

# **Amendment Notice 1**

**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

Date of amendment 5 May 2017

Prescribed Premises Category 5: Processing of Metallic and Non-

Metallic Ore

**Premises** Talison Lithium Mine

Mining Tenements M01/3, M01/6, M01/7, M01/16,

1

G01/1 and G01/02

**GREENBUSHES WA 6254** 

#### **Amendment**

The Chief Executive Officer (CEO) of the Department of Environment Regulation (DER) has amended the above licence in accordance with section 59 of the *Environmental Protection Act 1986* as set out in this Amendment Notice.

Date signed: 30 March 2017

**Tim Gentle** 

**Manager Licensing (Resource Industries)** 

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

Licence: L4247/1991/13 File No: 2012/007164

#### **Amendment Notice**

This notice is issued under 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.

## **Amendment Description**

Condition 4.1.1 of Talison Lithium's Licence L4247/1991/13 required 7 improvements to be completed as part of the licence amendment dated 15 July 2016 to raise the embankment for TSF 2 to RL 1280 m. As of 10 March 2017 submissions have been received for all improvement requirements IR1 – IR7.

In order to give effect to the improvements, post submission of the improvement plans and actions, these requirements are being converted into conditions where appropriate. This amendment notice also removes completed improvement requirements.

Concurrently with this notice, amendments are made to some existing conditions as a result of the improvement submissions. These changes are to amend condition 1.3.7 to permit discharges in the event of power failures and to amend conditions 5.2.1 and 5.2.3 to report monitoring data acquired as per Tables 3.4.2 and 3.4.3 quarterly instead of annually.

A separate application to amend the licence submitted by the Licensee was also received by DER on 15 December 2016, which is currently undergoing assessment.

#### **Decision**

#### 1.1 IR1

IR1 required submission of an emergency response plan to manage the risk of overflows from the TSF2 seepage sump. An IR1 submission was initially received 27 October 2016, which was revised on 18 November 2016, following advice from DER and a meeting held 11 November 2016 (TLA 2016f; TLA 2016h). The proposal of 18 November 2016 has been accepted by DER (with the following exception listed below) to allow seepage overflows at sump 02 (S2 in Figure 2 of the Licence) to S3 in the event of power failure and/or extreme weather events. The sump at S3 will be clay lined to mitigate further infiltration at that location. In the event of an outage, the Licensee has proposed a timeframe of 24 hours to install a portable pump downstream at the SRSS to stop the overflow and return seepage to the water circuit. DER has agreed to this proposal. Condition 1.3.7 will be amended to permit overflows only during power failures or extreme weather events.

It is noted that the Department of Parks and Wildlife have made a submission dated 3 March 2017, and raised concerns about potential environmental impacts from permitting contaminated overflows into Cowan Brook Dam, recommending that on site emergency power generation should be provided and connected to the pumps (DPaW 2017). DER may reconsider this approval in future licence amendments, dependent on the number of reported overflows. Currently the overflow is permitted with the understanding that these outages are rare events.

DER does not permit item e) of the Licensee's submission of 18 November 2016:

Licence: L4247/1991/13 File No: 2012/007164

"When water quality is suitable and S2 and S3 are operational, the SRSS pump can be switched off to allow clean storm water from its catchment to flow to Cowan Dam. This will reduce the risk of the water circuit reaching capacity and overflowing to Cowan Dam."

The Licensee may submit further information for DER's consideration to define 'suitable' water quality in terms of water quality criteria (pH, lithium, arsenic and total dissolved solids concentrations as a minimum) and the methodology for determining whether the water quality meets required criteria. Pending this advice DER will reconsider item e). As of date of signing this amendment no proposed methodology for determining water quality of stormwater had been provided by the Licensee and the original decision of 23 December 2016 stands.

#### 1.2 IR2

IR2 required the Licensee to develop an ecological assessment program for sites upstream and downstream of Norilup Dam, which is the receiving ambient surface water environment downstream of the Talison Lithium Mine. A submission for IR2 was received 31 October 2016 (TLA 2016g). This submission was completed following advice from the Department of Water as required. Condition 3.4.3 has been added to the Licence in response.

