Government of Western Australia
Department of Water and Environmental Regulation

Amendment Notice 3

Licence Number	L4247/1991/13
Licence Holder	Talison Lithium Australia Pty Ltd
ACN	139 401 308
Registered business address	Level 4 37 St Georges Terrace PERTH WA 6000
File Number	2012/007164
Premises	Talison Lithium Mine Mining Tenements M01/3, M01/6, M01/7 General Purpose Tenements G01/1 and G01/02 GREENBUSHES WA 6254
Date of Amendment	12 March 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.

Date signed: 12 March 2018

Tim Gentle

Manager Licensing (Resource Industries)

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
AACR	Annual Audit Compliance Report
ACN	Australian Company Number
AER	Annual Environment Report
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CENRM	Centre for Excellence in Natural Resource Management
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the *Environmental Protection Act 1986* Locked Bag 33 Cloisters Square PERTH WA 6850 info-der@dwer.wa.gov.au
CG	Chemical Grade
CS Act	*Contaminated Sites Act 2003* (WA)
CWD	Clear Water Dam
Delegated Officer	an officer under section 20 of the EP Act
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DER	(The former) Department of Environment Regulation
DMIRS	Department of Mines, Industry Regulation and Safety
DWER	Department of Water and Environmental Regulation
EP Act	*Environmental Protection Act 1986* (WA)

EP Regulations	*Environmental Protection Regulations 1987* (WA)
Licence Holder	Talison Lithium Australia Pty Ltd
m^3	cubic metres
Mtpa	million tonnes per annum
NEPM	National Environment Protection Measure
Noise Regulations	*Environmental Protection (Noise) Regulations 1997* (WA)
Noise Sensitive Premises	has the same meaning given to that term under the Noise Regulations.
Noise Sensitive Purpose	has the same meaning given to that term under the Noise Regulations.
Occupier	has the same meaning given to that term under the EP Act.
PM	Particulate Matter
PM_{10}	used to describe particulate matter that is smaller than 10 microns (µm) in diameter.
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 on the front page of this Notice.
Risk Event	as described in *Guidance Statement: Risk Assessment*
RO	Reverse osmosis
TG	Technical Grade
TLA	Talison Lithium Australia Pty Ltd
UDR	*Environmental Protection (Unauthorised Discharges) Regulations 2004* (WA)
UWA	University of Western Australia
Works	refers to the Works described in Table 2 of this Amendment Notice 2.

1. 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.

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

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Licence Duration (August 2016)*
- *Guidance Statement: Decision Making (November 2016)*
- *Guidance Statement: Risk Assessment (November 2016)*

1.1 Amendment description

On 24 October 2017, Talison Lithium Australia submitted an application to amend their Licence L4247/1991/13 to authorise the installation and operation of an additional 3 stage crusher, a reverse osmosis water treatment plant and a new clear water dam to replace the existing decant pond (clear water pond) on TSF2, and to provide feed to the reverse osmosis plant. The crusher would be located to the south of the existing processing plant, on a former tailings storage facility. Refer to Figure 1 for the proposed location of the new plant.

Talison are also seeking approval to operate the new chemical grade lithium plant, with an additional capacity of 2.4 million tonnes per year (Mtpa), taking the total category 5 throughput to 4.7 Mtpa.

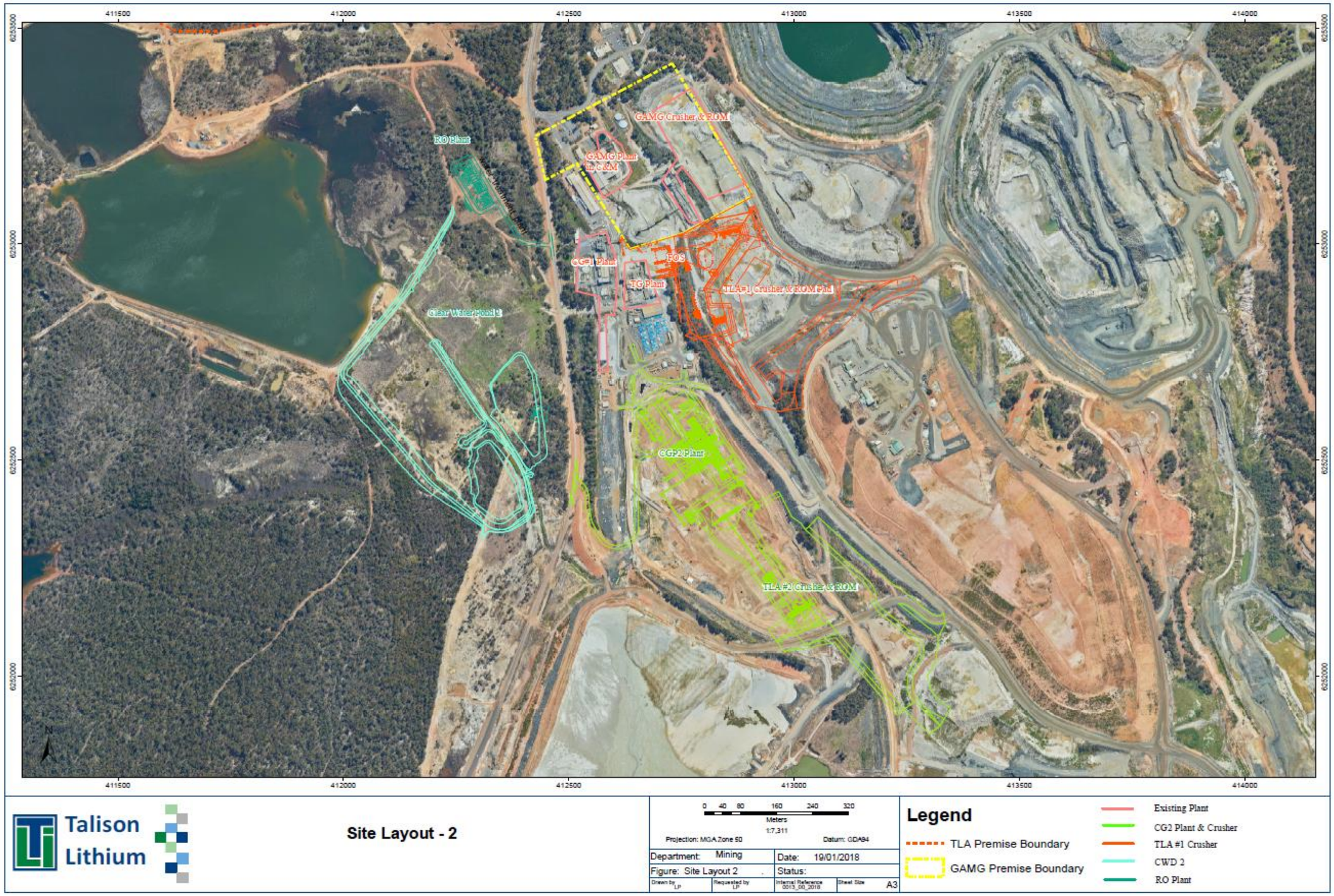


Figure 1: Indicative location of new water treatment circuit (clear water dam and RO plant) and new crusher (denoted TLA #1) (GHD 2017a)

1.1.1 Proposed Infrastructure – Crusher, Clear Water Dam and Reverse Osmosis Water Treatment Plant

The proposed infrastructure to be installed is detailed in Table 2 below.

Table 2: Proposed Infrastructure

	Infrastructure	Site Plan Reference
	Prescribed Activity Category 5	
Three Stage Crusher		
1	New ROM pad	As denoted by 'TLA #1 Crusher & ROM pad' and 'screening circuit' in Figure 1. .
2	Crusher and screening	
3	Conveyor to Fine Ore Stockpile (using either variable discharge height stacker or telescopic chute at the discharge to reduce dusting)	
4	Fine Ore Stockpile (including sprinklers to reduce dusting)	As denoted by ''FOS' in Figure 1.
Clear Water Dam (CWD)		
5	New clear water dam with north, west and central (internal divider) embankments	As shown in blue in Figure 1 and in detail in Figure 2.
Reverse Osmosis Water Treatment Plant		
13	1 000 000 tpa capacity reverse osmosis water treatment plant	As denoted 'RO plant' and shown in aqua in Figure 1
Process/decant water transfer pipelines		
20	Pipeline to transfer decant water from TSF2 to Clear Water Dam	Purple line shown in Figure 3.
	Pipeline to transfer Austins Dam seepage to Clear Water Dam	Dashed lilac line shown in Figure 3
Stormwater infrastructure		
23	Pipeline from subsurface drainage system to Austins Dam.	Indicative location shown in Figure 3.

The lithium oxide product is dewatered via filtration prior to discharge onto the new product stockpile and the recovered water recycled to the thickener.

No changes are proposed to existing power or water supplies.

