

BESPOKE ENVIRONMENTAL PERMIT APPLICATION

Prepared for: Greenology (Teesside) Limited

Appendix 5 Non-Technical Summary



360 Ref: GRE_NTS

Aug 2021

Greenology (Teesside) Ltd		NON-TECHNICAL SUMMARY	Issue date	Aug 2021
GRE_NTS	VI		Review by	-

I INTRODUCTION

I.1 GREENOLOGY (TEESSIDE) LIMITED, 'the operator', has instructed 360 Environmental Ltd to prepare a BESPOKE permit application, under the Environmental Permitting (England and Wales) Regulations 2016 (as amended), for the proposed End-of-Life Tyre (ELT) treatment site at;

GREENOLOGY HOUSE

51 Sotherby Road

Skippers Lane Industrial Estate

Middlesbrough

TS3 8BT

I.2 The Environment Agency (EA) application forms require a non-technical summary to be submitted in support of any variation to an environmental permit, and includes the following:

- an explanation of exactly what is being applied for;
- a summary of the regulated facility; and
- a summary of the key technical standards and control measures arising from the risk assessment.

I.3 This Non-Technical Summary should be read in conjunction with the rest of this application which also contains:

- Application Forms A, B2, B4, & F1
- Supporting Information
- Operating Techniques Document
- Environmental Risk Assessment.

I.4 GREENOLOGY (TEESSIDE) LIMITED are not making a claim for commercial or industrial confidentiality for any part of this variation application.

I.5 The operation will be a bespoke application due to the requirement to accept EWC codes for treatment and activities not listed within a Standard Rules permit, although the tyre treatment operation is allowed under the current SWIP permit, the despatch of tyre crumb from site isn't.

Greenology (Teesside) Ltd		NON-TECHNICAL SUMMARY	Issue date	Aug 2021
GRE_NTS	VI		Review by	-

1.6 The site currently operates under a Small Waste Incineration Permit (SWIP) [PPC/SWIP/04/21], issued by Middlesbrough Council, that allows it to accept the following wastes as described by the permit;

Table 1: Wastes currently permissible under the SWIP permit

Permitted non-hazardous waste types and quantities for pyrolysis			
Waste code	Description	Source	Quantity (approx.)
16 01 03	End of life vehicle (ELV) tyres	Various	10 800 t
19 12 04	Rubber crumb	PAS107 accredited suppliers	1 200 t
Total			12 000 t

1.7 The current pyrolysis installation operates as a ‘Small Waste Incineration Process (SWIP)’ as defined in Schedule 13A (Regulation 35(2)(g)) under the Environmental Permitting (England & Wales) Regulations 2010 (as amended). It is able to operate under IED Chapter IV (Schedule 13A EPR) and will not be subject to Chapter II IED (ex-IPPC, including BAT), providing the capacity is under 3t/hr.

For the purposes of this Chapter, waste incineration plants and waste co-incineration plants shall include all incineration lines or co-incineration lines, waste reception, storage, on site pre-treatment facilities, waste-, fuel- and air-supply systems, boilers, facilities for the treatment of waste gases, on-site facilities for treatment or storage of residues and waste water, stacks, devices and systems for controlling incineration or co-incineration operations, recording and monitoring incineration or co-incineration conditions.

1.8 The purpose of this application is for the operator to accept End-of-Life Tyres (ELTs) for processing, i.e., size reduction (shredding and granulating (crumbing)).

1.9 The outputs will be used;

- i) in the on-site pyrolysis operation, **or**
- ii) despatched from site to other third party recovery outlets (a SWIP permit does not allow for the transfer of material from site, only for the outputs to be pyrolysed on the same treatment site).

Greenology (Teesside) Ltd		NON-TECHNICAL SUMMARY	Issue date	Aug 2021
GRE_NTS	VI		Review by	-

1.10 For the purposes of the remainder of the application, the activities will be referred to as follows;

Table 2: Activity table

Activity ref	Activity
A	Tyre pyrolysis
B	Tyre recycling

2 THE SITE

2.1 The site is to be co-located at 51 Sotherby Road (NZ 52416 20090) with the tyre pyrolysis operation that will take place entirely within a dedicated building on an impermeable surface and sealed drainage system. There are no Source Protection Zones (SPZ) present.

2.2 The site is accessed via a security gate, from the public highway and is located within land owned by the operator.

2.3 East Middlesbrough Industrial Estate (also referred to as Skippers Lane Industrial Estate) is situated approximately two miles east of Middlesbrough town centre.

2.4 The estate itself is based just off South Bank Road, which is accessible by both the A171 (Cargo Fleet Lane) or the A66 dual carriageway.

2.5 The A66 lies about 1 mile from the estate and provides good motoring links east and west.

2.6 The estate site area is approximately 0.26 acres and includes a variety of national and local occupiers.

2.7 The location of the site is shown on GRE_SP.

2.8 Normanby Beck is 140 m east of the site boundary.

2.9 The Teesmouth and Cleveland Coast RAMSAR/SSSI/SPA are located approximately 1 000 m from the site boundary to the North. The citations and maps for these are included within the risk assessment (appendix 6).

Site

Greenology (Teesside) Ltd		NON-TECHNICAL SUMMARY	Issue date	Aug 2021
GRE_NTS	VI		Review by	-

3 SUMMARY OF PERMITTED WASTE TYPES AND PROPOSED ACTIVITIES

3.1 The permit application will allow the site to accept the same waste streams as currently permitted by the SWIP and will be subject to the same range of treatments aimed at recovering the beneficial properties of the material.