Subsequent to the proposed amendment notice of 23 December 2016, the Department of Parks and Wildlife has also provided comment on the proposed ecological assessment program. They have requested that at least one of the eight sites to be sampled is located within Cowan Brook (DPaW 2017). This has been incorporated into condition 3.4.3. Following comment from the Licensee, received 18 April 2017, this requirement has been modified to include 2 sites in Cowan Brook (TLA 2017c).

Additionally if any threatened aquatic fauna (as listed under the Wildlife Conservation Act 1950, such as Balston's pygmy perch (Nannatherina balstoni)) are identified during the monitoring program, the Licensee must notify DER within 7 days so this information can be forwarded to the Department of Parks and Wildlife. This requirement is incorporated into condition 5.3.1.

#### 1.3 IR3

IR3 required a plan and then installation of a flowmeter or equivalent to measure discharges from Norilup Dam downstream to Norilup Brook. The plan was submitted on 22 September 2016 (TLA 2016c). The Licensee will install a continuous monitoring depth gauge in Norilup Dam as close as reasonably practicable to the spillway and then connect this probe to a remote terminal to collect data on the depths in the Dam. Together with a still water staff gauge the data from the probe will provide flowrates from the dam within an approximate 10% accuracy (this has been clarified following comment from the Licensee (TLA 2017c). The probe will be installed in the summer of 2016-17. Condition 3.4.4 has been added to the Licence to require monitoring of discharges from Norilup Dam downstream to Norilup Brook.

#### 1.4 IR4

IR4 required a plan for capturing and/or reducing overflows of the Lithium Technical Grade Raw Water Tank to be developed and implemented. IR4 was submitted on 1 September 2016 with a follow-up submitted 20 October 2016, stating that changes had been made to the process level control on the Lithium Technical Grade Raw

Licence: L4247/1991/13 File No: 2012/007164

Water Tank to reduce the risk of overflows and that the Data Historian software to record overflows from the tank had been installed (TLA 2016b; TLA 2016e). Recording of overflows is already required by Condition 3.3.1, so no further amendments to the licence are required.

#### 1.5 IR5

IR5 required a plan to implement works to improve the water quality of discharges to Norilup Dam and/or isolate contaminated process water flows from clean stormwater. Overland conveying of process water and tailings seepage was required to be replaced with bunded piping or equivalent.

A submission for IR5 was received 21 November 2016 (TLA 2016i). The plan submitted included a table of controls to address:

- Discharge management;
- Isolation and containment (of contaminated water (tailings seepage) and process water flows);
- Water conveying upgrades; and
- Storage and emergency overflows.

The schedule details the actions to be adopted out to end 2020. The associated monitoring program to assess key parameters and milestones has also been developed in addition to contingency measures in the event of the proposed controls not proving effective.

The Licensee's proposed improvement program includes a provision for managed discharges from Cowan Brook Dam to Norilup Dam during winter, with the discharge (as shown by point 1 and discharge route in orange in Figure 1 following) diluted by flows from the upstream Spring Gully to Norilup Dam (shown in blue as point 4) to reduce contaminant concentrations in Norilup Dam (point 3).

The regulatory controls arising from IR5 are not considered further here and will be addressed as part of DER's forthcoming assessment of the Licensee's application for a further Licence amendment to increase the production capacity of the Chemical Plant.

