pure
transforming the circular economy

Chunxing Corporation Pty Ltd

Used Lead Acid Battery Community Liaison Committee Meeting
20-August-25
7.00pm
Online - MS Teams

Minutes

Topic	Host
Welcome Committee Members and Visitors	Philip Reichert
Apologies Philip Reichert (Chair) passed on his apologies for a break of CLC meeting in June due to business requirements and availability of members,	Philip Reichert
Approval of Minutes from Last Meeting Approved by Lorraine Bull (Latrobe Valley Sustainability Group) and Dr Lakshman Jayaweera (Pure Chunxing).	Philip Reichert
Site Progress Report **Rachel Irvine-Marshall (Pure):** Since our last meeting, the focus at site has been on managing stormwater over winter This has been going well, particularly with the two ponds on site where water is treated before being discharged to trade waste. We've maintained good freeboard across both ponds, with no issues managing stormwater at the site. As we move into spring, the focus will shift towards weed management and preparations for the summer season.	Rachel Irvine-Marshall
Update on EPA Submission **Dr Karlis Baltpurvins (Pure CEO):** We are in the process of preparing responses to several outstanding matters, which we hope will be the final stage of the submissions. There are several topics we're addressing, and we expect to have these compiled and completed over the coming months. A couple of notable aspects include the requirement for an accredited auditor to review the submission, which is quite involved, along with some additional design considerations. Overall, the process is progressing well, and we anticipate being able to resubmit the outstanding requirements in the coming months.	Dr Karlis Baltpurvins

Question Lorraine Bull (Latrobe Valley Sustainability Group)- I'm not sure where I read it, possibly in the submissions, but it mentioned that the site boundaries needed to be monitored. Are the two points we've proposed adequate for this? I'm referring specifically to emissions from the site. **Response Dr Karlis Baltpurvins (Pure CEO):** Lorraine. I believe so, but I would need to refer this to Rachel or others to provide a more accurate response regarding the environmental monitoring. In terms of setting up the perimeter monitoring, I need to confirm the location and number of those points before I can provide you with an answer. I can't provide that detail off the top of my head, sorry. **Response Rachel Irvine-Marshall (Pure):** I'll speak with Geoff Latimer, our environmental consultant, to verify that information. I'll then come back to the CLC with a response, and I can do that before the next meeting. **Response Stacey Clark (VIC EPA):** Just to clarify, VIC EPA haven't required any site monitoring under the development licence. There is no condition s at this stage. I just wanted to make that clear for everyone that it's not something VIC EPA requested.	

Amendments to the Development Licence Introduction: Wendy has been the assessing officer for this project since its beginning, right up to the present point. Her work has been done together with all the input from others in the VIC EPA, including the science group, and external consultants. The main reason for the amendments to the Development Licence (copy attached) is to incorporate the requirements from amendments to the Environmental Protection Act since 2020 and to incorporate minor process modifications. These minor process changes were proposed during detailed design and have been assessed and confirmed as acceptable. Minor design changes are common in the detailed design stage. Importantly, these minor process changes do not affect the environmental performance specifications in any way. Summary of changes discussed: 1. The older license format does not include an expiry date. In this amendment, VIC EPA have added an expiry date of 30 June 2030. This covers the detailed design, construction, and commissioning phases, but excludes the operation phase. While this may seem like a long period, it applies to the design, construction, and commissioning stages, which makes the timeline quite tight. 2. Previously the scheduled category for the activity was classified as AO2. However, due to changes in the Act, this type of activity is now considered under AO1. Accordingly, we have updated the schedule category in line with the new	Wendy Tao (VIC EPA)

requirements.

