INTRODUCTION

Starling Environmental Limited (SEL) has been commissioned by JN Civils Limited (the operator) to prepare an environmental permit variation application for the aggregate recycling facility located at Olympic Way, Blackpool, Lancashire, FY4 4QE.

The site is regulated under environmental permit EPR/KP3025SY which is a standard rules permit SR2010 No12 for the treatment of waste to produce soil, soil substitutes and aggregate. This allows dry processing such as screening of waste soil/stones to produce aggregates.

The operator has recently secured planning permission for construction of a washing plant and also construction of a building for the crushing activity. The proposed permit changes are:

- Add a soil washing activity for production of recycled aggregates
- Increase of the annual throughput
- Revise the waste codes permitted to match the WRAP protocol list

Site Details and Surrounding Area

The site is located off Olympic Way, Blackpool, Lancashire, FY4 4QE. The national grid reference for the site is SD 34333 33712. The site is a former gas works and was occupied by two large gas holders. These were demolished in 2015 and all associated infrastructure has been removed from the site, with just the concrete slabs remaining. The site is surfaced with a combination of concrete beneath the gas holder footprints, and tarmac and hardstanding elsewhere.

The area of the site is approximately 1.7 hectares and is situated in an industrial area in the south-west of Blackpool, approximately 4 km west of the shore front. It is bordered by the following land uses:

North	Cadent depot and beyond the Car Wash, Clifton Road and the residential area of Mereside
East	Cadent depot and beyond Blackpool Police Headquarters
South	the A5230 Yeadon Way/ M55 motorway
West	Olympic Way and beyond the wider industrial area

Layout

The site is securely fenced with palisade fencing approximately 2.5 m high. The site entrance is on Olympic Way. A waste processing building will be constructed to house the crushing operation and store products. The building will be located at the northern extent of the site with the doorway facing south, into the site. It will be constructed from a steel frame, concrete panel walls up to 4.5 m and steel panels on the upper walls and roof. Two roller shutter doors will allow access.

The wash plant will be constructed on the southern part of the site. Other equipment to be installed at the site includes a weighbridge, wheel wash, gate house, small electricity substation, office/welfare facilities and weighbridge cabin.

The site is surfaced with a combination of concrete, tarmac and loose stone chippings. The concreted areas will remain unchanged, but the tarmac is quite worn and so the tarmac and some hardstanding areas will be resurfaced with tarmac. The northern and western boundaries will be planted with a hedge on the inside of the fence for screening and for ecological benefit. The stone chippings are around the periphery of the site and are at a higher elevation to the hard surfaced areas. They will not be converted to hard surfacing as they will not be used for waste operations or for vehicle access, but will be enhanced with further planting for ecological purposes and also to minimise the amount of hard surfacing for drainage purposes.

Surface water currently drains into a sub-surface network and then out to sewer via an interceptor. A detailed drainage design has been undertaken and drainage improvements are required. Surface water will be collected within the site via an upgraded drainage network. It is proposed to harvest surface water for use on site using an underground tank. Water will be collected via a silt trap and interceptor to remove suspended solids and any trace oil or fuel so that it is fit for use.

Current Activities

A standard rules permit was issued in 2023 however no waste has been imported to date. The current permit allows importation of a range of waste types for processing to make aggregate products and soil substitute. The permitted annual throughput is 75,000 tonnes and the maximum permitted quantity of waste for storage is 40,000 tonnes. The site is undergoing preparatory works following grant of planning permission for construction of the wash plant and crusher building.

PROPOSED CHANGES

Soil Washing

It is proposed to add a soil washing activity to allow high quality recycled aggregate products to be produced.

The majority of waste received will be from utilities trenching and consist of mixtures of soil and sub-base aggregate. Waste will be processed using a fixed wash plant which separates the soil from the stone through washing and then screens the clean stone into different size products for re-use. Proposed waste types that will be subject to soil washing are listed in Table 1 below. This list mirrors the waste types allowed under the end of waste protocol.

