Equestrian Surfaces Limited

Non-Technical Summary

Ref: ES.PT.NTS.2505

May 2025

1.0 NON TECHNICAL SUMMARY

1.1 Introduction

1.1.1 Equestrian Surfaces Limited (the Operator) currently operates under Environmental Permit reference EPR/WE2768AB for the operation of a non-hazardous waste physical treatment facility relating to the recycling of carpet waste into equestrian surfaces. The operator requests a bespoke environmental permit variation to facilitate an increase in the maximum accepted tonnage of carpet waste. The current permit allows for 16,000 tonnes per annum; the proposed variation seeks to raise this to 60,000 tonnes per annum. The site layout will be subject to modification to accommodate the amended throughputs. In addition to creating equestrian surfaces, the site intends to process carpet waste for the production of Solid Recovered Fuel (SRF).

1.1.2 The bespoke permit variation, in summary, is therefore to:

- Increase the accepted waste tonnages to 60,000 tonnes per annum.
- Accommodate site layout changes.
- Facilitate the production of Solid Recovered Fuel (SRF) as well as equestrian surfaces.

1.1.3 The Recovery and Disposal codes sought for this permit variation do not differ from those in the existing permit.

1.1.4 Processing on site includes:

- Sorting / separating
- Baling
- Shredding

1.2 Accepted Waste Tonnages

1.2.1 The site currently accepts up to 16,000 tonnes of carpet waste per annum, which equates to 51 tonnes per day. The proposed permit variation seeks to increase the accepted tonnage from 16,000 to 60,000 tonnes per annum, which equates to 191 tonnes per day.

1.3 Waste Streams and Throughputs

1.3.1 The accepted carpet waste includes carpet underlay material. From a post-consumer and post-industrial perspective, the carpet waste is separated into the waste streams of carpet underlay,

synthetic-based carpet, and wool-based carpet. The annual tonnage for the separate waste streams is unknown as they are variable depending on the market.

1.3.2 Currently the facility only processes synthetic carpet, and any wool carpet, which is segregated out, is returned to the household waste recycling centres. The permit variation seeks an increase in the permitted tonnages, which will also facilitate the processing of wool carpet to become Solid Recovered Fuel (SRF).

1.3.3 Post-industrial synthetic carpets (carpets received from manufacturers) undergo processing to produce fibre for blending into an equestrian surface product. Product for equestrian surfaces is processed to meet with end-of-waste criteria. Post-consumer synthetic carpets will also be shredded for SRF production.

1.3.4 Post-industrial wool carpets are not handled, as manufacturer-supplied waste predominantly consists of synthetic materials.

1.3.5 Wool carpets and post-consumer synthetic carpets are largely sent for disposal in landfill. Producing Solid Recovered Fuel (SRF) from this carpet waste directly contributes to landfill diversion by transforming non-recyclable materials into a valuable energy source. This process significantly reduces the volume of waste sent to landfill, thereby conserving valuable land space and mitigating the environmental burdens associated with traditional waste disposal.

1.3.6 The daily average anticipated throughputs are as follows:

Material Type	Form	Amount (Daily) in tonnes
Carpet	Articulated Lorry Load	Average: 191

1.3.7 The changes to throughput will require changes to the site layout to accommodate this. Processing will take place in the larger building to the west of the site, and storage will take place in the building to the east of the site. There will also be numerous concrete walled bays added to the external yard for the storage of unprocessed carpet wastes.

1.4 Waste Processing Activities

1.4.1 Carpet waste is delivered to the tipping area to the west of the site, or the unloading area to the south of the site, depending on the vehicle making the delivery. Deliveries are made using Equestrian Surfaces Limited's own transport, pre-booked external contractor vehicles, and customer's own transport.

1.4.2 The waste is segregated by hand with the assistance of mobile plant and transferred to appropriate concrete-walled bays according to the waste stream prior to processing. Some carpet waste is received in bale form, as well as in loose form.

1.4.3 Once sorted and segregated, the waste is transferred to the assigned concrete walled bay, according to waste stream, within the external yard. All wastes are stored in their largest form. Wastes are then transferred to be processed within the processing building to the west of the site. Processing, including shredding and baling of the carpet waste, is fully enclosed within the processing building. Depending on the waste stream, the carpet waste is processed to produce SRF, or it is processed to produce equestrian surfaces.

1.4.4 The locations of the storage areas for each waste stream and product are shown on Drawing Ref: 250407ES101: The concrete bays within the processing building are for the storage of baled SRF; and the storage building to the boundary at the east will be for the storage of baled equestrian surfaces product. Additionally, product will be stored in one of the two assigned covered areas shown as '1' and '2' on Drawing Ref: 250407ES101. Once the product has been produced, it is stored for a maximum of 7 days (depending on the input level).

1.4.5 The potential for dust and odour emissions for the site are assessed as being low. To proactively minimise the potential for dust and odour emissions, the Operator will implement a comprehensive monitoring and control plan. This includes:

- Daily monitoring / site inspections
- The active use of water from the IBCs on site (x2) for external use, and use of the Mist-Air dust suppression system is utilised in the processing building.
- The containment of separated waste in designated bays
- The regular cleaning of the impermeable concrete surfaces using manual or mechanical sweepers.

1.5 Overview of Wastes

1.5.1 The facility accepts waste materials under the following European Waste Codes, with their respective destinations and processes within the facility:

European Waste Code (EWC)	Product Description	Destination within Facility				Process
		Sorting Building	Processing Building	Covered Areas	External Yard	
04 02 21	Wastes from unprocessed textile fibres	Yes	Yes	Yes	Yes	Sorting processing and storage
04 02 22	Wastes from processed textile fibres	Yes	Yes	Yes	Yes	Sorting processing and storage
19 12 08	Textiles	Yes	Yes	Yes	Yes	Sorting processing and storage
20 01 11	Textiles	Yes	Yes	Yes	Yes	Sorting processing and storage

R&D Codes:

The site will operate under the following recovery and disposal codes:

R/D Code and Description
R3: Recycling/reclamation of organic substances which are not used as solvents
R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)