

Licence

Licence number	L8103/1989/3
Licence Holder	Aragon Resources Pty Ltd
ACN	114 714 662
Registered business address	Level 6 197 St Georges Terrace PERTH WA 6000
DWER file number	2013/001965-1
Licence Duration	15/06/2011 to 14/06/2035
Date of amendment	11/11/2021
Premises details	Fortnum Gold Mine Mining Tenements: M52/6, M52/95, M52/96, M52/98, M52/99, M52/132, M52/133, M52/125, M52/5 and L52/172. MEEKATHARRA WA 6642

As defined in Schedule 1: Figure 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 5: Processing or beneficiation of metallic or non- metallic ore	1,100,000 tonnes per annual period
Category 6: Mine dewatering	3,137,253 tonnes per annual period
Category 89: Putrescible landfill site	300 tonnes per annual period
Category 12: Screening etc. of material	200,000 tonnes per annual period

This amended licence is granted to the Licence Holder, subject to the attached conditions, on 11 November 2021, by:

Melanie Bruckberger A/MANAGER, RESOURCE INDUSTRIES an officer delegated under section 20 of the *Environmental Protection Act* 1986 (WA)

DEFINITIONS

'AACR' means Annual Audit Compliance Report, a report in a format approved by the CEO as presented by the Licence Holder or as specified by the CEO from time to time and published on the Department's website and a copy of the AACR form is accessible from the DWER website.

'Act' means the Environmental Protection Act 1986;

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance 3 of the Design of sampling programs, sampling techniques and the preservation and handling of samples;

'AS/NZS 5667.10' means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters;

'AS/NZS 5667.11' means the Australian Standard AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters;

'CEO' means Chief Executive Officer of the Department of Water and Environmental Regulation;

'CEO' for the purpose of correspondence means:

Chief Executive Officer

Department Administering the *Environmental Protection Act 1986* Locked Bag 10 JOONDALUP DC WA 6027 Telephone: (08) 6367 7000 Facsimile: (08) 6367 7001 Email: info@dwer.wa.gov.au

'Clean Fill' has the meaning defined in Landfill Definitions;

'Department' means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Division 3 Part V of the EP Act.

'DWER' means Department of Water and Environmental Regulation;

'Inert Waste Type 1' has the meaning defined in Landfill Definitions;

'Inert Waste Type 2' has the meaning defined in Landfill Definitions;

'Landfill Definitions' means the document titled "*Landfill Waste Classification and Waste Definitions 1996*" published by the Chief Executive officer of the Department of Environment as amended from time to time;

'Licence' means this Licence numbered L8103/1989/3 and issued under the Act;

'Licence Holder' refers to the occupier of the premises being the person to whom this Licence has been granted, as specified at the front of this Licence;

'mAHD' means metres above the Australian Height Datum;

'm3 /day' means cubic metres per day;

'NATA' means National Association of Testing Authorities, Australia;

'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'Putrescible Waste' has the meaning defined in the Landfill Definitions;

'SWL' means standing water level;

- **'TDS'** means total dissolved solids;
- 'TSA' means transfer stockpile area;
- TSF' means tailings storage facility; and
- 'WAD-CN' means weak acid dissociable cyanide.

PREMISES INSTRUMENT HISTORY

Summary of licences and works approvals issued for the Premises since 2012:

