UMBRELLA ENVIRONMENTAL

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Non-Technical Summary

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CIWM

Affiliated Organisation 2025

Together, we stand for a world beyond waste

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3R Technology UK Limited
Unit 21-22 Roman Way Longridge Road
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Registered Office:
Unit 21-22 Roman Way Longridge Road
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1 INTRODUCTION

This Non-Technical Summary (NTS) accompanies the application for a variation to an exisiting bespoke waste installation EPR/TP3602SH/V001 at Unit 21-22 Roman Way Longridge Road, Preston, PR2 5BB. The site location is shown on plan 027.1_09_001 an aerial image provided in The site is approx. 5949 m^2 and is located at Unit 21-22 Roman Way Longridge Road, Preston, PR2 5BB. NGR SD 58158 32772, What Three Words: shops.tubes.risks.

Site is accessed by the north eastern gate for deliveries located on Roman Way.

Figure 1 Site Location (Aerial Photo).

The site was historically an industrial unit. The site will receive various types of hazardous waste plastics from Waste Electrical and Electronic Equipment (WEEE) containing Brominated Flame Retardants (BFR's) as well as WEEE. These consist of Persistent Organic Pollutants (POPs) of global environmental concern.

The site will accept loads of waste from various different suppliers all with a booking to control the rate of input and storage levels.

The site is designed to operate a Waste Electrical and Electronic Equipment (WEEE) sortation plant. The facility is equipped with purpose-built machinery designed to perform density separation, effectively segregating mixed WEEE shredder output into multiple recyclable streams. Some waste will just be accepted as apart of a waste transfer activity.

Following the updated classifications under the revised Persistent Organic Pollutants (POPs) regulations regarding WEEE waste, the process now generates fractions that are classified as hazardous waste. Specialized equipment has been installed to separate the plastic fractions by weight—distinguishing between heavy and light fractions. The light plastic fraction is directed to recycling streams, while the heavy fraction, containing POPs, is disposed of via high-temperature incineration processes.

The separation system will also incorporate the removal of other materials present in the feedstock, including metals, paper and other components, ensuring comprehensive segregation and compliant waste management.

This NTS provides an overview of:

- Explanation of what is being applied for;
- Summary of the activities;
- A summary of key technical standards, controls and mitigations that are proposed.

Further to support the application further information is submitted;

- Application Forms (Parts A, C2, C3, C4 and F1) and associated appendices, List of Directors and WAMITAB/Operator Competence Certificates;
- Associated Drawings;
- Environmental Risk Assessment (ERA);

- Best Available Techniques Assessment ;
- Environmental Management System (EMS)/ Operating Techniques document;
- Site Working Plan;
- Baseline Site Condition Report (SCR);
- Fire Prevention Plan (FPP).

1.1 Pre-Application Discussions

Enhanced pre app discussions (for permit EPR/TP3602SH/V001) was requested from the Environment Agency (EA) on 21/11/2024 further clarity was discussed on the below dates including a site visit.

- Email on 24/01/2025
- Telephone conversation on 11/03/2025
- Site visit on 13/03/2025
- Email on 09/04/2025
- Telephone on 17/04/25

Pre app is located in section 01 of this application pack.

1.1.1 Site Location

The site is approx. 5949 m^2 and is located at Unit 21-22 Roman Way Longridge Road, Preston, PR2 5BB. NGR SD 58158 32772, What Three Words: shops.tubes.risks.

Site is accessed by the north eastern gate for deliveries located on Roman Way.

Figure 1 Site Location (Aerial Photo)

(Google)

1.2 Current Permit

The current permit allows for:

Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types

S5.3A(1)(a)(ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico- chemical treatment	D9:Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12.	From receipt of hazardous waste into the treatment process to the transfer of recovered component polymers. Physical treatment including manual and mechanical sorting and separation, shredding, screening, washing and granulating of hazardous waste for disposal. Treatment of WEEE plastics shall be carried out within a building. Waste shall be stored and treated within a building on an impermeable surface with sealed drainage system. Waste types as specified in Schedule 2, table 2.2
S5.6 A(1)(a) The temporary storage of hazardous waste in a facility with a total capacity exceeding 50 tonnes pending any of the activities listed in sections 5.1, 5.2 and 5.3.	Storage of hazardous waste prior to treatment or disposal. D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)	From receipt of waste to introduction into the treatment process and the storage for disposal off site. Waste shall be stored and treated within a building on an impermeable surface with sealed drainage system.
Directly Associated Activity		
Process water filtration	Filtering of particulates and solids from recirculating water from wash and float/sink tanks via vibrating screens.	From the filtration of process waters to the transfer of filter cake off site. Process waters for recirculation into the process or for disposal offsite.
R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Storage of waste prior to submission to treatment operations on site. Waste shall be stored and treated within a building on an impermeable surface with sealed drainage system.	

