

Ref: Airbag/VBP/01

Permitting and Support Centre

Pre-application Service
Quadrant 2
99 Parkway Business Park
Sheffield
S9 4WF

Date: 11th January 2023

Dear Sirs,

EPR/FB3702UD – VANTAGE BUSINESS PARK

REQUEST FOR PRE-APPLICATION ADVICE

This letter is provided to facilitate a request for enhanced pre-application advice for the above facility. In the following sections, we provide the background, a description of the proposed changes, and the topics that we would like to address as part of our request.

BACKGROUND

The proposal relates to the permitted facility at Vantage Business Park (the site) which is currently regulated under a bespoke waste permit (EPR/FB3702UD) and is registered to Airbag Disposal (UK) Limited (ABD). The site is permitted to store and treat waste airbags that have either been received from third parties already deployed or those which are to be deployed on site. Treatment activities regulated in the environmental permit include manual and mechanical sorting and separation of the deployed airbags for recovery. The site is permitted to accept up to 5,000 tonnes of waste airbags per annum.

ABD are now seeking to expand their operations on site to allow the acceptance and/or treatment of hazardous and non-hazardous waste. In addition, ABD are seeking to increase the annual throughput from 5,000 to 70,000 tonnes. The following section provides a description of the proposed activities.

SUMMARY OF PROPOSED ACTIVITIES

In addition to the existing waste airbag treatment process, ABD propose to accept and process hazardous and non-hazardous wastes that predominantly comprise metals, WEEE (including fridges), car exhausts, batteries, plastics, cardboard and Time Expired Pyrotechnics (TEPs). Treatment will comprise variety of methods which include manual and mechanical sorting, separation shredding, granulating and baling. The proposed activities have been split into distinct activities which are provided below.

a) *WEEE & Metal – Storage and Treatment*

The treatment of WEEE will comprise manual dismantling to remove hazardous substances to satisfy the requirements of Annex VII of the WEEE Directive (2012/19/EU). Items of WEEE will then be loaded into a hopper which conveys into a granulator and shredder. The resultant material will then pass through an overband magnet and eddy current separator to allow segregation of components (i.e. plastics and metals) which are subsequently stored and bulked in designated containers prior to transfer off site.

In terms of fridges, the treatment process will comprise two stages. Stage 1 of the process will comprise manual dismantling of appliances including removal of the components, fluids and gases as appropriate. Stage 2 of the fridge treatment process will comprise the shredding of the fridge carcasses. Heavy metals and plastics will be recovered via an overband magnet and eddy current separator and foam will be extracted using suction force.

Treatment of car exhausts will comprise a de-canning process to remove the scrap ferrous cans from the catalyst material. The de-canning process will take place under a local exhaust ventilation (LEV) system that benefits from high efficiency particulate air (HEPA) bag filters. The outlet of each system is ducted and discharged within the building. There is no external point source emission to air from the LEV system.

Metals treated on site will predominantly be sourced from the automotive sector or other waste streams that will be processed on site such as WEEE.

Depending on the nature of the waste material, items may be subject to manual sorting and segregation to remove any components that are not suitable for mechanical treatment. Items will then be loaded into a hopper which conveys into a shredder. The metal will then be shredded to achieve the desired grades and then will be segregated via an overband magnet and eddy current separator. The resultant material will then be stored and bulked in designated containers prior to transfer off site to a suitable permitted facility for further recovery and/or disposal.

Waste batteries will derive from End-of-Life Vehicles (ELV) which are subsequently imported on to the site or from items of WEEE that's processed at the site. All waste batteries will be stored within in appropriate leak-proof and UN approved boxes and will be categorised and separated by type, class or group. Waste batteries will be bulked on site prior to transfer off site to specialist recyclers.

b) Non-Hazardous Waste – Storage and Treatment

In addition to metals, ABD propose to accept plastics and cardboard for storage and treatment. The treatment of plastics will be similar to metals whereby items will be subject to manual sorting and segregation prior to processing via shredding. The resultant material will then be stored and bulked in designated containers prior to transfer off site to a suitable permitted facility for further recovery and/or disposal. The treatment of cardboard will solely comprise of baling.

c) TEPs – Storage and Treatment

This activity will comprise the acceptance and/or treatment of specific TEPs which comprise of life jackets, railing fog detonators and fire extinguishers.

For life jackets that don't contain inflators, two cuts will be made on either side of the jacket. The jacket will then be placed into the shredder as most of the material consists of polyvinyl chloride and polyethylene.

Life Jackets with inflators have to be treated initially as they contain CO₂ cylinders. To be recycled, the cylinder must be empty. Checks will be made to ensure that the cylinders are empty before the cylinder is loaded into a shredder and then pass through an overband magnet and eddy current separator to allow segregation of components. The resultant material will then be stored and bulked in designated containers prior to transfer off site to a suitable permitted facility for further recovery and/or disposal.

The treatment of fire extinguishers will be limited to the discharge of the contents of the extinguisher and dismantling by removal of vales and other parts of the cylinder. Once the contents have been discharged, the metal cylinder will be loaded into the shredder and pass through an overband magnet and eddy current separator to allow segregation of components. The resultant material will then be stored and bulked in designated containers prior to transfer off site to a suitable permitted facility for further recovery and/or disposal.

Railing fog detonators will be subject to destruction via a decommissioning chamber that's currently used on site for the treatment of waste airbags.

