
NON TECHNICAL SUMMARY

This document has been prepared on behalf of Peel L&P Environmental Protos Limited ('Peel' or '*The Applicant*' hereafter) by Sol Environment Ltd and provides supporting evidence as required by Environmental Permit Application Forms Part C2 and C3 issued by the Environment Agency (EA).

Peel L&P Environmental Protos Limited is making this application to carry out a '*Substantial*' Variation of their existing EPR permit under The Environmental Permitting (England and Wales) Regulations 2018 (as amended) in order to change the nature of the facility from a materials recycling facility to a pellet manufacturing facility.

The subject site is located at Plot 5 at the Protos Resource Recovery Park, Land off Lordship Lane, Ince, Cheshire, CH2 4RB.

The site is currently permitted as a '*Waste Operation*' under EPR/DB3737AF to process 650,000 tonnes per annum (tpa) of commercial and industrial (C&I) and municipal solid waste (MSW), though this facility has never been constructed and the permit implemented.

The purpose of this variation is to:

- Vary the nature of the materials recycling facility to incorporate a dedicated alternative fuels pellet manufacturing facility;
- Install two pelletising lines comprising screening and sorting equipment with associated driers and pellet mills;
- Install two gas fired 6.5MW hot water boilers to provide the parasitic heat load required by the drying plant;
- Vary the permitted EWC codes to reflect the full spectrum of non-hazardous municipal solid waste and technically similar commercial and industrial wastes to be accepted; and
- Increase the permitted site boundary.

The proposed facility will accept and process up to 650,000 tpa of selected mixed wastes and SRF materials. Of this 425,000 tpa will be processed to produce a high specification pelletised fuel for export to Uskmouth Power Station, South Wales. In addition, up to 225,000 tpa Solid Recovered Fuel (SRF) bales (Main Burner Quality and Calciner Quality) may be produced and exported off site for energy recovery.

Due to the nature of the proposed operations, the facility will no longer be permitted as a '*Waste Operation*' as it meets the definition of an '*Installation*' by virtue of Schedule 1:

- **Section 5.4 'Disposal, recovery or a mix of disposal and recovery of non-hazardous waste' Part A(1)(b)(ii)** *Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities*

*covered by Council Directive 91/271/EEC—
(ii) Pre-treatment of waste for incineration or co-incineration*

The two 6.5MW gas fired hot water boilers meet the definition of a Medium Combustion Plant in accordance with the Medium Combustion Plant Directive (Directive 2015/2193/EU) ('MCPD') as set out in Schedule 25A of The Environmental Permitting (England and Wales) Regulations 2018 (as amended).

This permit variation application has been written and submitted concurrently with a Full Permit Transfer Application (Ref: SOL2009NPA02).

Once this permit variation has been determined, the permitted activities in full will be transferred to NPA Fuels Limited which is addressed within the Permit Transfer application. Due to the legally enforceable terms of the site lease which relate to the tenant and future operator of the site (NPA Fuels Limited), the permit transfer cannot take place until the variation has been determined by the Environment Agency.

This permit variation application is complete with a new environmental management system and working plan including an Odour Management Plan and Fire Prevention Plan. All management plans submitted as part of this permit variation are in the name of Peel L&P Environmental Protos Limited, however they will be transferred to NPA Fuels Limited as part of the transfer application. The Permit Transfer Application has been submitted to the Environment Agency as part of the Permit Variation submission link.

General Overview

Following pre-acceptance and arrival onsite non-hazardous commercial and industrial (C&I) and municipal solid waste (MSW) is delivered directly to the Reception Hall and loaded into one of three reception bunkers. Waste will be physically inspected and tested on a routine basis to ensure conformance with the sites acceptance specifications. All incoming waste shall be closely (physical and remote) monitored at numerous stages throughout the process with any non-conforming materials being removed. Wastes are typically stored for up to 3 days (maximum of 5 days) prior to processing. Any storage of wastes will be in accordance with the sites approved Fire Prevention Plan.

Incoming waste is transferred via crane system to one of the two processing lines where it undergoes the first stage of processing through the primary shredder. The shredded waste is then screened and sorted through a windsifter, over-band magnetic separator and eddy current separator for metal removal, optical sorter and double decker screener prior to undergoing secondary shredding to reduce the material size to below 30mm. Material is then passed through a final magnetic head drum for tramp iron removal before transferal to the drying plant.

There are two driers onsite, heated via two gas fired 6.5MW boilers, which reduce the moisture content of the material to below 5%. Dried material is then transferred to one of two pelletising lines,

each comprising multiple pelletisers for densification into the final fuel pellet prior to cooling and storage within one of two product silos for export offsite.

A proportion of incoming waste and excess dried material is diverted from the pelletising lines and transferred to the baler and wrapped for the production of refined SRF bales for export.