	Waste types as specified in Table 2.2	
R3: Recycling/reclamation of organic substances which are not used as solvents	Physical treatment including manual and mechanical sorting and separation, shredding, screening, washing and granulating of waste for recovery. Waste shall be stored and treated on an impermeable surface with sealed drainage system. Waste types as specified in Table 2.2	

2 OVERVIEW OF APPLICATION

The addition of extra waste codes, change of waste code description and the addition of an extra processing line. Referenced as below.

- **Substantial variation.** Section 5.3 (a) (ii) – hazardous waste installation – physico-chemical treatment to add extra waste codes,
- **Substantial variation**. Section 5.6 Part A(1) (a) (i) - Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.
- **Normal variation.** Physical treatment of non-hazardous waste to treat non-hazardous plastic, add waste codes and the sorting of non-hazardous batteries.

Additional waste codes

16 02 09*	transformers and capacitors continaing PCBs
16 02 10*	discarded equipment containing or contmainated by PCBs other than those mentioned in 16 02 09
16 02 11*	discarded equipment containing chloroflurocarbons, hydrochlorofluorocarbons and hydrofluorocarbons
16 02 12*	discarded equipment containing free asbestos
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
19 12 04	Plastic and Rubber
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35

Removal of wording

The below wording is to be removed from the permit

"Waste shall be stored and treated within a building on an impermeable surface with sealed drainage system. "Currently located in the activity table of the permit.. The external storage area is apart of a sealed drainage system and there is no risk of polluted water escaping the site.

Removal of wording from waste descriptions to align with current activities and WM3[1] Guidance, Wording to be removed to align with the business and guidance is the term 'plastic only'.

Waste code	Description
16	**Wastes not otherwise specified in the list**

[1] https://assets.publishing.service.gov.uk/media/6152d0b78fa8f5610b9c222b/Waste_classification_technical_guidance_WM3.pdf

16 02	**wastes from electrical and electronic equipment**
16 02 15*	Hazardous components removed from discarded equipment – plastics only
16 02 16	Components removed from discarded equipment other than those mentioned in 16 02 15 – plastics only
19	**Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use**
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**
19 02 04*	Premixed wastes composed of at least one hazardous waste – plastics only
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 04	plastic and rubber
19 12 11*	Other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances – plastics only
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment other than those mentioned in 19 12 11 – plastics only

Additional Processing line

There are currently two discreet lines P1/L1 and M1. The previous permit reflects one continuous line, during on site enhanced pre app it was identified that this should be referenced as two lines.

2.1 Waste Acceptance

Waste accepted at the site is restricted to that described in the List of Wastes, Section 09, 027.1_05_001 of this application pack.

As a minimum, the waste acceptance procedure will include.

- address/location
- identity of the producer
- the physical appearance of the waste
- amount of waste being accepted
- identifiable EWC Code

Site will only accept waste that is permitted and complies. Non-conforming wastes will be rejected or if identified after delivery, isolated and returned to producer.

Incoming waste will be brought to the site by registered waste carriers. Each load would be subject to the waste acceptance procedure and would be inspected by the Technically Competent Manager (TCM) or appropriately trained individual prior to being stored and prior to treatment.