Instrument log table			
Instrument	Issued	Description	
W5297/2012/1	24/12/2012	An embankment lift via the upstream method of Fortnum's existing above ground Tailings Storage Facility 2 (TSF2).	
W5491/2013/1	10/10/2013	Dewatering the pit lakes from Tom's and Yarlarweelor pits and discharge into Yarlarweelor Creek.	
L8103/1989/3	26/05/2011	Licence re-issue. Premises was under care and maintenance for years.	
L8103/1989/3	23/11/2015	Changed occupier from Grosvenor Gold Pty Limited to Aragon Resources Pty Ltd.	
L8103/1989/3	19/05/2016	Licence re-issue with extension to licence duration to 14 June 2035. Amended to include recent works completed at Fortnum through Works Approval W5491/2013/1, and to increase the throughput for category 5.	
L8103/1989/3	15/12/2016	Amendment Notice 1: Licence Holder initiated amendment to increase the capacity of the TSF2 by lifting the height of the embankments at both of the cells. In addition to this: changes to dewatering program and discharge between the Starlight, Tom's, Callie's South, Eldorado and Trev's pits as well as continuing a final discharge to the Yarlarweelor Creek.	
L8103/1989/3	5/10/2018	Amendment notice 2: Licence Holder initiated amendment to include tenement M52/6 within the Prescribed Premises. Dewatering of approximately 637,253 tonnes to be removed from the existing pit lake and removal of groundwater inflows during mining operations. Also to construct a new pipeline to convey water from Nathan's Pit to the existing water pipeline network located in the main mining hub (within tenement M52/132). Dewater from Nathan's will primarily be discharged/stored in Tom's Pit and used for processing and dust suppression. Premises boundary.	
L8103/1989/3	26/02/2019	Amendment notice 3: Licence Holder initiated amendment to discharge tailings from the existing processing plant to an existing mined pit known as Tom's Pit.	
L8103/1989/3	17/04/2020	DWER initiated amendment to consolidate/amalgamate separately issued amendment notices 1 to 3 in the Licence.	
L8103/1989/3	28/10/2020	 Category 5 - increase in the production capacity to 1,100,000 tonnes per annual period relating to reprocessing of tailings for the production of paste fill; Category 89 - increase in production capacity to 300 tonnes per annual period relating to the construction and operation of Yarlarweelor WRL landfill; Category 12 - addition of category relating to the operation of a mobile crusher; and, Disposal of tyres at Starlight pit and Toms in-pit TSF. 	
L8103/2018/1	11/11/2021	Category 5 – construction of Eldorado In-Pit TSF. Category 6 – Allow discharge of dewater from Labouchere Pit to Nathan's Pit and Callie's North Pit to Callies South Pit.	

CONDITIONS

MONITORING CONDITIONS

- 1.
- (a) The Licence Holder shall take representative samples from the monitoring sites listed in Column 1 of Table 1, at the frequency stated in Column 2 of Table 1 for the analysis of the parameters listed in Column 3 of Table 1.

Table 1: Monitoring of Representative Water Samples.				
Column 1	Column 2	Column 3	Column 4	Column 5
Monitoring sites	Frequency	Parameters	Units	Limits
TSF2 Monitoring bores:		Standing Water Level (SWL) ¹	mAHD	N/A
FTR246D Junction		pH ²		Range 6 to 9
Bore, M1, M2, M3, M4 and M5		Major ions – Na, K, Ca, Mg, HCO3, SO4, Cl	mg/L	N/A
(as depicted in Schedule 1, Figure 2)		Nitrate-nitrogen (NO ₃ -N)	mg/L	N/A
		Total Dissolved Solids (TDS)	mg/L	<u>4000 mg/L</u>
		Cyanide (total) ⁴	mg/L	<u>0.8 mg/L</u>
	Quarterly (January, April, July, October)	Arsenic (As) Antimony (Sb) Boron (B) Cadmium (Cd) Chromium (Cr) - including hexavalent chromium (Cr VI) Cobalt (Co) Copper (Cu) Iron (Fe) Lead (Pb) Manganese (Mn) Mercury (Hg) Nickel (Ni) Selenium (Se) Thallium (TI) Zinc (Zn)	mg/L	N/A

