THE DISPOSAL PROCESS OF VANNEX

The proposed battery recycling plant layout at Lot 215 RP (Part) in D.D. 78, Ta Kwu Ling North, New Territories will be used for the processing of regulated electrical appliances disposal (i.e. computers, printers, scanners and monitors) and waste batteries (lead-acid batteries, general rechargeable batteries, lithium batteries and industrial batteries). The plant area is divided into Waste Battery Disposal Section、WLAB Disposal Section、Waste LCD/LED Disposal Section and Waste PCB Disposal Section.

Below is the introduction to disposal sections and process from Vannex's waste disposal license.

(i) *Waste Battery Disposal Section*

This waste battery Disposal Section comprises 9 working areas, including (i) *Battery Temporary Storage Area*, (ii) *Battery Sorting Area*, (iii) *Electrical Discharge Area, (iv) Battery Capacity Separation Area*, (v) *Battery Soaking Area*, (vi) *Battery Drying Area*, (vii) *Battery Finished Product Storage Area*, (viii) *EV Battery Finished Product Storage Area,* and (ix) *Chemical Waste Storage Area*. In brief, the registered waste batteries will be sorted, transported to *Battery Temporary Storage Area* waiting for subsequent processing according to battery types, including removal of packaging materials, sealing up terminals (for general rechargeable batteries Li-ion & Li-polymer), soaking with saline solution and subsequent drying (for general rechargeable batteries NiCd & NiMH), electrical discharge (for automotive batteries), and packaging to be stored in the *Battery Finished Product Storage Area* for subsequently export to manufacturers/recycling companies. Waste EV Batteries will be further sorting into reusable or non-reusable, that the former will be selected with the battery capacity separator, and repacked as a reusable product.

The process of waste battery disposal section is showed from figure 1 to figure 5.

(ii) *WLAB Disposal Section*

This WLAB Disposal Section comprises 5 working areas, including (i) *Battery Temporary Storage Area*, (ii) *Battery Dismantling Area*, (iii) *Battery Processing Area*, (iv) *Battery Finished Product Storage Area*, and (v) *Chemical Waste Storage Area*. In brief, the registered WLABs will be transported to *WLAB Temporary Storage Area* for subsequent processing, including removal of plastics/metals parts, dismantling battery packs into individual battery cells, sealing electrical terminals and then packaging/securing on suitable pallets according to their types (details described in Section 3 Part D) to be stored in the *Battery Finished Product Storage Area* for subsequently export to manufacturers/recycling companies.

The process of WLAB disposal section is shown in figure 6.

(iii) *Waste LCD/LED Disposal Section*

This waste LCD/LED Disposal Section comprises 4 working areas, including (i) *LED Temporary Storage Area*, (ii) *LED Dismantling Area*, (iii) *Backlight Removal Area*, and (iv) *Chemical Waste Storage Area*. In brief, the registered waste LCD/LED will be transported to *LCD/LED Temporary Storage Area* for subsequent processing, including dismantling to recover plastics/metals/PCBs and backlight (CCFL) removal in a fume cupboard with extraction and filtration system.

The process of waste LCD/LED disposal section is shown in figure 7.

(iv) *Waste PCB Disposal Section*

This waste PCB Disposal Section comprises 4 working areas, including (i) *PCB Temporary Storage Area*, (ii) *PCB Processing Area*, (iii) *PCB Finished Product Storage Area,* and (iv) *Chemical Waste Storage Area*. In brief, the registered

waste PCB will be transported to *PCB Temporary Storage Area* waiting for subsequent processing, including removal of plastics/metals parts, disassembling electronic components, and then packaging/securing in Super Sacks to be stored in the *PCB Finished Product Storage Area* for subsequently export to manufacturers/recycling companies.

The process of waste PCB disposal section is shown in figure 8.

Figure 1: Waste battery Sorting Process for General rechargeable Battery and EV Battery

