Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L8830/2014/2
Licence holder	Lithco No.2 Pty Ltd
ACN	612 726 922
Registered business address	Level 7, 20 Parkland Road OSBORNE PARK WA 6017
DWER file number	DER2014/001293-2
Duration	14 November 2022 to 13 November 2030
Date of issue	11 November 2022
Premises details	Bald Hill Tantalite Project Shire of Coolgardie Tenements M15/400, M15/1305, M15/1308 and M15/1470 WIDGEMOOLTHA WA 6443 As depicted in Schedule 1.

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production capacity**
Category 5: Processing or beneficiation of metallic or non-metallic ore	1.5 Million tonnes per annum
Category *89*: Putrescible landfill site	250 tonnes per annum

This licence is granted to the licence holder, subject to the attached conditions, on 11 November 2022, by:

Neville Welsh

Digitally signed by Neville Welsh
Date: 2022.11.11 10:21:33 +08'00'

Neville Welsh
Senior Industry Regulation Officer
Regulatory Services
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
29/10/2015	L8830/2014/1	Licence amendment to not permit tailings deposition into TSF1.
17/12/2015	L8830/2014/1	Licence amended to allow deposition to the two voids on TSF1, following submission of geotechnical advice.
03/02/2017	L8830/2014/1	Amendment Notice 1
10/07/2017	L8830/2014/1	Amendment Notice 2
10/10/2018	L8830/2014/1	Amendment Notice 3
5/10/2022	L8830/2014/1	Licence Transfer to Lithco No.2 Pty Ltd
11/11/2022	L8830/2014/2	Licence Renewal and amalgamation of amendment notices 1, 2 and 3.

Interpretation

In this licence:

(a) the words ‘including’, ‘includes’ and ‘include’ in conditions mean “including but not limited to”, and similar, as appropriate;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a condition, each row in a table constitutes a separate condition;

(d) any reference to an Australian or other standard, guideline, or code of practice in this licence:

  (i) if dated, refers to that particular version; and

  (ii) if not dated, refers to the latest version and therefore may be subject to change over time;

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

Infrastructure and equipment

1. The licence holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1. and the licence holder shall ensure that tailings, mine dewater are only discharged into containment infrastructure with the relevant infrastructure requirements and at the location specified in Table 1 below.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Process water pond	Lined with 1mm HDPE to achieve a permeability of at least $<10^{-9}$ m/s or equivalent	As shown in Schedule 1 Map
Bioremediation treatment pad (on TSF1 waste rock dump south of landfill)	Any contaminated runoff from the treatment cells is contained	As shown in Schedule 1 Map
TSF2	Lined with oxide material to achieve permeability of 1×10^{-8} m/s	As shown in Schedule 1 Map
Boreline In-pit TSF	Not specified	As shown in Schedule 1 Map
Boreline Extended In-pit TSF	Not specified	As shown in Schedule 1 Map
Processing Plant Catchment Sumps	Sized to capture a 1 in 20 year, 72 hour rainfall event (~120mm). Install a rock lined spillway at the lowest point of the sump wall to direct overflow towards cleared areas.	As shown in Schedule 1 Map
ROM pad and processing plant surface grade	Designed to shed stormwater to the sumps.	As shown in Schedule 1 Map
Unit operations (DMS, thickener and flocculent plants) of Lithium Processing Plant	Located on bunded concrete pads.	As shown in Schedule 1 Map
ROM pad, product and waste stockpiles	Install individual catchment sumps/drains/bunding to capture runoff from each stockpile sized to capture a 1 in 20 year, 72 hour rainfall event.	As shown in Schedule 1 Map

2. The Licence holder shall:

(a) undertake inspections as detailed in Table 2

(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 with each record signed by the responsible person.

