

<b>Project details</b>	Environmental Permit Application Cleantank Limited – Amsterdam Road Materials Recycling Facility EPR/KB3607SG/A001
<b>Applicant details</b>	Cleantank Limited Amsterdam Road Hull Amsterdam Road Hull England HU7 OXF
<b>Report details</b>	<b>EP Application – Supporting Statement</b> <b>Document reference: DLR_2021.02/01_v2</b>
<b>Report date</b>	24 August 2022
<b>Submitted to</b>	Permitting and Support Centre Environmental Permitting Team Environment Agency Quadrant 2 99 Parkway Avenue Parkway Business Park Sheffield S9 4WF Email: PSC@environment-agency.gov.uk
<b>Author</b>	Rebecca Hodkinson EHS Consultant



Tel: [+44] 07949 178558 [www.revaenvironmental.co.uk](http://www.revaenvironmental.co.uk)  
Company Registered in England No. 11506654

## Table of Contents

### Contents

1	Introduction.....	3
1.1	General.....	3
1.2	Site Location and Description.....	3
1.3	Application Objective.....	4
1.4	Process Description.....	5
1.4.1	General.....	5
1.4.2	Waste Acceptance and Storage.....	7
1.4.3	Treatment.....	7
1.4.4	Emissions.....	8
2	Application Form.....	8
2.1	Form Part A.....	8
2.2	Form Part B2.....	8
2.2.1	Question 1a.....	9
2.2.2	Question 3.....	9
2.2.3	Question 4.....	9
2.2.4	Question 5.....	9
2.2.5	Question 6.....	10
2.3	Form Part B4.....	10
2.3.1	Question 1b.....	10
2.3.2	Question 2.....	11
2.3.3	Question 3.....	11
2.4	Form Part F.....	11

## 1 Introduction

### 1.1 General

Cleantank Limited (the applicant) has requested that Reva Environmental Ltd (the agent) prepares an Environmental Permit (EP) application, for its recycling facility at Amsterdam Road, Sutton Fields Industrial Estate, Hull, Humberside, HU7 0XF.

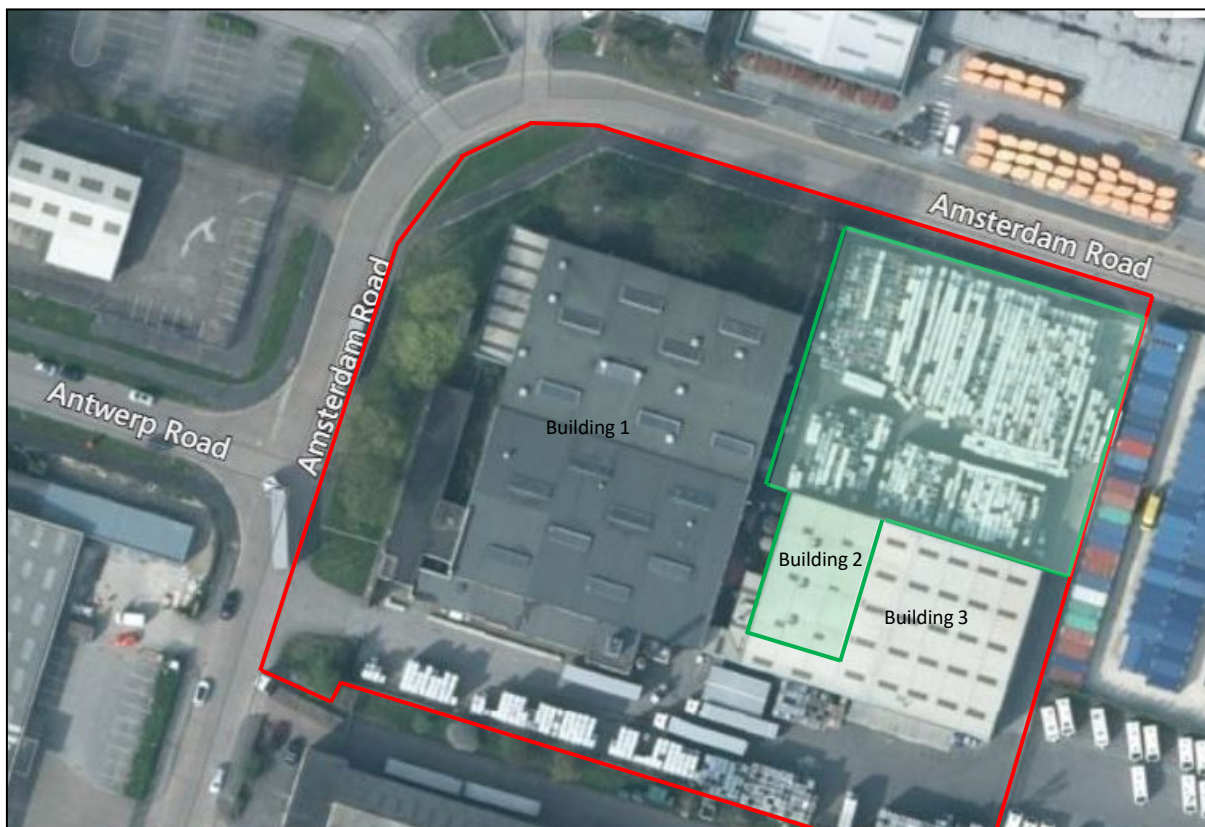
The site is located in an commercial/industrial area, at National Grid Reference TA 10246 32508. The site setting is described on **Drawing CLNT-HULL-EP03** provided in **Appendix D** of this application. The facility is not currently permitted for waste management. The building is in a good state of repair.