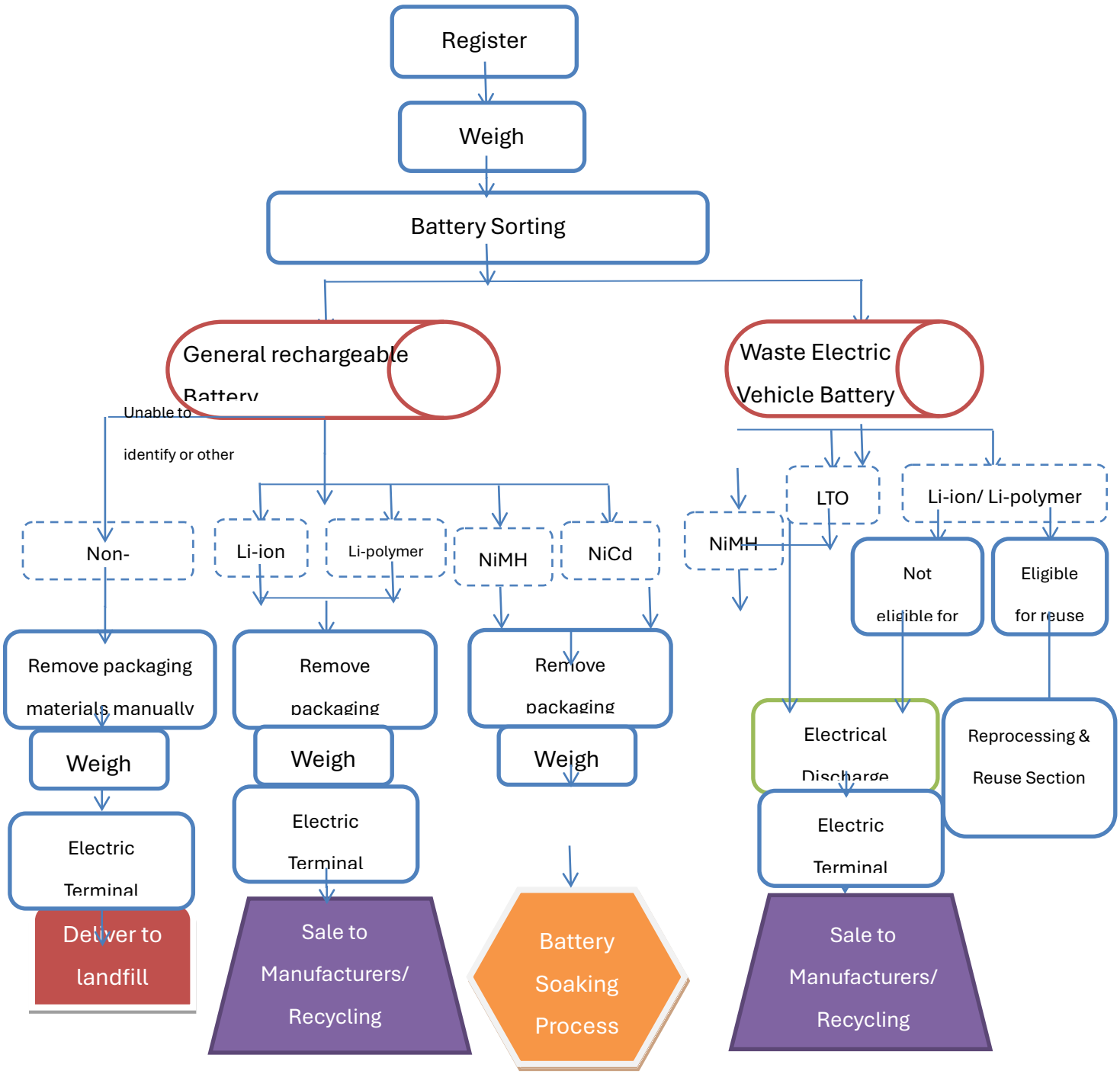


Figure 2: Waste battery Sorting Process for Industrial Battery

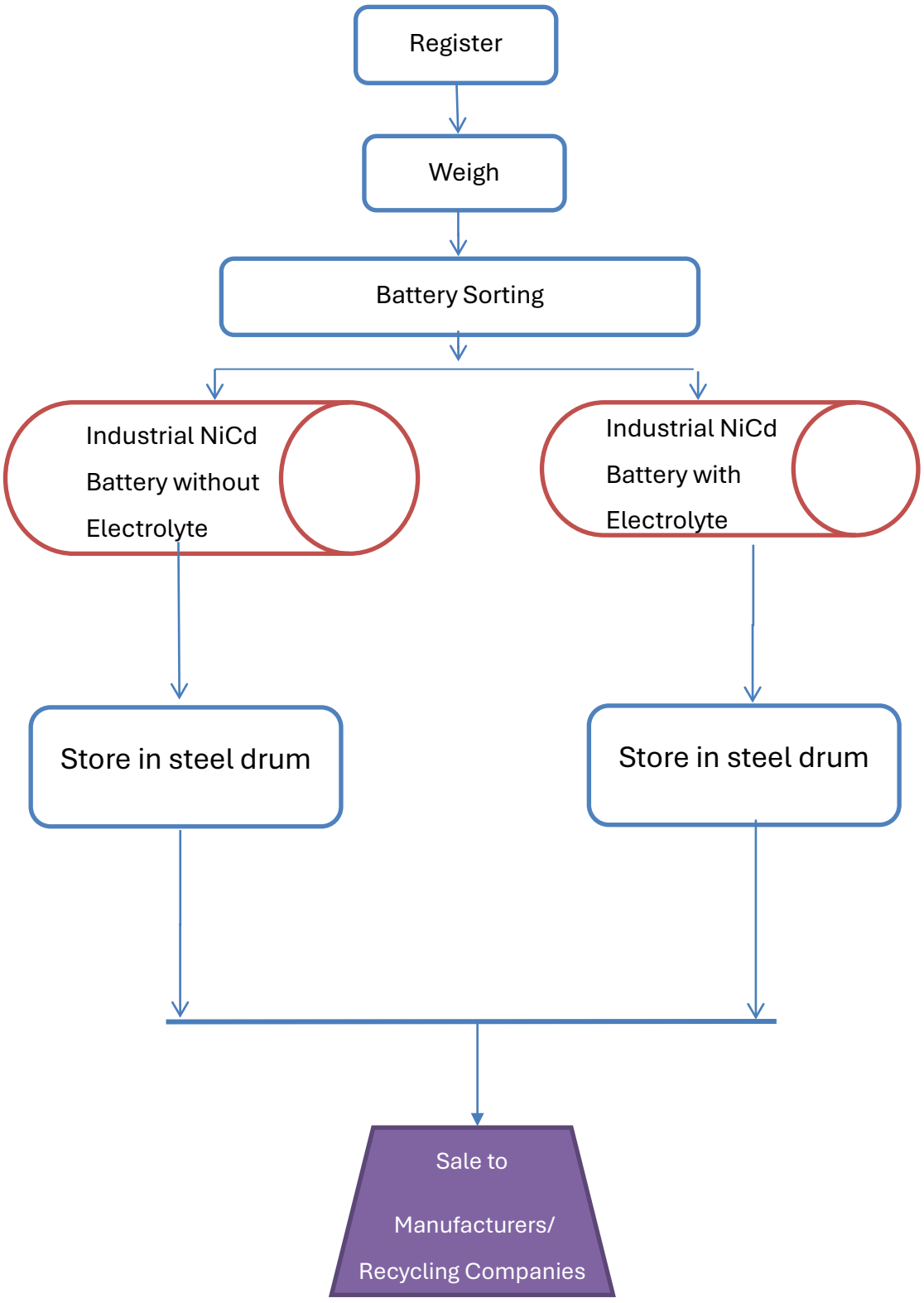