Table 3 below outlines the Applicant proposed changes to the Licence:

Table 3: Proposed throughput capacity changes

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
5	2,300,000 tonnes beneficiated per annual period 5,000,000 tonnes of tailings	4,700,000 tonnes beneficiated per annual period	Installation and operation of second crusher and chemical grade lithium processing plant, including additional product

	deposited per annum	5,000,000 tonnes of tailings deposited per annum (no change)	storage stockpile.

1.1.2 Proposed Infrastructure: Management

All pipelines will be polypipe (HDPE), located within bunds and no flows will be directed overland.
An underdrainage system and seepage cut-off drain will be installed within the west embankment of the Clear Water Dam. The dam is also designed with a spillway to overflow to Austins Dam in the event of a large rainfall event. Refer to Figure 2 below for the indicative location of the spillway.
Water level gauge boards will be installed within the Dam to allow accurate readings of water levels to be taken (GHD 2017a).

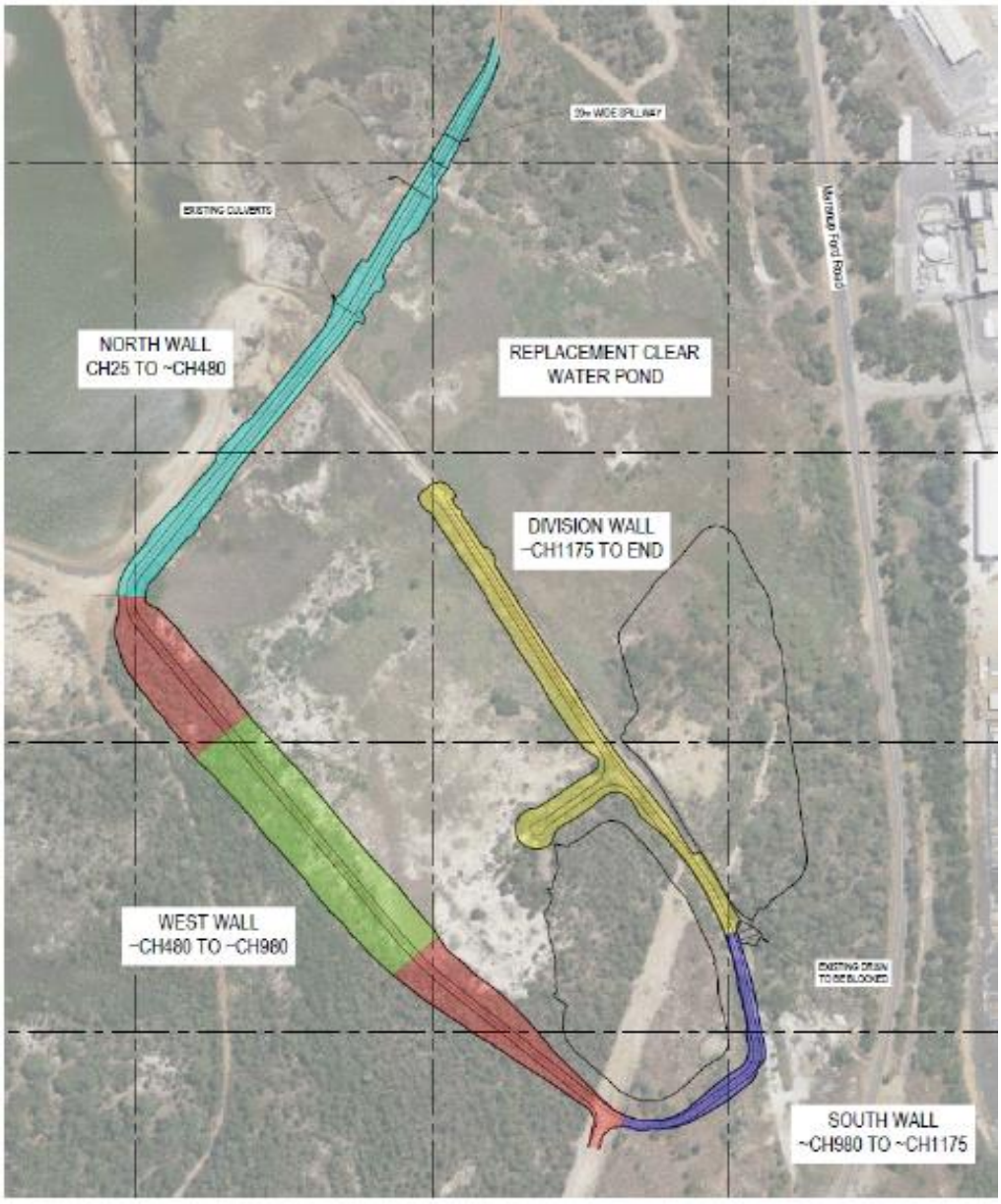


Figure 2: CWD design showing the embankments to be constructed (Austins Dam is located at the north west of this aerial photo).

Figure 3: Lithium Water Treatment Plant Piping Layout

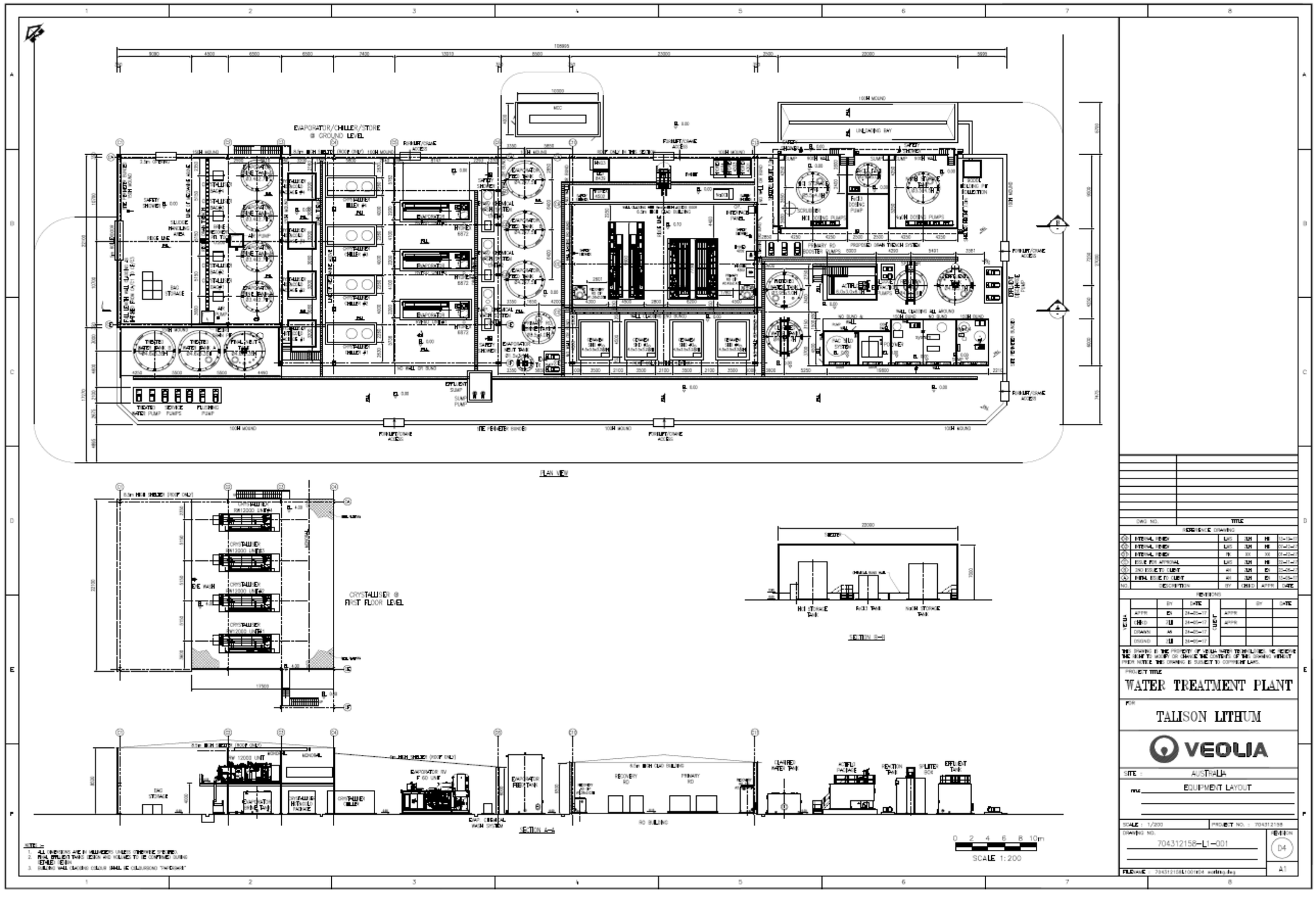


Figure 4: Site layout of the Water Treatment Plant

1.1.3 Installation of remaining TSF2 groundwater bores

Following completion of works on the south west corner of TSF2, the remaining groundwater bores were able to be installed. On 14 December 2017, Talison notified DWER of their completion and requested their listing on the Licence.