The facility will operate a two-line physical waste treatment activity for the recovery of plastic from hazardous and non-hazardous empty packaging that cannot be reconditioned, supported by associated activities governing waste acceptance, storage, handling, and onward transfer of the treated material (product).

Building 2 is situated within an area of warehousing, operated by a sister company to the applicant. The buildings have a physical separation and the proposed operations for Building 2 will not be carried out anywhere outside the proposed EP boundary.

### 1.2 Site Location and Description

The proposed EP boundary is shown on **Figure SS1** below, in green. The site lease boundary is shown in red. The EP will only include Building 2, the back yard area and the access road to these; the remainder of the rest of the leasehold site will continue to operate without the need for a permit, Building 1 and Building 3 being under the control of sister company Circular Polymers Limited.



**Figure SS1: Site Location and EP Boundary**

The EP facility is located at a site which comprises two areas of warehousing to the east and west, joined at their southern boundary by a corridor. The smaller warehouse to the east is split into two distinct areas, Building 2 (proposed to be covered by the Waste Operation EP) and Building 3.

There is a large yard area to the north of Buildings 2 and 3, all of which is to be included in the EP and which will be used for the storage of hazardous and non-hazardous packaging waste pending treatment, the storage of separated fractions for recovery/sale (IBC cages and granulate product), and will house the waste area (e.g. scrap metal).

The access route to the EP site is from Amsterdam Road to the north. The access road runs the full length of the eastern boundary then along the southern boundary to the exit back onto Amsterdam Road. A one way system is in place to control vehicle movements and the flow of materials through the site. The portion of the access road to the east of the yard is included in the EP boundary as this will be the unloading area for incoming waste for the waste facility before it is moved into the relevant storage location depending on whether it is IBCs or small containers, and based on its hazard classification. Access to Building 2 is on the northern wall of the Building.

There is a two storey office/welfare block and reception at the front entrance to Building 1. This is shared by Circular Polymers and Cleantank.

### 1.3 Application Objective

The objective of this application is to obtain a bespoke Environmental Permit (EP) which allows the applicant to:

- Accept hazardous and non-hazardous empty packaging (e.g. IBCs, small plastics, drums) that cannot be reconditioned, to enable plastic recycling by subjecting it to physical treatment comprising shredding, granulation and cleaning.

The materials are those that have been discarded or don't pass quality assurance (QA) tests for being reconditioned; instead they are shredded, granulated and cleaned so that the processed materials can be recovered.

The physical treatment in Building 2 will take place in up to two lines that will run in parallel (and can run independently from each other). If only one line is operational, this can process batches of IBCs and drums/small containers; if both lines are operational it is likely that one will be dedicated for IBCs and one for drums/other containers. In that scenario, this will not be limited as maximum flexibility will be key to achieving full efficiency so both plants remain able to process either waste stream. If run to their maximum operating capacities, 20 hours a day, 7 days a week, the 2 lines could process 8 tonnes per day combined; the likely split would be 2.4 tonnes non-hazardous and 5.6 tonnes hazardous waste (a 30:70 split).