Figure 3: Battery Soaking Process

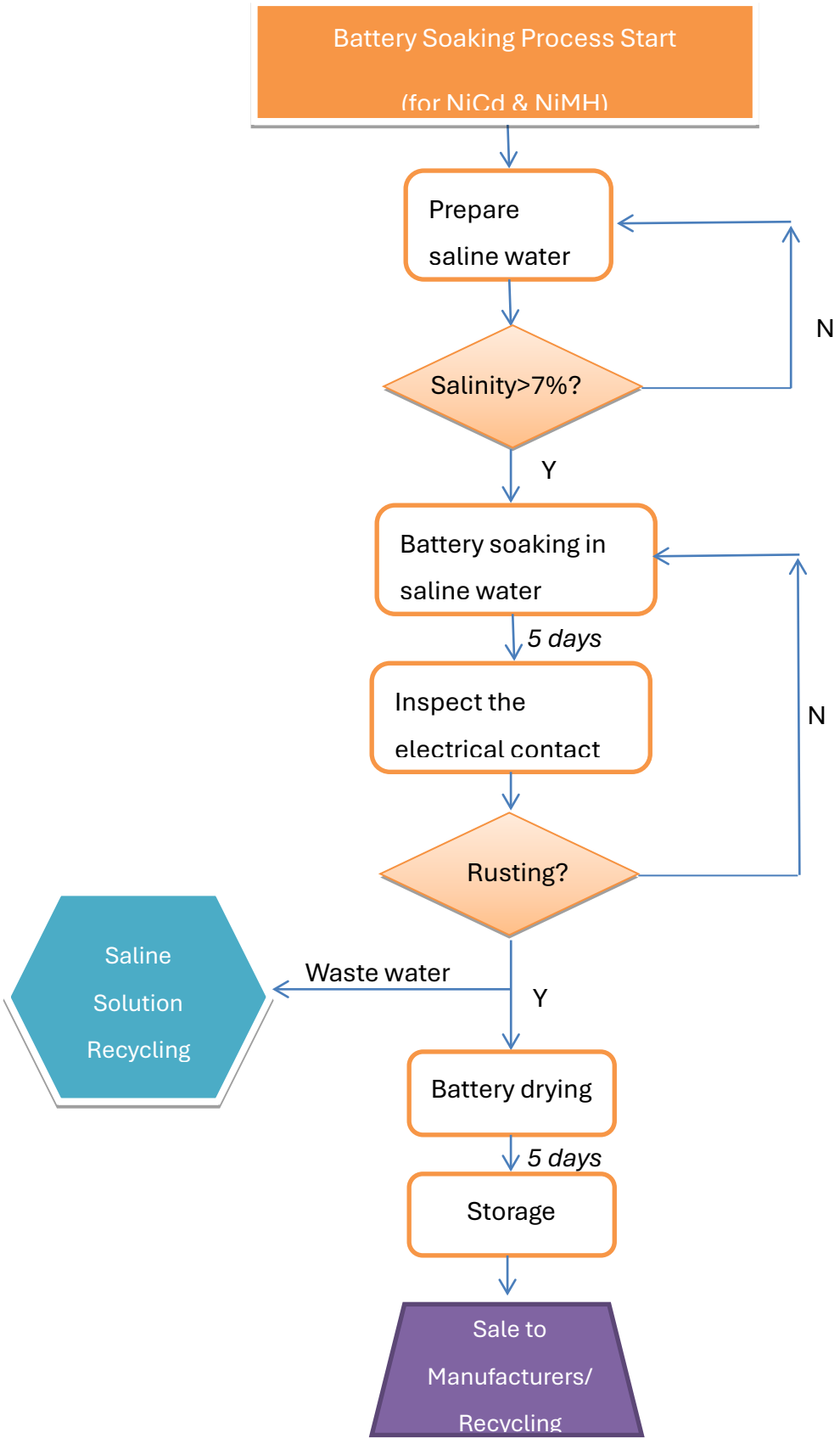


Figure 4: Saline Solution Recycling Process