OFFICIAL

EPA VICTORIA

Development licence

Environment Protection Act 2017

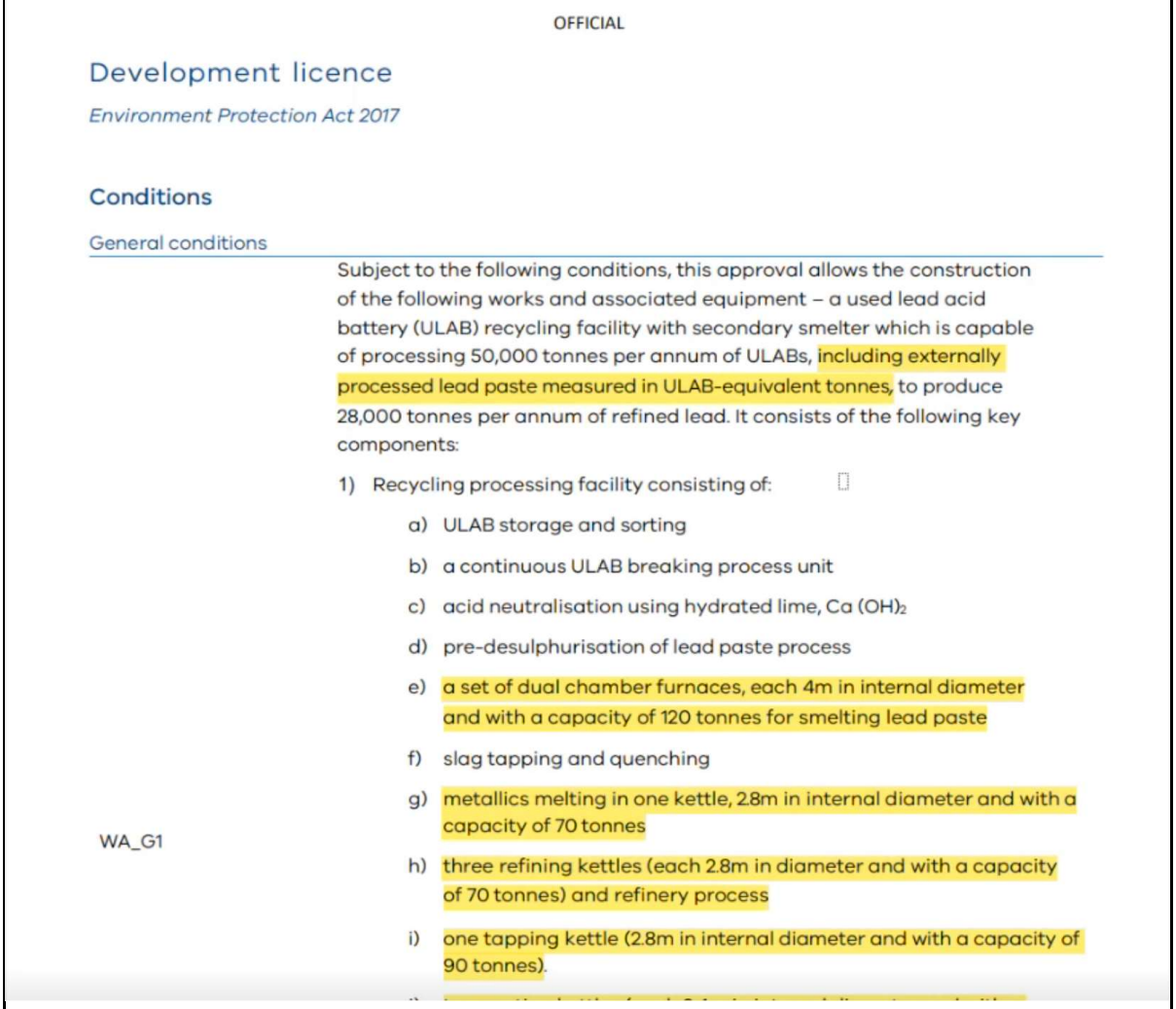
Licence number	DL000232330
Issue date	31/08/2020
Last amended	25/06/2025
Expiry date	30/06/2030
Licence holder	Chunxing Corporation Pty Ltd
ACN	632 456 538
Activity site(s)	Crown Allotment 2047, Fourth Road, Hazelwood North, VIC 3840
Prescribed permission activities	A01 Reportable priority waste management and I02 Metal melting

Issued on 31 August 2020 under section 19B of the *Environment Protection Act 1970* and continued under section 471 of the *Environment Protection Act 2017* (the Act).

3. Condition WA-G1 relates to the plant's throughput capacity. VIC EPA added wording to allow the acceptance of lead paste from external sources, but this does not change the overall throughput capacity, which remains capped at 28,000 tonnes of refined lead.

4. Point 1 has some minor process modifications adjustments to equipment dimensions, including the furnace, in line with the current detailed design. These updates have been incorporated accordingly.

   Importantly, the air performance specifications and discharge limits remain unchanged from the previous Development Licence Works Approval. Nothing has been altered in this regard. This applies to Discharge Point 1, and also to Discharge Point 2 for fugitive emissions.



OFFICIAL

Development licence

Environment Protection Act 2017

Conditions

General conditions

WA_G1

Subject to the following conditions, this approval allows the construction of the following works and associated equipment – a used lead acid battery (ULAB) recycling facility with secondary smelter which is capable of processing 50,000 tonnes per annum of ULABs, including externally processed lead paste measured in ULAB-equivalent tonnes, to produce 28,000 tonnes per annum of refined lead. It consists of the following key components:

1) Recycling processing facility consisting of:
   a) ULAB storage and sorting
   b) a continuous ULAB breaking process unit
   c) acid neutralisation using hydrated lime, $Ca(OH)_2$
   d) pre-desulphurisation of lead paste process
   e) a set of dual chamber furnaces, each 4m in internal diameter and with a capacity of 120 tonnes for smelting lead paste
   f) slag tapping and quenching
   g) metallics melting in one kettle, 2.8m in internal diameter and with a capacity of 70 tonnes
   h) three refining kettles (each 2.8m in diameter and with a capacity of 70 tonnes) and refinery process
   i) one tapping kettle (2.8m in internal diameter and with a capacity of 90 tonnes).

Question Angus Fraser (ALIVE Inc): I was just wondering about the externally produced processed lead paste, is there anything you can share about that? It sounds quite different from battery recycling.