1.1.4 Note in relation to previous Licence improvement conditions IR5, IR6, IR7

As discussed in the previous Amendment Notice 2, this amendment application is to install the water treatment plant and new clear water pond. As a result, actions from IR5 (improvement requirement 5) can be considered closed out, as the installation and operation of the RO plant will address the actions remaining from IR5.

IR6 and IR7 will be addressed at a future amendment.

1.2 Amendment history

Table 4 provides the amendment history for L4247/1991/13.

Table 4: Licence amendments

Instrument	Issued	Amendment
L4247/1991/13	15 July 2016	Amendment to authorise embankment raise to TSF2 to RL 1280 m. New groundwater monitoring program required by Condition 3.4.1. Ambient surface water quality limits set for receptor downstream dam, Norilup Dam. Improvement condition 4.1.1 added to the Licence with 7 improvement requirements to improve monitoring and management of contaminants discharged to ambient surface water.
L4247/1991/13	5 May 2017	Amendment Notice 1 Amendment to convert IR1 – IR7 requirements to conditions where appropriate, following receipt of Licensee submissions. Amendments also made to existing conditions 1.3.7, 2.2.1, 5.2.1 and 5.2.3. Additional change made to condition 5.3.1 following comments made by the Department of Parks and Wildlife on the 23 December 2016 draft amendment notice. DER administrative change made to condition 5.1.2 following publication of new template for AACRs.
L4247/1991/13	30 August 2017	Amendment Notice 2 Amendment to authorise construction of an additional chemical grade lithium processing plant, including ROM pad and crusher.
L4247/1991/13	12 March 2018	Amendment Notice 3 Amendment to authorise installation of additional 3 stage crushing circuit, reverse osmosis water treatment plant and clear water dam (to replace the existing clear water pond) and associated supporting infrastructure including piping. Amendment to list of groundwater bores to be monitored.

1.3 Location and receptors

Table **5** below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 5: Receptors and distance from activity boundary

Residential and sensitive premises	Distance from Prescribed Premises
Town of Greenbushes	Located on the northern boundary of the Premises (approximately 1 km to the north of the proposed processing plant).

Table 6 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which are receptors relevant to the proposed amendment.

Table 6: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Prescribed Premises
Cowan Brook, Cowan Brook Dam and sub-catchment	At the western edge of the Premises boundary. (The brook connects Cowan Brook Dam located within the Premises and Norilup Dam). Refer to Figure 5 following for approximate location.
Spring Gully, Swenkies Dam and Mt Jones sub-catchment	At the northwestern edge of the Premises boundary. Refer to Figure 5.
Greenbushes State Forest	Located within the western side of the Premises and surrounding the western half of the Premises boundary.
Norilup Brook including Norilup Dam and sub-catchment	Approximately 2km to the west south-west of the Premises. The location of Norilup Dam is shown in Figure 5.

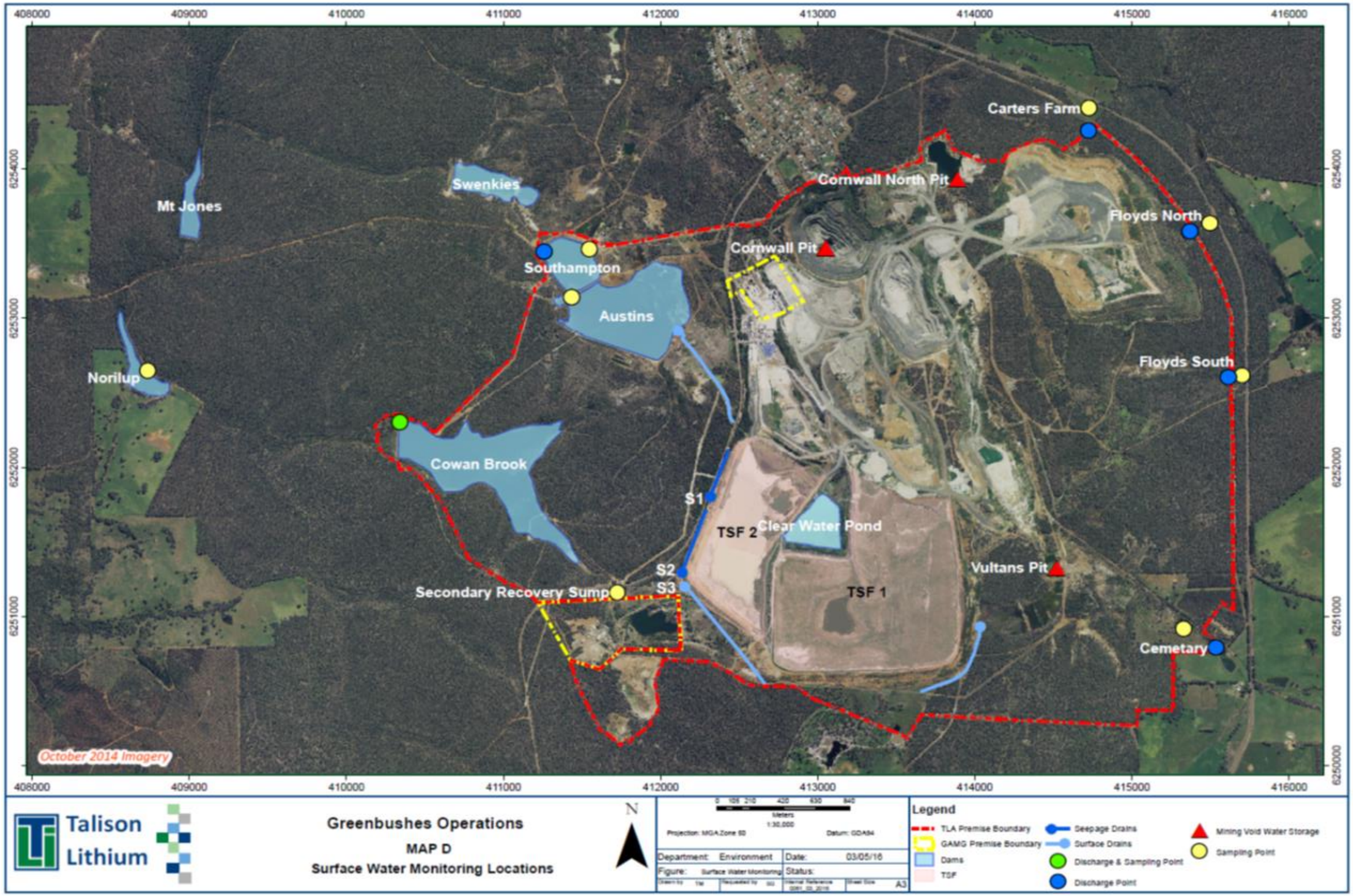


Figure 5: Location of Premises Boundary (in red) with respect to surrounding land use and water storages

1.4 Criteria for Assessment

1.4.1 Noise

Talison operates under an existing Regulation 17 exemption to the Noise Regulations: *Environmental Protection (Talison Lithium Australia Greenbushes Operations Noise Emissions) Approval 2015*. The Regulation 17 exemption specifies the noise levels allowed to be emitted from the mine site from activities other than blasting, as well as prescribing the noise emissions permitted for blasting. The noise emissions for other than blasting are detailed in Table 7 below.

Table 7: Talison Regulation 17 permitted noise emissions (other than blasting)

Type of premises receiving noise	Time of day	L_{A10} approved level (dB)	L_{Amax} approved level (dB)
A highly sensitive area (being that area (if any) of noise sensitive premises comprising a building, or part of a building, on the premises that is used for a noise sensitive purpose; and any other part of the premises within 15 metres of that building or that part of the building)	0700 to 1900 hours all days	53	71
	1900 t0 2200 hours all days	51	69
	2200 to 0700 hours all days	50	68
A noise sensitive premises other than a highly sensitive area	All hours	60	80
Commercial premises	All hours	60	80
Industrial and utility premises	All hours	65	90

1.4.2 Surface Water

No trigger values for lithium are listed within the national ANZECC guidelines for protection of freshwater ecosystems. Site-specific eco-toxicity testing of the effluent (tailings seepage/decant/ process water) on three fish species obtained from Norilup Brook was conducted for Talison in 2013 by the Centre of Excellence in Natural Resource Management at UWA, Albany to derive a trigger value of 0.42 mg/L.

This value was based on a concentration of 41.9mg/L lithium, at which 50% of one of the three species (Pygmy Perch) experienced adverse effects (in this case immobility) after exposure to the effluent over 96 hours (96 h EC_{50}) (CERNM 2013).

DWER (formerly DER) reviewed the methodology used for derivation of the trigger value and found it was consistent with the methodology prescribed in Schedule B5b of the *National Environment Protection (Assessment of Site Contamination) Measure 1999* for deriving Ecological Investigation levels for potential contaminants, noting that the attenuation factor of 100 applied was derived using an Assessment Factor method, consistent with section 3.2.3 of the NEPM Schedule B5b (DER 2016d). It was noted that the value of 0.42mg/L was a conservative value in relation to acute toxicity effects from lithium; however it was considered appropriate in the absence of literature on potential chronic effects of lithium on freshwater

species (for example on reproductive function, or on the long-term consequences of elevated lithium on ecosystem function (DER 2016d)).