The total storage capacity of the site is calculated as the aggregate of the storage areas. This is defined in the FPP as 61.5 tonnes. This represents a worst case scenario of the yard area being full; this is very unlikely due to the treatment capacity of the plant and the expected waste input. Based on the hazardous/non-hazardous split noted above, this equates to a maximum 18.5 tonnes of non-hazardous waste and 43 tonnes of hazardous. For the purposes of the EP, where total capacity is included as a limit, it is requested that 61.5 tonnes is included as a total (combined) limits, with a restriction of 50 tonnes applied to the hazardous element. This will allow for the flexibility in the market/customer needs.

Following processing in Building 2 the material is considered to be a product not a waste. It can be transferred off site in this state as a product. Further details of this, in relation to the EU End of Waste Regulations, Quality Protocols, and the completed end of waste assessment in accordance with article 6(1) and 6(2) of the WFD 2008, is provided in the BAT Assessment in **Appendix I** of this application (ref. DLR\_2021.02/06).

In terms of identifying the type of environmental permit (EP) that is needed, the relevant parts of the EP Regulations are Sections 5.3, 5.4 and 5.6 of Chapter 5.

- With respect to Section 5.3 this refers to the hazardous waste portion of the activities. The proposed treatment is physico-chemical. The site will process < 10 tonnes per day of hazardous waste so whilst physico-chemical treatment is a listed activity (5.3 Part A(1)(a)(ii)), the proposed hazardous activity is a Waste Operation.
- With respect to Section 5.4 this refers to the non-hazardous waste portion of the activities. Again the proposed treatment is physico-chemical. This is a listed activity (5.4 Part A(1)(a)(ii)) however the threshold for this section is 50 tonnes per day which the applicant will be operating significantly below.
- The EP will also need to allow the storage of waste (hazardous and non-hazardous). Storage of hazardous waste (5.6 Part A(1)(a)(i)) will be significantly below the 50 tonne threshold for a listed activity.

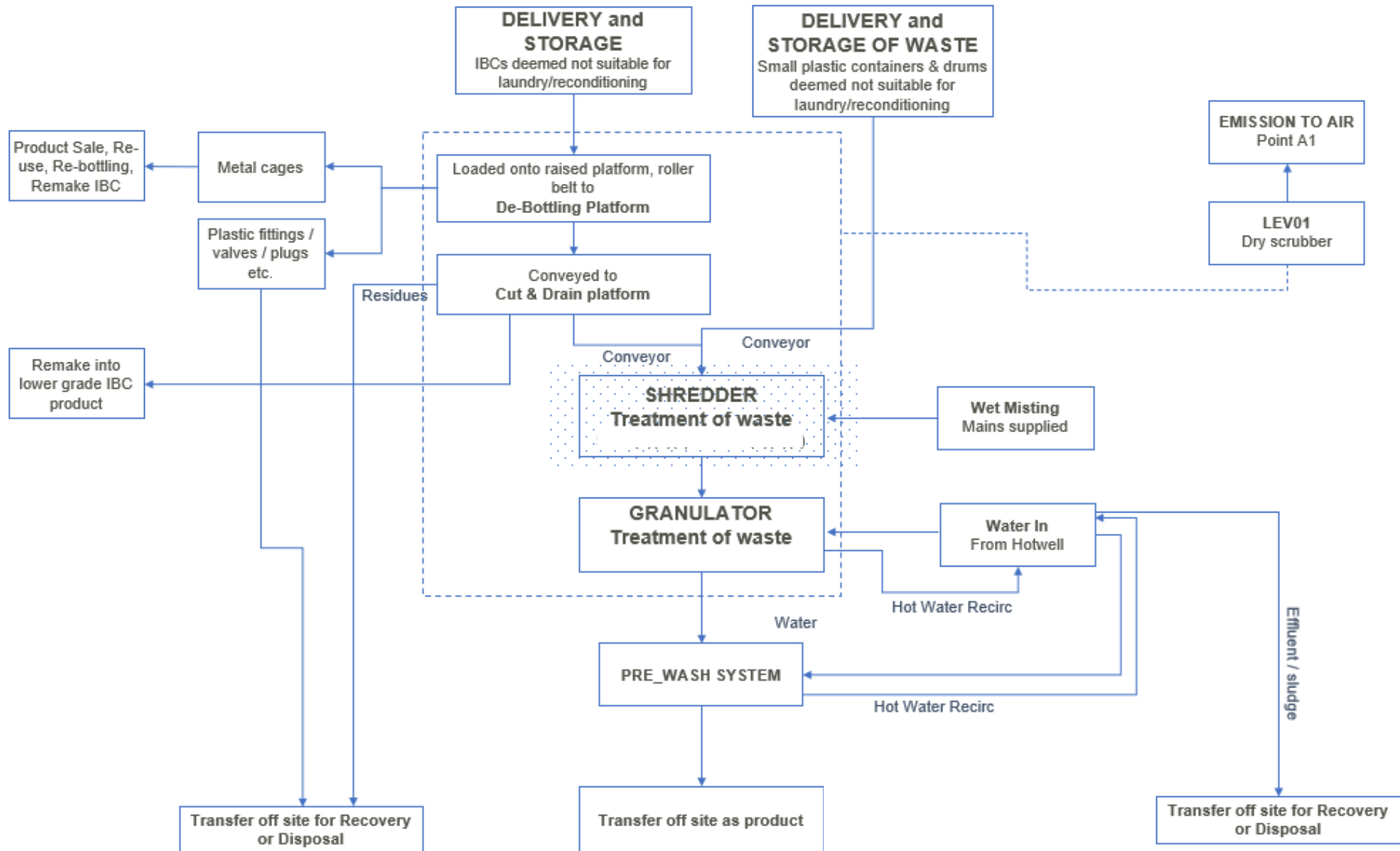
Based on this review of the proposals against the EP Regulations, it is considered that the application is for a new bespoke Waste Operation for the physical treatment of hazardous waste. The treatment of non-hazardous waste and the storage of waste are included as part of this primary Waste Operation.