Table 1: Monitoring of Representative Water Samples.				
Column 1	Column 2	Column 3	Column 4	Column 5
Monitoring sites	Frequency	Parameters	Units	Limits
Toms In-Pit TSF	Monthly	Standing Water Level (SWL) ³	mAHD	N/A
Toms 1, Toms 2, Toms	Quarterly	рН²	N/A	Range 6 to 9
3, Toms 4, Toms 5, Toms 6, and Toms 7		Major ions – Na, K, Ca, Mg, HCO ₃ , SO ₄ , Cl	mg/L	N/A
Eldorado In-Pit TSF		Nitrate-nitrogen (NO ₃ – N)	mg/L	N/A
E1, E2, E3, E4 and E5		Total dissolved solids (TDS)	mg/L	4000 mg/L
		Cyanide (total) ⁴	mg/L	0.8mg/L
(as depicted in Schedule 1, Figure 2)		Antimony (Sb) Arsenic (As) Boron (B) Cadmium (Cd) Cobalt (Co) Chromium – including hexavalent chromium (Cr VI) Copper (Cu) Iron (Fe) Lead (Pb) Manganese (Mn) Mercury (Hg) Nickel (Ni) Selenium (Se) Thallium (TI) Zinc (Zn)	mg/L	N/A

Table 1: Monitoring of Representative Water Samples.				
Column 1	Column 2	Column 3	Column 4	Column 5
Monitoring sites	Frequency	Parameters	Units	Limits
	Quarterly:	pH ²		Range 6 to 9
	(January, April, July, October)	Total Dissolved Solids (TDS)	mg/L	N/A
Pit lake water within the Starlight, Callie's South, Trev's pits and Nathan's Pit. (as depicted in Schedule 1, Figure 3)	Bi-annually (April & October)	Major ionsSodium (Na),Potassium (K),Calcium (Ca),Magnesium (Mg), Bicarbonate(HCO3),Sulphate (SO4),Chloride (Cl)Total RecoverableHydrocarbons (TRH)Arsenic (As)Cadmium (Cd)Chromium (Cr) including hexavalent chromium (Cr VI)Copper (Cu)Lead (Pb)Nickel (Ni)Nitrate-nitrogen (NO3-N)Selenium (Se)Sulphate (SO4)Zinc (Zn)	mg/L	N/A

Table 1: Monitoring of Representative Water Samples.				
Column 1	Column 2	Column 3	Column 4	Column 5
Monitoring sites	Frequency	Parameters	Units	Limits
Nathan's Pit dewater	Quarterly	рН²		Range 6 to 9
(post-primary dewatering phase)	April, July, October)	Total dissolved solids (TDS)	mg/L	N/A
	Bi-annual	<u>Major ions</u>	mg/L	N/A
	(April &	Na, K, Ca, Mg, HCO3, SO4, Cl		
	October)	Total Recoverable Hydrocarbons (TRH)	mg/L	N/A
		Arsenic (As)		
		Cadmium (Cd)		
		Chromium (Cr) - including Hexavalent Chromium (Cr VI)		
		Copper (Cu)		
		Lead (Pb)		
		Nickel (Ni)		
		Nitrate-nitrogen (NO3-N)		
		Selenium (Se)		
		Zinc (Zn)		

Note 1: For TSF2, Tom's Pit and Eldorado Pit monitoring bores standing water level must be determined prior to collection of water samples.

Note 2: Measurement of pH with a serviced and calibrated field water quality meter is permitted. All other parameter analyses must be completed by a NATA accredited laboratory.

Note 3: The parameter limit for cyanide in groundwater is derived from Department of Health (2014) contaminated sites ground and surface water chemical screening guidelines for non-potable groundwater use.

- (b) The Licence Holder shall ensure that:
 - (i) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
 - (ii) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
 - (iii) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;
 - (iv) all annual samples are collected at least 9 months apart; and
 - (v) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.
- (c) The Licence Holder shall keep a record of all the analysis results obtained in accordance with condition 1(a), in the units specified in column 4 of Table 1 and provide a copy of these records with the Annual Environmental Report required to be submitted by Condition 4.
- (d) The Licence Holder shall maintain a flow meter to ensure the continuous and accurate recording of the cumulative quantity of dewatering discharge to the Starlight, Callie's South, and Trev's pits.

- (e) The Licence Holder shall record the cumulative discharge from the flow meter specified in condition 1 (d) on a monthly basis. These cumulative volumes shall be provided in the Annual Environmental Report specified in condition 4
- (f) The Licence Holder shall ensure that the flow meters specified in conditions 1 (d) are calibrated on an annual basis. A reference of this calibration shall be included in the Annual Environmental Report specified in condition 4.