Licence: L4247/1991/13 File No: 2012/007164

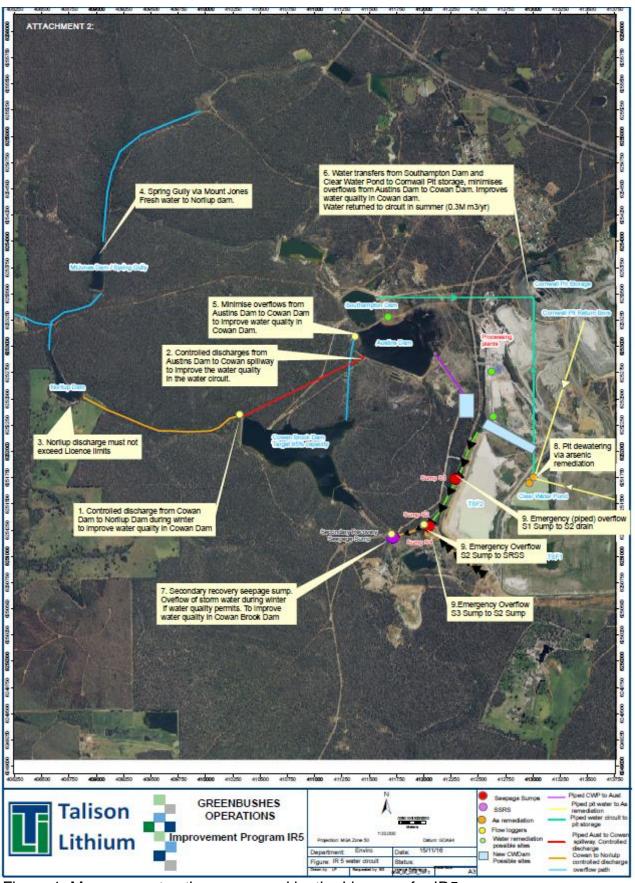


Figure 1: Management actions proposed by the Licensee for IR5

Licence: L4247/1991/13 File No: 2012/007164 Template: 1.3

late: 1.3

5

#### 1.6 IR6

A submission for IR6 was received 2 March 2017, during the period between issue of the draft Amendment Notice 1 on 23 December 2016 and the final version of this Amendment Notice (TLA 2017b). IR6 required monitoring of water quality of the wetland upstream of Southampton Dam to Swenkies Dam for the period December 2016 – February 2017. An estimate of seepage flows from Southampton Dam to Swenkies Dam was also required, with a map showing the affected area. This requirement has been met and consequently the requirement has been removed from the Licence. Assessment of the submission is currently in progress and any resulting regulatory controls (if required) will be incorporated into the next amendment of the Licence, as part of the response to the application received from the Licensee on 15 December 2016.

#### 1.7 IR7

Reporting of monthly surface water quality in Swenkies Dam and Mt Jones Dam for the six month period July 2016 – December 2016 was required by IR7. This requirement has been met and consequently the requirement has been removed from the Licence (refer documents TLA 2016a, TLA 2016b, TLA 2016d, TLA 2016e, TLA 2016j, TLA 2016l). Assessment of the data is currently in progress and any resulting regulatory controls (if required) will be incorporated into the next amendment of the Licence, as part of the response to the application received from the Licensee on 15 December 2016.

Licence: L4247/1991/13 File No: 2012/007164

## 1.8 Changes to Conditions 5.2.1 and 5.2.3

Advice received from the Department of Health during the consultation period for the Licence amendment of 15 July 2016 stated that the Department of Health required immediate notification of any ambient water quality results at Norilup Dam that were above Australian Drinking Water Guidelines criteria (DoH 2016). In order to give better effect to this requirement it was determined that the ambient surface water quality monitoring required by Table 3.4.2 of condition 3.4.1 should be changed to a quarterly submission instead of annually. DER notes the submission made by the Licensee on 5 December 2016, requesting no change to reporting periods for condition 3.4.1 (TLA 2016k). DER considers, however that the notification requirement for the Department of Health remains active.

DER also considers that timelier reporting of this data and data for ambient groundwater quality will allow appropriate regulatory responses to be taken.

The data from the new condition 3.4.4 requiring monitoring of flows from Norilup Dam to Norilup Brook (previously to be implemented as part of IR3) will also be required to be submitted quarterly. DER notes that the Licensee, in comments received 18 April 2017 has questioned the need for quarterly reporting on monitoring (TLA 2017c). DER maintains that the quarterly reporting frequency is necessary and reasonable in the context of allowing more timely responses to monitoring data as it is gathered.

### 1.9 Change to Condition 5.3.1

Comments from the Department of Parks and Wildlife on the draft Amendment Notice, dated 3 March 2017, requested that that Department be notified in the event that any threatened aquatic fauna (as listed under the *Wildlife Conservation Act 1950*) are identified as part of the ecological monitoring program (DPaW 2017). In order to give effect to this request, DER has amended condition 5.3.1 to require the Licensee to notify DER within 7 days of such event occurring.

## 1.10 DER Administrative Changes

DER has made changes to the process for reporting Annual Audit Compliance Reports. The template is now available to download from the DER website: der.wa.gov.au. Accordingly the template that was in Schedule 2 of the Licence has been removed. Minor changes to condition 5.1.2 and the definition of terms in condition 5.1.2 have been made.

