

## Permitting Decisions- Variation

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We have decided to grant the variation for Ecobat Logistics operated by Ecobat Resources UK Limited.

The variation number is EPR/DB3704FG/V006.

The variation is for the addition of a metal shredder, Recupyl machine, for the shredding of lithium batteries and the sorting and sieving of the resulting material. The process produces three main outputs, including, black-mass, ferrous and non-ferrous fractions. Outputs are removed from site for onward recovery. Shredding takes place in an inert atmosphere controlled by the addition of CO<sub>2</sub>.

The variation also includes a name change for the company from H. J. Enthoven Limited to Ecobat Resources UK Limited.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

### Purpose of this document

This decision document provides a record of the decision-making process. It

- highlights key issues in the determination
- summarises the decision making process in the decision considerations section to show how the main relevant factors have been taken into account
- shows how we have considered the consultation responses

Unless the decision document specifies otherwise, we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

# Key issues of the decision

## Treatment activity

The treatment process comprises a shredder, followed by sorting and separation steps to recover the various recoverable fractions. Lithium batteries (EWC 16 06 05 & 20 01 34) are classified as non-hazardous waste. However once they are shredded the resulting waste material is deemed hazardous. We consider that the sieving and separation of the shredded battery material into recoverable fractions is the treatment of hazardous waste, and is the primary purpose of the treatment activity, with the shredder being a directly associated activity.

Due to a Section 5.3 Part A(1)(a)(iv) installation activity already existing on site in the form of processes lead acid batteries with a capacity of greater than 10 tonnes a day, and a further Section 5.3 Part A(1)(a)(ii) for pH adjustment of more than 10 tonnes of hazardous wastes a day, the aggregation rule described in RGN2 applies. This results in the further processing of the resulting hazardous waste material via sorting and sieving becoming classified as an additional Section 5.3 Part A(1)(a)(ii) hazardous waste treatment activity.

For the above reasons this operation has been permitted as a Section 5.3 Part A(1)(a)(ii) hazardous waste treatment activity (sieving and separation) with an associated Directly Associated Activity for the initial Shredding of the non-hazardous waste batteries.

## Emissions

No emissions data was available for the Recupyl machine which carries out the shredding, sieving and separation. The operator has instead used data from a plant similar to the Recupyl machine based in Hettstedt Germany. The input material to this plant is the same as that which will be processed at Ecobat and therefore emissions are concluded to be similar and representative. The Recupyl machine however has air emissions abatement in the form of a water scrubber whereas the plant in Germany does not. The liquor from the scrubber will be tested regularly and removed from site. For the above reasons, it is concluded that the plant in Germany will most likely represent a worst-case scenario for emissions to air.

An improvement condition has been included for the completion of air emissions monitoring at the air abatement system exhaust in order to confirm that actual emissions from the Recupyl machine are in line with expected performance. Substances are required to be monitored in line with table S3.1.

Applicable BAT-AELs are stated in the permit where appropriate and available. Where emissions screened out as insignificant no limit was set. In the event the actual emissions do not reflect expected performance the improvement condition IC2 will be used to set limits and parameters for monitoring where required.

The management of potential hydrogen fluoride emissions was raised, and we agree with the proposed management practices outlined in the schedule 5 response.

## **Decision considerations**

### **Confidential information**

A claim for commercial or industrial confidentiality has not been made.

The decision was taken in accordance with our guidance on confidentiality.

### **Identifying confidential information**

We have not identified information provided as part of the application that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

### **Consultation**

The consultation requirements were identified in accordance with the Environmental Permitting (England and Wales) Regulations (2016) and our public participation statement.

The application was publicised on the GOV.UK website.

We consulted the following organisations:

Food Standards Agency

Local Authority – Environmental Health

Health and Safety Executive

No responses were received.

### **The regulated facility**

We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility' and Appendix 2 of RGN2 'Defining the scope of the installation'.

The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.

## **The site**

The operator has provided a plan which we consider to be satisfactory.

These show the extent of the site of the facility including the emission points.

The plan is included in the permit.

## **Nature conservation, landscape, heritage and protected species and habitat designations**

We have checked the location of the application to assess if it is within the screening distances, we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is not within our screening distances for these designations.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

The decision was taken in accordance with our guidance.

## **Environmental risk**

We have reviewed the operator's assessment of the environmental risk from the facility.

The operator's risk assessment is satisfactory.

A H1 screen has been included within the risk assessment. The data for this was derived from similar plant in Hettstedt Germany. This has been deemed to be representative and the operator will be subject to an improvement condition to verify the actual emissions from the plant on site.