2.2 Waste Storage

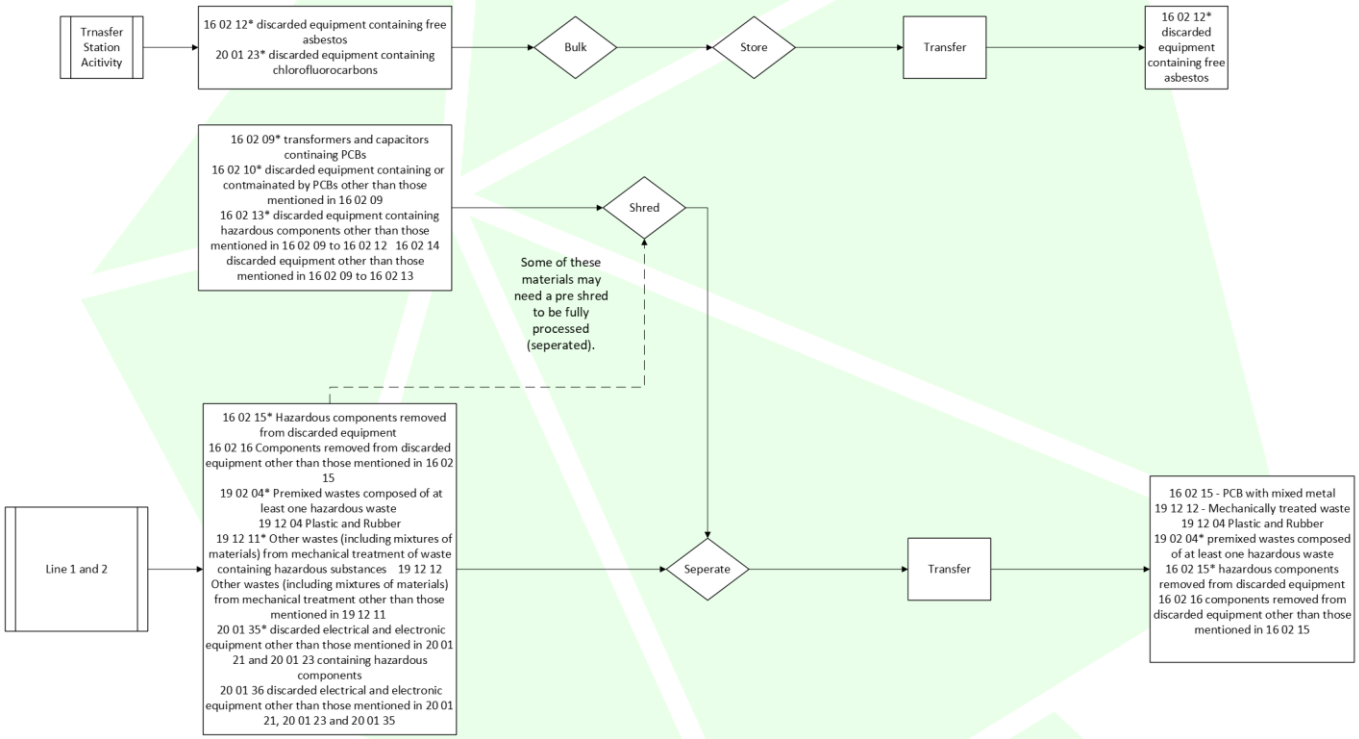
Table 1 Total Annual Waste Types

EWC	Material	Tonnes p.a.
16 02 09*	transformers and capacitors containing PCBs	6
16 02 10*	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09	5.5
16 02 11*	discarded equipment containing chlorofluorocarbons, hydrochlorofluorocarbons and hydrofluorocarbons	12.5
16 02 12*	discarded equipment containing free asbestos	0.5
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12	4.5
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13	7.5
16 02 15*	Hazardous components removed from discarded equipment – plastics only	2000
16 02 16	Components removed from discarded equipment other than those mentioned in 16 02 15	1250
19 02 04*	Premixed wastes composed of at least one hazardous waste	6500
19 12 04	Plastic and Rubber	1250
19 12 11*	Other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances	1250
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment other than those mentioned in 19 12 11	500
20 01 23*	discarded equipment containing chlorofluorocarbons	500
20 01 35*	Discarded Electrical and Electronic Equipment other than those mentioned in 200121 and 200123 containing hazardous components	6250
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	5000