Licence: L4247/1991/13 File No: 2012/007164

**Amendment History** 

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 (DPaW 2017). DER administrative change made to condition 5.1.2 following publication of new template for AACRs.

#### **Amendment**

- 1. Condition 1.3.7 of the Licence is amended by the deletion of the text shown in strikethrough and the insertion of the text in red underline below:
- 1.3.7 Following completion of works as listed in condition 1.3.6, no-overflows from the TSF 2 sump 02 and 03 (denoted as S2 and S3 in Figure 2) via the SRSS to Cowan Brook Dam are only permitted as a result of power failures or extreme rainfall events (an event having rainfall equivalent to a 1% annual exceedance probability (AEP) over a period of at least 3 hours as defined by the Bureau of Meteorology's 2016 Rainfall IFD (Intensity- Frequency-Duration) System). Portable pumping must be installed within 24 hours of any such outage at S2 or S3 to return seepage to the water circuit. The downstream Secondary Recovery Seepage Sump (SRSS) pump is not allowed to be bypassed.
- 2. Condition 4.1.1 of the Licence is amended by the deletion of the condition 4.1.1 as shown in strikethrough below:
- 4.1.1 The Licensee shall complete the improvements in Table 4.1.1 by the date of completion in Table 4.1.1.

<b>Improvement</b>	Improvement	Date of
<del>reference</del>		<del>completion</del>
<del>IR1</del>	Develop, submit to the CEO and implement an emergency response plan that addresses overflows from TSF2 seepage sump 02. The plan shall include a timeframe to complete works so as to provide either emergency containment, and/or additional redundancy in the form of a back up pumping system or equivalent to reduce the impact of overflows from pump failure at sump 02.	<del>Plan by</del> <del>1/11/16</del>
<del>IR2</del>	Develop an annual ecological assessment program for the receiving environment downstream of the Premises, including Norilup Brook. The program must include assessment of sites	<del>1/11/16</del>

	upstream and downstream of Norilup Dam where the following parameters are assessed: water quality, flows (discharges from Cowan Brook Dam and flows within the watercourse itself), metal concentrations in sediments, macroinvertebrate diversity and abundance and assessment of aquatic faunadiversity and abundance. An assessment of bioaccumulation of contaminants must be completed annually as a minimum.  The program must provide an assessment of impact due to the discharge.  The Licensee shall consult with the Department of Water and	
	from Cowan Brook Dam and flows within the watercourse- itself), metal concentrations in sediments, macroinvertebrate- diversity and abundance and assessment of aquatic fauna- diversity and abundance. An assessment of bioaccumulation of contaminants must be completed annually as a minimum.  The program must provide an assessment of impact due to the discharge.	
	itself), metal concentrations in sediments, macroinvertebrate diversity and abundance and assessment of aquatic fauna diversity and abundance. An assessment of bioaccumulation of contaminants must be completed annually as a minimum.  The program must provide an assessment of impact due to the discharge.	
	diversity and abundance and assessment of aquatic fauna diversity and abundance. An assessment of bioaccumulation of contaminants must be completed annually as a minimum.  The program must provide an assessment of impact due to the discharge.	
	diversity and abundance and assessment of aquatic fauna diversity and abundance. An assessment of bioaccumulation of contaminants must be completed annually as a minimum.  The program must provide an assessment of impact due to the discharge.	
	diversity and abundance. An assessment of bioaccumulation of contaminants must be completed annually as a minimum.  The program must provide an assessment of impact due to the discharge.	
	contaminants must be completed annually as a minimum.  The program must provide an assessment of impact due to the discharge.	
	The program must provide an assessment of impact due to the discharge.	
	discharge.	
	The Licensee shall consult with the Department of Water and	
IDO	the Department of Parks and Wildlife to develop the scope for the ecological assessment prior to implementation. The scope shall then be submitted to the CEO.	
	The Licensee shall install a flowmeter or equivalent to measure discharges from Norilup Dam downstream to Norilup Brook.	<del>Plan by</del> <del>30/09/16</del>
		Flowmeter to
		be installed in
		accord with
		<del>plan</del>
IR4	Develop and submit a plan to capture and/or reduce overflows	Plan by
	from the Lithium TG Raw Water Tank such that the overflow is not released to the siltation trap.	01/09/16
	,	Remedial
	The plan must be implemented in accord with a timeframe	works to be
	agreed to by the Licensee and CEO.	completed in
	agreed to by the Electrices and SEC	accord with
		plan
IR5	Provide a scope and schedule to the CEO for implementation	Plan by
	•	1/12/2016
	of works to improve the water quality of discharge to Norilup	<del>1/12/2010</del>
	Dam and/or isolate the contaminated process water flows	14/
	(including tailings seepage) from clean stormwater so as to	Works
	meet the ambient surface water quality limits (as specified in	completed by
	Table 3.4.2 of condition 3.4.1).	<del>2021</del>
	The works must also replace the current system of conveying	
	tailings seepage overflows from TSF2 and the Clear Water	
	Pond and process water overflows from the Lithium Processing Plant in open channels or drains across the Premises with	
	<del>bunded pipelines or equivalent.</del>	
	The need for provision of additional storage capacity within the	
	Premises for emergency overflows must be evaluated and included in the scope.	
	Sample water quality for pH, TDS, Lithium, arsenic, cadmium,	<del>1/04/2017</del>
	copper, manganese, nickel, uranium and thorium in receiving	• . •
	north west wetland for seepage from Southampton Dam,	
	monthly over a consecutive three month period from December	
	- February. Provide results to the CEO. In the event of	
	adverse results, preliminary contingency management plans	
	must also be submitted.	
	Provide an estimate of the size of the wetland in hectares,	
	contribution of seepage flows from Southhampton Dam in-	
	average m³/day and as a total percentage of inflows to the	
	wetland. Provide a map showing the wetland's location with regard to the Premises boundary.	
	The Licensee shall monitor ambient surface water quality at	Monthly from
	Swenkies and Mt Jones Reservoir surrounding the Premises	date of