1.5 Risk assessment

1.5.1 Risk Assessment Methodology

The risk assessment utilises the risk rating matrix as shown in Table 8, recently updated in accord with the Department's *Guidance Statement: Risk Assessments (November 2016).* The risk criteria used in the matrix below are further defined in Table 9.

Table 8: Risk Rating Matrix

Likelihood	Consequence				
	Slight	Minor	Moderate	Major	Severe
Almost certain	Medium	High	High	Extreme	Extreme
Likely	Medium	Medium	High	High	Extreme
Possible	Low	Medium	Medium	High	Extreme
Unlikely	Low	Medium	Medium	Medium	High
Rare	Low	Low	Medium	Medium	High

DWER will undertake an assessment of the consequence and likelihood of the Risk Event in accordance with Table 9 below.

Table 9: Risk criteria table

Likelihood		Consequence		
The following criteria has been used to determine the likelihood of the Risk Event occurring.		The following criteria has been used to determine the consequences of a Risk Event occurring:		
			Environment	Public health* and amenity (such as air and water quality, noise, and odour)
Almost Certain	The risk event is expected to occur in most circumstances	Severe	• **onsite impacts**: catastrophic • **offsite impacts local scale**: high level or above • **offsite impacts wider scale:** mid-level or above • Mid to long-term or permanent impact to an area of high conservation value or special significance^ • Specific Consequence Criteria (for environment) are significantly exceeded	• Loss of life • **Adverse health effects:** high level or ongoing medical treatment • Specific Consequence Criteria (for public health) are significantly exceeded • **Local scale impacts:** permanent loss of amenity
Likely	The risk event will probably occur in most circumstances	Major	• **onsite impacts**: high level • **offsite impacts local scale**: mid-level • **offsite impacts wider scale**: low level • Short-term impact to an area of high conservation value or special significance^ • Specific Consequence Criteria (for environment) are exceeded	• **Adverse health effects:** mid-level or frequent medical treatment • Specific Consequence Criteria (for public health) are exceeded • **Local scale impacts**: high level impact to amenity

Likelihood	
The following criteria has been used to determine the likelihood of the Risk Event occurring.	
Possible	The risk event could occur at some time
Unlikely	The risk event will probably not occur in most circumstances
Rare	The risk event may only occur in exceptional circumstances

Consequence		
The following criteria has been used to determine the consequences of a Risk Event occurring:		
	Environment	**Public health* and amenity (such as air and water quality, noise, and odour)**
Moderate	• **onsite impacts**: mid-level • **offsite impacts local scale**: low level • **offsite impacts wider scale**: minimal • Specific Consequence Criteria (for environment) are at risk of not being met	• **Adverse health effects:** low level or occasional medical treatment • Specific Consequence Criteria (for public health) are at risk of not being met • **Local scale impacts:** mid-level impact to amenity
Minor	• **onsite impacts**: low level • **offsite impacts local scale**: minimal • **offsite impacts wider scale**: not detectable • Specific Consequence Criteria (for environment) likely to be met	• Specific Consequence Criteria (for public health) are likely to be met • **Local scale impacts:** low level impact to amenity
Slight	• **onsite impact**: minimal • Specific Consequence Criteria (for environment) met	• **Local scale**: minimal to amenity • Specific Consequence Criteria (for public health) met

^ Determination of areas of high conservation value or special significance should be informed by the *Guidance Statement: Environmental Siting.*
* In applying public health criteria, DWER may have regard to the Department of Health's *Health Risk Assessment (Scoping) Guidelines.*
"onsite**"** means within the Prescribed Premises boundary.

1.5.2 Acceptability and treatment of Risk Event

DWER will determine the acceptability and treatment of Risk Events in accordance with the Risk treatment Table 10 below:

Table 10: Risk treatment table

Rating of Risk Event	Acceptability	Treatment
Extreme	Unacceptable.	Risk Event will not be tolerated. DWER may refuse application.
High	May be acceptable. Subject to multiple regulatory controls.	Risk Event may be tolerated and may be subject to multiple regulatory controls. This may include both outcome-based and management conditions.
Medium	Acceptable, generally subject to regulatory controls.	Risk Event is tolerable and is likely to be subject to some regulatory controls. A preference for outcome-based conditions where practical and appropriate will be applied.
Low	Acceptable, generally not controlled.	Risk Event is acceptable and will generally not be subject to regulatory controls.

Table 11 and Table 12 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.

It is noted that the geotechnical and safety assessment of the proposed Clear Water Dam is completed by DMIRS under the *Mining Act 1978* and the *Mines Safety and Inspection Act 1994* and any requirements relating to compliance with these Acts must be adhered to.

Table 11: Risk assessment for construction of an additional crusher, clear water dam and new water treatment plant

Risk Event						Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
Category 5 Processing or beneficiation of metallic or non-metallic ore	Construction of Clear Water Dam and RO water treatment plant	Dust: associated with construction activities	Town of Greenbushes	Air/Wind	Health and amenity impacts	Slight	Unlikely	Low	The location of the construction works is shielded from the town by mining activities and is also below the surrounding mine stockpiles. No specific regulatory controls required.

Table 12: Risk assessment for operation of an additional crusher, clear water dam and new water treatment plant including cumulative impacts

Risk Event						Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities		Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
Category 5 Processing or beneficiation of metallic or non-metallic ore	Operate additional three stage crusher	Dust: associated with crushing operations in chemical grade plant	Town of Greenbushes	Air/Wind	Health and amenity impacts	Minor	Unlikely	Medium	The additional ROM pad, crusher and processing plant are shielded from the town by mining activities and are also located below the town. Whilst dust will be generated in the vicinity of the ROM pad and crusher, it is not expected to result in additional particulate emissions reaching the town. Condition 3.4.1 of Licence L4247 currently requires continuous monitoring of particulates in ambient air at the Premises boundary, adjacent to the town. The new crusher will be installed with a wet scrubber dust extraction system and the fine ore stockpile will have a sprinkler system installed. These controls, in addition to existing site controls (water carts, shielding of product stockpiles and use of a chute to mitigate dust emissions) are deemed sufficient to manage the risk from dust. The proposed controls for the crusher will be required by Licence condition and no further regulatory controls are required.
		Noise	Town of Greenbushes	Air/Wind	Health and amenity impacts	N/A	N/A	N/A	Noise assigned levels as set by the Regulation 17 exemption applies (refer to previous section 1.4.1). Updated noise model including new crusher indicates that the combined operation will comply with the Regulation 17 exemption (Herring Storer 2017). Refer also to section 1.5.3 following.
		Contaminated stormwater	On Premises surface water storages: Cowan	Surficial shallow seepage flows via	Impacts to freshwater	Minor	Unlikely	Medium	Captured by bunding within the TLA #1 crushing circuit as per the

			Brook Dam and Austins/Southampton Dam. Off Premises surface water receptors: including Cowan Brook, Norilup Dam, Swenkies Dam, and Mt Jones Reservoir.	groundwater and above ground flows to Premises' surface water dams; overflows from Premises' dams and seepage from Premises' dams to downstream surface water bodies	aquatic species abundance and diversity within onsite and offsite surface water receptors; reduced ecological function of those receptors.				arrangements for TLA #2.
	Increase in production capacity to 4.7 Mtpa	Lithium and metals/metalloids (arsenic, manganese, nickel) released via tailings seepage / contaminated process water releases (tailings decant)	On Premises surface water storages: Cowan Brook Dam and Austins/ Southampton Dam. Off Premises surface water receptors, including aquatic ecosystems associated with each receptor: Cowan Brook, Norilup Dam, Swenkies Dam, and Mt Jones Reservoir.	Surficial shallow seepage flows via groundwater and above ground flows to Premises' surface water dams; overflows from Premises' dams and seepage from Premises' dams to downstream surface water bodies	Impacts to freshwater aquatic species abundance and diversity within onsite and offsite surface water receptors; reduced ecological function of those receptors. Potential third party impacts to recreational fishers consuming fish/crayfish from affected streams/ dams.	Major (off-site impacts local scale: mid –level)	Possible	High	Given the construction and operation of the RO plant (see below), TLA should be able to treat the process water to progressively reduce soluble lithium concentrations over time. The permeate and distillate of the RO plant (the treated water at approximately 0.5 mg/L – 1.0 mg/L Lithium concentration) will be returned to water storages (Austins Dam) to dilute the overall process water lithium concentration. Treated water volumes represent approximately one third the stored capacity of Cowan Dam. The likelihood for this risk remains at possible, pending review following successful operation of the water treatment plant. The risk will be reviewed following submission of commissioning documents that demonstrate the effectiveness of the RO water treatment plant. Following advice from the Licence Holder that full commissioning of the RO plant is expected by December 2019, and that TLA can manage water flows to ensure no off-Premises surface water discharges out to 2020, DWER will permit increased production conditional on no discharges from the Premises is conditioned on the Licence. Cowan Brook Dam is removed as an authorised discharge point and conditions 2.2.1 and 2.2.2 are modified accordingly.
	Operation of Clear Water Dam (new decant pond)	Soluble lithium and metals/metalloids (arsenic, manganese, nickel) released via CWD seepage	State forest, soils within Premises boundary; surficial groundwater aquifer	Via soil infiltration	Soil/ groundwater contamination; adverse vegetation health	Minor (soils and groundwater in this area already subject to historical and mining derived contamination from both directed and unmanaged overflows from processing plant site over 20 year period)	Unlikely (installation of underdrainage system; also dominant flow is towards Austins so contingency capture at Austins available	Medium	Existing groundwater monitoring downstream of the CWD will identify if the underdrainage is not functioning as expected and groundwater mounding from CWD seepage is occurring. Significant changes in SWLs at bores MB97/01 and MB17/01 would provide the initial data to indicate an issue. There is also the consideration that the soils and subsurface groundwater/surface water flows in this area have been subjected to contamination from historical mining activities.
		Overflow of decant water during an extreme rainfall event	State Forest within Premises and off Premises	Direct release to land	Soil contamination/ adverse impact	Moderate (Decant water may be diluted due to the rainfall	Unlikely	Medium	Spillway to Austins Dam directs all overflows to Austins Dam. All water storages on site subject to annual