Comment Dr Karl Baltpurvins (Pure CEO): To clarify, there are essentially two main elements to the battery recycling process.

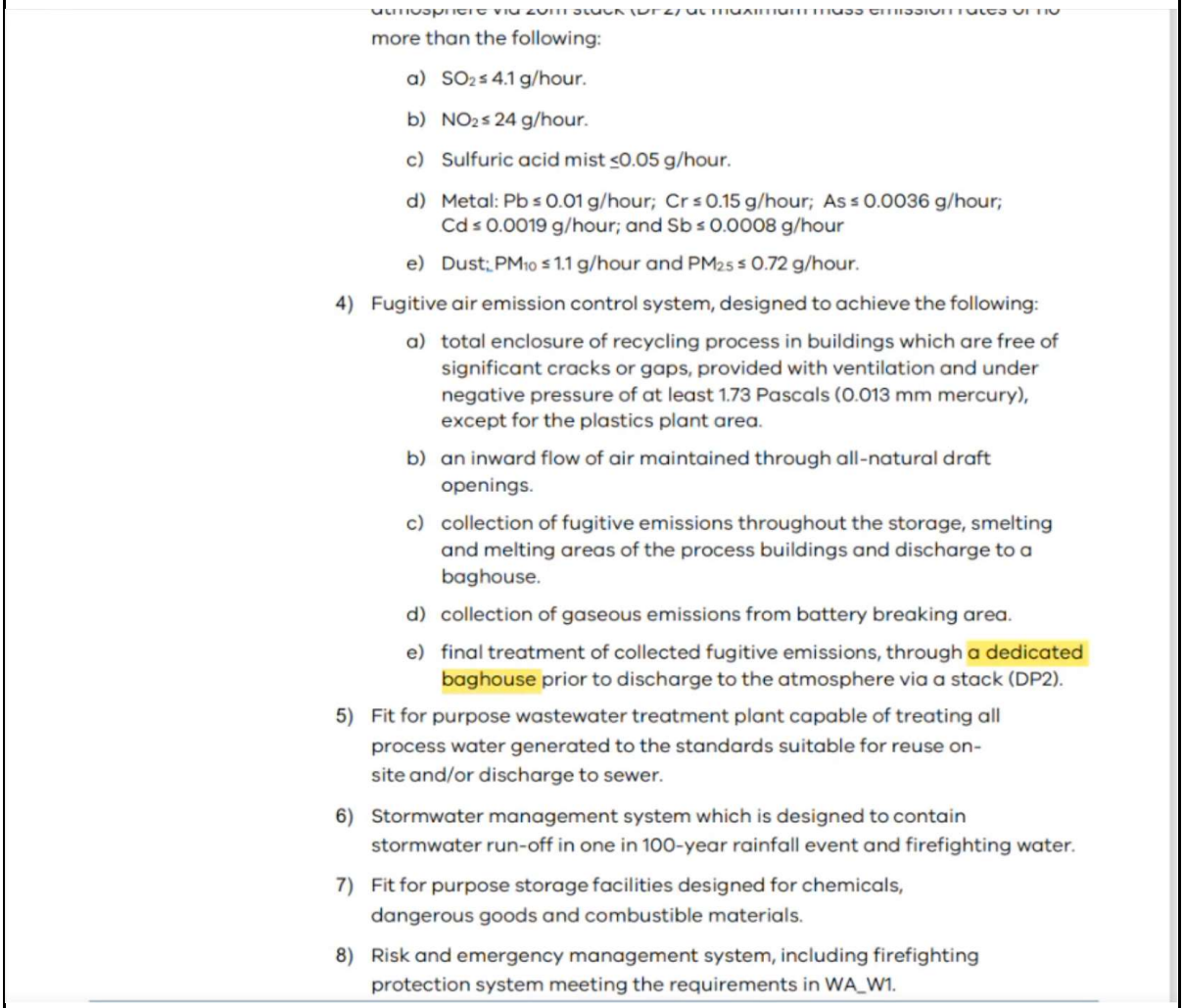
First, the batteries are broken down into their constituent materials. For example, a typical car battery consists of a polypropylene plastic casing, sulfuric acid, lead paste, and lead plates (referred to as lead grid).

Our proposal is to operate the battery breaker on-site, where we would receive whole batteries, break them down, and then feed the lead paste and lead grid into the refinery.

What this change allows is the flexibility to also receive lead paste and lead grid from other external breakers. For instance, if another facility breaks down batteries elsewhere, they could send the paste and lead grid to our site for refining.

To be clear, this does not involve any other types of lead sources from other industries. It is purely about whether the batteries are broken down on our site or at another facility before the materials are delivered.