Waste Code	Description
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07 *May include excavation from mineral workings*
01 04 09	Waste sand and clay *Must not include contaminated sand*
10 11 03	Waste glass based fibrous material *Waste without organic binders only*
15 01 07	Glass packaging
17 01 01	Concrete *Must not include concrete slurry*
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 Must not include fibreglass or glass fibre
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01 *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)* *Must not include coal tar or tarred products* *Must not include freshly mixed bituminous mixtures*
17 05 04	Soil and stones other than those mentioned in 17 05 03 *Must not contain any contaminated soil or stone from contaminated sites*
17 05 06	Dredging spoil other than those mentioned in 17 05 05 *Only inert aggregate from dredgings* *Must not contain contaminated dredgings* *Must not contain fines*
17 05 08	Track ballast, soil and stones other than those mentioned in 17 05 07 *Must not contain soil and stones from contaminated sites*
17 09 04	Mixed construction and demolition waste other than those mentioned in 17 09 01, 17 09 02 and 17 09 03 *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*
19 12 05	Glass *Does not include glass from cathode ray tubes*
19 12 09	Minerals (eg sand, stones) *Must not contain contaminated concrete, bricks, tiles, sand, stone or gypsum from recovered plasterboard*
20 01 02	Glass *Must not include fibreglass*
20 02 02	Garden and park waste (including cemetery waste) – soil and stones *Must not contain contaminated stones from garden and parks waste*

Table 1: Proposed Waste Types

Incoming waste will be deposited in a stockpile next to the washplant and loaded into a hopper which feeds the 'Log Wash', which is the main wash box. From this stone is screened into separate stockpiles to produce various sizes for use as pipe bedding (eg. <40mm, <20mm and <10 mm). Sand is also separated through a cyclone to produce a coarse grit sand and a fine sand for reuse. The components and configuration of the wash plant is shown on Drawing No 102/5 Wash Plant layout and Elevations.

Products will be stored in 4 m high concrete block bays around the wash plant as they are produced and then moved to either the storage building or to the 4 m high concrete block storage bays outside of the building.

The incoming waste stockpile will not be in a bay, this will be freestanding. It will be maintained at a maximum height of 4 m and will be situated to the east of the wash plant so that it is sheltered from the prevailing wind. This is presented on Drawing No 102/110 Stockpile Location and Detail.

Wash water will be returned into a thickening tank where it is separated into water/sludge by flocculation. Sludge will be sent for filtration and water is returned to the water feed tank for reuse. The plant will be a closed loop system, there will be no discharge of water. Water is 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.

The sludge will be filtered through a plate and frame filter press to produce a filtercake with a consistency of dry clay. This is stored below the press in a covered housing.

Any oversized material (eg. whole bricks of large pieces of concrete) will be crushed prior to washing using mobile crushing plant. To contain dust, a new building will be constructed to house the crushing operation and also store lightweight products that may be easily wind blown or generate dust.

Recycled products will be produced to meet Highways Agency specification for aggregates and in accordance with the WRAP quality protocol . This protocol will enable the products to achieve ‘end of waste’ status so that they can be reused in engineering projects as recycled products.

Additional Throughput

The wash plant has a maximum treatment capacity of 1000 tonnes per day. The maximum annual throughput will be 250,000 tonnes based on:

1000 tn x 5 days = 5000 tn per week x 50 weeks = 250,000 tn

It is proposed to increase the throughput from the current 75,000 tonnes to 250,000 tonnes to allow the plant to operate at maximum capacity.

Changes to Waste Codes

It is proposed to reduce the number of permitted waste codes to those listed in Table 1. This list mirrors the waste types allowed under the end of waste protocol, including the additional descriptive text which is specified in the WRAP protocol.

EWC 17 09 04 is not currently on the standard rules permit and it is proposed to add this waste code to the permit, with the description restricting the waste to:

> Mixed construction and demolition waste other than those mentioned in 17 09 01, 17 09 02 and 17 09 03 *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*

This description is the best waste code for the utilities trenching waste that is generated by JN Civils core business.

SUPPORTING DOCUMENTS

The following documents have been submitted with the application:

Environmental Risk Assessment – identifies receptors and assesses the risks from the proposed changes and proposes mitigation to reduce risks where required. Report No 102/4.

Dust Emissions Management Plan – this is a standard requirement for this activity as the site is within 500 m of a sensitive receptor. Report No 102/6.

Noise Impact Assessment and Management Plan - Report No J004664-7570-RC-01

Environmental Management System – including any controls identified through the risk assessment and a climate change risk assessment. Report No 102/5.

Wamitab certificates – the site manager Antony Finlay holds an EPOC certificate which is sufficient for the existing standard rules permit. He is registered on the MROC course and will complete the qualification in the coming months. Both the EPOC and registration confirmation email have been supplied.

Site Layout Plan – Drawing No 102/01B.