LANDFILL CONDITIONS

- 2.
- (a) The Licence Holder shall ensure that where wastes produced on the premises are not taken offsite for lawful use or disposal, they are managed in accordance with the requirements of Table 2.

Table 2 : Manageme	Table 2 : Management of Waste				
Facility	Waste type	Processes	Requirements ^{1,2}		
Callies WRL Landfill	Clean Fill Putrescible Waste Inert Waste Type 1 and 2	Storage and disposal of waste by landfilling	 <u>All waste types</u> No more than 52 tonnes per year of all waste types cumulatively shall be disposed of by landfilling. Disposal of waste by landfilling shall only take place within the Callies WRL landfill shown in Schedule 1, Figure 4. The separation distance between the base of the landfill and the highest groundwater level shall be not less than 3 metres. 		
Yarlarweelor WRL Landfill as shown in Schedule 1, Figure 6	Clean fill Putrescible waste Inert waste type 1 and 2	Disposal and storage of waste by landfilling	 <u>All waste types</u> No more than 300 tonnes per year of all waste types cumulatively shall be disposed of by landfilling. Landfill inspected weekly and covered as required. <u>Inert waste and putrescible waste</u> Deposited in excavated trenches within the WRL Trenches 3m deep, 5m wide, and 20-40m long 		

Note 1: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*. Note 2: Additional requirements for the acceptance and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

- (b) The Licence Holder shall manage the landfilling activities to ensure:
 - (i) waste is placed and compacted to ensure all faces are stable and capable of retaining rehabilitation material; and
 - (ii) rehabilitation of a cell or phase takes place within 6 months after disposal in that cell or phase has been completed.

(c) The Licence Holder shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 3 and that sufficient stockpiles of cover are maintained on site at all times.

Table 3: Cover requirements1				
Facility	Waste Type	Material	Depth	Timescales
Callies WRL Landfill	Inert Waste Type 1			No cover
	Putrescible Waste	Turne 4 in ent	300mm	Weekly or as soon as practicable after deposit.
	Type 1 i Inert Waste waste Type 2	waste	500mm	As soon as practical following the achievement of final waste levels in the area(s) in which tyres are deposited.
Yarlarweelor WRL Landfill	Inert Waste Type 1	Soil or waste rock	300mm	Weekly or as soon as practicable after deposit.
	Putrescible Waste	Soil or waste rock	300mm	Weekly or as soon as practicable after deposit.
	Inert Waste Type 2	Soil or waste rock	500mm	As soon as practical following the achievement of final waste levels in the area(s) in which tyres are deposited.

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987.*

(d) The Licence Holder shall take all reasonable and practical measures to ensure that no windblown waste escapes from the premises and that wind-blown waste is collected on at least a weekly basis and returned to the tipping area.

WATER MONITORING PARAMETERS TRIGGER VALUES AND REPORTING

3. The Licence Holder shall, as soon as practicable but no later than 5pm of the next usual working day, on becoming aware that any limit stated in column 5 of Table 1 for the corresponding parameter stated in column 3 of Table 1 has been exceeded, advise the CEO in writing of the date, time and reason for the exceedance with a limit exceedance report.

The limit exceedance report shall include, but not be limited to:

- (i) the date, time and reason for the exceedance(s);
- (ii) the potential or known environmental consequences of the exceedance(s);
- (iii) corrective action taken or planned to mitigate any related adverse environmental consequences if appropriate; and
- (iv) corrective action taken or planned to prevent a recurrence of the exceedance(s), if appropriate, including a timeline for implementation.