## 1.4 Process Description

### 1.4.1 General

The process is set out below and a process flow diagram is provided in **Figure SS2**.

### Plastic Recycling – Building 2



### **1.4.2 Waste Acceptance and Storage**

Wastes received and stored for processing in the permitted plant are empty plastic containers, either intermediate bulk containers (IBCs) or small containers that have not passed the quality assurance tests for reconditioning.

Wastes are segregated for safe storage purposes in the external yard area. There are designated zones for hazardous and non-hazardous IBCs (based on the hazard description) and a dedicated area for the small plastics. The areas are shown on **Drawing CLNT-HULL-EP02: Site Layout Plan**.

A clear route through the yard area, and between the designated areas, is maintained. The primary function of this is safety and fire prevention. The Fire Prevention Plan (FPP) is provided in **Appendix G** of this application (ref. DLR\_2021.02/04) and sets out the storage arrangements in accordance with the EA fire prevention plan guidance. Measures relating to storage are also described in the BAT Assessment provided in **Appendix I** of this application (ref. DLR\_2021.02/06).

### **1.4.3 Treatment**

There is capacity for two treatment lines in Building 2. Line 1 is the primary line and is designed to treat both IBCs and the small plastics; the second, Line 2, has not yet been installed but will not have the front end processing capability for the IBCs. Whilst it will be able to treat both types of waste, IBCs would need to be de-bottled on Line 1 before being shredded and granulated in Line 2.

The treatment process will be managed on a batch process. As well as being an operational efficiency optimisation measure, this also ensures that any incompatibility issues between waste types/residues can be avoided.

#### **1.4.3.1 Loading of IBCs**

IBCs are loaded up on the raised platform on Line 1 and moved via rollers to a location on the platform where they can be de-bottled, to remove the plastic liner from the metal cage. The metal cage is either placed in the waste area of the yard as scrap metal or placed in Pile 2 if it is reusable. The liner is then cut manually and any minimal residual content (the containers are nominally empty) allowed to drain into an IBC positioned below the platform. The liner is then ready for treatment in either Line 1 or Line 2.

#### **1.4.3.2 Loading of Smalls**

Small containers will be checked for the presence of any nominal residual contents. If required, containers will be drained into a dedicated container, or into the same IBC as above, following compatibility checks to confirm whether this is acceptable.