					to State Forest	event)			safety and geotechnical review that assesses the capability of storages to contain extreme rainfall events.
	Operation of RO water treatment plant: disposal of Crystalline solid waste (lithium and other salts recovered from treated process water)	Leachate from solids comprising lithium and other salts, trace metals including arsenic	Groundwater at Class III landfill	Soil infiltration via faulty liner	Soil/ groundwater	Minor	Rare (being disposed to class III lined landfill)	Low	Approximately 7 tonnes per day of solids are expected to be generated from the RO plant (GHD 2017a). A sample of the solids' waste has undergone leachate testing in accordance with DER Landfill Guidelines. Leachate testing indicates that due to the arsenic concentration, the solid waste must be disposed of to a Class 3 landfill. It is noted that there is no guidance level for lithium in solid wastes. TLA has made the commitment to dispose to a class 3 landfill, until such time as approval is sought and granted to construct and operate an onsite facility.

1.5.3 Operations Risk Assessment: Noise

Herring Storer Acoustics completed a model of the expected noise emissions from the new ROM pad operation, crusher and determined that the operation of the new plant together with the existing operations, would meet the requirements of the Regulation 17 approval (HSA 2017). The existing Regulation 17 approval requires that there should be no increased noise emissions beyond the existing permitted limit. The Licence Holder will therefore be required to complete a post-construction noise verification study to confirm that the operation of the new plant will not cause an exceedance of the permitted noise level.

1.6 Decision

Approval to construct the new Clear Water Dam (replacement Clear Water Pond) and install and commission the reverse osmosis water treatment plant (VWT 2017, GHD2017c, and GHD 2017d) is granted. Condition 1.3.14 has been added to the Licence to require a commissioning plan for the water treatment plant to be submitted ahead of commencing commissioning. New Condition 5.2.7 requires submission of a commissioning report to detail the operating parameters of the plant and its effectiveness in removing lithium from the water circuit.

Approval is also granted to install the additional crushing circuit. The Regulation 17 exemption applies.

The increase in the processing rate to 4.7 Mtpa for Category 5 is approved with the condition that no discharges are permitted from the Premises. Given the high risk associated with off-site discharges, containment of all process water streams must be met in order to permit increased production ahead of successful operation of the water treatment plant.

Pending successful commissioning of the reverse osmosis water treatment plant this condition can be revised. As recovery of lithium from the process water is now feasible with the construction and successful operation of the new RO plant, the risk from increasing production should then be mitigated.

Condition 1.3.11 will be modified to specify the new infrastructure to be constructed, as authorised by this Amendment. Condition 3.4.1, Table 3.4.1 currently on the Licence regulates operational dust emissions arising from operations and does not require amendment. Table 3.4.3 has been modified to refer to the new groundwater bores as constructed.

Condition 1.3.15 has been added to the Licence to ensure that a noise assessment of the combined operations, post commissioning of the new crusher circuit, is completed to verify compliance with the Regulation 17 exemption.

1.7 Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 16 January 2018. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2. A second draft was provided to the Licence Holder on 23 February 2018 following receipt of comments. The Licence Holder responded to this draft on 27 February 2018. A summary of their comments and DWER's response are included in Appendix 2.

2. Amendment

1. The Prescribed Premises category threshold for category 5 has been amended by the deletion of text shown in strikethrough and the insertion of red text in underline.

Prescribed premises category
Schedule 1 of the Environmental Protection Regulations 1987

Category number	***Category description***	***Category production or design capacity***	***Approved Premises production or design capacity***
5	*Processing of ore*	*50 000 tonnes or more per year*	*~~2,300,000~~ 4,700,000 tonnes beneficiated per annual period 5,000,000 tonnes of tailings deposited per annum*

2. Table 1.3.1 of Condition 1.3.1 of the Licence is amended by the insertion of the red text shown in underline below:

Table 1.3.1: Containment infrastructure		
Containment cell or dam number(s)	***Material***	***Infrastructure requirements***
TSF1	*Emergency tailings deposition of up to a depth of 300mm for a period not exceeding 6 months*	• *Embankment height at RL 1282m* • *Working decant system*
TSF2	*Tailings*	• *Buttress* • *Two seepage collection trenches and pipelines* • *Seepage collection sump pumps at sump 01, 02*
Clear Water Pond	*Tailings decant, seepage, mine dewater, contaminated stormwater*	*Arsenic remediation units to treat water within the circuit[1]*
Clear Water Dam	*Tailings decant, seepage, mine dewater, contaminated stormwater*	• *Underdrainage system* • *Seepage cut-off trenches*
Austins Dam	*Process water (seepage return and decant), site runoff, overflows from Lithium Processing Plant siltation trap and stormwater*	*None specified*
Southampton Dam	*Process water from Austins Dam*	*None specified*
Cowan Brook Dam	*Contaminated and clean stormwater; emergency overflows from Austins Dam; current overflows from southern seepage recovery sump and forecast emergency overflows from the seepage trench sump 02 post completion of the embankment raise to RL 1265 m.*	*None specified*
Cornwall North Pit	*Mine dewater, stormwater, process water*	*None specified*
Cornwall Pit	*Mine dewater, stormwater, process water*	*None specified*
Vultans Pit	*Mine dewater, stormwater*	*None specified*

Note 1: Arsenic remediation unit to remain at the Clear Water Pond or elsewhere within the process water circuit, until the Clear Water Dam is commissioned; at which time it may be relocated to the Clear Water Dam.

3. Condition 1.3.11 is amended by the insertion of the red text in underline below:

1.3.11 The Licence Holder 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.

Table 1.3.7: Infrastructure and equipment requirements	
Column 1	***Column 2***
Infrastructure/Equipment	***Requirements (design and construction)***
Conveyor to Fine Ore Stockpile TLA#2 Crusher and TLA#1 Crusher	*Fitted with telescopic chute at the discharge*
Fine Ore Stockpile TLA#2 Crusher and TLA#1 Crusher	*Sprinklers installed*
CG Processing Plant Reagents Area	*Bunding to contain 110% of the largest vessel (tank) in the compound*
Milling circuit	*Bunding to contain 110% of the largest vessel (tank) in the compound; collection sump within bund*
Heavy media separation circuit	*Bunding to contain 110% of the largest vessel (tank) in the compound; collection sump within bund*
Classification circuit	*Bunding to contain 110% of the largest vessel (tank) in the compound; collection sump within bund*
Coarse and fine flotation circuits	*Bunding to contain 110% of the largest vessel (tank) in the compound; collection sump within bund*
Wet high intensity magnet (WHIMs) and tantalum recovery circuit	*Bunding to contain 110% of the largest vessel (tank) in the compound; collection sump within bund*
Process Water Tank, Raw Water Tank, Thickener	• *Bunding to contain 110% of the largest vessel (tank) in the compound; collection sump within bund* • *All installed with level alarms. Level alarms linked to process control instrumentation to allow recording of overflows.*
Product stockpiles	*Located on bunded hardstand*
New Tailings Line	*Located within bunding with capacity to contain volume of the pipeline*
Concentrate Storage Area Wedge Pit	• *Capacity of 170m^3* • *Fitted with sump pump to return flow to Thickener*
Plant Wide Wedge Pit	• *Capacity of 670m^3* • *Fitted with overflow alarm linked to process control instrumentation to record duration of overflows.* • *Fitted with sump pump to return flow to Thickener*
CG Processing Plant area	*Subsurface drainage system*
RO Water Treatment Plant	• *Capacity of 1 000 000 m^3/year*
Clear Water Dam (CWD)	• *Seepage cut-off trench installed under west embankment* • *Underdrainage system installed to collect seepage and recycle back to CWD* • *Arsenic remediation unit installed*