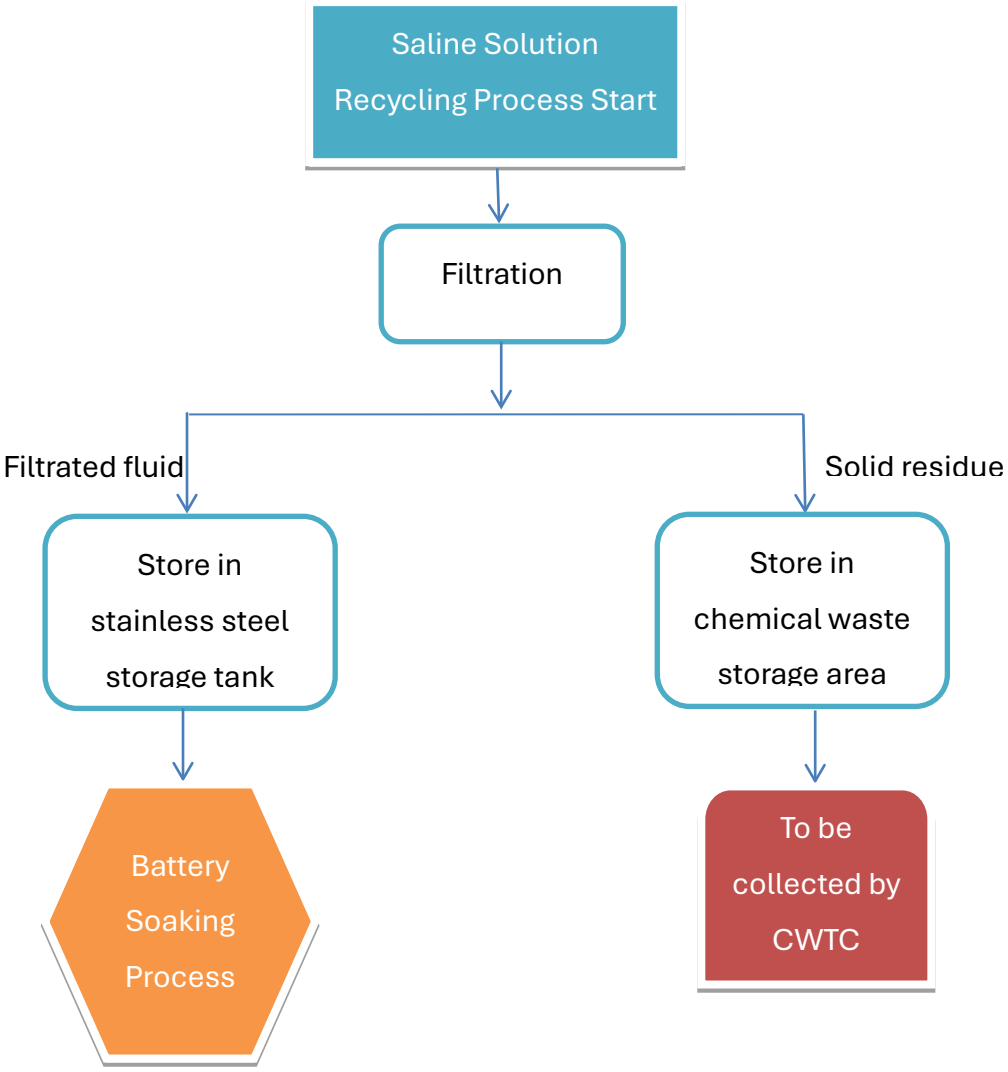


Figure 5: EV Lithium-ion Battery & Lithium Polymer Battery Reprocessing and Reuse Process