Table 2 Total Storage at Any One time

Area of Site	Waste Types	Maximum total storage volume (m^3)
Outside bay	15 01 01	90
Outside 40-yard skip	15 01 03	38
Outside bay or tipping bay	16 02 09*	5
Outside bay or tipping bay	16 02 10*	5
Outside bay or tipping bay	16 02 11*	5
Outside bay or tipping bay	16 02 12*	5
Outside bay or tipping bay	16 02 13*	5
Outside bay or tipping bay	16 02 14	5
Outside bay or internal bay	16 02 15*	60
Outside bay or internal bay	16 02 16	45
Outside bay	17 04 01	90
Outside bay	17 04 02	90
Outside bay or internal bay	19 02 04*	184
Outside 40-yard skip	19 10 01	38
Outside bay	19 12 11*	180
Outside bay	19 12 12	90
Outside bay	20 01 23*	90
Outside bay or internal bunker	200135*	180
Outside bay or internal bunker	20 01 36	180
Totals		**1385**

2.3 Waste Handling and Processing



2.4 Site Management

A Technically Competent Manager (TCM) manages the operation and attends site in compliance with the regulatory defined attendance requirement. Individuals such as site supervisors or yard managers can be trained to carry out ongoing site operations, office and plant operations in lieu of the TCM when not in attendance.

During hours of operation there will be a minimum of one member of staff on site, who will be fully conversant with the requirements of the Environmental Permit and the Environmental Management System regarding the following:

- Waste Acceptance and Control Procedures
- Operational Controls and Environmental Monitoring
- Maintenance
- Record Keeping
- Emergency Action Plans
- Fugitive Emissions

3 APPLICATION CONTENTS

3.1 Application Forms

Parts A, C2, C3, C4, and F1 of the EA's EP application forms have been completed in support of this variation application and are enclosed as Section 02. The application forms also require the following additional information, which has been included:

- Appendix A: List of Directors;
- Appendix B: WAMITAB Certificates and Operator Competence Certificates; and

3.2 Application Fee

Application activity	Charge ref	Charge description	Charge fee	Deduction	Final fee
Hazardous metals treatment	1.16.1.2	Section 5.3 (a) (ii) – hazardous waste installation – physico-chemical treatment.	£14,401	100%	£14,401
Haz storage >50t	1.16.4	Section 5.6 - temporary or underground storage of hazardous waste.	£6,760	100%	£6,760
Treatment of non-hazardous waste	1.16.12	Physical treatment of non-hazardous waste	£3,965	100%	£3,965.0
				Total	**£25,126.00**
Management Plan					
Fire Prevention Plan	1.19.3				£1,241
Emissions management plan	1.19.5				£1,241
Habitats assessment	1.19.2				£779
				Total	**£3,261.0**
Grand Total					
				Total	**£28,387.00**

3.3 Environmental Risk Assessment

An Environmental Risk Assessment (ERA) (027.1_05_003) is located in section 04 of this application pack. The ERA identifies the sites setting, environmental hazards caused by the waste activity and the operators mitigation methods whether than be hard engineering or managerial procedures. This mitigation is designed to protect the environment from fugitive emissions or point source emissions if stated.

The site is operated by **3R Technology UK Limited** An Management System Summary has been created providing overview of the sites operations and any environmental controls. The Management System Summary

explains the sites operations, maintenance procedures and describes the emergency response in the event of an accident and or incident

3.4 Site Condition Report

A Baseline Site Condition Report (SCR) is a requirement for the addition of a listed activity. The baseline SCR describes the condition of the site and will provide a point of reference and baseline environmental data. Therefore, when the EP is surrendered it can be demonstrated that there has been no deterioration in the condition of the land as a result of the proposed operations and ensure that the condition of the land is in a 'satisfactory state' on surrender of the EP.

The site will continue to operate with due regard to the conditions of the EP and all relevant environmental legislation to ensure that the site does not pose a significant risk to the surrounding human and natural environment.

The Baseline SCR (reference 027.1_05_007) is included as Section10 of this EP variation application.

3.5 Management System Summary

The site will be operated in accordance with the EMS_Op document. This document sets out best practice for operating the site, based on legislation and best available techniques in the industry. It will also include associated procedures which the site will operate in accordance with.

The EMS_Op Tech 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 EMS_Op Tech;
- Performance against the management system is audited at regular intervals; and
- The EP is complied with.

The EMS_Op (reference 027.1_05_004) is included as Section 06 of this EP variation application.

3.6 Fire Prevention Plan

The Fire Prevention Plan (FPP) follows EA guidance for FPPs and details the required mitigation and management methods to prevent a fire of combustible materials stored on site.