4. Table 2.2.1 of the Licence is amended by the deletion of the text shown in strikethrough below:

Table 2.2.1: Emission points to surface water	
Emission point reference on Map of emission points	**Source**
~~Cowan Brook Dam~~	~~Contaminated surface water (stormwater, TSF2 seepage and process water)~~
Carters Farm	Contaminated stormwater from disturbed mine work areas including mine waste dumps
Floyds North	
Floyds South	
Cemetery	Contaminated stormwater from disturbed mine work areas including mine waste dumps Seepage from TSF1

5. Condition 2.2.2 of the Licence is amended by the insertion of the red text shown in underline below:

2.2.2 The Licensee is not permitted to discharge off the Premises from Southampton Dam or from Cowan Brook Dam.

6. Table 3.2.1 of Condition 3.2.1 of the Licence is amended by the insertion of the red text shown in underline below:

Table 3.2.1: Monitoring of point source emissions to surface water						
Monitoring point reference (as per Figure 2)	**Process description**	**Parameter[1]**	**Units**	**Frequency**	**Averaging Period**	**Method**
Cowan Brook Dam	Discharge from Cowan Brook Dam to Norilup Dam (off Premises)	Flow	m^3	Each event	-	None specified
		pH	-	Each event [2]	Spot sample	As per L3.1.1
		EC	µS/cm			
		Lithium	mg/L			
		Arsenic				
		Cadmium				
		Chromium				
		Copper				
		Manganese				
		Nickel				
		Uranium				
Cowan Brook Dam[3]	Seepage flow from Cowan Brook Dam	Flowrate	m^3/hr	Monthly	-	None specified
		pH	-	Monthly	Spot sample	As per L3.1.1
		EC	µS/cm			
		Lithium	mg/L			
		Arsenic				
		Cadmium				
		Chromium				
		Copper				
		Manganese				
		Nickel				
		Uranium				
Floyds North	Surface water discharge off Premises	Flow	m^3	Each event	-	None specified
		pH	-	One event per quarter[2]	Spot sample	As per L3.1.1
		EC	µS/cm			

		Lithium	*mg/L*			
		Arsenic				
		Cadmium				
		Chromium				
		Copper				
		Manganese				
		Nickel				
		Uranium				
Floyds South	*Surface water discharge off Premises*	*Flow*	*m^3*	*Each event*	*-*	*None specified*
		pH	*-*	*One event per quarter[2]*	*Spot sample*	*As per L3.1.1*
		EC	*µS/cm*			
		Lithium	*mg/L*			
		Arsenic				
		Cadmium				
		Chromium				
		Copper				
		Manganese				
		Nickel				
		Uranium				
Carters Farm	*Surface water discharge off Premises*	*pH*	*-*	*One event per quarter[2]*	*Spot sample*	*As per L3.1.1*
		EC	*µS/cm*			
		Lithium	*mg/L*			
		Arsenic				
		Cadmium				
		Chromium				
		Copper				
		Manganese				
		Nickel				
		Uranium				
Cemetery	*Surface water discharge off Premises*	*pH*	*-*	*One event per quarter[2]*	*Spot sample*	*As per L3.1.1*
		EC	*µS/cm*			
		Lithium	*mg/L*			
		Arsenic				
		Cadmium				
		Chromium				
		Copper				
		Manganese				
		Nickel				
		Uranium				

Note 1: pH and EC in-field non-NATA accredited analysis permitted.
Note 2: 'Event' refers to a rainfall event of 24 hours duration or more.
Note 3: This sampling site is located at the base of the Cowan Brook Dam, downstream of the location shown in Figure 2 (upstream of Cowan Brook 1).

7. Table 3.3.1 of the Licence is amended by the insertion of the red text shown in underline below:

Table 3.3.1: Process monitoring					
Monitoring point reference	**Process description**	**Parameter**	**Units**	**Frequency**	**Method**
Clear Water Pond	*Overflow from the Clear Water Pond to Austins Dam*	*Flow*	*m^3*	*Continuous*	*None specified*
Austins Dam	*Overflow from Austins Dam to Cowan Brook Dam*	*Flow*	*m^3*	*Total m^3 per event*	*None specified*
Lithium TG Raw Water Tank	*Overflows to ground*	*Frequency*	*-*	*Number of events*	*None specified*
Secondary seepage recovery sump	*Overflow to Cowan Brook Dam*	*Flow*	*m^3*	*Total m^3 per event*	*None specified*
Lithium CG Processing Plant 1 Siltation Trap	*Overflow from siltation trap to Austins Dam*	*Frequency and duration*	*Hrs*	*Number of events*	*Visual observation*
Lithium CG Processing Plant 2 – Plant Wide Wedge Pit[1]	*Overflow from new wedge pit (siltation sump) to Austins Dam*	*Frequency and duration*	*Hrs*	*Number of events*	*Recorded events*
Austins Dam Seepage Pond	*Seepage recovered*	*Volume*	*m^3*	*Monthly*	*Seepage recovered from Austins Dam and returned to the process water circuit*

Note 1: Monitoring required to commence following commissioning of the Lithium CG Processing Plant 2.

8. Table 3.4.3 of the Licence is amended by the deletion of text in strikethrough shown below:

Table 3.4.3: Monitoring of ambient groundwater quality~~[1]~~				
Monitoring point reference	**Parameter**	**Units**	**Averaging period**	**Frequency**
Shallow bores				
MB17/01S *MB17/02S* *~~MB17/05S~~* *MB17/06S* *MB17/07S* *MB17/08S*	*Standing water level*	*m(AHD) & mbgl*	*Spot sample*	*Quarterly*
	pH	*-*		
	Total dissolved solids	*mg/L*		
	Chloride *Nitrate* *Magnesium* *Sodium* *Sulfate* *Arsenic* *Cobalt* *Copper* *Iron* *Lithium* *Manganese* *Nickel* *Uranium* *Thorium*	*mg/L*		
	Radium 226 *Radium 228*	*Bq/L*		*Six monthly*

Intermediate bores				
MB17/01I *MB17/02I* *MB17/03I* *MB17/04I* *~~MB17/05I~~* *MB17/06I*	*Standing water level*	*m(AHD) & mbgl*	*Spot sample*	*Quarterly*
	pH	*-*		
	Total dissolved solids	*mg/L*		
	Chloride *Nitrate* *Magnesium* *Sodium* *Sulfate* *Arsenic* *Cobalt* *Copper* *Iron* *Lithium* *Manganese* *Nickel* *Uranium Thorium*	*mg/L*		
	Radium 226 *Radium 228*	*Bq/L*		*Six monthly*
Deep bores[2]				
MB97-05D *MB17/02D* *MB97/4* *MB17/04D* *MB17/05D* *MB17/06D* *MB17/07D* *MB3* *MB01/09* *MB01/01*	*Standing water level*	*m(AHD) & mbgl*	*Spot sample*	*Quarterly*
	pH	*-*		
	Total dissolved solids	*mg/L*		
	Chloride *Nitrate* *Magnesium* *Sodium* *Sulfate* *Arsenic* *Cobalt* *Copper* *Iron* *Lithium* *Manganese* *Nickel* *Uranium* *Thorium*	*mg/L*		
	Radium 226 *Radium 228*	*Bq/L*		*Six monthly*
MB97/1 *MB97/2* *MB01/11*	*Standing water level*	*m(AHD) & mbgl*	*Spot sample*	*Quarterly*
	pH	*-*		
	Total dissolved solids	*mg/L*		
	Sulfate *Sodium* *Arsenic* *Lithium*			

~~Note 1: Monitoring of new bores (MB17/xx series) only required following construction.~~

9. The Licence is amended by the insertion of the following Condition 1.3.14:

1.3.14 At least two weeks prior to commencing commissioning of the reverse osmosis water treatment plant, the Licensee shall submit a commissioning plan to the CEO. The commissioning plan shall include:
(a) the commissioning stages and expected timescales for commissioning;

(b) key performance indicators for commissioning of the new plant;
(b) expected emissions during commissioning and how they will be managed;
(c) details of monitoring that will be undertaken during the commissioning period, including monitoring to verify the operational performance of the new plant; and
(d) the reporting and management procedure for incidents.

Commissioning shall be carried out in accordance with the commissioning plan.