Table 2: Infrastructure inspection schedule

Scope of inspection	Type of inspection	Frequency of inspection
Tailings pipelines	Visual integrity	Daily
Return water lines	Visual integrity	Daily
Process water pond embankment freeboard	Visual to confirm required freeboard capacity is available	Daily
Stormwater catchment sumps/drains/bunding	Visual to ensure that sumps/drains/bunding are free of accumulated sediment.	Monthly and after significant rainfall events as access permits[1]
TSF2, Boreline In-pit TSF and Boreline Extended In-pit TSF	Visual to confirm required freeboard capacity is available	Daily

Note 1: Significant rainfall events are those in excess of 26.5 mm in 1 hour, 38.5 mm over 3 hours or 48.9mm over six hours (equivalent to a 10 % AEP event (1 in 10 year))

3. The Licence holder shall manage the containment infrastructure in Table 1 such that:

(a) top of embankment freeboard of at least 500mm is maintained; and

(b) the size of the operational pond on the TSF is kept to below 15% of the total surface area of the TSF cell.

Emissions and discharges

4. The Licence holder shall ensure that where wastes produced on the Premises are not taken off-site for lawful use or disposal, they are managed in accordance with the requirements in Table 3

Table 3: Management of waste

Waste type	Management strategy	Requirements
Putrescible waste	Receipt, handling and disposal of waste by landfilling	<u>All waste types</u> • No more than 250 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 waste rock dump area to the south of TSF1;

Waste type	Management strategy	Requirements

Clean Fill		• Waste shall be placed in a defined trench or within an area enclosed by earthen bunds; and
		• The active tipping area shall be restricted to a maximum linear length of 30 metres.
		• Construction, operation and decommissioning of landfill cells can occur within the defined landfill area providing there is no waste within:
		  ○ 100 m of any surface water body; and
		  ○ 3 m of the highest level of the water table aquifer.

Hydrocarbon contaminated waste	Bioremediation pad	Ensure soil is bioremediated by: • maintaining a suitable soil thickness; • maintaining an appropriate moisture content and nutrient level within the soil which sustains biological activity; and • at least monthly soil aeration.

5. The Licence holder shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 4 and that sufficient stockpiles of cover are always maintained on site.

Table 4: Waste cover

Waste Type	Material	Depth	Timescales
All waste	Inert and incombustible material	1000mm	Within three months of the final waste load in each trench

6. The Licence holder is authorised to construct embankment raises and operate TSF2 to the height as listed in Table 5 below:

Table 5: TSF2 Construction and operating heights

Phases	Construction to elevation	Operating to elevation
Phase 1	RL 299m	RL 299m
Phase 2	RL 303m	Not permitted at this stage
Phase 3	RL 306m	
Phase 4	RL 309m	
Phase 5	RL 313m	

7. For each operational TSF the Licence holder shall complete a monthly water balance. The water balance shall as a minimum record the following:

(a) site rainfall;

(b) evaporation rate;

(c) decant water recovery volumes;

(d) seepage recovery volumes;

(e) volumes of tailings deposited; to derive an

(f) estimate of seepage losses.

8. The Licence holder shall immediately recover or remove and dispose of spills of materials outside an engineered containment system.

9. The Licence holder shall ensure that all pipelines containing materials are either:

(a) equipped with automatic cut-outs in the event of a pipe failure; and/or

(b) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.

Monitoring

10. The Licence holder shall ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;

(b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;

(c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

11. The Licence holder shall ensure that:

(a) monthly monitoring is undertaken at least 15 days apart;

(b) quarterly monitoring is undertaken at least 45 days apart; and

(c) six monthly monitoring is undertaken at least 5 months apart.

12. The Licence holder shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications and the requirements of the Licence.

13. The Licence holder shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

14. The Licence holder shall undertake the monitoring in Table 6 according to the specifications in that table.

Table 6: Process Monitoring

Monitoring point reference	Process description	Parameter	Units	Frequency	Method
TSF2, Boreline In-pit TSF and Boreline Extended In-pit TSF	Tailings deposition	Volumes of tailings deposited into the TSF	m^3	Monthly	None specified
TSF2, Boreline In-pit TSF and Boreline Extended In-pit TSF	Decant water recovery	Volumes of water recovered from the TSF	m^3	Monthly	None specified
TSF2, Boreline Pit in-pit TSF and Boreline Extended Pit in-pit TSF	Tailings deposition	Boron, barium, fluoride, lithium, manganese, nickel, thallium, thorium, tin and uranium in tailings[1]	ppm	Monthly	None specified

Note 1: An exemption from NATA laboratory analysis is allowed for process monitoring requirements provided certified standards are reported.

