



Annual Audit Compliance Report Form

Environmental Protection Act 1986, Part V Division 3

Once completed, please submit this form either via email to info@dwer.wa.gov.au, or to the below postal address:

Department of Water and Environmental Regulation
Locked Bag 10
Joondalup DC WA 6919

Section A – Licence details

Licence number:	L8830/2014/2	Licence file number:	DER2014/001293
Licence holder name:	Lithco No.2. Pty Ltd		
Trading as:	Lithco No.2		
ACN:	612 726 922		
Registered business address:	Level 7, 20 Parkland Road, Osborne Park WA 6017		
Reporting period:	01 / 04 / 2022 to 31 / 03 / 2023		

Section B – Statement of compliance with licence conditions

Did you comply with all of your licence conditions during the reporting period?
(please tick the appropriate box)

- ☐ Yes – please complete:
- section C;
 - section D (if required); and
 - sign the declaration in Section F.
- ☒ No – please complete:
- section C;
 - section D (if required);
 - section E; and
 - sign the declaration in Section F.

Section C – Statement of actual production

Provide the actual production quantity for this reporting period. Supporting documentation is to be attached.

Prescribed premises category	Actual production quantity
Category 5	1,195,558 tonnes

Section D – Statement of actual Part 2 waste discharge quantity

Provide the actual Part 2 waste discharge quantity for this reporting period. Supporting documentation is to be attached.

Prescribed premises category	Actual Part 2 waste discharge quantity
Category 89	Approximately 170 tonnes

Section E – Details of non-compliance with licence condition			
Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.			
Condition no:	<p>3. The Licence holder shall manage the containment infrastructure in Table 1 such that:</p> <p>(a) top of embankment freeboard of at least 500mm is maintained; and</p> <p>(b) the size of the operational pond on the TSF is kept to below 15% of the total surface area of the TSF cell.</p>	Date(s) of non-compliance:	2022 / 2023
Details of non-compliance:			
<p>Process water pond levels managed by mill operators >500mm freeboard using CITEC system - real-time data, high/low level alarms and pumps on/off as required;</p> <p>Monthly survey of TSF2 conducted, which includes calculation of pond size - 31/03/2023 surveyed pond size was 14,757m² / 130,000m² (TSF2 area) = 11.35%.</p> <p>Issues experienced with tailings density lower than planned (high water content), increasing the normal TSF commissioning issue of maintaining supernatant water <15% of TSF area and away from embankments - until tails beach developed sufficiently.</p> <p>TSF Audit (REC, Oct 2022) stated 'The low densities observed in the TSF and the high groundwater levels from the VWP data indicate that the early deposition of tailings has not been conducted in accordance with the design intent. All efforts shall be made to reduce the extent of water deposited to the tailings dam.'</p> <p>Boreline Pit Extended IPTSF has insufficient storage capacity for the 1 in 100 AEP 72-hour storm event, given that the tailings are level with the embankment crest. (REC 2022)</p>			
What was the actual (or suspected) environmental impact of the non-compliance?			
<p>NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p> <p>Low: Boreline Extended IPTSF has not previously exceeded water storage capacity and overflowed, is included in inspection program (daily, weekly, monthly and following high rainfall events, and the surrounding area is not considered high-risk due to mining disturbance.</p> <p>At the time of the TSF2 audit inspection (REC, 2022), 'the embankment crests and batters showed no visible signs of cracking or deterioration that would affect the integrity of the facility';</p> <p>Figure 12 in AER document shows the Monthly TSF survey at end March 2023. Figure is an aerial view of the TSF with the pond and tailings beach mapped and calculated – pond is 11.35% of TSF surface area (<15%) and being actively pushed away from embankment.</p>			
Cause (or suspected cause) of non-compliance:			
<p>Commissioning challenges with low tailings density;</p> <p>Delays installing meter on supernatant decant pump;</p> <p>Boreline IPTSF not considered High-risk due to high levels of mining disturbance surrounding.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			

Section E – Details of non-compliance with licence condition

- 1.Continue to remove supernatant water from TSF2 using installed pumps, monitor volumes recovered and measure progress via monthly survey of pond size and location. Issue and track corrective actions (via INX) if pond size exceeds licence limit;
- 2.Water Balance system in place now: Figure 13 shows the GDM Water Balance Screen – with full functionality; Figure 14 shows the water balance flow-chart, simplifying the understanding of water movement around site; Figure 15 shows the editable Water Balance chart; and Figure 16 the Site Water Summary of water meters, usage and status across site;
- 3.The administrator of the GDM system is booked to come to site and train all staff on its use and addition of data through the reporting year, so real time monitoring and assessment can occur;
- 4.Operations staff required to manage the Water Balance and ensure they complete the Training Program in the system and are competent in its operation;
5. Undertake recycling of waste water onsite (approvals process underway) to further reduce water inflow to the TSF;
- 6.Conduct risk assessment re. freeboard at Boreline IPTSF and manage in short/medium term as required pending outcome; and
- 7.Implement Closure Designs and potential rehabilitation schedule for Boreline Extended IPTSF.

