

Introduction

This non-technical summary is presented in connection with the minor technical variation application for permit GP3337KD. The variation is required in order to update the permit with revised IED schedule 1 references detailed below;

5.3A(1)(a)(ii)

Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities – (ii) Physico-chemical treatment

5.3A(1)(a)(iv)

Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities – recycling or reclamation of inorganic materials other than metals or metal compounds.

5.6A(1)(a)

Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in sections 5.1, 5.2, 5.3 and paragraph (b) of this section except – (i) temporary storage, pending collection, on the site where the waste is generated or, (ii) activities falling within section 5.2.

Non-Technical Summary

EnviroWales generates slag and other waste materials from the lead thermal metallurgy process (Permit EPR/EP3230BW) on the production site on Rassau Industrial Estate that requires re-processing/pre-treatment in preparation for permanent storage at an authorised site and/or for recycling at our processing plant.

The waste materials handled will be;

- Furnace slag
- Drosses
- Plastics
- Waste domestic/portable batteries

These materials will be handled as follows;

Furnace slag

EnviroWales produces approximately 5000 tonnes per annum of Furnace slag depending upon the volume throughput of waste batteries received. This slag is transported to the Tafarnaubach site using skip lorries. The skips of slag are tipped in area 2 of the building, (see schematic in appendix 1), for temporary storage. Area 3 is the main processing area for the slag and is where the crusher and bagging system are located.

The slag will be fed by FEL into the crusher to reduce particle size to <50 mm as per the storage site specifications. The crusher used to perform this operation is a hired Jaw crusher capable of processing 10 tonnes/hr.

Following crushing, the material has to be decanted into large builders type bags containing no more than 1.5 tonnes of re-worked material and located centrally on standard 2 tonne four-way pallets. The material is then loaded ready for delivery to the disposal site.

Drosses

The drosses are generated by the EnviroWales process as impurities are removed from the lead bullion in the refining process. These drosses still contain a significant amount of lead, along with other metals/impurities. The EnviroWales site currently re-cycles these drosses through the rotary furnaces in order to reclaim the lead metal and to entrap other contaminants within a slag. It is possible that additional storage may be required on a short term basis and thus the wastes will require to remain on the Tafarnaubach permit.

When necessary, these drosses are transported to the Tafarnaubach site where they will be segregated by type and prepared for recycling, (packaged), in area 2 of the site. The packaging involves simply sampling and

analysing the drosses where this has not already been done. This will then indicate which drosses are best recycled together in order to get the best return from them when they are recycled. Once repackaged/organised, these drosses will be returned to the Rassau site on demand for recycling.

Plastics

EnviroWales generates approximately 15 tonnes of polypropylene per operational 24 hour period. The majority of this is treated in the polypropylene processing plant on the Rassau site, however, during times of extended shutdown of this plant it would not be possible to securely store the raw polypropylene there. EnviroWales would transport 'overspill' quantities of plastic to the Tafarnaubach site for short-term storage before shipping to end user. This material will be stored in area 1 of the site.

Domestic/Portable battery types

EnviroWales is a purpose-built site designed to recycle lead-acid batteries. Inevitably other battery types find their way into the feedstock supply chain.

These battery types are removed at various points along the process route to ensure they do not contaminate our process stream.

It is proposed that, while every attempt is made to sort these batteries by type, the job would be better done under cover at the Tafarnaubach site. The batteries will then be separated and sorted by chemistry and securely stored in 210 l steel drums with fixed lids. These drums will then be located three drums to a pallet on sturdy pallets awaiting collection by authorised contractor for disposal.

General

The proposed site has no connection to drains from within the building and none is required. There will be no emissions to atmosphere, ground or groundwater directly from activities on the Tafarnaubach site. The only LEV required will be located in the crushing area, area 3 and this will be of a type that utilises HEPA filtration and recycling of air, therefore causing no emission to air. This information is detailed in the H1 assessment.

A thorough operations plan is included in the application as Documents EWS – app 6.01, 02, 03 and 04. This plan indicates timings etc for the movements of material to and from the Tafarnaubach site and estimates of processing times for the estimated tonnages we will need to process there as well as the information required by appendix 6 of Part B of the application.