The process itself will not inherently produce large volumes of waste. Small volumes of metals and inert heavies (e.g. stone, wood, glass) will be collected and exported offsite for recovery.

All aspects of the plant will be managed through an integrated EMS management system.

Emissions to Air

Two gas fired hot water boilers will be installed on site to provide the heat required by the driers. Each 6.5MW hot water boiler will utilise Natural Gas from the mains supply to the site. Emissions to atmosphere will be via two 20 m high stacks (A1 and A2). Due to having a rated thermal input equal to or greater than 1 megawatt but less than 50 megawatts, the boiler plant meets the description of a Medium Combustion Plant.

Additional air emissions onsite are from the drying plant via four 20m high stacks (A3 – A6) and a single multiflued 20m high stack from the odour control plant (A7).

An Air Quality Assessment accompanies the application, as required by the Medium Combustion Plant Directive. The air quality impact assessment assumes all BAT ELV's stipulated by the MCPD and considers the air impacts to all identified residential, sensitive habitat and ecological receptors. In addition, the Air Quality Assessment takes into account the potential dust emissions from the drier stacks onsite (A3 – A6), which will be in line with the emission limit values stipulated by the Waste Treatment BREF.

It is the conclusion of the impact assessment that the facility is unlikely to have a significant impact at any of the receptor locations examined and is unlikely to have a significant impact on the environment.

Please refer to the Air Quality Assessment provided within *Annex D – Air Quality Assessment* for more information.

Odour

Due to all waste handling operations being undertaken within a sealed and engineered building that is fitted with extraction and carbon filter abatement, there will be little risk of odour releases from the site. Additionally, the proposed site is located in a long-established industrial area. The site is over 1km from the nearest residential area, therefore is not located in a sensitive location.

Potentially odorous air from the Reception Hall of the building is extracted, ducted and treated by a carbon filter odour abatement system to neutralize any odour generated. The main potential odour

risk comes from the unloading and storage of RDF feedstocks within the building and is mitigated through vehicle marshalling and building control measures. The carbon filter extraction system within the building maintains a slight negative pressure and ensures that no odorous air escapes when the doors are opened to allow delivery.

Although a secondary potential odour risk has been introduced to the site via the proposed drying plant, the sites strict waste acceptance procedures prevent the acceptance and processing of odorous materials into the facility. The refined material that will be dried through the plant is largely devoid of organic content and therefore has a very low odour potential. A detailed Odour Impact Assessment provided within *Annex E – Odour Impact Assessment* which demonstrates that there is no risk of odour emissions from site.

The site incorporates a covered building for additional short-term storage of finished pellet products. The site will on occasion temporarily store wrapped baled SRF within the Reception Building prior to export offsite for storage or usage. There is minimal odour risk from the short term storage of baled wastes due to their wrapped nature, internal storage and swift removal from site.

The site will be operated in accordance with the Odour Management Plan provided within *Annex I – Odour Management Plan*.

Emissions to Controlled Water

There will be no direct process emissions to controlled water arising from the facility.

The site is underlain by impermeable concrete hardstanding and sealed separate surface and foul drainage systems.

All external [clean] surface water runoff will be discharged via a system of interceptors and catch pits to the existing ditch along the sites boundary (W1-W4). The surface water drainage system will provide attenuation prior to discharge into the ditch and is equipped with a number of isolating chambers and penstock valves in order to allow containment of any potentially contaminated drainage in the event of any incidents.

The existing ditch forms part of the strategic surface water drainage network for the wider Protos development site.

There is a potential for wind-blown rain to enter the covered storage area. As such, this area is fitted with a drainage system which will capture any potential run-off which will be collected within a holding tank for removal from site via tanker.

The external bunded quarantine area is fitted with a central drainage gully to which any run-off will drain. Under normal operation when the quarantine area is empty, this will be directed to the surface water drainage system, however, in the event that the area is in use, the drainage will divert to the holding tank which is periodically emptied via tanker.

The process itself does not produce any effluents, however periodic washing down of the equipment is undertaken. Wash down waters are collected within holding tank and periodically tankered offsite.

In the unlikely event of a fire onsite, any potentially contaminated firewater would be contained within the reception bunkers and tankered offsite for removal.

Sewerage from the welfare facilities onsite will be treated at the onsite package treatment plant which meets the requirements of BS EN 12566 prior to discharge to the drainage ditch (W2).

Emissions to Sewer

There are no emissions to sewer arising from the process.

Emissions to Land

There are no emissions to land arising from the Installation.

Waste / Product Management

The facility will primarily produce fuel pellets which will be stored within the onsite silos and covered storage area prior to export to Uskmouth Power Station via rail.

In addition, the facility will also produce refined SRF bales which will also be exported offsite for energy recovery.

The process will also remove small volumes of metals, paper, PVC and inert heavies from the incoming wastes which will be collected and exported off site for recycling / disposal.