monthly for a consecutive six month period from date of licence	amendment
amendment. The initial month's results shall be immediately	
forwarded to the CEO on receipt with the following results to be	
submitted on a monthly basis until conclusion of the six	
monthly period.	

- 3. The Licence is amended by the insertion of the following condition 3.4.3:
- 3.4.3 Each Spring the Licensee shall complete an annual ecological assessment of 4 sites upstream (two of which are in Cowan Brook) and 6 sites downstream of the Norilup Dam. The annual assessment shall evaluate:
  - Water quality at each sample site. Analysis of arsenic, calcium, cadmium, cobalt, copper, iron, lead, lithium, magnesium, manganese, nickel, phosphate, potassium, sulfate, sodium, thorium, uranium and zinc (soluble and total metal concentrations) in each sample. Analysed at a NATA registered laboratory;
  - 5 replicate sediment samples at each site. Analysis for total and soluble metals/ metalloid concentrations in sediments at a NATA registered laboratory;
  - Macroinvertebrate diversity and abundance sampled over a 10 metre distance, using a sweep method where permitted;
  - Aquatic fauna diversity and abundance, sampled using 5 baited box traps per site; and
  - From 2017 bioaccumulation of contaminants including arsenic, calcium, cadmium, chromium, cobalt, copper, iron, lead, lithium, magnesium, manganese, nickel, potassium, sodium and zinc as a minimum, analysed in the whole body of sampled fish/crayfish. Samples to include major organs in addition to flesh. Where any threatened aquatic fauna (as defined by the Wildlife Conservation Act 1950) are identified during the course of sampling, the Licensee shall notify the CEO within 7 days.
- 4. The Licence is amended by the insertion of the following condition 3.4.4:
- 3.4.4 The Licensee shall undertake the monitoring in Table 3.4.4 according to the specifications in that table.