ANNUAL ENVIRONMENTAL REPORT

- 4. The Licence Holder shall provide to the CEO by 1 October each year an Annual Environmental Report containing data collected during the period beginning 1 July the previous year and ending on 30 June in that year. The report shall contain, but not necessarily be limited to:
 - (i) the monitoring data and other collected data required by any condition of this licence, for the prescribed period (data should be provided in tables and in graphical format);

- (ii) a discussion of the monitoring data and other collected data against historical data (trend analysis), known standards and trigger values set in this licence;
- (iii) a summary of incident and exceedance reports;
- (iv) discussion of any significant responses taken to minimise the likelihood of recurrence of incidents and exceedances;
- (v) a summary of activities undertaken at the bioremediation facility and a review of its performance;
- (vi) a record of any tailings, chemical or hydrocarbon spill;
- (vii) a monthly water balance over the Tom's In-pit TSF accounting for all inputs (estimates of tailings slurry volumes and solids content; rainfall inputs); and outputs (evaporation and water recovery) to derive a monthly seepage estimate; and,
- (viii) the cumulative volume of paste fill deposited at Starlight underground mine during the annual period.

ANNUAL AUDIT COMPLIANCE REPORT

5. The Licence Holder shall by 1 October in each year, provide to the CEO an Annual Audit Compliance Report, indicating the extent to which the Licence Holder has complied with the conditions of this licence, and any previous licence issued under Part V of the Act for the premises, during the period beginning 1 July the previous year and ending on 30 June in that year.

INFRASTRUCTURE AND EQUIPMENT

- 6.
- (a) The Licence Holder must construct the infrastructure listed in Column 1 in accordance with the requirements set out in Column 2 of Table 4 and at the location as specified in Column 3.

Table 4: Infrastructure Requirement Table					
Column 1	Column 2	Column 3			
Infrastructure	Specifications (design and construction)	Infrastructure/ equipment location			
Spill containment earth bund for tailings pipeline corridor to Eldorado in-pit TSF	 Compacted 600-1000mm high earth bund. Constructed adjacent to tailings slurry and TSF return water pipeline corridor. 	Tailings slurry and return water pipeline corridor. As depicted in Schedule 1, figure 5			
Eldorado In-Pit TSF Tailings slurry and TSF return water pipelines	 HDPE pipelines Pipelines fitted with flow meters in accordance with manufacturer specifications. Tailings slurry pipeline installed with two moveable discharge points at Eldorado Pit. 	Tailings slurry and return water pipeline corridor; Eldorado In- Pit TSF.			
Eldorado In-Pit TSF Decant return water pump	Pontoon mounted decant pump.Pump capacity of 25 to 32 litres per second.	Eldorado Pit			

Table 4: Infrastructure Requirement Table					
Column 1	Column 2		Column 3		
Infrastructure	Specificat	ions (design and construction)	Infrastructure/ equipment location		
Dewatering pipeline: Labouchere pit to Nathan's Pit	 Approxi DN160 Position Installed Equippe 21 litres 	imately 9000m of pipeline ranging from PN6.3 to DN160 PN20 ned within the haul road corridor. d in V-drain to secure pipeline infrastructure ed with a pontoon pump capable of pumping s per second or 77 cubic metres per hour.	As shown in		
Dewatering pipeline: Callies North to Callies South	 Approxi PN6.3 t Installe Equippe 21 litres 	imately 500 m of pipeline ranging from DN160 o DN160 PN16 ed in V-drain to secure pipeline infrastructure ed with a pontoon pump capable of pumping s per second or 77 cubic metres per hour.			
	The TS compare	F2 is upstream lifted on the existing footprint cted tailings in stages set out below to a final e	using mechanically elevation of RL520m:		
	Stage	Description			
	1	Raise Cell 2 by 3m to RL514m			
	2	Raise Cell 1 by 2m to RL514m (can be constructed in parallel with Stage 1 lift)			
	3	Raise Cell 2 by 3m to RL517m			
	4	Raise Cell 1 by 3m to RL517m			
Embankment lifts to	5	Raise Cell 2 by 3m to RL520m			
TSF2	6	Raise Cell 1 by 3m to RL520m			
	 Foundation preparation (on tailings) – remove vegetation and matters followed by ripping, moisture condition and compact Foundation preparation (on existing embankment) – remove organic matters and remove and stockpile wearing course for ripping, moisture condition and compaction; Raise perimeter embankment by borrowing tailings from bear condition, place and spread, and compact to maximum 300 removes and stockpile weater to waste rock; Raise decant causeway by borrowing tailings or waste rock; Raise decant tower slotted concrete rings and place waste removes and spigots; Repair or replace rature water nump and piping; 				