Was this non-compliance previously reported to DWER?

No – This oversight has now been rectified with the requirement for external reporting of exceedances and non-compliant items, impacts and actions taken triggered by input of monitoring and inspection data, plus incidents to the INX system.

<input type="checkbox"/> Reported to DWER verbally	Date: / /
<input type="checkbox"/> Reported to DWER in writing	Date: 28 /04 /2023

Condition no:	7: For each operational TSF the Licensee 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.	Date(s) of non-compliance:	2022 / 2023
Details of non-compliance:			
<p>A Water Balance has been developed using an on-line management system (Geoscience Data Management – GDM), which incorporates the parameters in Condition 7.</p> <p>The system is functional and effective, however was recently commissioned (late 2022) and relatively complex – site staff are still learning to operate the system to its full capacity and benefit.</p>			
<p>What was the actual (or suspected) environmental impact of the non-compliance?</p> <p>NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
<p>Low – ‘At the time of the audit inspection (REC, 2022), the embankment crests and batters showed no visible signs of cracking or deterioration that would affect the integrity of the facility;</p> <p>Figure 12 in AER document shows the Monthly TSF survey at end March 2023. Figure is an aerial view of the TSF with the pond and tailings beach mapped and calculated – pond is 11.35% of TSF surface area (<15%) and being actively pushed away from embankment.</p>			
Cause (or suspected cause) of non-compliance:			
Commissioning challenges, supply issues and staff shortages			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>1. Water Balance system in place now: Figure 13 shows the GDM Water Balance Screen – with full functionality; Figure 14 shows the water balance flow-chart, simplifying the understanding of water movement around site; Figure 15 shows the editable Water Balance chart; and Figure 16 the Site Water Summary of water meters, usage and status across site;</p> <p>2. The administrator of the GDM system is booked to come to site and train all staff on its use and addition of data through the reporting year, so real time monitoring and assessment can occur;</p> <p>3. Operations staff required to manage the Water Balance and ensure they complete the Training Program in the system and are competent in its operation;</p> <p>3. Recently employed site environmental advisor, to assist implementation of the compliance program, including completion of monthly water balances as required;</p>			

4. Review and update the Groundwater Licence Operating Strategy (GLOS), to include potential addition of further telemetry systems to provide real time data for effective water management; and

5. Lithco manages site compliance via INX, where non-compliant items are entered, corrective actions are issued to the responsible department and tracked to completion. The system is transparent, measures performance in closing out actions and is driven by site leadership, who in-turn are held responsible by Corporate. INX shows trends in environmental performance across risk groups (dust, GW etc) for managing and reporting purposes, ensures the responsible departments understand their commitments and can manage training requirements and competencies.

Was this non-compliance previously reported to DWER?

No – This oversight has now been rectified with the requirement for external reporting of exceedances and non-compliant items, plus impacts and actions taken triggered by input of monitoring and inspection data, plus incidents to the INX system.