15. The Licence holder shall undertake the monitoring specified in Table 7 and Table 8 and record and investigate the exceedance of any limit specified.

Table 7: Monitoring of ambient air quality

Monitoring point reference and location	Parameter	Units[1]	Frequency	Method
Static dust deposition gauges – SDM1, SDM2, SDM3, SDM4 (as depicted in Schedule 1)	Total suspended particulate[1]	$mg/m^2/month$	Monthly	AS/NZS 3580.10.1

Table 8: Monitoring of ambient groundwater quality

New monitoring point reference	Old monitoring point reference	Parameter	Limit	Units	Averaging period	Frequency
TSF2MB01 TSF2MB02 TSF2MB03 TSF2MB04 GMB01 GMB02 GMB03 GMB04 BHWB002 Cotters Bore	MB01 MB02 MB03 MB04 MB05 MB06 MB07 MB08 MB09 MB10 MB11 MB12	Standing Water Level (SWL)[1]	4	mbgl	Spot sample	Quarterly during operations
		pH[2]	-	pH units		
		Total Dissolved Solids (TDS)[2]; aluminium, barium, boron, cadmium, chromium, cobalt; copper, fluoride, lead, lithium, manganese, mercury, molybdenum, nickel, phosphorus, selenium, tantalum, thallium, thorium, tin, uranium, vanadium, zinc.	-	mg/L		
Cotters Bore TSF2MB03 TSF2MB04	MB04 MB11 MB12	Radium-226 (^{226}Ra), Radium-228 (^{228}Ra), gross alpha and gross-beta	-	Bq/L	Spot sample	Six-monthly

Note 1: Standing water level shall be determined prior to collection of water samples.

Note 2: An exemption from NATA laboratory analysis is allowed for pH and TDS only given geographical remoteness of the sample site and the short holding time of these parameters. Field sample results are to be reported as per condition 23

Records and reporting

16. All information and records required by the Licence shall:

(a) be legible;

(b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;

(c) except for records listed in Condition 18 be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and

(d) for those following records, be retained until the expiry of the Licence and any subsequent licence:

(i) off-site environmental effects; or

(ii) matters which affect the condition of the land or waters.

17. The Licence holder must submit to the CEO an Annual Audit Compliance Report by 28 April in each year indicating the extent to which the licence holder has complied with the conditions in this licence for the annual period.

18. The Licence holder shall implement a complaints management system that as a minimum record the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

19. The Licence holder shall submit to the CEO an Annual Environmental Report within 28 calendar days after the end of the annual period. The report shall contain the information listed in Table 9 in the format or form specified in that table.

Table 9: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form [1]
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
-	Actual annual production rates for category 5 and category 89	None specified
Condition 7	A summary of all monthly water balances over operational TSFs	None specified
Table 6	Process monitoring: volumes of tailings deposited into the TSF, volumes of water recovered from the TSF. boron, barium, fluoride, lithium, manganese, nickel, thallium, thorium, tin and uranium in tailings	None specified
Table 7	Static dust deposition: Total Suspended Particulate (TSP), Low volume dust sampling – TSP, PM_{10}, gross alpha activity	None specified
Table 8	Groundwater monitoring:	None specified

	Total Dissolved Solids (TDS); aluminium, barium, boron, cadmium, chromium, cobalt; copper, fluoride, ~~iron~~, lead, lithium, manganese, mercury, molybdenum, nickel, phosphorus, selenium, tantalum, thallium, thorium, tin, uranium, vanadium, zinc, radium-226 (^{226}Ra), radium-228 (^{228}Ra), gross-alpha and gross-beta	
Table 8	Limit exceedances	None specified
Condition 17	Compliance	Annual Audit Compliance Report (AACR) [1]
Condition 18	Complaints summary	None specified

Note 1: AACR form is available from the Departments website.

20. The Licence holder shall ensure that the Annual Environmental Report also contains:

(a) any relevant process, production or operational data required by the Conditions; and

(b) an assessment of the information contained within the report against previous monitoring results and Licence limits.

