SEL2 - Non-Technical Summary - Road Sweeper De-Watering Transfer Station at Sweeptech Environmental Services Ltd, 5 Ross Road, Rossmore Industrial Estate, Ellesmere Port, Cheshire, CH65 3DB

1.0 Introduction

Sweeptech Environmental Services Ltd are a market leading national provider of operated and self-drive mechanical road sweepers. As a by-product of the road sweeping process waste is collected from the surfaces being swept. This waste can either be tipped back onto the site it has been swept, where it will not impact negatively on the environment. However, on a number of occasions the waste cannot be tipped on the site being swept and as a result must be tipped at a permitted waste facility with an Environmental Permit allowing the European Waste Catalogue code (EWC) Code 20 03 03, 17 05 04 or 17 09 04 for road sweepings. The permit must also allow wastes that are in the form of a liquid or a sludge.

Environmental Permits that can accept (EWC) Code 20 03 03, 17 05 04 or 17 09 04 for road sweepings in the form of a liquid or a sludge are limited and as a result travel times and distances to transfer the waste can be very significant. As a result, Sweeptech Environmental Services Ltd is proposing to construct its own transfer facility to accept road sweepings that are in the form of a liquid or sludge. This will greatly reduce the distances travelled by the company's vehicles, saving time and fuel, ultimately reducing emissions. The transfer facility will be at 5 Ross Road, Rossmore Industrial Estate, Ellesmere Port, Cheshire, CH65 3DB.

It is worth Noting that Sweeptech Environmental Services Ltd already operates a facilities that recycles or de-waters road sweepings at the following permitted sites –

- NB3933AW / EAWML 400131 - Unit 1 The Old Brickworks, Shoreham Road, Henfield, West Sussex, BN5 9SE
- JB3207LE / EAWML 406855 - Unit 5, Unit 5, Tilley Road, Washington, Washington, Tyne And Wear, NE38 0AE
- KB3201CR / EAWML 407551 - Unit 22 Shawfield Road, Carlton Industrial Estate, Barnsley, South Yorkshire, S71 3HS

In August 2025 the Storing and bulking sweeping waste by the waste producer: RPS 65 was updated and provided additional EWC codes Construction site sweepings (17 05 04 or 17 09 04) as a result these wastes will be applied for too.

2.0 Sweeping process

The process of mechanical road sweeping involves a vehicle equipped with brushes, high pressure water jets and a vacuum system. Water is sprayed onto the surface being cleaned, loosening and saturating debris. Brushes further loosen the debris from the surface and a powerful vacuum system sucks up the resulting solids and liquids and deposits them in the hopper mounted on top of the sweeper. The resulting waste is mixture of solids and liquids and depending upon the amount of water being used and environmental conditions the amount of water in the hopper can vary and as a result the waste in the hopper can be a liquid or a sludge.

3.0 Sites and industries serviced

Sweeptech Environmental Services Ltd serves a variety of industries, however the industries that provide high levels of waste that requires removing from sites are construction, ground works, muck shifting and house building. These sites require the waste to be removed to keep the sites clean, prevent run-off into water courses and keep roads free from mud. As a result, the waste that is collected is a reflection of the debris on the surface swept, which the majority is soil, aggregates, sand. In addition, the water on the surface or used by the sweeper is also collected.

4.0 Hazardous waste

Sweeptech Environmental Services Ltd does not collect any hazardous waste such as oils and fuels from road traffic accidents or environmental spills. As a result, there will be no hazardous waste accepted at the proposed de-watering transfer station.

5.0 Ellesmere Port Depot

The Ellesmere Port operation will be home to fleet of over 20 vehicles and a busy workshop. It is located on the busy Rossmore Industrial Estate. The site has been used to maintain, store and manage road sweepers for over 20 years.

6.0 De-Watering Process

The proposed process of dewatering road sweeper waste is a proven method, which is already in use on a number of sites in England. The dewatering system uses proven technology to removed suspended solids from the waste generated in the sweeping process.

The included document – **SEL 5 Road Sweeper De-watering process flow chart at proposed Ellesmere Port transfer station** – shows the steps taken in the process of receiving the sweeper waste and how the waste is dewatered and the resulting liquid has suspended solids removed from it.

When a sweeper returns to the depot containing waste it tips into a sealed reception tank called a ‘high tip’. This allow the liquid element to be pumped to a holding tank and the solids remain. Once full the ‘high tip’ then tips the solids into a sealed roll-on-off skip.

The process is repeat. Once the roll-on-off skip containing the solids is full it is removed from site to a suitably permitted waste facility for recovery of the solids.

The liquid element is allowed to settle in the sealed tank. The settles liquid is pumped to the foul sewer (no more than 50m³ per day). Once there is no space left in the tank for clen water again the sludge is pumped from to the tank into a tanker and removed from site to a suitably permitted waste facility for recovery of the solids.

The depot will benefit from a trade discharge consent from the local sewage provide which will accept run-off from the pad where the de-watering system will sit and the discharge itself.

7.0 Wastes received and stored

The only waste to be received under the permit will be Road Sweeping Residues, European Waste Catalogue (EWC) Code 20 03 03, 17 05 04 or 17 09 04 and be of non-hazardous properties.

- The maximum quantity of waste to be received within 1 week in 300 tonnes
- The maximum quantity of waste to be received within 1 year is 15,000 tonnes
- The maximum quantity of waste to be stored on the site at any time is 100 tonnes

8.0 Drainage

The whole operation including the transfer, storage and treatment of waste takes place on a sealed surface. The area is concreted with a curbed edge preventing any liquid being able to seep to ground. The area drains to foul sewer preventing any run off to surface water.

The final effluent is discharged to the foul sewer.

9.0 Emissions and Fire

The Only point source discharge for the operation is the treated effluent to the foul sewer. Due to the wetness of the waste and the process dust will not be produced. The waste is lacking in organic matter due to its origin and as a result is not odorous. In addition, there is no crushing, screening, tromelling or compaction of the waste as a result no additional noise will be created. Vehicles are constantly moving in and out of the depot during hours of operation and skips containing scrap metal and office waste are regularly removed.

The waste stream is not flammable and as a result a Fire Prevention Plan is not required.