THROUGHPUT OF PROPOSED WASTE ACTIVITIES

The maximum treatment capacity of non-hazardous waste will continue to be less than 75 tonnes per day as a result of the proposed changes. For hazardous waste, the maximum treatment capacity will be less than 10 tonnes per day.

With regards to storage, ABD propose to store more than 50 tonnes of hazardous waste at the site at any one time.

According to the environmental permit, the facility is currently identified as a non-hazardous waste physical treatment facility. As such, we considered that the proposed changes to the site operation will comprise the following:-

- Variation to the permitted non-hazardous physical treatment activity;
- Addition of a hazardous waste physical treatment activity; and
- Addition of Schedule 1 activity reference Section 5.6 Part A(1)(a) for the 'Temporary storage of hazardous waste pending any of the activities listed in Section 5.1, 5.2 and 5.3

As part of this request, we have outlined a number of points which Airbag Disposal (UK) Limited seek enhanced advice from the Environment Agency (EA) to ensure that the correct application is applied for which will subsequently minimise any delays during the duly making and determination process.

TOPICS TO ADDRESS UNDER PRE-APPLICATION REQUEST

1. Application Type

The proposal will require a variation to the Environmental Permit to allow the operation of the waste activities mentioned above and to increase the annual throughput.

According to the EA's 'Environmental permits: when and how you are charged', Section 3.6.2 indicates that a substantial variation may be required if the proposal would make an activity a Part A(1) activity in its own right. Based on the proposed storage capacity for hazardous waste, it is likely that the storage of hazardous waste will comprise a Schedule 1 activity and therefore a substantial variation would need to be submitted. To that end, we seek to confirm that this understanding is correct to ensure that the correct application is prepared.

2. Scope of Environmental Permit Application

Regardless of what type of application will be required for the proposal, relevant EA guidance indicates that the required documentation will be similar. As such, we propose to prepare the following documents to support the environmental permit application:-

Document	Description
Application Forms	Completion of the required application forms.
Non-Technical Summary	Summary of the application and documents submitted to accompany the application.
Operating Techniques	Preparation of an Operating Techniques document that details how the site will operate.

Environmental Risk Assessment	Preparation of a risk assessment that assesses the risk associated with the proposal and sets out how risks will be managed to an acceptable level.
Best Available Techniques (BAT) Assessment	Assessment of the storage of hazardous waste against the BAT Conclusion for Waste Treatment and relevant appropriate measures guidance.
Noise Impact Assessment (NIA) and Noise Management Plan (NMP)	Preparation of a noise impact assessment in accordance with EA guidance which stipulates BS4142 and the preparation of a noise management plan in accordance with the EA's 'Noise and vibration management: environmental permits' guidance.
Revised Fire Prevention Plan	Preparation of a revised fire prevention plan in accordance with the EA's Fire prevention plans: environmental permits
Dust Management Plan	Preparation of a Dust Management Plan in accordance with the EA's 'Control and monitor emissions for your environmental permit' guidance and the 'Dust and Emission Management Plan (DEMP)' template.

Given that the proposal involves the mechanical treatment of metals and WEEE (via shredding), consideration has been given to the EA's 'Treating metal waste in shredders: appropriate measures for permitted facilities' guidance. According to Section 6.1 of the guidance, an Air Quality Assessment (AQA) must be prepared to assess fate and impact of the substances emitted to air (e.g. dust and VOCs). For this proposal, there will not be any channelled emissions to air and therefore it's considered that an AQA is not required to support this application. As such we seek to confirm that this understanding is correct and no further specific assessments (excluding noise) will be required prior to the submission of the permit application.

3. Application Fees

With reference to the EA's 'Environmental permits: when and how you are charged' guidance, it's considered that the application fee will comprise the following:-

Activity Reference	Description	Application Type	Amount
1.16.4	Section 5.6 - temporary or underground storage of hazardous waste	New Activity	£13,203 ⁽¹⁾
1.16.13	Physical treatment of hazardous waste	New Activity	£3,965 ⁽²⁾
1.16.12	Physical treatment of non-hazardous waste	Normal Variation	£1,982.50 ⁽²⁾
1.19.3	Fire Prevention Plan	-	£1,241
1.19.5	Emissions Management Plan	-	£1,241
1.19.7	Noise Management Plan	-	£1,246
Total			£22,879

Note 1 – The application charge for a Section 5.6 activity (reference 1.16.4) is the highest charge and therefore it's considered that 100% of this charge needs to be paid.

Note 2 – With reference to Section 2.12 in the EA's 'Environmental permits: when and how you are charged' guidance, it's considered that the application charge for the Physical treatment of hazardous waste (reference 1.16.13) and physical treatment of non-hazardous waste (1.16.12) can be reduced by 50%.

SUMMARY OF PRE-APPLICATION REQUEST

To summarise the requests above, we request the following to be agreed with yourselves:

1. We seek confirmation that the proposed scope of the permit application is correct and that no further specific assessments, particularly an AQA, will be required prior to the submission.
2. We seek confirmation that the application fees are correct.

We trust that the above is clear and will be considered in a timely manner. However, should you wish to discuss this in further detail we would be happy to facilitate a teleconference at your earliest convenience and if this is deemed necessary please feel free to contact the undersigned.

Yours sincerely,



Alice Shaw

Senior Consultant

Tetra Tech Environment Planning Transport Limited.