21. The Licence holder shall submit the information in Table 10 to the CEO according to the specifications in that table.

Table 10: Non-annual reporting requirements

Condition or table (if relevant)	**Parameter**	**Reporting period**	**Reporting date (after end of the reporting period)**	**Format or form**
	Copies of original monitoring reports submitted to the Licence holder by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licence holder from third parties

22. to the CEO in accordance with the notification requirements of the table.

Table 11: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form[1]
Table 8	Limit exceedance where management action taken	As soon as practicable but no later than 5pm of the next usual working day.	None specified
Condition 17	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	None specified [2]
Condition 13	Calibration report	As soon as practicable.	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

Note 2: Consider using the AACR form Part A and Part B to create a notice to provide the Condition 17 information to the CEO in the timeframe prescribed in Table 11.

Definitions

In this licence, the terms in Table 12 have the meanings defined.

Table 12: Definitions

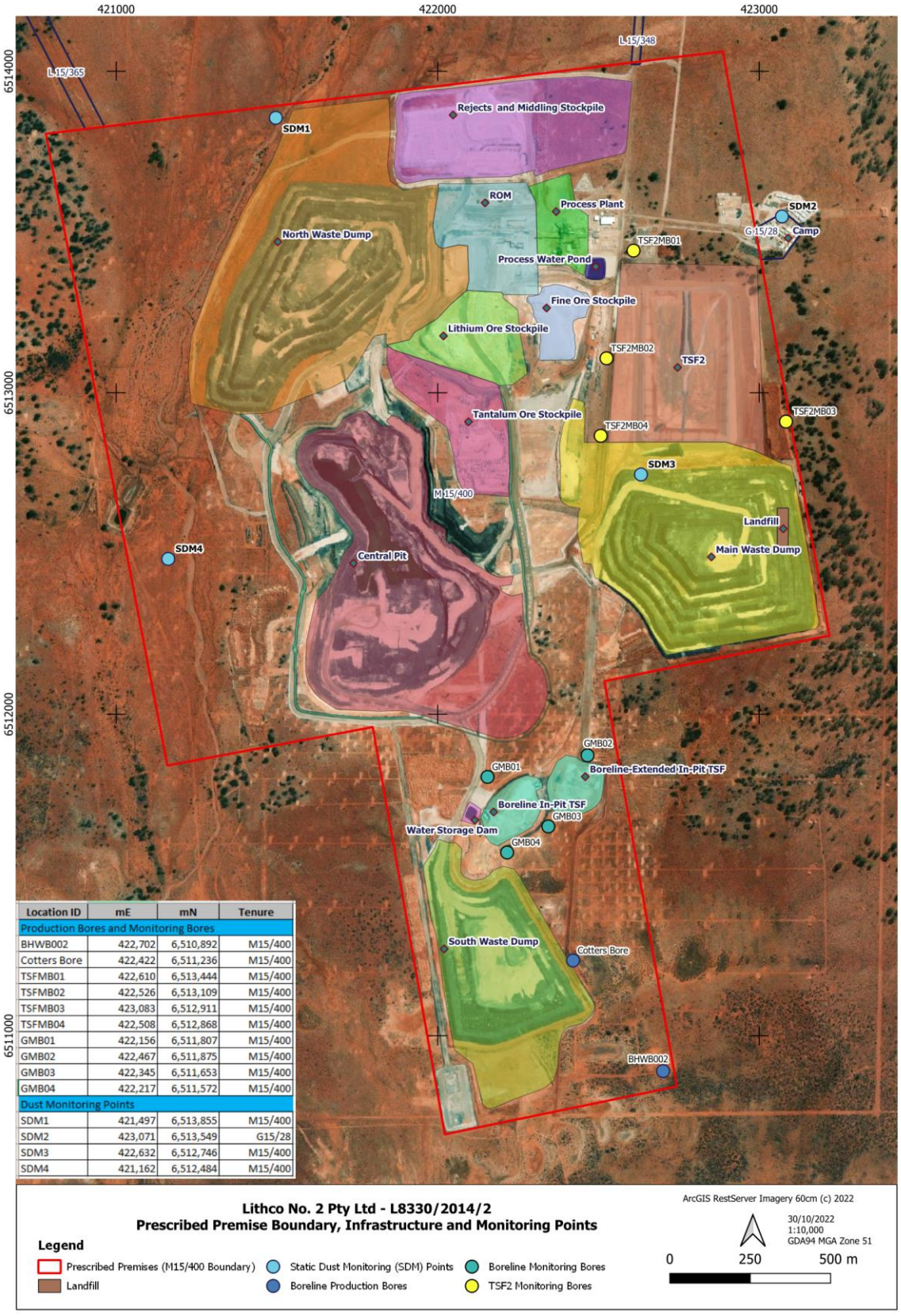
Term	Definition
Act	means the *Environmental Protection Act 1986*
ACN	Australian Company Number
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 April until 30 March of the immediately following year.
Averaging period	means the time over which a limit is measured or a monitoring result is obtained;
AS/NZS 3580.9.9	means the Australian Standard AS/NZS 3580.9.9 *Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM (sub) 10(/sub) low volume sampler - Gravimetric method*
AS/NZS 3580.10.1	means the Australian Standard AS/NZS 3580.10.1 *Methods for sampling and analysis of ambient air - Determination of particulate matter - Deposited matter - Gravimetric method*
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*
books	has the same meaning given to that term under the EP Act.
Bq/L'	means Becquerel (Bq) per litre (L). One Bq is defined as the activity of a quantity of radioactive material in which one nucleus decays per second
Bq/m^3'	means Becquerel (Bq) per cubic metre (m^3).
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Controlled waste	Has the same meaning given under the *Environmental Protection (Controlled Waste) Regulations 2004*
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.

