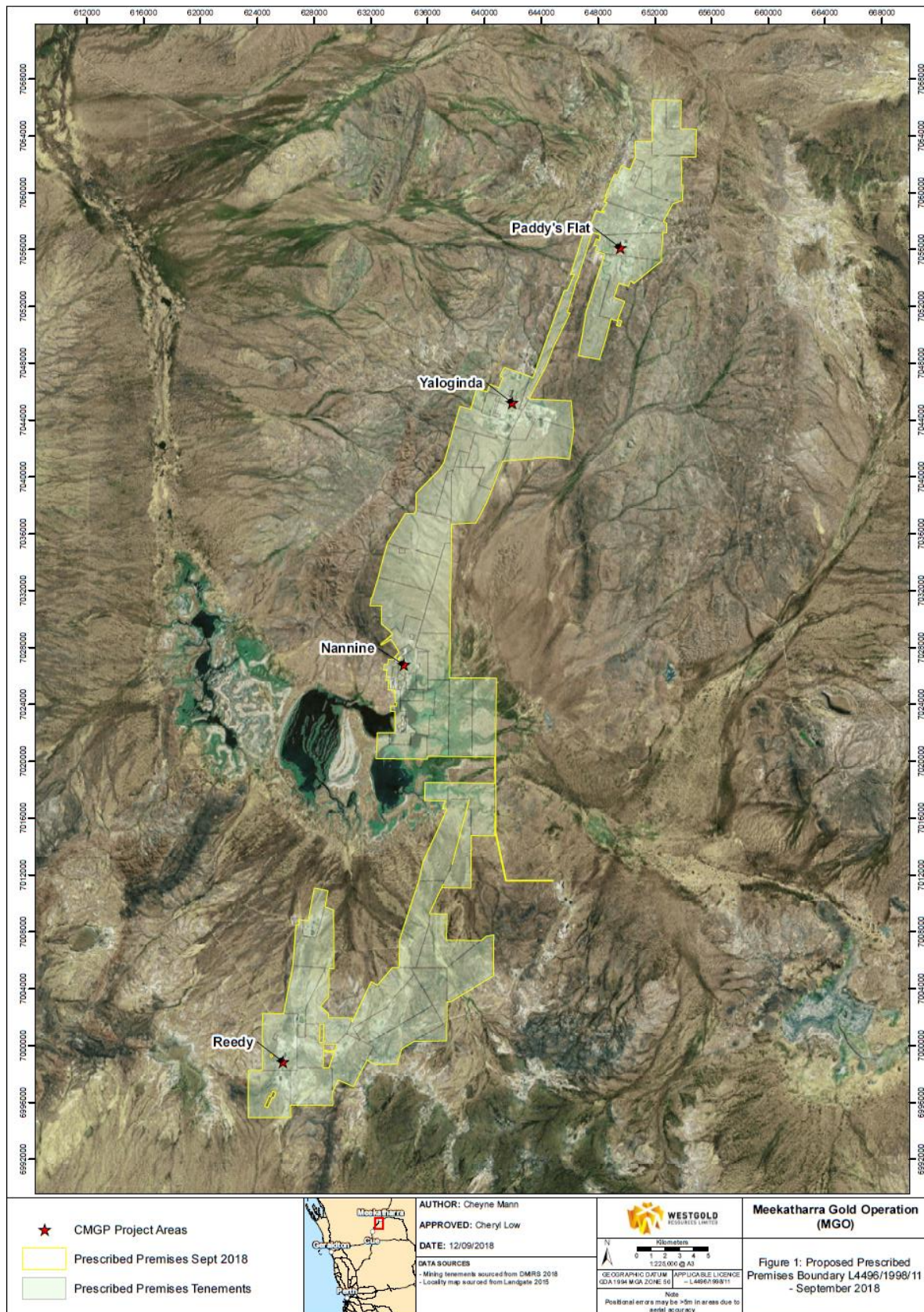








9. The Licence is amended by removing the map in schedule 1 Map of Premises and insertion of the map below;



## Appendix 1: Key documents

	Document title	Availability
1	Licence amendment application form and supporting documentation received	DWER record A1657713
2	Licence amendment application – additional supporting information, tyre disposal maps.	DWER record A1667014
3	Licence Holder response to email request for additional information, received 11 September 2018.	DWER records A719061
4	Licence Holder response to email request for additional information regarding premises boundary and map received 12 September 2018	DWER record A1719399
5	Licence Holder email and attachment requesting special waste cell at Reedy landfill received 18 October 2018.	DWER record A1730054
6	DER, October 2015. <i>Guidance Statement: Setting conditions.</i> Department of Environment Regulation, Perth.	Accessed at; <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a>
8	DER, November 2016. <i>Guidance Statement: Risk Assessments.</i> Department of Environment Regulation, Perth.	
9	DER, November 2016. <i>Guidance Statement: Decision Making.</i> Department of Environment Regulation, Perth.	