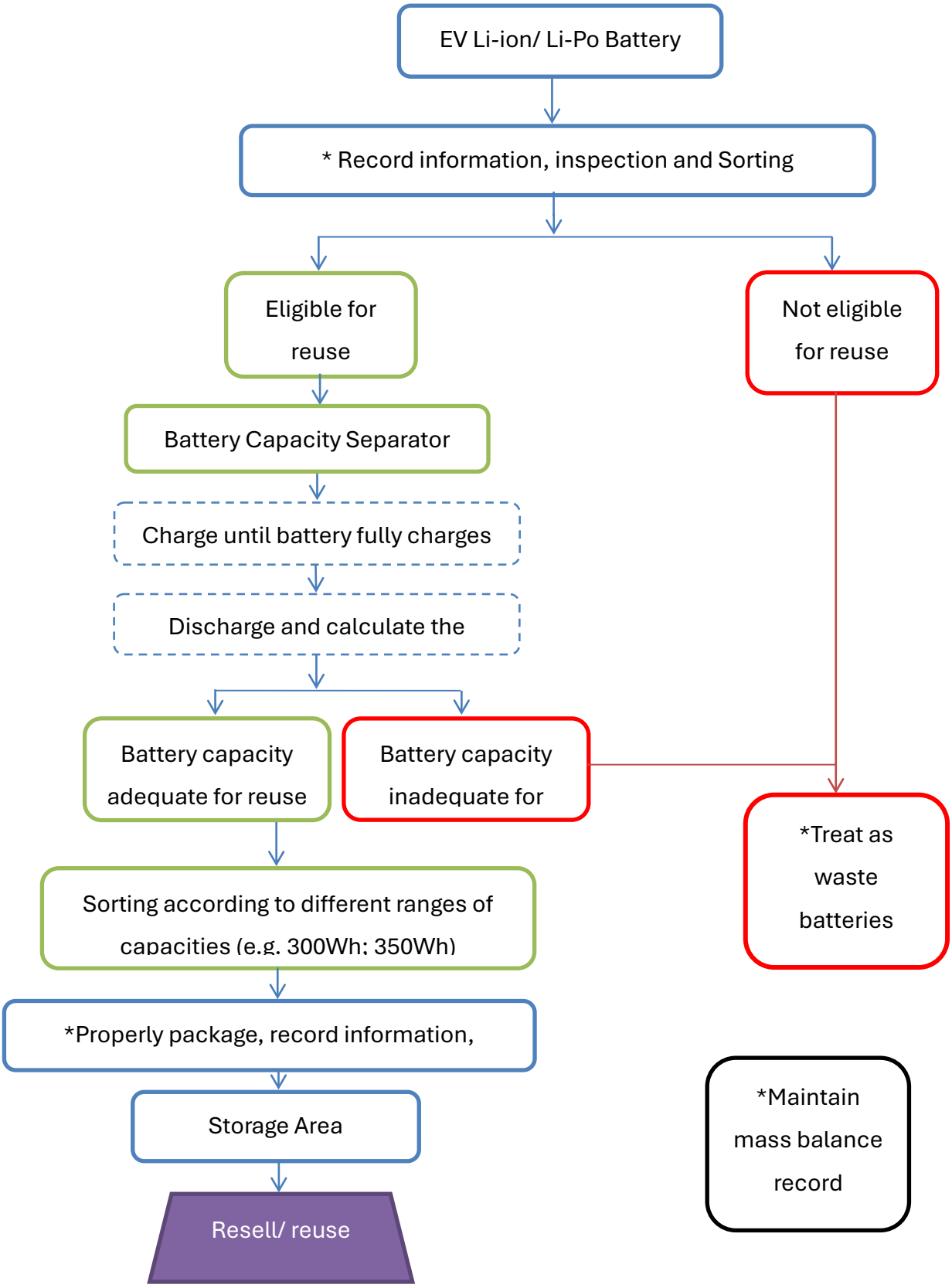


Figure 6: WLAB Recycling Process