Table 3.4.4: Ambient surface water flows					
Monitoring point reference	Process description	Parameter	Units	Frequency	Method
Norilup Dam	Discharge from Norilup Dam to downstream to Norilup Brook	Flow	m³	Each event	Continuous monitoring depth gauge at Norilup Dam spillway to collect continuous data

# 5. Table 5.2.1 of condition of 5.2.1 of the Licence is amended by the deletion of the text shown in strikethrough and the insertion of the text in red underline below:

Table 5.2.1: Annual	Environmental Report	
Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
-	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 production throughputs for premises categories	None specified
<del>2.2.3</del>	Water quality of surface water discharges	None specified
3.2.1 3.3.1 3.4.3	Summary of surface water flow trends for the reporting period	None specified
<u>Table</u> 3.4.1	Monitoring of ambient air quality, surface water quality,	None specified

Table 3.4.2	and groundwater quality.	
Table 3.4.3	Summary of surface water quality and groundwater	
	quality trends for the reporting period	
5.1.2	Compliance	Annual Audit
		Compliance Report
		(AACR)
5.1.3	Complaints summary	None specified

Note 1: Forms are in Schedule 2

6. Table 5.2.2 of condition of 5.2.3 of the Licence is amended by the deletion of the text shown in strikethrough and the insertion of the text in red underline below:

Table 5.2.2: Non-an	Table 5.2.2: Non-annual reporting requirements					
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form <sup>1</sup>		
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEO's request	As received by the Licensee from third parties		
3.2.1 and 3.3.1	Surface water discharges and process monitoring	Quarterly	Within 30 days	None specified		
<u>Table 3.4.2</u>	Ambient surface water quality	<u>Quarterly</u>	Within 30 days	None specified		
<u>Table 3.4.3</u>	Ambient groundwater quality,	<u>Quarterly</u>	Within 30 days	None specified		
<u>3.4.4</u>	Norilup Dam downstream flows	<u>Quarterly</u>	Within 30 days	None specified		

Note 1: Forms are in Schedule 2

7. Table 5.3.1 of condition 5.3.1 of the Licence is amended by the insertion of the text in red underline below:

Table 5.3.1:	Table 5.3.1: Notification requirements				
Condition or table (if relevant)	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>		
1.3.3	Issue of new versions of the Surface Water Management Plan	Within 30 days of issue of the new version of the Surface Water Management Plan	None specified		
1.3.7	Secondary Recovery Seepage Sump overflow not due to power outage or extreme rainfall event	Part A: As soon as practicable but no later than 5pm of the next usual working day.  Part B: As soon as practicable	<u>N1</u>		
2.1.1	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	N1		

3.1.5	Calibration report	As soon as practicable.	None specified
3.4.3	Identification of any threatened fauna species as listed under the Wildlife Conservation Act 1950.	Within 7 days of identification.	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act Note 2: Forms are in Schedule 2

- 8. The Licence is amended by the removal of the Annual Audit Compliance Report template in Schedule 2.
- 9. Condition 5.1.2 of the Licence is amended by the deletion of the text shown in strikethrough below and the insertion of the red text shown in underline below
- 5.1.2 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- 5.1.2 The Licensee must submit to the CEO an Annual Audit Compliance Report by 30

  September in each year indicating the extent to which the Licensee has complied with the conditions in this licence for the Annual Period.
- 10. The Licence is amended by the insertion of the definitions below:

'Annual Audit Compliance Report' means a report in a format approved by the CEO as presented by the Licensee or as specified by the CEO from time to time and published on the Department's website;

**'Extreme rainfall event'** means an event having rainfall equivalent to a 1% annual exceedance probability (AEP) over a period of at least 3 hours as defined by the Bureau of Meteorology's 2016 Rainfall IFD (Intensity—Frequency—Duration) System;