5. There is a change regarding the fugitive and air emissions control system. Previously Chunxing had proposed using a scrubber. Based on the detailed design, this has changed to a dedicated baghouse. This is considered acceptable and is quite common, given that the nature of the airstream is not wet but essentially dry. The change simply reflects the updated design.



atmosphere via 20m stack (DP 2) at maximum mass emission rates of no more than the following:

a) $SO_2 \leq 4.1$ g/hour.

b) $NO_2 \leq 24$ g/hour.

c) Sulfuric acid mist ≤ 0.05 g/hour.

d) Metal: Pb ≤ 0.01 g/hour; Cr ≤ 0.15 g/hour; As ≤ 0.0036 g/hour; Cd ≤ 0.0019 g/hour; and Sb ≤ 0.0008 g/hour

e) Dust; $PM_{10} \leq 1.1$ g/hour and $PM_{2.5} \leq 0.72$ g/hour.

4) Fugitive air emission control system, designed to achieve the following:

a) total enclosure of recycling process in buildings which are free of significant cracks or gaps, provided with ventilation and under negative pressure of at least 1.73 Pascals (0.013 mm mercury), except for the plastics plant area.

b) an inward flow of air maintained through all-natural draft openings.

c) collection of fugitive emissions throughout the storage, smelting and melting areas of the process buildings and discharge to a baghouse.

d) collection of gaseous emissions from battery breaking area.

e) final treatment of collected fugitive emissions, through a dedicated baghouse prior to discharge to the atmosphere via a stack (DP2).

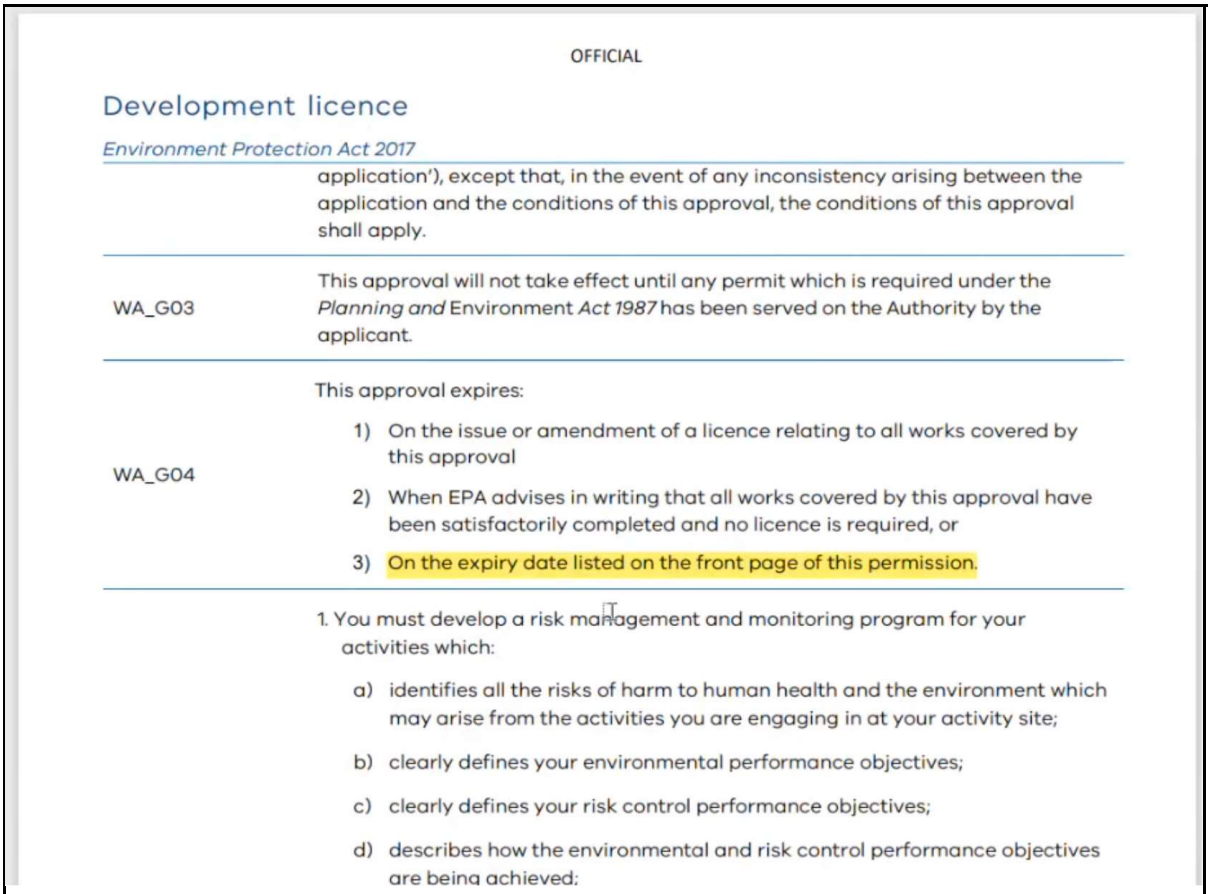
5) Fit for purpose wastewater treatment plant capable of treating all process water generated to the standards suitable for reuse on-site and/or discharge to sewer.

6) Stormwater management system which is designed to contain stormwater run-off in one in 100-year rainfall event and firefighting water.