Table 4: Infrastructure Requirement Table				
Column 1	Column 2	Column 3		
Infrastructure	Specifications (design and construction)	Infrastructure/ equipment location		
	Minimum freeboard for each stage a combined total of the contingency storage allowance (minimum of 500mm) plus extreme storage allowance (1:100 AEP 72 storm of 221 mm);			
	 Corresponding central concrete decant tower is extended during each stage; and 			
	Repair or replace the lining at the underdrainage colle an impervious barrier for retaining collected seepage	ection sump to achieve water from the TSF2.		

- (b) The Licence Holder must not depart from the requirements specified in the Infrastructure Requirements Table except:
 - (i) where such departure is minor in nature and does not materially change or affect the infrastructure; or
 - (ii) where such departure improves the functionality of the infrastructure and does not increase risks to public health, public amenity or the environment.
- (c) The Licence Holder must upon completion of the works and prior to operation as per condition 6 (a) provide to the CEO an engineering certification from a suitably qualified professional confirming each item of infrastructure as specified in Table 4 has been constructed with no material defects.
- (d) The Licence Holder must ensure that the equipment and infrastructure in Table 4 are maintained in good working order.
- 7. The Licence Holder must construct and/or install the infrastructure listed in Table 5 in accordance with:
 - (a) the corresponding design and construction requirement / installation requirement; and
 - (b) at the corresponding infrastructure location as set out in Table 5.

Table 5: Infrastructure design and construction requirements			
Infrastructure	Design and construction requirement / installation requirement	Infrastructure location	
Transfer stockpile area (TSA)	 Area of 100m x 100m 		
	 Pad consisting of 200mm compacted earth base layer overlain by 300mm granular mine waste layer; 		
	 Surface water runoff collection system consisting of channels around the TSA perimeter and a collection sump at the north- eastern end of the TSA; 	As shown in	
	 TSA surface water collection sump to include a water level indicator and two pumps. Pumping rates able to accommodate a 72 hour rainfall event; 	Schedule 1, Figure 7	
	 TSA pumps linked to existing dewater pipelines to transfer water to the processing plant or Tom's in pit TSF; 		
	 TSA surface water collection sump to include an emergency spillway to direct overflow to Starlight pit; and 		
	1m high bund walls around the TSA perimeter (outside of the		

	drainage channels).
Mobile crusher	 Installed within TSA
Mobile paste plant	 Installed within TSA Plant to include a tails hopper, cement hopper and pug mill; and Plant to include a paste hopper linked to a steel pipeline for delivery of paste directly from the plant to the underground

- **8.** Following the construction/installation of an item of infrastructure required by Condition 7 and within 30 days of completion of construction/installation, the Licence Holder must:
 - (a) undertake an audit of the item's compliance with the requirements of Condition 7 and
 - (b) prepare and submit to the CEO an audit report on that compliance.

The audit report must include as a minimum the following:

- (c) certification by a suitably qualified engineer whether or not the items of infrastructure, or components thereof, as specified in Condition 7 have been constructed in accordance with the relevant requirements specified in Condition 7;
- (d) as constructed plans and a detailed site plan incorporating all items of infrastructure or component of infrastructure specified in Condition 7;
- (e) be signed by a person authorised to represent the Licence Holder and contains the printed name and position of that person; and,
- (f) In the event of a departure from the requirements specified in Condition 7, the Licence Holder must provide to the CEO a description of the departure and remedial actions proposed to comply with the requirements of Condition 7.
- **9.** The Licence Holder must operate the mobile crusher and paste plant detailed in Condition 7 in accordance with the conditions of this Licence, following submission of the compliance reports required under Condition 8.
- **10.** The Licence Holder must ensure that the infrastructure specified in Column 1 of Table 6 is maintained in good working order and operated in accordance with the requirements specified in Column 2.