Licence: L4247/1991/13 File No: 2012/007164

# **Appendix 1: Key Documents/References**

	Document Title	In text ref	Availability
1	DER (2015) Guidance Statement: Regulatory Principles.		https://www.der.wa.go
2	DER (2015) Guidance Statement: Setting conditions		<u>v.au</u>
3	DER (2016) Guidance Statement: Licence duration		1
4	DER (2016) Guidance Statement: Licensing and works approvals		
5	DER (2016) Guidance Statement: Risk Assessments		
6	Email from Nic Woolfrey, Manager Environmental Management Branch DPaW to Tim Gentle, Manager Licensing DER, including attachment 'Document Review Comment Sheet' dated 11 May 2016	DPaW 2016	DER document records A11081896, A1101906
7	Letter from Jim Dodds, Director Environmental Health Directorate, Department of Health to Tim Gentle, Manager Licensing DER dated 18 May 2016	DoH 2016	DER document record A1103380
8	Letter from Talison Lithium Australia (TLA) to DER, L4247/1991/13 – Improvement Condition IR7 (July monitoring data), dated 17 August 2016	TLA 2016a	DER document record A1154571
9	Letter from TLA to DER, <u>Improvement conditions IR4 and IR7</u> (IR4 submission and IR7 August monitoring data), dated 1 September 2016	TLA 2016b	DER document record A1160174
10	Letter from TLA to DER, <u>Improvement condition IR3</u> (submission), dated 22 September 2016	TLA 2016c	DER document record A1169311
11	Letter from TLA to DER <u>L4247/1991/13- Improvement</u> <u>Condition IR7</u> (September monitoring data), dated 29 September 2016	TLA 2016d	DER document record A1172918
12	Letter from TLA to DER <u>L4247/1991/13- Quarterly Report</u> and Improvement Conditions IR4 & IR7 (submission and October monitoring data), dated 20 October 2016	TLA 2016e	DER document record A1185092
13	Letter from TLA to DER, Improvement Condition IR1 (submission), dated 27 October 2016	TLA 2016f	DER document record A1187007
14	Letter from TLA to DER, <u>Improvement Condition IR2</u> (submission), dated 14 October 2016, received 31 October 2016	TLA 2016g	DER document record A1188314
15	Letter from TLA to DER, Improvement Condition IR1 (further information), dated 18 November 2016	TLA 2016h	DER document record A1327808
16	Letter from TLA to DER, Improvement Condition IR5 (submission), dated 21 November 2016	TLA 2016i	DER document record A1328782
17	Letter from TLA to DER, <u>L4247/1991/13 – Improvement</u> <u>Condition IR7</u> (November monitoring data), dated 29 November 2016	TLA 2016j	DER document record A1333427
18	Letter from TLA to DER, <u>Response to DER letter dated 22</u> <u>November 2016</u> (proposed alteration to reporting frequency for condition 3.4.1), dated 5 December 2016	TLA 2016k	DER document record A1337917
19	Bureau of Meteorology (2016) 2016 Rainfall Intensity – Frequency –Duration (IFD) System Data for Greenbushes WA:  • 3 hour 1% AEP = 58.2mm  • 6 hour 1% AEP = 76.1mm  • 12 hour 1% AEP = 99.5 mm  • 24 hour 1% AEP = 125.5 mm  • 48 hour 1% AEP = 148.1mm  • 72 hour 1% AEP = 158.8 mm		http://www.bom.gov.au /water/designRainfalls/ revised- ifd/?coordinate_type=d ms&latdeg=33&latmin =50&latsec=49&londe g=116&lonmin=3&lons ec=29&sdmin=true&sd hr=true&sdday=true&u ser_label=Greenbushe s+WA&year=2016
20	Letter from TLA to DER <u>L4247/1991/13- Improvement</u> Condition IR7 (December monitoring data), dated 20	TLA 2016I	DER document number A1347199

	December 2016		
21	Letter from TLA to DER, Section 59(B) Of the Environmental Protection Act 1986 – Notice of Proposed Amendment to Licence L4247/1991/13, dated 5 January 2017	TLA 2017a	DER document record: A13554002
22	Email from Dr Tim Storer, A/ Branch Manager Water Science, Department of Water to Louise Lavery, Senior Licensing Officer DER, dated 27 February 2017	DoW 2017	DER document record: A1390667
23	Email from Daniel Coffey, Area Manager South, Environmental Management Branch, Department of Parks and Wildlife to Tim Gentle, Manager Licensing DER, including attachment 'Document Review Comment Sheet' dated 3 March 2017, email dated 8 March 2017	DPaW 2017	DER document record: A1390661
24	Letter from TLA to DER, <u>L4247/1991/13 – Response to</u> queries on Oct-Dec 2016 Quarterly Report & Completion of <u>Improvement Program Condition IR6</u> , dated 1 March 2017	TLA 2017b	DER document record: A1386471
25	Letter from TLA to DER, <u>L4247/1991/13 – Response to</u> <u>Licence Amendment Notice 6/4/17</u> , dated 18 April 2017	TLA 2017c	DER document record: A1424280

Licence: L4247/1991/13 File No: 2012/007164 Template: 1.3