7) Fit for purpose storage facilities designed for chemicals, dangerous goods and combustible materials.

8) Risk and emergency management system, including firefighting protection system meeting the requirements in WA_W1.

6. Condition WA_G04 is updated to reflect the new expiry date, which is now clearly listed on the front page.



OFFICIAL

Development licence

Environment Protection Act 2017

	application'), except that, in the event of any inconsistency arising between the application and the conditions of this approval, the conditions of this approval shall apply.
WA_G03	This approval will not take effect until any permit which is required under the *Planning and* Environment *Act 1987* has been served on the Authority by the applicant.
WA_G04	This approval expires: 1) On the issue or amendment of a licence relating to all works covered by this approval 2) When EPA advises in writing that all works covered by this approval have been satisfactorily completed and no licence is required, or 3) On the expiry date listed on the front page of this permission.
	1. You must develop a risk management and monitoring program for your activities which: a) identifies all the risks of harm to human health and the environment which may arise from the activities you are engaging in at your activity site; b) clearly defines your environmental performance objectives; c) clearly defines your risk control performance objectives; d) describes how the environmental and risk control performance objectives are being achieved;

7. DL_CO5 is a new General Condition. This is a substantial addition, about half a page in length, and requires the development of a comprehensive risk management and monitoring program. This requirement now applies across all licensed sites, and therefore it has also been included here.

8. DL_CO7 is a new General Condition. This condition requires the provision of a post-commissioning monitoring report. While the older version did request Chunxing to provide such a report before obtaining the operating licence, it was not clearly stated. We have now made this requirement explicit by including it as a standard new condition.

DL_C05	1. You must develop a risk management and monitoring program for your activities which: a) identifies all the risks of harm to human health and the environment which may arise from the activities you are engaging in at your activity site; b) clearly defines your environmental performance objectives; c) clearly defines your risk control performance objectives; d) describes how the environmental and risk control performance objectives are being achieved; e) identifies and describes how you will continue to eliminate or minimise the risks in 1(a) (above) so far as reasonably practicable; and f) describes how the information collated in compliance with this clause, is or will be disseminated, used or otherwise considered by you or any other entity. 2. The risk management and monitoring program must be: a) documented in writing; b) signed by a duly authorised officer of the licensed entity; and c) made available to the Authority on request.
DL_C07	Within 45 days of the completion of the approved activities, you must provide to EPA a written report that summarises the activities undertaken and includes, but not to limited to: (a) operating conditions, including incoming materials' handling volumes; (b) the results of the commissioning monitoring program per condition WA_R1 2); and

9. VIC EPA have also introduced a new, more stringent requirement under works condition WA_W1. This requires that any future submission be reviewed and endorsed by an EPA-appointed Environmental Auditor before it is submitted to the EPA. This adds an extra layer of quality control, ensuring that reports are independently reviewed and verified by an auditor formally appointed by the EPA.

   In terms of which reports require review by the auditor, it applies to all except those highlighted in green. The green items have already been approved in the past and mainly relate to the Construction Management Plan and Community Engagement Plan. Since these were previously approved, they are excluded from this new requirement.

   This is also reflected in the condition wording, with the condition noting the exclusion of sub-conditions 6,10,11,12.

10. In addition, WA_W1, also has minor process description changes. It aligns with the proposed process modifications—for example, in the older version the wording

referred to “one lead bullion tap kettle,” whereas the updated version reflects the revised equipment configuration.

Works conditions

Before commencing construction of the following components of the works, you must provide to EPA the following plans or reports. Those reports, except under sub-conditions 6), 10), 11) and 12), must be endorsed by an EPA-appointed environmental auditor[1] to ensure they meet the condition requirements:

1) Reports of the final detailed process design. The reports, with any accompanying plans and specifications (prepared under section a) through c) of this condition must be endorsed by a suitably qualified person or persons approved by the EPA in writing.

a) The complete process, including:

i. ULAB storage and sorting
ii. a continuous ULAB breaking process
iii. acid neutralisation using hydrated lime, Ca $(OH)_2$
iv. pre-desulphurisation process to achieve < 1.2% sulphur remaining in paste
v. smelting lead paste in a set of dual chamber furnaces

