

Introduction

The Arley Consulting Company Limited (TACCL) has been commissioned by Phoenix Park NW CIC to prepare an environmental permit application for their site at Phoenix Park, off Wallend Road, Preston, Lancashire. This risk assessment forms part of the application.

The application is for a bespoke permit to allow physical treatment of waste to produce soil, soil substitutes and aggregate. Treatment will be by separation, sorting, screening, crushing, washing and blending of waste.

Site Details and Surrounding Area

The site is located off Wallend Road at Preston Docklands, Lancashire, PR2 2HW. This is situated at the eastern end of the Phoenix Park complex, close to the entrance. The approximate National Grid Reference for the centre of the site is SD 49717 29230.

The surrounding area is a mix of commercial, industrial and rural land use. Directly to the north is Preston Waste Transfer Station operated by Lancashire County Council. To the east is the Docklands area which is a mixture of commercial and industrial use. To the south is the Ribble Estuary, which is bordered by saltmarsh and mud flats. Beyond the river further south is farmland used for grazing sheep.

The site will cover an area of approximately 2,442 m² and currently consists of a level surface with either tarmac or hardstanding and is used as a car park. The processing facility will include a wash plant and crusher. The wash plant will be constructed on a new concrete pad.

A bund will be constructed around the permit area to contain surface water runoff which will be directed to an interceptor and harvested for reuse. Water from the interceptor will be stored in an underground storage tank and reused on site for the wash plant and dust suppression.

Beneath the site is a culverted watercourse (CD Drain) which underlies the site in a north/south direction, discharging to the Ribble Estuary some 50 m south of the permit boundary. Surplus water will be removed by tanker for off-site disposal.

Proposed Waste Operation

Aggregate processing will be conducted using fixed wash plant and mobile crushing plant according to demand for products.

Hardcore will be dry crushed to produce 6F2.

Permit Application EPR/LB3704KD/A001 - October 2023
Phoenix Park, Preston: Non-Technical Summary

Washing of soil/stone mixtures will be carried out to produce a clean stone product. The plant will be a closed loop system, there will be no discharge of water. Water will be lost as moisture in the filtercake and the system will be topped up with clean water. The water source will initially be harvested surface water and mains water, with plans to investigate possible installation of a borehole for water abstraction.

Incoming wastes and aggregate products will be stored within the permit area.

The maximum treatment capacity of the site will be 500 tonnes per day. The maximum storage capacity will be 40,000 tonnes and the proposed maximum throughput is 150,000 tonnes per year.

Proposed waste types are listed in Table 1 below. This list mirrors the waste types allowed under the end of waste protocol for the production of aggregates from inert waste.

Waste Code	Description
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07 <i>May include excavation from mineral workings</i>
01 04 09	Waste sand and clay <i>Must not include contaminated sand</i>
10 11 03	Waste glass based fibrous material <i>Waste without organic binders only</i>
15 01 07	Glass packaging
17 01 01	Concrete <i>Must not include concrete slurry</i>
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02 02	Clean glass <i>Must not include fibreglass or glass fibre</i>
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01 <i>Only bituminous mixtures from the repair and refurbishment of the asphalt layers of roads and other paved areas (excluding bituminous mixtures containing coal tar and classified as waste code 17 03 01)</i> <i>Must not include coal tar or tarred products</i> <i>Must not include freshly mixed bituminous mixtures</i>
17 05 04	Soil and stones other than those mentioned in 17 05 03 <i>Must not contain any contaminated soil or stone from contaminated sites</i>
17 05 06	Dredging spoil other than those mentioned in 17 05 05 <i>Only inert aggregate from dredgings</i> <i>Must not contain contaminated dredgings</i> <i>Must not contain fines</i>
17 05 08	Track ballast, soil and stones other than those mentioned in 17 05 07 <i>Must not contain soil and stones from contaminated sites</i>
17 09 04	Mixed construction and demolition waste other than those mentioned in 17 09 01, 17 09 02 and 17 09 03 <i>mixed construction and demolition waste, limited to that generated from utilities trenching, consisting of sub base aggregates, and containing only material that would be described as 17 01 01, 17 03 02 and 17 05 04</i>
19 12 05	Glass

Permit Application EPR/LB3704KD/A001 - October 2023
Phoenix Park, Preston: Non-Technical Summary

Waste Code	Description
	<i>Does not include glass from cathode ray tubes</i>
19 12 09	Minerals (eg sand, stones) <i>Must not contain contaminated concrete, bricks, tiles, sand, stone or gypsum from recovered plasterboard</i>
20 01 02	Glass <i>Must not include fibreglass</i>
20 02 02	Garden and park waste (including cemetery waste) – soil and stones <i>Must not contain contaminated stones from garden and parks waste</i>

Table 1: Proposed Waste Types

Supporting Documents

The following documents have been submitted with the application:

Site Condition Report – to establish baseline conditions before permit issue

Environmental Risk Assessment – identifies receptors and assesses the risks from the proposed activities and proposes mitigation to reduce risks where required. Includes a habitats assessment for the Ribble and Alt Estuaries SPA.

Emissions Management Plan (Dust) – this is a standard requirement for this activity as the site is within 500 m of a sensitive receptor, which is residential property in this case.

Environmental Management System – including waste acceptance procedures, operational procedures, control of pollution, monitoring.