#### **1.4.3.3 Shredding & Granulation**

Both IBCs and small plastics are conveyed into the shredder unit. IBCs are loaded from the conveyor off the platform whilst small plastics and drums will be manual loaded onto the conveyor system. The shredder is a dry system and is fully enclosed. It consists of a rotor with a hydraulic ram that pushes the material against the rotor in order for it to be cut. The screen size allows the material to be processed in the subsequent granulator.

Waste is conveyed into the granulator unit where it is further processed to reduce its size and improve uniformity.

The shredded and granulated waste is then transferred through a pre-wash unit. Water for the pre-wash system is obtained from the hotwell of the wider site boiler system (this contains the warm condensed steam). Water from the hotwell is pumped to the granulator and the auger screws to facilitate a chemical clean (5% caustic solution). This water is recirculated via a vibrating sieve back into the hotwell and re-used in the pre-wash system. When the water become 'dirty' and



sludges/solids build up, these are removed and stored (in IBCs) for transfer off site for disposal. The water itself can be reused for a finite period of time; these are also then stored appropriately and transferred off site for aqueous waste disposal.

The use of a wash system enables the processed material to be in a suitable condition to meet the requirements for non-waste status, and therefore to be transferred off-site as a product not a waste, for use as a recycled raw material. Full details of the end-of-waste assessment is provided in the BAT Assessment in **Appendix I** of this application (ref. DLR\_2021.02/06).

#### **1.4.4 Emissions**

##### **1.4.4.1 Emissions to Air**

There is a hood extraction over the Line 1 shredder and one over the Line 1 granulator, as well as extraction over the IBC conveyor line. All feed to a common local exhaust ventilation (LEV) system which will include filtration. Particulates are not considered to be of concern with the plastic treatment activity, instead the primary focus is on potential VOCs from the waste residues in the containers being processed. The LEV system will therefore provide VOC abatement using a carbon filtration system. When Line 2 is installed, this will also incorporate a hood extraction unit over the shredder and granulator, and will be connected to the same filtered LEV system. Despite that, particulates have been included in the H1 assessment completed for this application.

Emission of the filtered extract is marked as **Emission Point A1** on the Site Layout Plan, **Drawing CLNT-HULL-EP02**. Inspection of the filters will take place to ensure that they remain fit for purpose and retain their specified efficiency/abatement performance. To reflect consistency across the Holding Company permitted sites, it is proposed that monitoring of the LEV exhaust is carried out within 3 months of full commissioning of the process. Monitoring will be undertaken of VOCs but also dust (as a precautionary measure – it is expected that there will be no dust above the limit of detection of the monitoring equipment). The results will be provided to the EA and the impact of the emissions to air will be assessed via an updated H1 assessment. Where additional appropriate measures are required to further mitigate the impact of the emissions these will be proposed to the EA.

##### **1.4.4.2 Effluent**

As detailed in 1.4.3.3 liquid effluent from the process is limited to water for the granulator and pre-wash system. This is recirculated until it is no longer clean enough to be suitable, and at that point is collected and stored in IBCs for transfer off site for disposal.

## **2 Application Form**

An application for a new Waste Operation EP requires the completion of the EA application form parts A, B2, B4 and F1. Details have primarily been provided on the form however this section provides additional supporting information and signposts to supplementary documents provided in support of the application.

The completed application form is provided at the front of this EP application document.

### **2.1 Form Part A**

Contact details for the agent and the applicant are provided in this part of the application form. As required by Question 4 in Appendix 1 of the form, details are provided for the named Directors as follows:

- David Michael Eliot Cuckney (Managing Director) – Date of Birth:
- Keira Finnerty (Commercial Director) – Date of Birth:



- Mike Mulligan (Business Development Director) – Date of Birth:
- Debbie Spiers (Financial Director) – Date of Birth:
- Correspondence pertaining to the application should be directed to the following

persons:

- Rebecca Hodkinson (the Agent) – [rebecca@revaenvironmental.co.uk](mailto:rebecca@revaenvironmental.co.uk)
- Gareth Worthy (on behalf of the applicant) – [gareth.worthy@krh.uk.com](mailto:gareth.worthy@krh.uk.com)

## 2.2 Form Part B2

### 2.2.1 Question 1a

The application was discussed with the EA inspector, Oliver Smith, on 6 July 2021 prior to the original submission in November 2021. A request was also submitted to the EA for conservation screening. A copy of the response document is provided in **Appendix A** of this application. This August 2022 application is the re-submission of the application following return of the November 2021 submission by the EA in June 2022. For clarity, the following pre-application correspondence is also referenced:

- Non-duly made request from the EA for further information, dated 11 May 2022;
- Non-duly made response letter submitted by Cleantank on 31 May 2022; and
- The 2021 application refusal email sent by the EA, dated 29 June 2022.