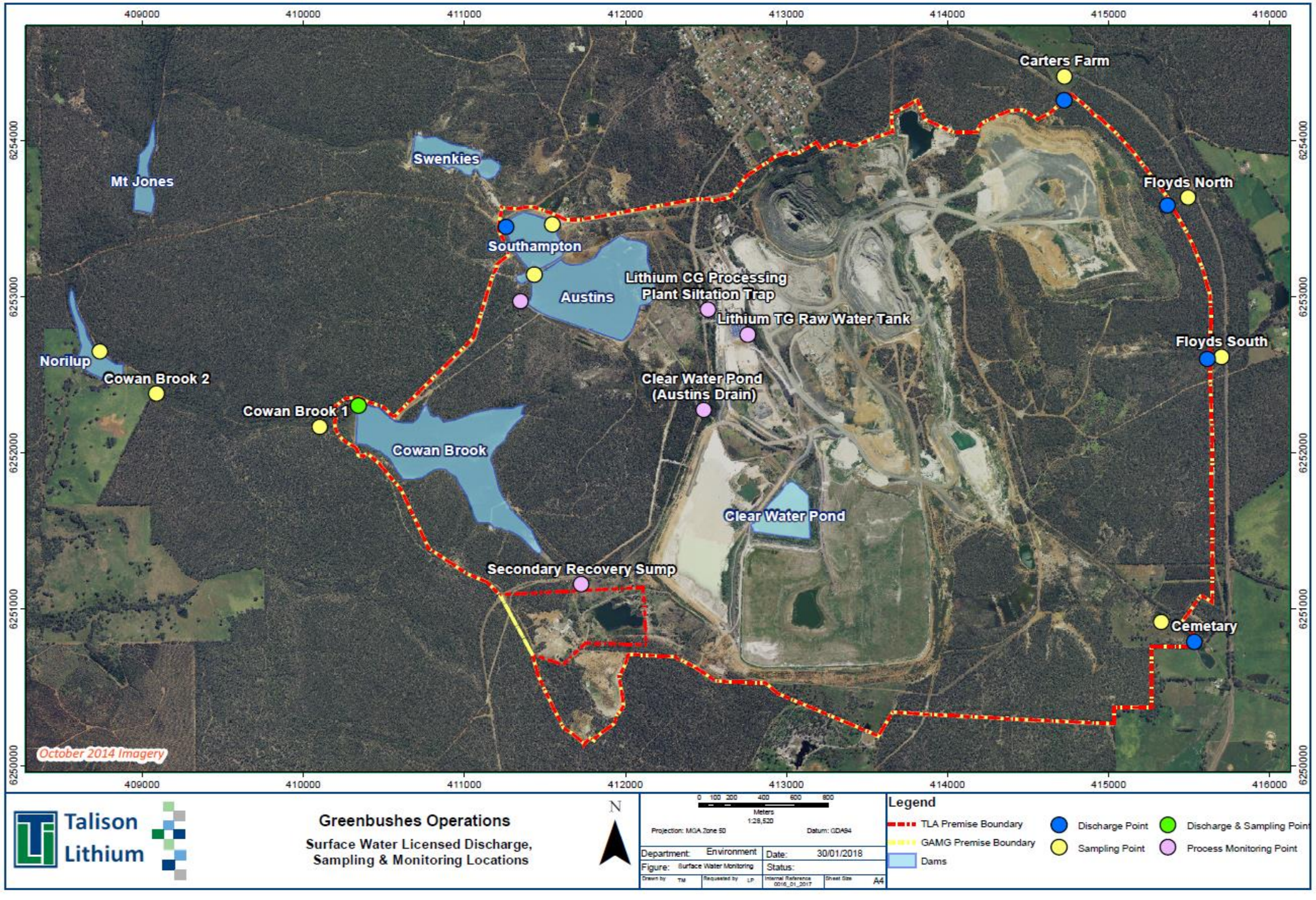
10. The Licence is amended by the insertion of the following Condition 1.3.15:

1.3.15 Following commissioning of the additional crushing circuit, the Licensee shall complete a noise assessment of the operation of the new circuit and existing crushers and assess compliance with the Regulation 17 exemption: Environmental Protection (Talison Lithium Australia Greenbushes Operations Noise Emissions) Approval 2015. The Licensee shall submit a report to the CEO within 60 days of completion, describing the methodology employed in the assessment, the noise assessment results, compliance with the Regulation 17 exemption and any recommendations for operation.

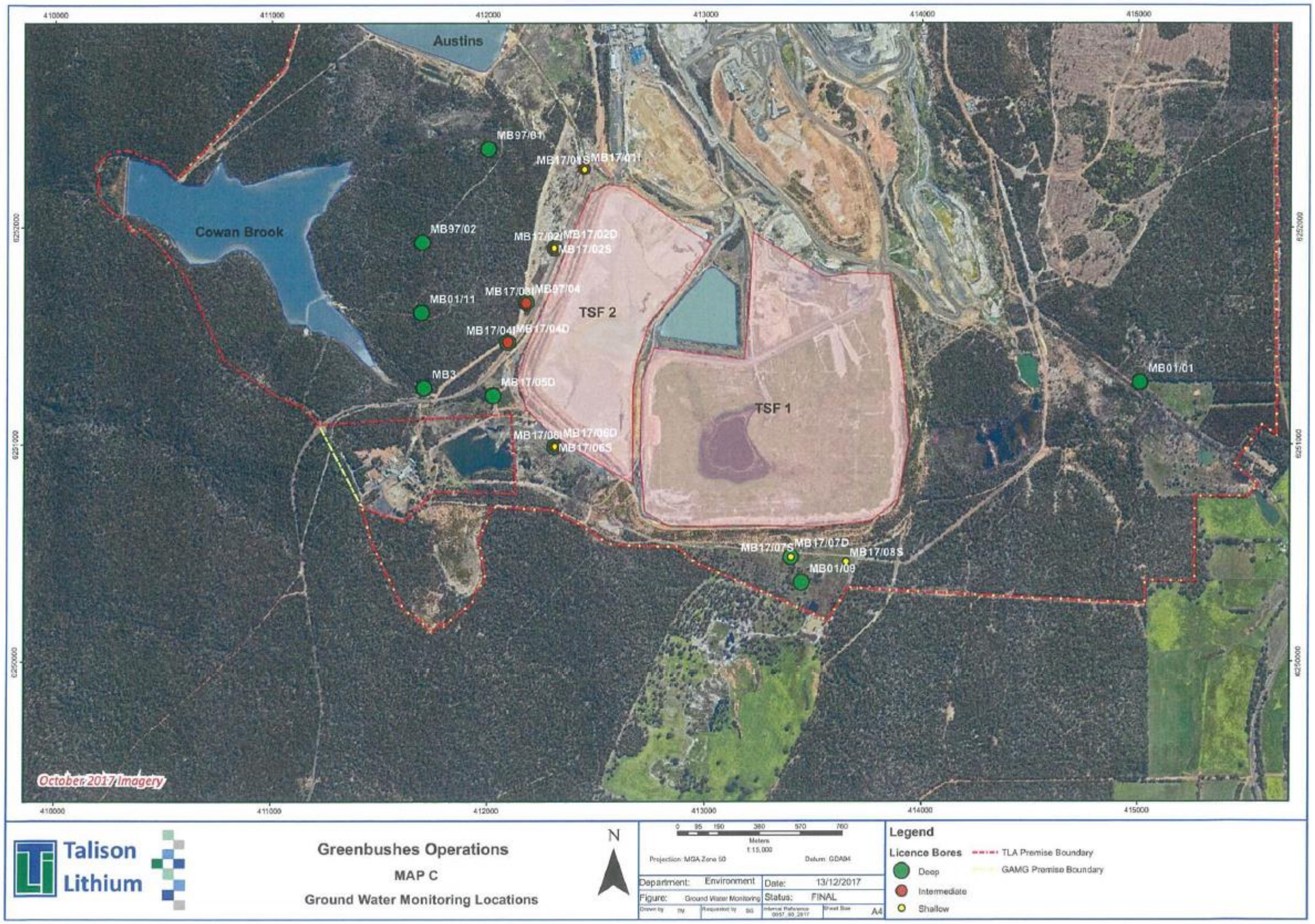
11. The Licence is amended by the insertion of the following Condition 5.2.7:

5.2.7 The Licensee shall submit to the CEO a commissioning report for the RO water treatment plant, within 3 months of completion of commissioning. The report shall include:
(a) a summary of the monitoring results as recorded by the commissioning plan;
(b) a list of any original monitoring reports submitted to the Licensee from third parties for the commissioning period;
(c) a summary of the performance of the water treatment plant in removing lithium, as compared to the design specification range set out in the licence amendment application; and
(d) where the specification has not been met, measure(s) to meet the design specification together with timescales for implementing the proposed measure(s).

