

Our ref: Wagga Wagga Lithium-Ion Battery Recycling Facility

Mr Darren Nelson Managing Director Calibre Metals Pty Ltd 30 Mallee Road Springvale NSW 2650

Attention: Ms Brooke Neville, GHD Pty Ltd

12 June 2025

Subject: Request for Additional Information - SSD-67983064

Dear Mr Nelson

I refer to the Department of Planning, Housing and Infrastructure's (the Department) letter on 14 May 2025, which advised that the Department would be providing comments following the exhibition of the Environmental Impact Statement for the proposed Wagga Wagga Lithium-Ion Battery Recycling Facility (SSD-67983064).

The Department notes that the development involves emergent technologies and processes for the recycling of lithium-ion batteries and key considerations for the proposal include fire safety, hazards and risks, air quality, and waste management.

As part of your response to submissions (RtS) report addressing submissions and advice received during exhibition of your application, the Department requests you provide a response to the issues include in **Attachment 1** to this letter.

If you have any questions, please contact Ellen Luu on (02) 8275 1037 or via email at Ellen.Luu@planning.nsw.gov.au.

Yours sincerely,

A/Director

**Industry Assessments** 

Joanna Bakopanos

as delegate for the Planning Secretary

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#### Attachment 1

### Hazards

• The Department is satisfied that the proposed quantities of dangerous goods do not exceed the thresholds outlined in Applying SEPP 33. However, lithium-ion batteries (LIB) store significant amounts of energy, and their discharge or destruction may result in the sudden release of energy or hazardous chemicals, potentially resulting in off-site impacts. These types of hazardous incidents cannot be adequately addressed by a screening method based solely on dangerous goods quantities and have not been addressed in the PHA.

Further, the EIS does not provide enough detail on the potential scale of energy or chemical releases during processing, making it difficult to assess the extent and severity of the associated hazards. As such, the Department is unable to evaluate whether the proposed controls are adequate and appropriate. Please provide:

- justification for the proposed separation and storage arrangements, ensuring they
  effectively minimise the risk of fire propagation, account for the diversity in battery
  types and conditions, and consider relevant standards and guidelines or undertake a
  first-principles assessment
- confirmation that the reference to NFPA 855 is appropriate noting it relates to installation of stationary energy storage systems.
- further details on the monitoring and management of state-of-charge (SOC) of LIBs within safe limits, including discharge process, chemistry, discharge rates and voltage rebound, processes for verifying SOC, potential gas generation, and associated hazards
- an evaluation of the quantity of volatile organic compounds (VOCs) likely to be generated by the shredder-dryer process and the potential consequences relative to this quantity
- the potential for a dust explosion during the process and, if necessary, evaluation of the consequences and safeguards for managing dust risks.

### Fire Safety

- LIB fires are a significant concern in recycling facilities. Please provide further details on:
  - the transport, storage and handling of LIB to avoid overheating and fire
  - o fire/thermal detection systems



- all fire containment / management systems and any water tanks dedicated for firefighting (including showing the location on a site plan)
- employee training, emergency procedures and robust risk assessment processes
- how the site will provide safe, efficient and effective fire brigade access in accordance with the 'FRNSW Access for Fire Brigade Vehicles and Firefighter' guidelines
- storage containment, treatment and disposal of waste firewater
- FRNSW has advised that waste facilities present special problems of fighting fire. Please
  demonstrate that the development will comply with the NCC, including details of any
  performance solution prepared in consultation with FRNSW.

## Waste Management

- Please provide further details of the collection and transportation of waste LIB to the site, including:
  - how waste LIB batteries (e.g. household, electric vehicles, commercial/household energy storage systems (ESS) etc) will be collected prior to transport to the facility
  - details on any sorting and separation of different battery types to occur prior to transportation to the facility, including any dismantling of larger batteries
  - o safeguards that will be in place for the transportation of waste LIBs to the site
- Provide a flow chart clearly showing the end-to-end waste management activities at the site,
   and detailed plans showing the location of these activities, including:
  - receival and storage
  - sorting and removal of non-complying batteries
  - battery discharge
  - battery disassembly to individual cells
  - processing of cells
  - storage and dispatch of recovered materials and residual waste
- Table 6.67 (Operational Waste) provides an overview of residual waste generation. Please update the table to provide further details of:
  - the composition of the 'General waste' stream, including details of all expected residual wastes from dismantling and processing of batteries



- non-conforming batteries
- any saline solution requiring disposal, including the potential for contamination from the immersed batteries

## Air Quality

Section 3.3.1 of the EIS states that a review of air emission was undertaken for a single
operational facility. It is recommended additional reference facilities be considered to inform
the assessment of potential operational emissions and the performance of available
mitigation measures.

## Traffic

- Table 3.12 outlines the heavy vehicle traffic generation. Please provide further details of the breakdown of heavy vehicle movements based on the inputs and outputs from the site, including LIB delivered to the site and the various recovered materials and residual waste streams.
- Provide site layout plans with appropriate labels to demonstrate locations of heavy vehicle unloading (waste LIB) and loading (resource outputs / residual waste etc).

### Water Management

- Provide a site water balance including description of the water demands for the development, particularly with consideration of LIB discharging and recycling operations.
- The EIS states wastewater from recycling operations will be discharged to trade waste. Please provide details on the characterisation of water quality at the point of discharge, including contaminants of concern arising from waste processing operations

### Flooding

 DCCEEW CPHR have noted that the Wagga Wagga LEP calls for additional consideration of flood risk for sensitive and hazardous development, which includes consideration of whether the development will adversely affect the environment in the event of a flood. The EIS notes that waste storage and handling will primarily be raised above floor level to provide 0.5 m of freeboard above the 1% AEP. Please provide further details on the site preparation, and storage and handling of waste materials and recovered materials during flood events to prevent contamination of flood waters.