### 2.2.2 Question 3

Question 3 refers to the applicants ability as an operator. It is confirmed that in response to Question 3a and 3c respectively, the relevant persons have not been convicted of any relevant offences nor declared bankrupt.

Regarding Question 3b, copies of the relevant COTC certificates (including certificate of continuing competence) are provided in **Appendix B** of this 2021 application. The named person also provides COTC cover at the following site:

Permit Number	Site Address	Postcode
GB3209MW	Ken Rooms (Hull) Limited, Cumberland Street, Hull, Humberside	HU2 0PU

Question 3d specifically relates to management systems. The applicant will operate the site in accordance with a set of internal documents and procedures that comprise the integrated management system (IMS) generated by its holding company, Clean Eco Group. This has been written in accordance with ISO 9001 (quality), ISO 14001 (environment) and ISO 45001 (health and safety) and is certified at the Cumberland Street site to ISO 14001 by UKAS accredited certifying body Cfa (certificate no. 20/0298).

The system is in the process of being reviewed and adapted to make it specifically relevant and applicable to the Amsterdam Road site. Using the existing certified system as a basis provides confidence that it will also meet the requirements of the ISO standard. The intention is to obtain accreditation at the Amsterdam site in the future. The system matrix is provided in **Appendix C** of this application. An additional document has been produced that demonstrates that the EA guidance on management systems is satisfied by the existing EMS. This should be considered as a cover document for Appendix C and read alongside the EMS Matrix.

### 2.2.3 Question 4

Question 4 requires confirmation of the sewerage undertaker where a discharge is part of the activity being applied for. There is currently no active discharge consent for the activities carried out at the facility. The operator has contacted Yorkshire Water to identify if consent was needed but has never received notification to that effect.

Uncontaminated surface water from the yard area, and from building roofs, is collected in sumps in the yard and discharged to surface water drain unless contaminated. If contaminated (e.g. as a result of spillage) it is pumped out of the sumps and transferred off site for disposal.

Details of the existing drainage network at the site are provided on **Drawing CLNT-HULL-EP04** in **Appendix D**.

### 2.2.4 Question 5

Question 5a requires site plans to be provided in support of the application. These are provided in **Appendix D** of this application and are as follows:

- Drawing CLNT-HULL-EP01: Site Location Plan
- Drawing CLNT-HULL-EP02: Site Layout Plan
- Drawing CLNT-HULL-EP03: Site Setting
- Drawing CLNT-HULL-EP04: Site Drainage Plan
- Drawing CLNT-HULL-EP05: Fire Management Plan

Question 5b requires the provision of a site condition report (SCR). The guidance for completing Part B2 confirms that this is required for new Waste Operations. A copy of the H5 template has been completed (Sections 1 – 3) and a supporting SCR, based on a Landmark Envirocheck report, is provided in **Appendix E** of this application (ref. DLR\_2021.02/02).

Question 5c requires the provision of a non-technical summary. This has been produced and is provided in **Appendix F** of this application (ref. DLR\_2021.02/03).

Question 5d requires the provision of a fire prevention plan (FPP) where the activities include the storage of combustible waste. A copy of the FPP produced for the purposes of this application is provided in **Appendix G** of this application (ref. DLR\_2021.02/04). The relevant drawing that provides details of the fire provisions as set out in the FPP, is **Drawing CLNT-HULL-EP05: Fire Management Plan**.

### 2.2.5 Question 6

Question 6 requires the provision of an environmental risk assessment. A qualitative risk assessment has been generated for the facility, following the EA's source-pathway-receptor approach. A copy of this is provided in **Appendix H** of this application (ref. DLR\_2021.02/05). In addition to the qualitative risk assessment, an H1 environmental assessment has been completed using the EA's latest database tool. A number of assumptions have had to be made for this; there is no actual data as the facility (and LEV) is not yet operational. All assumptions and/or justifications for the inputs used are provided in the tool. Whilst the focus is on VOCs, dust has also been included for completeness. A copy of the completed H1 is also provided in **Appendix H**. For clarification, the current version of the H1 tool does not reflect the newer short term EAL for benzene, which is 30 µg/m<sup>3</sup>. To address this, a new substance 'benzene new ST EAL' has been added into the tool.