The FPP identifies measures to be employed to reduce the likelihood of fires at the site. In addition, the plan identifies measures to be employed in the event of a fire to limit the damage caused to the environment or human health.

The FPP (reference 027.1_05_005) is enclosed as Section 07 of this EP variation application.

3.7 Dust Emissions Management Plan

During the pre application stage the EA were requested to identify if an Dust Emission Management Plan (DEMP) was required. The EA identified that it was not the ERA 027.1_05_008 presented in section 11 further supports this.

The DEMP will be incorporated into the site's procedures and will be revised as necessary to ensure that it remains appropriate to the activities occurring on site and that any changes in conditions relating to dust management are dealt with as part of those revisions. In particular, the monitoring procedures and compliance actions will be updated as required by the procedures within the DEMP.

3.8 Best Available Techniques Assessment/Appropriate Measures

3R Technology UK Limited is managed in accordance with EMS_Op Tech, BAT assessment detail the managerial procedures implemented on site to minimize the risk of accidents, emissions and their impact on employees, people and local receptors**.**

These documents include detailed process descriptions, relevant roles and responsibilities to ensure the safe and competent management of the site to maintain compliance with he EP.

Documents cover the following;

- Management;
- Site operations
- Process controls; and
- Information

Managerial procedures will ensure that:

- Risks that the activities pose to the environment are identified;
- The measures that are required to mimise the risk are identified;
- Activities are managed in accordance with the management systems
- Performance is monitored
- EP is complied with and other relevant legislation.

3.9 Drawings

A suite of drawings has been produced to detail all characteristics of the site relevant to the variation application and are enclosed as Section 05 of this EP variation application. The full list of drawings produced is as follows:

Ref	Name	Revision
027.1_09_001	Permit Boundary Plan	Rev A

027.1_09_002	FRS Route Plan	Rev A
027.1_09_003	FWC Plan	Rev A
Plant layout-3R Factory and yard	Site Layout Plan	000
027.1_09_005	1 km Sensitive Receptors	Rev A
027.1_09_006	2 km Sensitive Receptors	Rev A
027.1_09_007	10 km Sensitive Receptors	Rev A

3.10 Noise Impact Assessment and Noise and Vibration Management Plan

During the pre application stage the EA were requested to identify if an Noise and Vibration Management Plan (NVMP) was required. The EA identified that an NIA and NVMP were not required as apart of this application as a previous one had been supplied during the original application.

4 TECHNICAL STANDARDS

The following technical standards have been utilised in the design and development of the proposed activities, the preparation of this Environmental Permit application, and will govern permitted site activities:

- Sector Guidance Note IPPC S5.06 'Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous waste' May 2013European Directive 2010/75/EU — on industrial emissions
- Noise and vibration management: environmental permits[2]
- Develop a management system: environmental permits.[3]
- Control and monitor emissions for your environmental permit[4]
- Containment systems for the prevention of pollution (C736)[5]
- Best Available Techniques (BAT) Reference Document for Waste Treatment Industrial Emissions Directive 2010/75/EU (Integrated Pollution Prevention and Control); EUR 29362 EN; Publication Office of the European Union, Luxembourg, 2018
- Relevant EA Guidance e.g. Environmental Risk Assessment's, DEMPs, FPPs.
- Non-hazardous and inert waste: appropriate measures for permitted facilities[6]
- Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities[7]

As an 'installation' under the Industrial Emissions Directive the permitted site must achieve 'BAT'. Best Available Techniques (BAT) means the available techniques which are the best for preventing or minimising emissions and impacts on the environment. Techniques include both technology used and the way the installation is designed, built, maintained, operated and ultimately decommissioned. As well as appropriate measures[8][9]

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[2] https://www.gov.uk/government/publications/noise-and-vibration-management-environmental-permits/noise-and-vibration-management-environmental-permits
[3] https://www.gov.uk/guidance/develop-a-management-system-environmental-permits
[4] https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit
[5] https://www.ciria.org/
[6] https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities
[7] https://www.gov.uk/guidance/waste-electrical-and-electronic-equipment-weee-appropriate-measures-for-permitted-facilities
[8] https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities
[9] https://www.gov.uk/guidance/chemical-waste-appropriate-measures-for-permitted-facilities

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