WA_W1

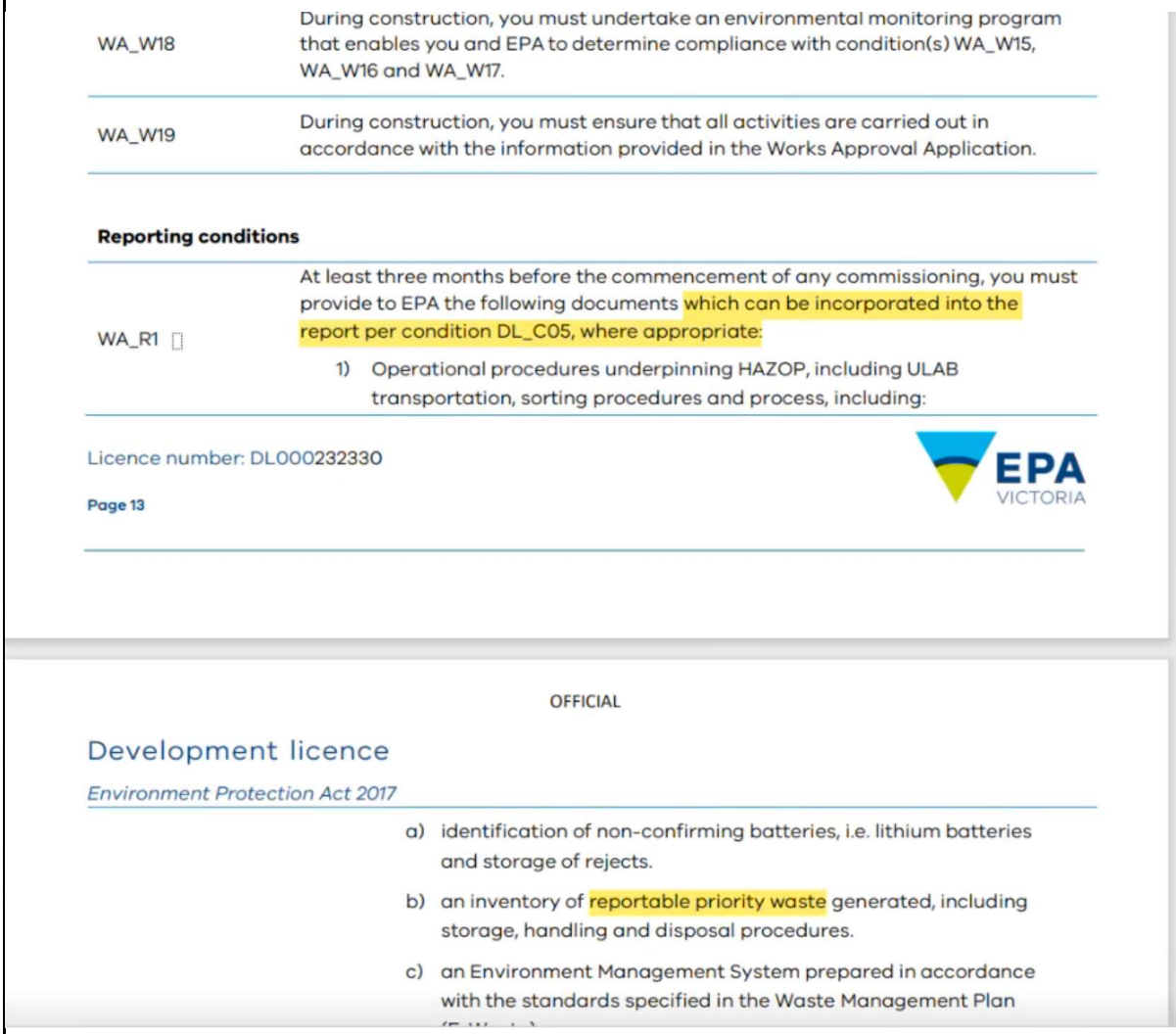
vi. one lead bullion tapping kettle
vii. slag tapping and quenching
viii. metallics melting in one kettle
ix. three refining kettles and refinery process
x. two casting kettles
xi. by-products production
xii. storage and shipment of finished goods and waste
xiii. plastics processing plant.

b) a report of the detailed design of equipment, demonstrating good

11. The reporting condition WA_R1 require Chunxing to provide various types of reports after commissioning. This links to condition DL_CO2, which requires Chunxing to provide an Environmental Risk Management and Monitoring Plan (RMRM&P).

    The condition also references DL_CL05. The intention is to allow the requirements under both conditions to be incorporated into a single document. This provides flexibility, giving the option to consolidate the information rather than duplicating it.

12. There is also a terminology change to use “reportable priority waste”. This has replaced the older term “PIW” under the amendments to the Act.



WA_W18	During construction, you must undertake an environmental monitoring program that enables you and EPA to determine compliance with condition(s) WA_W15, WA_W16 and WA_W17.
WA_W19	During construction, you must ensure that all activities are carried out in accordance with the information provided in the Works Approval Application.

Reporting conditions

WA_R1	At least three months before the commencement of any commissioning, you must provide to EPA the following documents which can be incorporated into the report per condition DL_C05, where appropriate: 1) Operational procedures underpinning HAZOP, including ULAB transportation, sorting procedures and process, including:

a) identification of non-confirming batteries, i.e. lithium batteries and storage of rejects.

b) an inventory of reportable priority waste generated, including storage, handling and disposal procedures.

c) an Environment Management System prepared in accordance with the standards specified in the Waste Management Plan

13. Similarly, the air emission standards are now specified in condition WA_G12. This aligns with the environmental air performance requirements. In the older version, compliance was referenced against separate air quality standards, but these are no longer used, so the condition has been updated accordingly.