## **General operating techniques**

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes (Treating metal waste in shredders: appropriate measures for permitted facilities & Chemical waste: appropriate measures for

permitted facilities) and we consider them to represent appropriate techniques for the facility.

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit.

## **Operating techniques for emissions that do not screen out as insignificant**

Emissions of Nickel and Cadmium cannot be screened out as insignificant. We have assessed whether the proposed techniques are Best Available Techniques (BAT).

Nickel and cadmium will be released in the form of dust emissions. The operator has controls in place for managing dust emissions in the form of a water scrubber. There is also a monitoring requirement for dust emissions. We believe this abatement is in line with Chemical waste: appropriate measures for permitted facilities, Treating metal waste in shredders: appropriate measures for permitted facilities and the Waste Treatment BAT Conclusions.

The proposed techniques for emissions that do not screen out as insignificant are in line with the techniques and benchmark levels contained in the technical guidance and we consider them to represent appropriate techniques for the facility. The permit conditions enable compliance with relevant BAT reference documents (BREFs) and BAT Conclusions.

Operating techniques for emissions that screen out as insignificant Emissions of Total Particulate Matter (Dust), Total VOC's, HCL, SO<sub>2</sub> and MN have been screened out as insignificant, and so we agree that the applicant's proposed techniques are Best Available Techniques (BAT) for the installation.

We consider that the emission limits included in the installation permit reflect the BAT for the sector.

## **National Air Pollution Control Programme**

We have considered the National Air Pollution Control Programme as required by the National Emissions Ceilings Regulations 2018. By setting emission limit values in line with technical guidance we are minimising emissions to air. This will aid the delivery of national air quality targets. We do not consider that we need to include any additional conditions in this permit.

## **Fire prevention plan**

We have assessed the fire prevention plan and are satisfied that it meets the measures and objectives set out in the Fire Prevention Plan guidance.

## **Waste types**

We have specified the permitted waste types, descriptions and quantities, which can be accepted for the 5.3 hazardous waste activity in table S2.6. Lithium batteries coded 16 06 05 and 20 01 34 can be accepted for treatment and these batteries are pre-treated and sorted on site as part of an already permitted activity.

We are satisfied that the operator can accept these wastes for the following reasons:

- they are suitable for the proposed activities
- the proposed infrastructure is appropriate; and
- the environmental risk assessment is acceptable.

## **Improvement programme**

Based on the information on the application, we consider that we need to include an improvement programme.

We have included an improvement programme to ensure that emissions to air are properly characterised from the activity being added with this variation. Where emissions deviate from those projected during the application further assessment of their impact will be required.

## **Emission limits**

Emission Limit Values (ELVs) and equivalent parameters or technical measures based on Best Available Techniques (BAT) have been added for the following substances:

### **Total Particulate Matter (Dust)**

The limits for the below substances are to be agreed under IC2:

### **Total VOC's**

### **Metals – Ni and Cd**

**As, Co, Cr, Cu, Mn, Pb, Sb, Se, Tl, V**

**SO<sub>2</sub>**

**HCL**

**HF**

## **Brominated flame retardants**

## **Dioxin-like PCBs**

## **PCDD/F**

These limits have been included for the 5.3 hazardous waste treatment operation added in this variation. Specific parameters are to be agreed in line with IC2. Brominated flame retardants, Dioxin-like PCBs and PCDD/F have been included as parameters following the appropriate measures guidance for Treating metal waste in shredders. In line with IC2 however it could be shown by the operator that these are not produced by the process and not relevant.

## **Monitoring**

We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified or agreed in line with IC2:

### **Total Particulate Matter (Dust)**

### **Total VOC's**

### **Metals – Ni and Cd**

**As, Co, Cr, Cu, Mn, Pb, Sb, Se, Ti, V**

### **SO<sub>2</sub>**

### **HCL**

### **HF**

## **Brominated flame retardants**

## **Dioxin-like PCBs**

## **PCDD/F**

These monitoring requirements have been included in order to ensure compliance with the emission limits.

We made these decisions in accordance with Treating metal waste in shredders: appropriate measures for permitted facilities.

## **Reporting**

We have added reporting in the permit for the following parameters:

Emissions to air.

We made these decisions in accordance with Treating metal waste in shredders: appropriate measures for permitted facilities, Chemical waste: appropriate measures for permitted facilities, Treating metal waste in shredders: appropriate measures for permitted facilities and the Waste Treatment BAT Conclusions.

## **Management system**

We are not aware of any reason to consider that the operator will not have the management system to enable it to comply with the permit conditions.

The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.

## **Technical competence**

Technical competence is required for activities permitted.

The operator is a member of the CIWM/WAMITAB scheme.

## **Growth duty**

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit variation.

Paragraph 1.3 of the guidance says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards



applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.