12. Figure 2 of Schedule 1 of the Licence is replaced by the Figure below:



13. Figure 3 of Schedule 1 of the Licence is replaced by the Figure below:



Appendix 1: Key documents

	Document title	In text ref	Availability
1	TLA (2016) Application to Amend Licence L4247/1991/13, signed 24 October 2017	TLA 2017a	DWER internal record (A1549625)
2	Centre for Excellence in Natural Resource Management (2013), *Ecotoxicology of Lithium*, unpublished report for Talison Lithium, Greenbushes, August 2013.	CENRM 2013	DWER internal record (A998376)
3	Centre for Excellence in Natural Resource Management (2017) *Ecological assessment program for Norilup Brook in relation to expansion of a tails dam at the Talison Lithium Mine, Greenbushes, Western Australia,* unpublished report for Talison Lithium, Greenbushes, February 2017.	CENRM 2017	DWER internal record (A1495307)
4	DER (2015) *Guidance Statement: Regulatory principles.* Department of Environment Regulation, Perth, July 2015.	DER 2015a	accessed at www.dwer.wa.gov.au
5	DER (2015). *Guidance Statement: Setting conditions.* Department of Environment Regulation, Perth, October 2015.	DER 2015b	
6	DER (2016). *Guidance Statement: Licence duration.* Department of Environment Regulation, Perth August 2016.	DER 2016a	
7	DER (2017) *Guidance Statement: Risk Assessments*. Department of Environment Regulation, Perth February 2017.	DER 2017	
8	DER (2016) *Guidance Statement: Decision Making*. Department of Environment Regulation, Perth, November 2016.	DER 2016c	
9	DER (2016) Memorandum from B. Richmond to L. Lavery 'Talison Lithium – new groundwater monitoring network and proposed lithium water quality targets', 1 February 2016	DER 2016d	DWER internal record (A1101888)
10	GHD (2017) *Talison Lithium Limited DWER Licence Amendment*	GHD 2017a	DWER internal record (A1548027)

	Supporting Document Clear Water Dam 2, *Water Treatment Plant and Crusher 1*, October 2017(Attachment 3A)		
11	GHD (2017) *Talison Lithium Limited Replacement Clear Water Pond Detailed Design*, issued 19 October 2017	GHD 2017b	DWER internal record (A1557723)
12	Letter from GHD to DER, Talison Lithium GHD Current Scope of Works, dated 16 May 2017	GHD 2017c	DWER internal record (A1437151)
13	Letter from GHD to DER, Talison Lithium Pty Ltd Construction and Approvals Timeline , dated 19 May 2017	GHD 2017d	DWER internal record (A1437150)
14	Herring Storer Acoustics (2017) *Talison Lithium Ltd. Proposed New Crushing Plant Greenbushes Acoustic Assessment*, report no: 22275-1-17214, September 2017	HSA 2017	DWER internal record (Appendix to A1548027)
15	Letter from TLA to DER, Application to amend Licence L4247/1991/13 under the *Environmental Protection Act 1986*, dated 19 January 2017	TLA 2017b	DWER internal record (A1374575)
16	Letter from TLA to DER, L4247/1991/13 – Monitoring Bore Installation, dated 12 December 2017	TLA 2017c	DWER internal record (A1580646)
17	Veolia Water Technologies (2017) Memorandum from VWT to Talison Lithium, Talison Lithium – Water Treatment Plant (WTP) Summary, dated 11 May 2017	VWT 2017	DWER internal record (A1437151)

Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 16 January 2018, with a second draft provided on 23 February 2018 for review and comment. The Licence Holder responded on 23 January 2018 and 5 February 2018. Additional comments from the Licence Holder on the second draft were provided on 27 February 2018.

Amendment / Condition	Summary of Licence Holder comment	DWER response
Request to consider production increase to 4.7Mtpa independent of commissioning water treatment plant.	Explanation given that there was low risk of a process water discharge from site to at least 2020 given: • Cowan Dam overflows were due to overflows from the process water circuit rather than rainfall events; • From 2014 Talison has significantly reduced discharges by upgrading TSF 2 seepage recovery • From 2015 Talison have prevented overflows from Austins Dam to Cowan Dam by utilising in-pit water storage; • Increased consumption of water within the circuit at the higher production rate of 4.7Mtpa from approximately April 2019; • Additional site water storage of 490 000m^3 from the CWD (clear water dam) from May – October 2018 • Significant in-pit water storage capacity if required to manage potential overflows	The increase in production is authorised, conditional on containment of process water within the Premises; i.e. no discharges from Cowan Dam. This applies until such time as the Water Treatment Plant is successfully commissioned (anticipated as late 2019).
Figure 1 of this Amendment Notice	Updated Figure supplied.	Replaced.
Section 1.1.1, Table 2 of this Amendment Notice	Revised text for the crusher dust control.	Updated.
Figure 4 of this Amendment Notice	Updated drawing supplied.	Replaced.
Section 1.1.4 of this Amendment Notice	Query about text in relation to IR6 and IR7.	Explained to Talison that whilst the data has been collected for these improvement requirements and consequently removed from the Licence, the

Amendment / Condition	Summary of Licence Holder comment	DWER response
		follow up actions relating to regulatory control for these items are still pending. Once the water treatment plant is operating, it is DWER's intention to address these items.
Table 1.3.1, Condition 1.3.1	Note that the arsenic remediation unit will be relocated from the Clear Water Pond (CWP) following commissioning of the Clear Water Dam (CWD) and decommissioning of the CWP. The remediation unit may also not be required for the CWD pending the water quality achieved by the RO plant.	Noted and updated.
Table 1.3.7, Condition 1.3.11	The first draft of this Table required installation of a pump to recover seepage from Cowan Brook Dam back to the dam instead of discharging into Cowan Brook. Talison stated that this action would starve the watercourse of flow and impact on the ecological function of the brook, thereby compromising the ecological monitoring program conducted in accord with condition 3.4.3.	DWER sought internal advice in relation to ecological and water quality impacts in the creek. For the interim, it was agreed that Talison should monitor the water quality of the seepage and quantify the flowrate of the seepage to determine if further controls are required.
Comments on second draft		
Condition 2.2.1, Table 2.2.1 and Condition 2.2.2	Request to still permit offsite discharges from Cowan Brook Dam at the increased processing rate of 4.7Mtpa because (due to condition 1.3.7) Cowan Brook Dam is now not connected to the process water circuit, except in the case of emergency overflows from Austins Dam or the Secondary Seepage Recovery Sump.	Not accepted. As per the risk assessment in Table 12 of this Amendment Notice 3 and the decision detailed in section 1.6 of this Notice, DWER has assessed this discharge as high risk. The likelihood that downstream surface water quality ambient limits prescribed in the Licence would be met if discharges were allowed, at a doubling of the processing rates has been assessed as unlikely due to a commensurate increase in soluble lithium concentrations within the process water circuit. Whilst DWER accepts that two contributing contaminated surface water flows to Cowan Brook Dam have (mostly) been isolated, Cowan Brook Dam is still connected to seepage flows from TSF2 through the underlying

Amendment / Condition	Summary of Licence Holder comment	DWER response
		surficial aquifer. Seepage recovery systems at TSF2 only recover some seepage through the western embankment wall; seepage through the floor of the facility is still transported through the surficial aquifer via previously disturbed dredge mining channels into Cowan Brook Dam and other water storages located downstream of TSF2. Seepage of these water storages (Austins Dam, Southampton Dam and Cowan Brook Dam) has also been recorded in turn. For DWER to permit increased processing rates ahead of the water treatment plant operating, with a resulting increase in lithium concentration in process water flows (including TSF2 seepage) these flows must be contained within the Premises and thus discharges from Cowan Brook Dam are not permitted.
Table 1.3.1	As the TSF2 embankment works to RL 1265m are completed, an alternative wording was proposed for sources for Cowan Brook Dam, as listed in the Table,.	Accepted in part. The flows from the Secondary Seepage Recovery Sump to Cowan Brook Dam include permitted emergency (i.e. due to extreme rainfall and power outages) overflows and other overflows due to failures in the pumping and recovery systems.
Table 1.3.7	Request to allow for flexibility in placement of the arsenic remediation units within the process water circuit.	Accepted. Note 3 to Table 1.3.7 amended to allow flexibility in unit siting.
Table 3.2.1	Suggested new monitoring point downstream of Cowan Brook Dam be located at site Cowan Brook Dam 1 (refer to Figure 2).	Not accepted. The intent of this addition to the sampling program is to sample the water quality of seepage exiting from the base of the embankment of Cowan Brook Dam. Samples at location Cowan Brook Dam 1 may be diluted by other flows into the creek, and results may not be representative of the water quality of seepage.
Table 3.3.1	Request to removed recording of overflows from the Clear Water Pond, Lithium CG siltation traps 1 & 2 as discharges	Not accepted. This proposed change anticipates future works not yet completed. Table 3.3.1 will

Amendment / Condition	Summary of Licence Holder comment	DWER response
	from the Clear Water Pond are now piped and the siltation trap flows will be directed to the Clear Water Dam once this dam is built.	be amended once the Clear Water Dam is completed and respective compliance documents are submitted.
Table 2.2.1	Request to amend the description of source waters for Cowan Brook Dam.	Not accepted. This dam is being removed from the Table as an authorised surface water discharge point (until such time as the water treatment plant is operating), hence the need to update the source description is redundant.