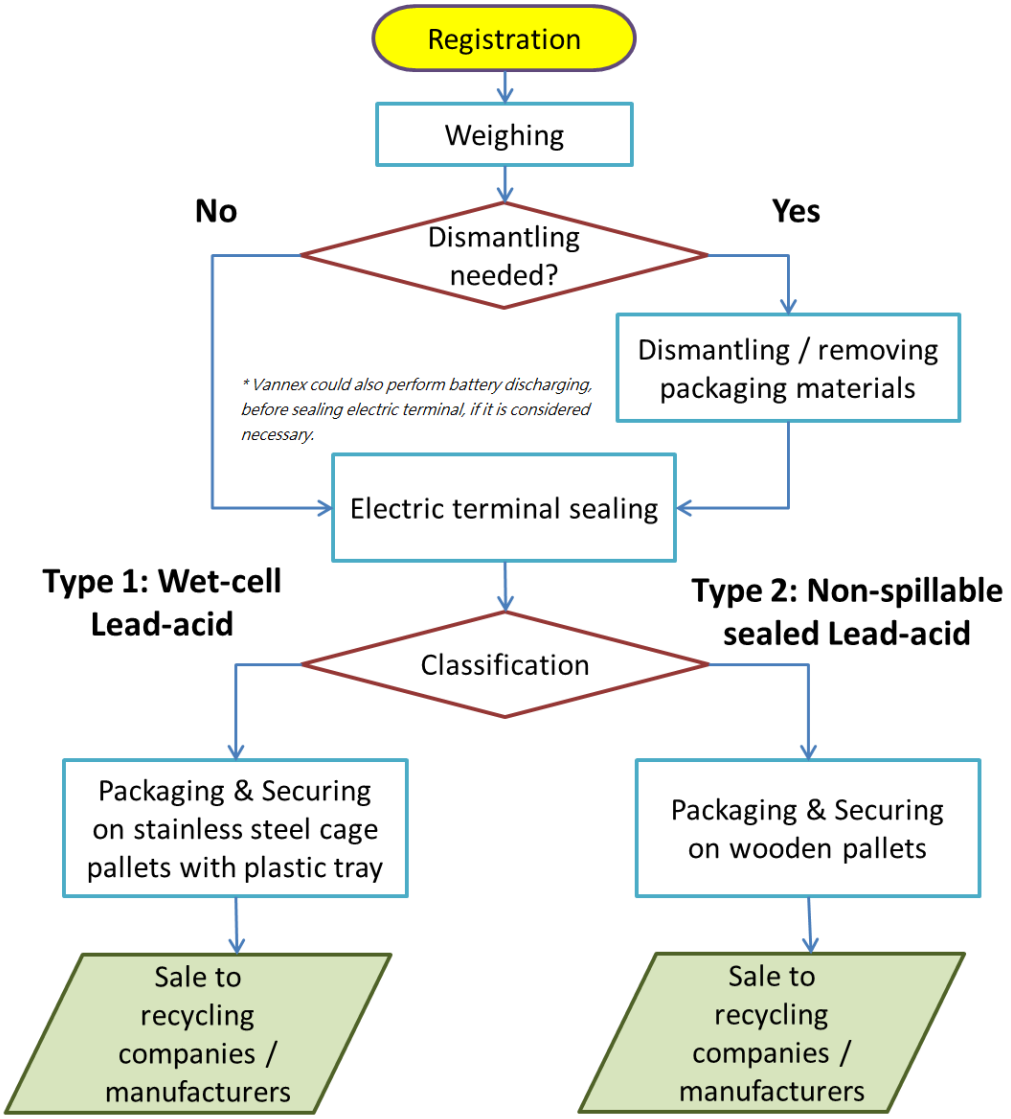


Figure 7: Wasted LCD/LED Recycling Process