EWC	Description
16	WASTES NOT OTHERWISE SPECIFIED ON THE LIST
16 01	End-of-life vehicles from different means of transport [including off-road machinery] and wastes from dismantling of end-of-life vehicles maintenance (except 13, 14, 16 06 and 16 08)
16 01 03	End of life tyres (ELTs)

Tyre pyrolysis (Activity A)

This operation is dealt with by the SWIP permit and is regulated by Middlesbrough Council.

Treatment of waste ELTs for recovery (Activity B)

3.2 The operator will accept and store non-hazardous waste ELTs at the site and mechanically size reduce them for the purposes of on-site pyrolysis or recovery elsewhere.

3.3 Treatment is limited to shredding and granulating (crumbing) with the resultant outputs bagged then stored awaiting further recovery either on-site or despatched from site.

3.4 The activities carried out at the site as defined under Annex II of the Waste Framework Directive can be summarised as follows:

- R3: Recycling or reclamation of organic substances which are not used as solvents;
- R4: Recycling/reclamation of metals and metal compounds
- 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).

Greenology (Teesside) Ltd		NON-TECHNICAL SUMMARY	Issue date	Aug 2021
GRE_NTS	VI		Review by	-

4 OPERATING TECHNIQUES

4.1 The site will be operated in accordance with the Operating Techniques document which has been drafted to satisfy the requirements of EA Guidance, and details the following:

- management;
- site operations;
- emissions and monitoring; and
- information.

4.2 Operational management procedures will ensure that:

- the risks that the activities pose to the environment are identified;
- the measures that are required to minimise the risks are identified;
- the activities are managed in accordance with the management system and operating techniques document;
- performance against the management system is audited at regular intervals; and
- compliance with the environmental permit.

4.3 The risk management and mitigation measures employed at the site and identified in the environmental risk assessment are detailed in the sites operating techniques document.

4.4 In summary, the rules and operating procedures employed at the site will ensure the following with respect to the specified waste management activities:

- All non-specified waste treatment and storage will take place on concrete impermeable pavement provided with sealed drainage;
- Concrete surfacing falls towards drainage channels ensuring that potentially contaminated runoff is contained on site;
- Strict waste acceptance procedures will be adhered to, to ensure only permitted wastes are accepted on site;
- The site manager will ensure that regular inspections are made of the site. If necessary, remedial measures will be arranged as soon as possible.

Greenology (Teesside) Ltd		NON-TECHNICAL SUMMARY	Issue date	Aug 2021
GRE_NTS	VI		Review by	-

5 ASSESSMENTS

5.1 Environmental risk assessment

5.1.1 An environmental risk assessment (ERA) has been carried out to assess the environmental risk posed by the proposed variation to the activity.

5.1.2 There are no point source emissions to land, air, surface or groundwater from the proposed facility. Please note that there is a point source emission point from the pyrolysis plant but this is controlled through the SWIP.

5.1.3 The proposed facility will have drainage infrastructure in place at the site so that all potentially contaminated site drainage is captured and directed via a sealed system, consisting of concrete impermeable pavement across the site with falls towards the drain channels that captures all liquids and directs it to the underground sealed tank.

5.1.4 Operational procedures at the site will monitor and manage amenity and accident risks from the proposed activities and includes provision for the monitoring of odour, noise, and fugitive emissions.

5.1.5 The impact of the proposed development on surrounding human and environmental receptors has been assessed in the ERA.

5.1.6 As the management measures detailed in the risk assessment are currently in place the conclusion has been reached that the proposed waste materials and treatment activities, are unlikely to result in a significant accident risk or risk to the local environment, including from odour and noise, or pollution of surface or ground waters.

Greenology (Teesside) Ltd		NON-TECHNICAL SUMMARY	Issue date	Aug 2021
GRE_NTS	VI		Review by	-

6 SITE CONDITION REPORT

6.1 The current Baseline Report (BR) has been updated to provide a Site Condition Report (SCR) as a part of this application as the proposed operation will introduce the ability for tyre derived outputs, i.e., tyre crumb, to be removed from site.

6.2 The proposed facility will operate with due regard to the conditions of the environmental permit and all relevant environmental legislation to ensure that land and groundwater is protected during the lifetime of the site and that the land is in a satisfactory state when the permit is eventually surrendered.

6.3 The possibility of any significant releases to the ground occurring during the lifetime of the permit is therefore limited.

6.4 All waste will be stored and treated on areas of impermeable concrete to eliminate direct potential pathways to soil and groundwater.

6.5 Minor spillages, if they occur, are dealt with immediately by trained staff using appropriate spill response procedure and spill kits located around the site.

6.6 The impermeable concrete site surfacing will locally break any potential pathway for contaminants that could be emitted from the permitted activities to land or groundwater.

Greenology (Teesside) Ltd		NON-TECHNICAL SUMMARY	Issue date	Aug 2021
GRE_NTS	VI		Review by	-

7 CONCLUSION

7.1 The overall conclusion of the studies undertaken in support of this bespoke environmental permit application for a waste storage and treatment facility at 51 Sotherby Road, Skippers Lane Industrial Estate, Middlesbrough is that there is unlikely to be a significant environmental impact.

7.2 GREENOLGY (TEESSIDE) LIMITED are fully committed to ensuring the highest standards are met and will undertake their activities in a manner consistent with best industrial practices and in accordance with the company Environmental Management System (EMS).

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