Question 6b is a new requirement for waste and installation permits; it includes the completion of climate change risk screening. Based on the 3 questions on the form, the total screening score is 4. As a result of the score being less than 5, a climate change risk assessment is not required to be submitted with the application. It will however be carried out and implemented as part of the EMS.

In support of the EP application, a noise impact assessment has been carried out and a noise management plan produced. A copy of this is provided in **Appendix K**. Due to the inclusion of shredding in the permit, the EA has also requested the provision of a dust management plan; a copy is included in **Appendix J** (ref. DLR\_2021.02/07).

## 2.3 Form Part B4

### 2.3.1 Question 1b

The following waste types are to be accepted at the site:

- 07 02 13 – Waste plastic from the MFSU of plastics, synthetic rubber and man-made fibres
- 15 01 02 – Plastic packaging
- 15 01 05 – Composite packaging
- 15 01 06 – Mixed packaging
- 15 01 10\* - Packaging containing residues of or contaminated by hazardous substances
- 16 01 19 – Plastic from end-of-life vehicles
- 16 01 21\* - Plastic from end-of-life vehicles contaminated by hazardous substances
- 17 02 03 – Plastic from construction and demolition wastes
- 19 12 04 – Plastic and rubber from the mechanical treatment of waste (plastic component only)
- 20 01 39 – Plastic as a separately collection fraction of municipal waste

In Section 2.1.3 and Table BAT1 of the BAT Assessment in **Appendix I** of this application (ref, DLR\_2021.02/06), the following information is provided for each of the waste types included in the tables above:

- Storage location(s);
- Maximum quantity stored at any one time; and
- Maximum storage time

It is acknowledged that the EP is likely to include two or three separate tables for waste types, relevant to the activities of storage, shredding and granulation. Please note that for this particular application, the tables would be a direct duplicate as all incoming wastes will be processed in both parts of the treatment plant. All are inherently part of the one Waste Operation governed by the EP.

### 2.3.2 Question 2

As detailed in 1.4.3.3, liquid effluent from the process is limited to water for the granulator and pre-wash system. This is recirculated until it is no longer clean enough to be suitable, and at that point is collected and stored in IBCs for transfer off site for disposal.

With respect to air emissions, the extraction and filtered LEV system is described in Section 1.4.4.1 above.

### 2.3.3 Question 3

This relates to operating techniques that will be employed. A BAT Assessment has been compiled that references the relevant sector guidance and summarises the operations undertaken and the measures employed to control emissions.

For this application, the key relevant guidance is as follows:

- Sector Guidance Note 5.06 “Guidance for the Recovery and Disposal of Hazardous and Non-

Hazardous Waste”;

- Non-hazardous and inert waste: appropriate measures for permitted facilities; and
- Chemical waste: appropriate measures for permitted facilities.

A BAT assessment has been produced, and is provided in **Appendix I** of this application (ref. DLR\_2021.02/06).

## 2.4 Form Part F

The application fee has been identified using the 2022 EA Charging Scheme. The application seeks to permit one new Waste Operation. The activity charge for this has been cited by the EA as falling into two separate categories as follows:

- Physical treatment of hazardous waste, ref. 1.16.13 in Table 1.16. The application charge for this is £7,930; and
- Physical and chemical treatment of hazardous waste, ref. 1.16.14 in Table 1.16. The application charge for this is £3,965 (a 50% reduction is applied).

The following additional plans are submitted, and incur an additional fee:

- Fire Prevention Plan, ref. 1.19.3 in Table 1.19 of the Charging Scheme. The charge for this is £1,241;
- Noise and Vibration Management Plan, ref. 1.19.7 in Table 1.19 of the Charging Scheme. The charge for this is £1,246; and
- Dust Management Plan, ref. 1.19.5 in Table 1.19 of the Charging Scheme. The charge for this is £1,241; and

The total application fee is £15,623. Payment of the application fee has been made by the applicant, by BACs as follows:

- £9,171 paid in November 2021, BACs reference: PSCAPPCLEAN321); and
- £6,542 paid on 1 June 2022, BACs reference: PSCAPPCLEAN322).