

## INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER 105-1

APPLICANT: Returnbatt Ltd., Kildare

RECOMMENDATION: That a licence subject to conditions be granted.

### 1. Introduction

Name of Applicant	RETURNBATT Ltd.
Facility Name (s)	Returnbatt Ltd.
Quantity of waste (tpa)	Currently 2,000 tonnes per annum
Environmental Impact Statement Required	No
Number of Submissions Received	None
Date application received	20 July 1999

### FACILITY VISITS:

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
5/8/99	Site notice inspection and site tour	B. Meaney	-
7/3/00	Site notice inspection	D. Shannon	-

### Activity Summary

Lead acid and other batteries are accepted at the facility (waste lead acid batteries and some other waste batteries are hazardous waste). Returnbatt Ltd is the only company in Ireland engaged in the activity of processing lead acid batteries.

Batteries are typically collected in the company's own vehicles from garages and from industry. Batteries with liquid electrolyte (such as lead acid and some nickel cadmium batteries) are drained of electrolyte. Lead acid battery bodies are shredded and baled for export and metal recovery. All other batteries (e.g. lithium, nickel cadmium and nickel metal hydride) are stored whole pending export to recovery facilities.

## **Facility Location**

Appendix 1 contains a site location map and a plan showing the layout of the facility.

## **Facility Design**

The facility is located in an existing industrial building which has been split up into industrial and distribution units. The boundary of the Returnbatt facility is delineated by internal dividing walls and the external walls of the factory building. The facility has a working floor area and office and staff accommodation and has loading access to the car parking area outside.

The applicant's neighbours include engineering and machining units and a fruit and vegetable distribution outlet.

## **Operation**

Lead acid batteries are shredded at the facility and the sulphuric acid electrolyte drained to a bunded storage area. The lead, plastic and other solid components of the batteries are baled, compacted and wrapped in plastic prior to export for the recovery of lead.

Wet cell nickel cadmium batteries are drained of potassium hydroxide electrolyte. The drained cells are stored pending shipment to overseas facilities for the recovery of metal.

In each case, the electrolyte is stored pending transport to another facility for neutralisation and disposal. The mixing of these two electrolytes ( $H_2SO_4$  and  $KOH$ ) is prohibited under condition 5.7 of the proposed decision (PD).

Other dry cell batteries are stored pending shipment to overseas facilities for the recovery of metal. No processing is carried out.

## **Waste Acceptance Procedures**

Waste acceptance criteria are applied at the point of collection of the waste batteries. It is stated that no unacceptable wastes are collected. Condition 5.6 of the PD sets out the quarantine and rejection procedures in the event of unacceptable waste arriving at the facility.

## **Waste Handling**

Lead acid and other wet cell batteries are accepted in plastic containers issued to the customer by the applicant. These containers are unloaded within the building and are stacked pending the processing of the waste. The shredding machine is operated on a batch basis as determined by quantities of waste at the facility.

Other dry cell batteries are accepted in various types of container (mainly plastic and cardboard bins and boxes) and are stored at the facility pending onward transportation.

### **Nuisance Control**

There is no significant potential for the generation of nuisance. Odour emissions are prohibited by Condition 7.3 of the PD.

### **Restoration and Aftercare**

Condition 8 of the PD controls decommissioning and aftercare.

## **2. Waste Types and Quantities**

Condition 5.1 and Schedule G of the PD specify which batteries may be accepted at the facility and limit the total quantity of waste to 7,000 tonnes per annum (the maximum projected throughput).

## **3. Emissions to Air**

There are no direct emissions to air. Measurement of air quality at the facility boundary demonstrated lead concentrations of  $7.68 \mu\text{g}/\text{m}^3$  (no date) and  $4.3 \mu\text{g}/\text{m}^3$  (23/2/97). The Air Pollution Act, 1987 (Air Quality Standards) Regulations, S.I. No. 244 of 1987, prescribes an air quality standard for lead of  $2 \mu\text{g}/\text{m}^3$  calculated as the mean of daily values measured over a 12 month period. The shredding equipment is operated infrequently, up to 10-12 hours per week, and it is likely that this is the period of maximum generation of airborne lead. An annual average should incorporate periods other than equipment operating periods and it is therefore likely that the annual standard will be met. The air quality standard is specified in Schedule F.1 of the PD.

Conditions 9.1 and 9.7 and Schedule E.2 of the PD require the measurement of air quality for lead at the facility boundary.

Condition 7.3 of the PD controls noise emissions.

## **4. Emissions to Groundwater**

There are no emissions to groundwater.

## **5. Emissions to Surface Water**

There are no emissions to surface water.

## **6. Emissions to Sewer**

Trade effluent emissions to sewer are controlled by Condition 7.5 of the PD. Condition 7.5.1 allows for variation in the volume and parameter limit values subject to agreement with the Sanitary Authority.

## **7. Other Significant Environmental Impacts**

None (Condition 7.1 of the PD).

## **8. Waste Management, Air Quality and Water Quality Management Plans**

The draft waste management plan for County Kildare contains no reference to the facility. While the facility is located in Kildare, the collection of batteries is carried out on a national basis.

## **9. Submissions/Complaints**

There have been no submissions with respect to the facility.

There have been no complaints with respect to the facility.

Signed \_\_\_\_\_  
Brian Meaney

Dated

**APPENDIX 1**  
**LOCATION PLAN and FACILITY LAYOUT**