14. In line with performance requirements, VIC EPA have also updated the noise condition to reflect the current noise guideline, based on the latest publication.

a) identification of non-confirming batteries, i.e. lithium batteries and storage of rejects.

b) an inventory of reportable priority waste generated, including storage, handling and disposal procedures.

c) an Environment Management System prepared in accordance with the standards specified in the Waste Management Plan (E-Waste).

d) requirements for record keeping of incoming, outgoing, rejected wastes that would include/satisfy the monitoring/auditing requirements of the Waste Management Plan (E-Waste).

2) A detailed commissioning plan, including:

a) confirming effective building sealing and achieving negative pressure specifications.

b) air emissions monitoring plan to demonstrate compliance with the air emission standards specified in condition WA_G12).

c) noise emission measurement to confirm that ULAB activities can meet the noise limits in accordance with EPA publication 1826: *Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues, as amended.*

d) test of the performance of the wastewater treatment plant.

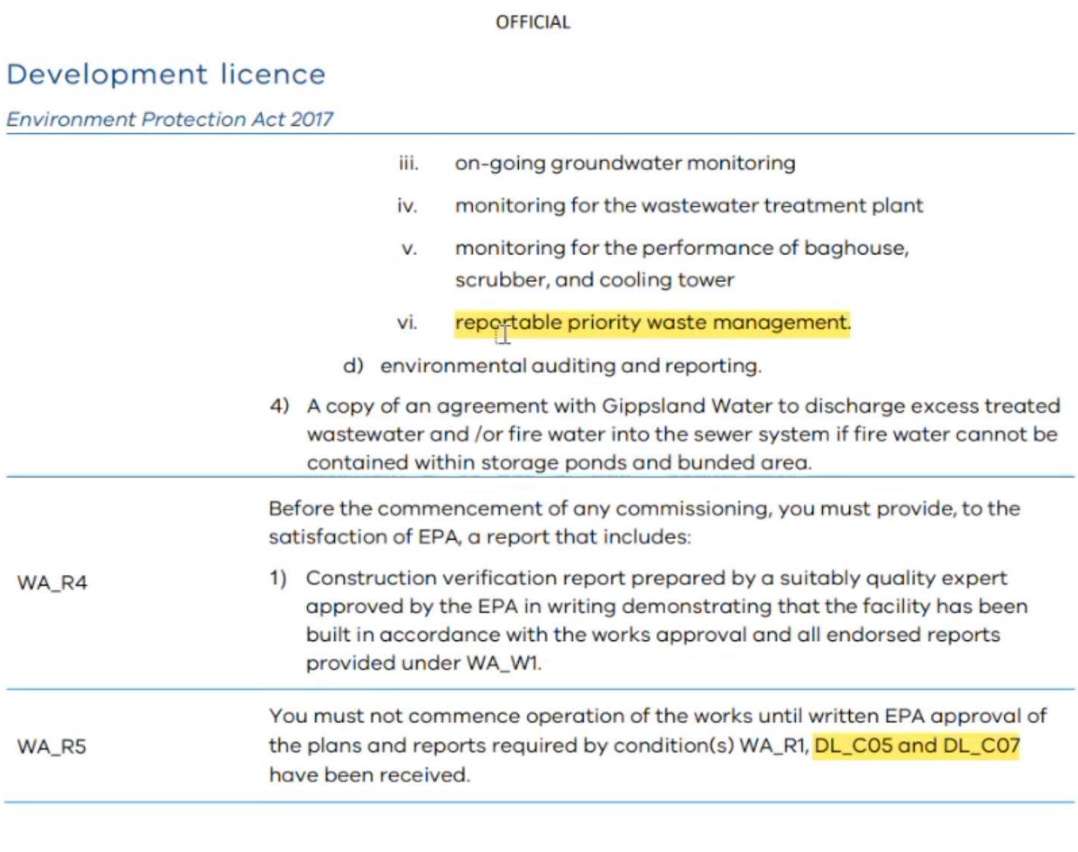
e) testing to confirm waste categorisations for slag, waste refractory materials and plastic separators.

3) An environmental improvement plan (EIP) for managing ongoing operation of the ULAB facility, in accordance with EPA's publication 739 Guidelines for the Preparation of Environment Improvement Plans. The EIP must include, but not be limited to:

a) the plan for on-going Community Liaison Committee (CLC) meetings.

15. The terminology "reportable priority waste management" has been updated accordingly.

16. A new reporting condition related to commencement has also been added. Operations cannot begin until the requirements of WA_R1, DL_CO5, and DL_CO7 are met. These are newly introduced conditions.



OFFICIAL

Development licence

Environment Protection Act 2017

iii. on-going groundwater monitoring

iv. monitoring for the wastewater treatment plant

v. monitoring for the performance of baghouse, scrubber, and cooling tower

vi. reportable priority waste management.

d) environmental auditing and reporting.

4) A copy of an agreement with Gippsland Water to discharge excess treated wastewater and /or fire water into the sewer system if fire water cannot be contained within storage ponds and bunded area.