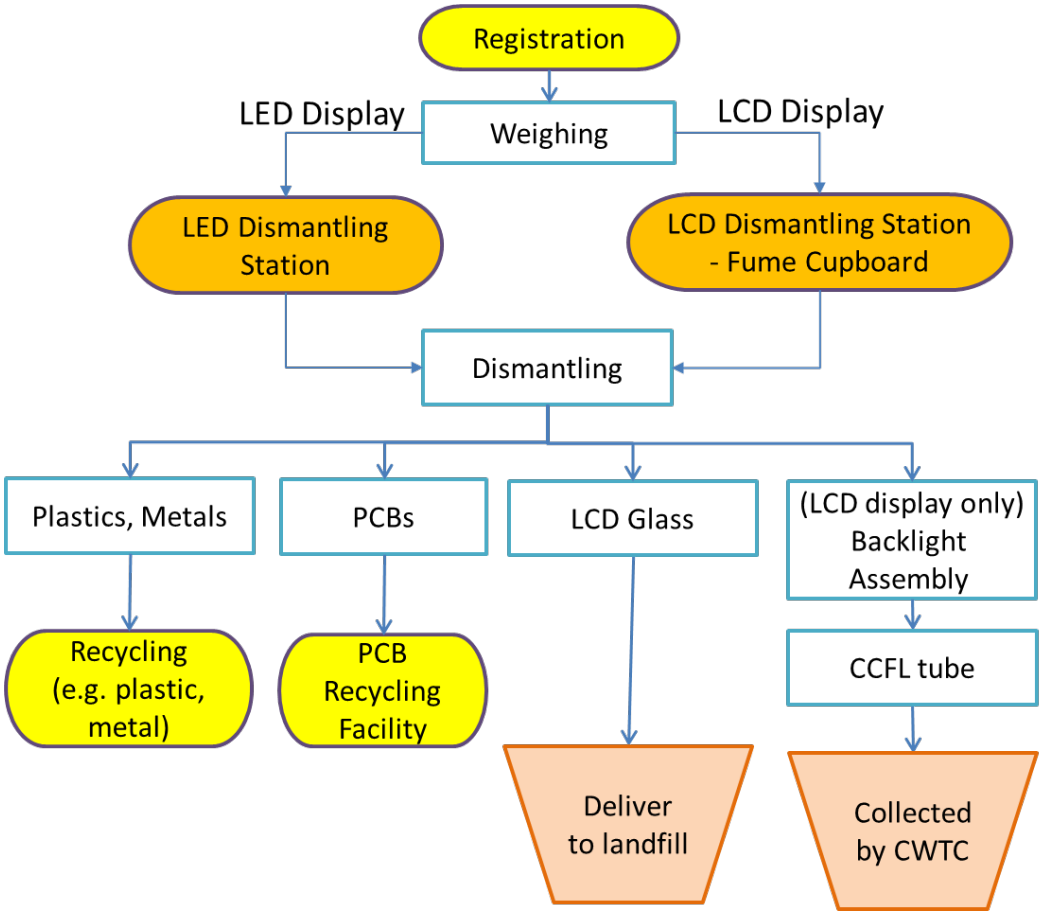
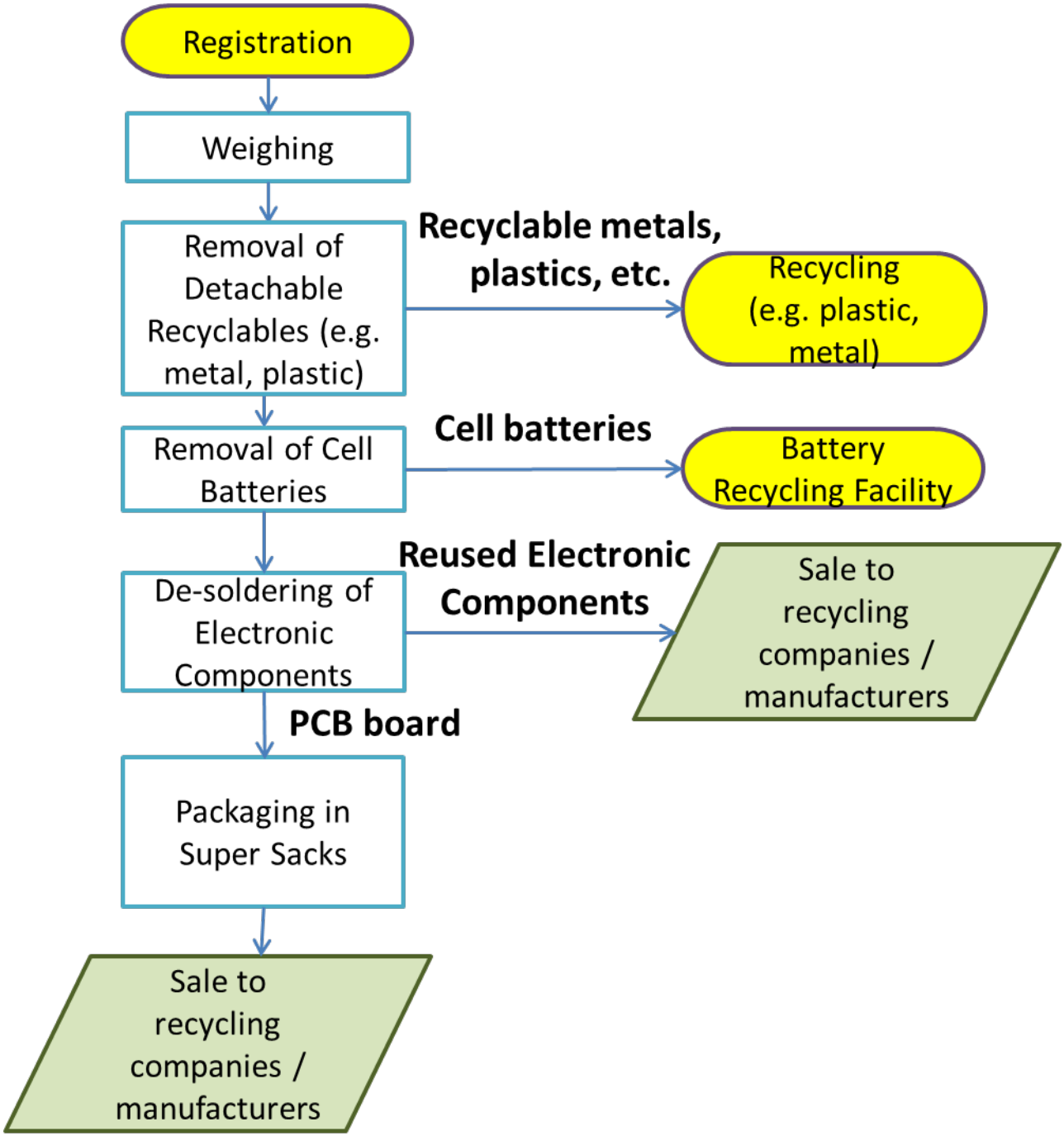