☐ Reported to DWER verbally

Date: / /

☐ Reported to DWER in writing

Date: 28 / 03 / 2023

Condition no:	<p>9. The Licence holder shall ensure that all pipelines containing materials are either:</p> <p>(a) equipped with automatic cut-outs in the event of a pipe failure; and/or</p> <p>(b) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.</p>	Date(s) of non-compliance:	2022 / 2023
Details of non-compliance:			
<p>Most pipes are buried or in surface V drains, with traffic crossings provide additional secondary containment, however, some pipes remain outside secondary containment.</p> <p>Pipelines are included in daily inspections, and those that are un-bundled are generally not located where vegetation would be impacted in a spill.</p>			
What was the actual (or suspected) environmental impact of the non-compliance?			
<p>NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
<p>Low – The benign nature of the tails (Klohn Crippen Berger, 2018) reduces potential environmental impact. Also, pipelines not within secondary containment generally not where vegetation would be impacted if a spill.</p>			
Cause (or suspected cause) of non-compliance:			
<p>Due to the extensive development across the site following the administration process a number of tailing and water transfer pipelines were redirected.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>1. Daily inspections of pipeline infrastructure – AER Appendix 3 provides copies of inspection daily, weekly, monthly and quarterly inspection checklists in place, and examples of those undertaken;</p> <p>2. Implement pipeline bunding improvement program across site and track progress to completion in INX - Lithco manages site compliance via INX, where non-compliant items are entered, corrective actions are issued to the responsible department and tracked to completion.</p>			
Was this non-compliance previously reported to DWER?			
<p>No - This oversight has now been rectified with the requirement for external reporting of exceedances and non-compliant items, plus impacts and actions taken triggered by input of monitoring and inspection data, plus incidents to the INX system.</p>			
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Condition no:	Table 6: Volumes of water recovered from the TSF; and Boron, barium, fluoride, lithium, manganese, nickel, thallium, thorium, tin and uranium in tailings ¹	Date(s) of non-compliance:	2022 / 2023
Details of non-compliance:			
<p>Flow meter installed on TSF2 supernatant pump in Jan 2023 – accurate monthly volumes recorded from that point (AER Figure 16); and</p> <p>One round of analysis conducted in April 2022.</p>			
<p>What was the actual (or suspected) environmental impact of the non-compliance?</p> <p>NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
Low			
Cause (or suspected cause) of non-compliance:			
<p>Commissioning challenges, supply issues and staff shortages for monitoring; and</p> <p>The benign nature of the tails identified during environmental studies for the TSF2 approval (Klohn Crippen Berger, 2018) reduces environmental risks and potential impacts.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>1.Flow meter installed on TSF2 supernatant pump in Jan 2023 – accurate monthly volumes recorded from that point (AER Figure 16);</p> <p>2.Conduct analysis of metals in tailings as required, until licence amendment can be sought to adjust condition; and</p> <p>3.Waste characterization works currently underway (Dr Graeme Campbell) will also further assess environmental risk (of tailings) and management parameters required.</p>			
Was this non-compliance previously reported to DWER?			
No - This oversight has now been rectified with the requirement for external reporting of exceedances and non-compliant items, plus impacts and actions taken triggered by input of monitoring and inspection data, plus incidents to the INX system.			
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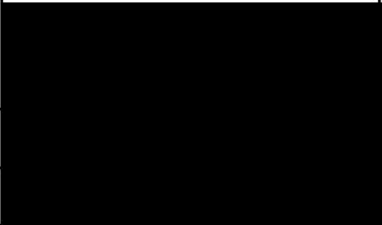
Condition no:	Table 7: Static dust deposition at gauges SDM1, SDM2, SDM3, SDM4 (Schedule 1) and analysis of Total suspended particulate - mg/m2//Monthly	Date(s) of non-compliance:	2022 / 2023
Details of non-compliance:			
Dust monitoring not undertaken during 2022 / 2023 period.			
What was the actual (or suspected) environmental impact of the non-compliance? NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
Low			
Cause (or suspected cause) of non-compliance:			
Static dust monitoring not conducted during period, however, live dust monitors are installed on crushing and processing plant, to assist management of dust for health and safety purposes. Pre-set levels inform of high dust so additional actions can be taken, which also reduces environmental impacts of dust.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
1. Conduct static dust monitoring as required, until licence amendment can be sought to adjust condition as risk to surrounding values/receptors is very low; 2. Utilise live dust monitors on crusher and process plant, investigate exceedances, issue corrective actions as required, and include results in Annual Environmental Reporting; 3. Maintain dust suppression activities around the active minesite.			
Was this non-compliance previously reported to DWER?			
No -This oversight has now been rectified with the requirement for external reporting of exceedances and non-compliant items, plus impacts and actions taken triggered by input of monitoring and inspection data, plus incidents to the INX system.			
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Condition no:	Table 8: Groundwater Monitoring Program	Date(s) of non-compliance:	2022 / 2023
Details of non-compliance:			
<ul style="list-style-type: none"> Monitoring of SWL not conducted quarterly at all bores; Monitoring of pH not conducted quarterly at all bores; Monitoring of dissolved metals not conducted quarterly at all bores; analysis for thallium not included; and Monitoring of radiation parameters was conducted twice during the reporting period (July 2022 & March 2023, however not all specified bores were sampled. 			
What was the actual (or suspected) environmental impact of the non-compliance?			
NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
Believed to be low from previous investigations.			
Cause (or suspected cause) of non-compliance:			
Commissioning challenges and staff shortages			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
1. Develop and implement groundwater monitoring procedure to meet licence requirements, and to include immediate review of results, entering of exceedances into INX, external reporting and issue of corrective actions as required; 2. Review of GLOS underway, to assist compliance with licence conditions, including parameters such as pH and their importance on achieving environmental outcomes; 3. Replace unserviceable monitoring bores; and 4. Recently employed site environmental advisor, to assist implementation of the site compliance program, including completion / management of groundwater monitoring.			
Was this non-compliance previously reported to DWER?			
No - This oversight has now been rectified with the requirement for external reporting of exceedances and non-compliant items, plus impacts and actions taken triggered by input of monitoring and inspection data, plus incidents to the INX system.			
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Section F – Declaration

I / We declare that the information in this Annual Audit Compliance Report is true and correct and is not false or misleading in a material particular¹.

I / We consent to the Annual Audit Compliance Report being published on the Department of Water and Environmental Regulation's (DWER) website.

Signature ² :		Signature:	
Name: (printed)		Name: (printed)	
Position:		Position:	
Date:		28 April 2023	Date:
Seal (if signing under seal):			

¹ It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular.

² AACRs can only be signed by the licence holder or an authorised person with the legal authority to sign on behalf of the licence holder.