WA_R4	Before the commencement of any commissioning, you must provide, to the satisfaction of EPA, a report that includes: 1) Construction verification report prepared by a suitably quality expert approved by the EPA in writing demonstrating that the facility has been built in accordance with the works approval and all endorsed reports provided under WA_W1.
WA_R5	You must not commence operation of the works until written EPA approval of the plans and reports required by condition(s) WA_R1, DL_C05 and DL_C07 have been received.

17. Additionally, due to process modifications and the relatively small scale of the plant, the facility may need to receive lead paste from external sources. This adjustment has been included in the updated conditions

Comment Stace Clark (VIC EPA): This is a public document and is available on our website, where you can view or print the plan in greater detail if needed.

Question John Ellingham (community member): What I don't understand is that I received an email from Stacey stating that conditions are being added for risk management and monitoring plans, which are mandatory requirements for an EPA-licensed facility under the Environmental Protection Act 2017. Why are we referring to the 2017 Act when we now have the 2020 Act?

Comment Stace Clark (VIC EPA): The Environment Protection Act 2017 is the current piece of legislation. Although it was drafted in 2017, that remains the official year attached to the Act. The Environment Protection Regulations, however, were introduced in 2020 and 2021, with amendments made to both the Act and the Regulations over time. The year of the Act itself does not change.

Previously, approvals were issued under the Environment Protection Act 1970. We now operate under the Environment Protection Act 2017, which is the legislation currently in

force. This document has therefore been transitioned from the old Works Approval under the 1970 Act to a Development Licence under the 2017 Act. Many of the changes you see are updates to language and conditions to align with the requirements of the new legislation. It's available on the website, and I also included the link in the email I sent around earlier this week. I can email you the exact document directly if you'd prefer.	

Any other questions from the community members for discussion **Question Leigh Markham (Hazelwood North Primary School):** Regarding the EPA Development Approval. You previously mentioned that construction would take approximately two years. Given that we're now approaching the end of winter, do you have an indication of when construction is expected to commence and when it might be completed? **Comment Dr Karl Baltpurvins (Pure CEO):** The starting point for construction depends on a number of factors. To put it simply, the first is obtaining EPA consent, we need to finalise this initial EPA approval. Following that, there are a range of subsequent conditions that must be addressed before construction and production can proceed. Then comes the actual construction of the processing equipment, such as the battery breaker and smelter, which is a major component of the build. In approximate terms, construction of the processing equipment itself will take around 12 months. In addition, there is the balance of plant, such as electrical works, connections, and supporting infrastructure, as well as the civil works for the warehouse. In round figures, that adds roughly another 12 months. Some of these activities can run in parallel, creating some efficiencies. As an estimate, we hope to achieve EPA consent within the next six months. From that point, the overall construction period is expected to be around 24 months. Of course, this is subject to conditions such as weather, and the seasonality of the construction cycle in Victoria will play a role in the actual timeline. **Question John Ellingham (community member):** If 2030 is the cut-off date for the current licence, what would be the latest possible date for EPA approval to still allow the project to be completed on time? **Comment Stace Clark (VIC EPA):** They have until 2030 to submit the required documentation in order to commence construction of the plant. If we take a step back, it's similar to when they originally began building. There's a timeframe within which earthworks must commence on a site before a planning permit expires. It's a similar situation with the development licence. They need to submit all required documentation and obtain approval to begin construction within the timeframe of the development licence. In other words, as long as they submit everything to us and receive approval before the 2030 cut-off date, they can proceed with building the plant. I'm happy to confirm this with Wendy to make sure I've got it exactly right, but I'm confident that's the case. Note: Stacey did clarify this with Wendy. She has acknowledged that she was quoting from the Environment Protection Act 1970 - the old legislation. Please see the clarification below which is correct under the current legislation, the Environment Protection Act 2017.	Philip Reichert

Comment Philip Reichert (Chair): I'm not speaking on behalf of the Council, but based on my understanding of building permits, and not specifically for the lead plant, just from other projects, if a permit's timeframe expires, you can apply for an extension if there are valid mitigating reasons. John (Patrakos), perhaps you could clarify from a building perspective how those dates can be adjusted or extended depending on the application. **Comment John Patrakos (Latrobe City Council):** Planning permits do have expiry dates. Under certain conditions, applicants can apply for extensions. One such condition is that they must begin some earthworks, which helps prevent applicants from simply holding onto permits without taking action. An application for an extension of time is assessed against criteria to guide a decision. **Stacey Clark (VIC EPA) - Clarification provided post-meeting**: After confirming with Wendy Tao, Stacey Clark provided the following clarification. Under the *Environment Protection Act 2017 Act* (the Act) and this Development Licence (DL), all conditions of the DL must be satisfied before the expiry, this includes building of plant and equipment, commissioning and providing the commissioning reports. An extension can be applied for under section 72 of the Act.	
Next Meeting: Agenda Items, please send to Rachel prior to the meeting Wednesday 15 October 2025 - online meeting.	Philip Reichert