Figure 8: Wasted PCB Recycling Process



Proposed Temporary Battery Recycling Plant and Associated Filling of Land for a Period of 3 Years at Lot 215 RP (Part) in D.D. 78, Ta Kwu Ling North, New Territories
Planning Application No. A/NE-TKLN/99 **1 August 2025**

Response to Comments

Comments	Responses
Comments from Transport Department	
1. The applicant should provide a proposal and advise its adequacy on the vehicular access arrangement including the local access road leading to the ingress/egress points of the development;	Please refer to **Figure 1** showing the access arrangement and it's connection to the local access road.
2. The applicant should seek comments from LandsD for the proposed local access road linking the development passing through government land, and should have obtained no objection from LandsD on the land matters to validate the feasibility for the use as access road;	Noted. LandsD's comment will be sought.
3. The applicant shall demonstrate the satisfactory maneuvering of the vehicles entering and exiting the subject site, maneuvering within the subject site and into / out of the parking preferably using the swept path analysis;	Noted. Swept path analysis is conducted to demonstrate the manoeuvring of vehicles entering and exiting the subject site as well as parking in and out of the parking space and the loading/unloading space. Please refer to **Figure 2** and 3 for details.
4. The applicant shall advise the measures for preventing illegal parking of visitors' vehicles outside the subject site;	Two private car parking spaces are provided within the subject site. One is for the operation staff and another for visitors. The proposed use will not induce illegal parking outside the subject site.
5. The applicant shall advise the management/ control measures to be implemented to ensure no queuing of vehicles outside the subject site; and;	The applicant will arrange a pre-book system to manage the arrival time of the LGVs to ensure no queuing of vehicles outside the subject site.
6. The proposed vehicular access between Lin Chuk Road and the application site is not managed by TD. The applicant should seek comments from the responsible party.	Noted. The applicant would seek comments from the responsible party.