Term	Definition
emission	has the same meaning given to that term under the EP Act.
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
Freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point
HDPE	means High Density Polyethylene
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
monthly period	means a one-month period commencing from 2 of a month until day1 of the immediately following month. *e.g. "means a one-month period commencing from the seventh day of a month until the sixth day of the immediately following month."*
NATA	means the 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
PM10	means particles with an aerodynamic diameter of less or equal to 10 μm
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises maps in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Quarterly	means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March
Schedule 1	means Schedule 1 of this Licence unless otherwise stated
Schedule 2`	means Schedule 2 of this Licence unless otherwise stated
Six monthly	means the 2 inclusive periods from 1 April to 30 September and 1 October to 31 March in the following year
Spot sample	means a discrete sample representative at the time and place at which the sample is taken
STP dry	means standard temperature and pressure (0^{o}Celsius and 101.325 kilopascals respectively), dry
waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

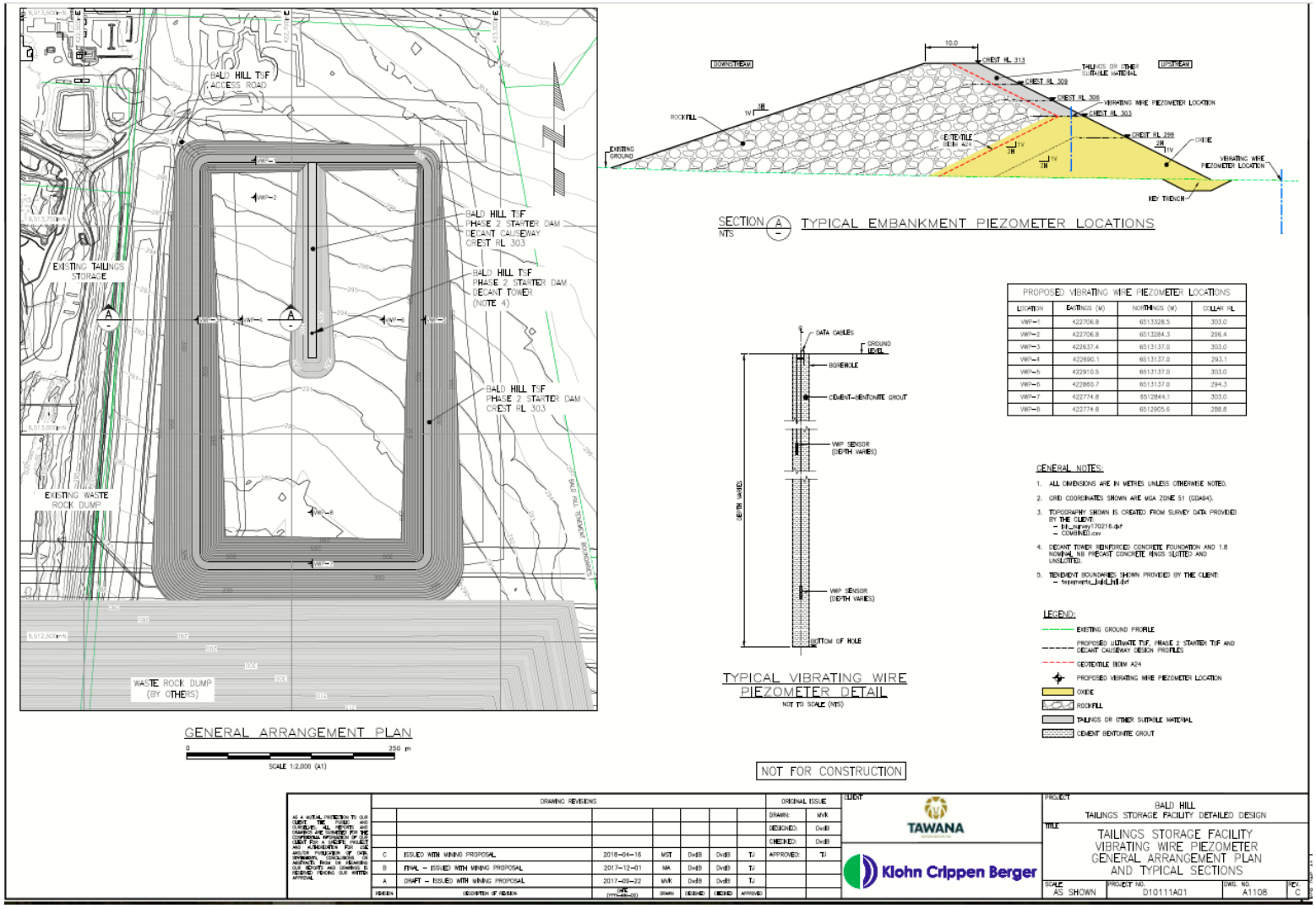
Schedule 1: Maps

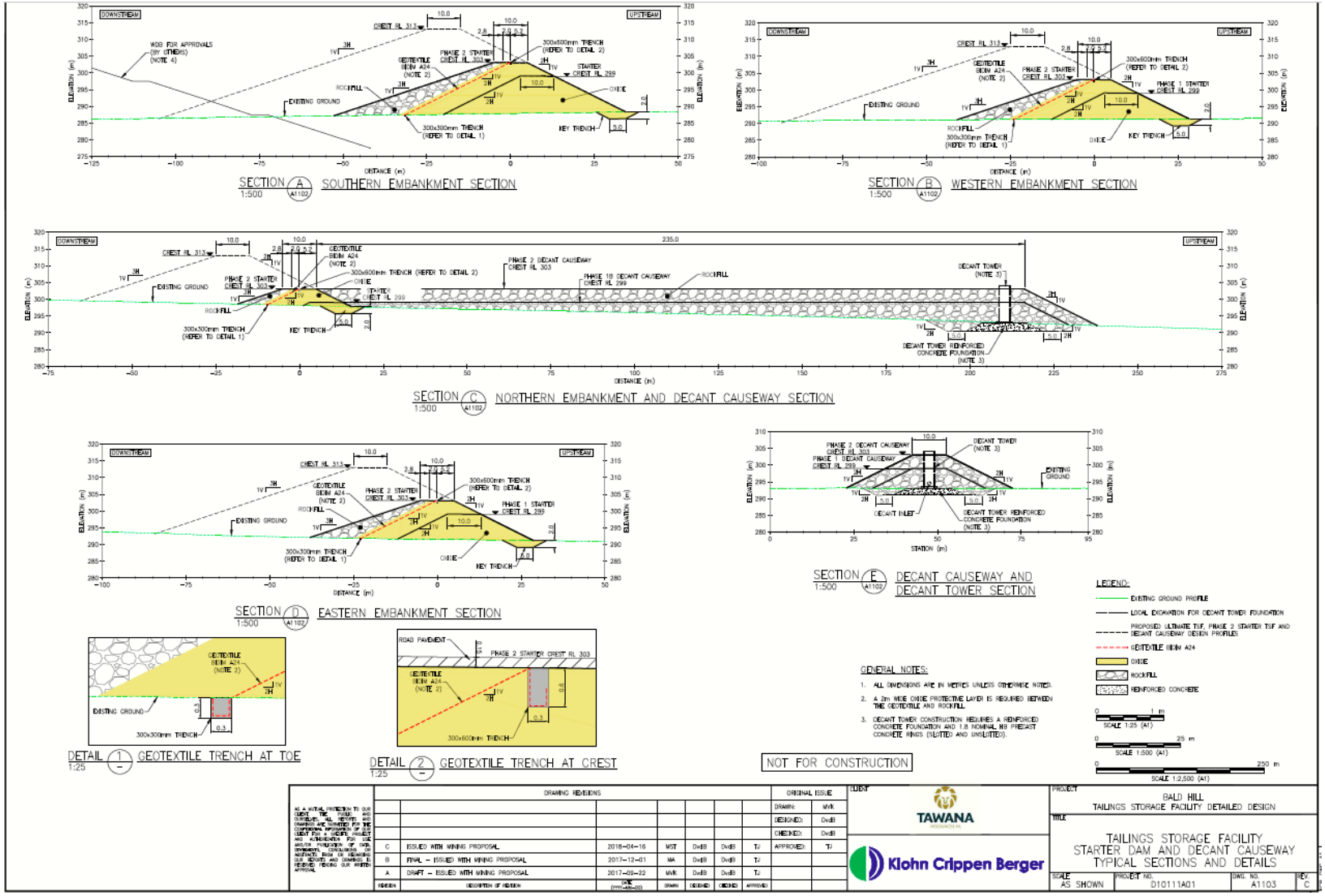
Figure 1 – Premises Boundary, Infrastructure and Monitoring Points Map



Location ID	mE	mN	Tenure
Production Bores and Monitoring Bores			
BHWB002	422,702	6,510,892	M15/400
Cotters Bore	422,422	6,511,236	M15/400
TSFMB01	422,610	6,513,444	M15/400
TSFMB02	422,526	6,513,109	M15/400
TSFMB03	423,083	6,512,911	M15/400