Table 6: Infrastructure and equipment controls table				
Column 1	Column 2	Column 3		
Site infrastructure	Operational requirements	Infrastructure location		
Dewatering/discharge pipe network	 Weekly monitoring of pipeline integrity Cease pumping/flow upon detection of leak in pipeline (pumping/flow may recommence subject to repair of leak). 	As shown in Schedule 1, Figure 3		
Starlight, Callie's South, Trev's and Nathan's Pit	• A freeboard of 1 m from the lowest point of each pit to be maintained at	As shown in Schedule 1, Figure 3		

Table 6: Infrastructure and equipment controls table				
Column 1	Column 2	Column 3		
Site infrastructure	Operational requirements	Infrastructure location		
	 all times. Weekly monitoring of the freeboard is to be made using the measure of metres below the lowest point of the pit rim. 			
Tailings slurry and return water pipelines	 Inspections Daily inspections of the integrity of the pipelines Monitoring Continuous measurement of tailings slurry flow rate. Continuous measurement of tailings return water flow rate. Contingency actions Immediately cease flow in the event of a leak, until the leakage is repaired. Maintain compacted 600-1000mm high earth bund Maintain flow meters in accordance with manufacturer specifications. 	As shown in Schedule 1, Figure 5		
Tom's In-pit TSF Eldorado In-Pit TSF	 Tailings deposition & decant return Deposition of tailings from two spigot locations at the pit rim, selectively operated to control the decant pond location and size. Pontoon mounted decant pump. Pump capacity of 25 to 32 litres per second An annual average water return of least 60% for tailings deposited to Tom's In-pit TSF. 	As shown in Schedule 1, Figure 5		

Table 6: Infrastructure and equipment controls table			
Column 1	Column 2	Column 3	
Site infrastructure	Operational requirements	Infrastructure location	
	Inspections		
	Daily inspection including (but not limited to):		
	 Condition of tailings distribution and return water pipelines 		
	 Tailings spigots 		
	 Tailings deposition 		
	Decant pond location and level		
	 Decant pump location and condition. 		
	Monthly inspections including (but not limited to):		
	 Condition of tailings distribution and return water pipelines 		
	 Tailings spigots 		
	Decant pond location and level		
	 Decant pump location, access and condition 		
	 Condition of groundwater monitoring bores 		
	Assessment of water recovery rate		
	Freeboard requirement		
	 Maintain freeboard including allowance for a 1:100 AEP 72 hour storm and an additional 500mm contingency freeboard. 		
TSA stormwater management infrastructure	Inspect all components monthly and maintain to ensure functionality.	As shown in Schedule 1, Figure 7.	

EMISSIONS AND DISCHARGES

11. The Licence Holder must ensure that the emissions specified in Table 7 are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 7: Authorised discharge points			
Emission	Discharge point	Discharge point location	
Paste fill	Paste plant	Starlight underground mine as shown in Figure 7	
Dewater	 Trev's Pit Starlight Pit Nathans Pit and Callies South Pit 	As shown in Schedule 1, Figure 3	
Tailings	 Tom's In-Pit TSF Eldorado In-Pit TSF TSF 2 	As shown in Schedule 1, Figure 5	

SCHEDULE 1

FIGURE 1: Premises Map

Premises plan: premises boundary is depicted in pink lines with blue hatching.





FIGURE 2: TSF Groundwater monitoring bore location map





FIGURE 3: Dewater pipeline and discharge locations (Starlight Pit, Callie's South Pit, Eldorado Trev's Pit and Nathan's Pit.) Note: Yarlarweelor Creek is not an authorised discharge point under this licence.)





FIGURE 4: Location of Callies WRL Landfill

FIGURE 5: Eldorado In-Pit TSF and Tom's In-Pit TSF infrastructure and equipment location







Appendix 3 FIGURE 7: Stockpile area design for paste plant and paste discharge location