TSFMB04	422,508	6,512,868	M15/400
GMB01	422,156	6,511,807	M15/400
GMB02	422,467	6,511,875	M15/400
GMB03	422,345	6,511,653	M15/400
GMB04	422,217	6,511,572	M15/400
Dust Monitoring Points			
SDM1	421,497	6,513,855	M15/400
SDM2	423,071	6,513,549	G15/28
SDM3	422,632	6,512,746	M15/400
SDM4	421,162	6,512,484	M15/400

Schedule 2: tailings storage facility




SECTION A 1:500 SOUTHERN EMBANKMENT SECTION
SECTION B 1:500 WESTERN EMBANKMENT SECTION
SECTION C 1:500 NORTHERN EMBANKMENT AND DECANT CAUSEWAY SECTION
SECTION D 1:500 EASTERN EMBANKMENT SECTION
SECTION E 1:500 DECANT CAUSEWAY AND DECANT TOWER SECTION
DETAIL 1 1:25 GEOTEXTILE TRENCH AT TOE
DETAIL 2 1:25 GEOTEXTILE TRENCH AT CREST
GENERAL NOTES:
NOT FOR CONSTRUCTION
TAWANA
Klohn Crippen Berger
BALD HILL
TAILINGS STORAGE FACILITY DETAILED DESIGN
TAILINGS STORAGE FACILITY
STARTER DAM AND DECANT CAUSEWAY
TYPICAL SECTIONS AND DETAILS