Darwen Resource Recovery Park

784- B043732

Non-Technical Summary

Environmental Permit Variation Application

SUEZ Recycling and Recovery UK Ltd

May 2024

Document prepared on behalf of Tetra Tech Limited. Registered in England number: 01959704

TETRA TECH

Tetra Tech Manchester, 11 York Street, 2nd Floor, Manchester, United Kingdom, M2 2AW

Document prepared on behalf of Tetra Tech Limited. Registered in England number: 01959704
Registered Office: 3 Sovereign Square, Sovereign Street, Leeds, United Kingdom, LS1 4ER

DOCUMENT CONTROL

Document:	Non-Technical Summary
Project:	Darwen Resource Recovery Park
Client:	SUEZ Recycling and Recovery UK Ltd
Project Number:	784- B043732
File Origin:	X:\784-B043732_Darwen_Resource_Recovery_Park\60 Project Output\63 Published

Revision:	Final to the EA	**Prepared by:**	Gemma Allan
Date:	May 2024	**Checked by:**	Lauren Stanger
Status:	Final	**Approved By:**	Andrew Bowker
Description of Revision:			

Revision:		**Prepared by:**	
Date:		**Checked by:**	
Status:		**Approved By:**	
Description of Revision:			

Revision:		**Prepared by:**	
Date:		**Checked by:**	
Status:		**Approved By:**	
Description of Revision:			

Revision:		**Prepared by:**	
Date:		**Checked by:**	
Status:		**Approved By:**	
Description of Revision:			

TABLE OF CONTENTS

LIST OF TABLES

DRAWINGS

Environmental Permit Boundary - SUEZ/B043732/PER/01
Proposed Site Layout – 1446_PL101_B

APPENDICES

Appendix A - Application Forms
Appendix B – Pre-application Discussions with the EA
Appendix C – BATOT Document
Appendix D – Environmental Risk Assessment
Appendix E – Dust Management Plan
Appendix F– Odour Management Plan
Appendix G – Air Quality Assessment
Appendix H – Bioaerosol Risk Assessment
Appendix I – Site Condition report

1.0 NON-TECHNICAL SUMMARY

1.1 PERMIT APPLICATION

1.1.1 This Environmental Permit Application has been prepared by Tetra Tech on behalf of the Operator, SUEZ Recycling & Recovery UK Ltd (SUEZ), in accordance with the requirements of the Environmental Permitting (England and Wales) Regulations 2016 as amended. It is a requirement of these Regulations that any application is accompanied by a Non-Technical Summary of the submitted documentation.

1.1.2 The application relates to SUEZ's permitted facility at Darwen Resource Recovery Park (the site), Lower Eccleshill Road, Darwen, Lancashire, BB3 0RP. The site is currently regulated under a bespoke environmental permit (EPR/BB3609KA) which allows the operation the following: -

- Material Recycling Facility (Activity Reference A1);
- Plastics Physical Treatment Facility (Activity Reference A2);
- Glass Bulking Facility (Activity Reference A3); and
- Household, Commercial and Industrial (HCI) Waste Transfer Station Facility (Activity Reference A4).

1.1.3 At present, SUEZ operate a HCI waste transfer station at the site. The main transfer building is used to tip general municipal/residual black bag and bulky waste prior to treatment via shredding. The shredding process is undertaken within the building to produce a Refuse Derived Fuel (RDF) type product prior to despatch off site to a permitted Energy from Waste (EfW) facility. The building is also used for the bulking of cardboard waste prior to transfer off site for recovery or disposal.

1.1.4 There are external bays located to the west of the main transfer station building which are used for the bulking of road sweepings, wood, hardcore/rubble, dry mixed recyclables, and green waste.

1.1.5 In addition to the above, there are two small buildings located to the south of the external bays which are used for the storage, manual sorting and transfer of source segregated, post-consumer recyclable materials.

1.1.6 The permitted glass bulking facility is currently not operational as a separate, distinct activity and would be incorporated into the HCI Waste Transfer Station through the variation to the permit. Furthermore, there is no intention to operate the Plastics Physical Treatment Facility at the site. Subsequently, SUEZ propose that the Plastics Physical Treatment Facility and the Glass Bulking Facility activities will be removed from the environmental permit.

1.1.7 SUEZ are now seeking to vary the environmental permit to allow the operation of a new Anaerobic Digestion (AD) Facility. The process will generate biogas which will mainly be processed by 2 Combined Heat and Power (CHP) engines to generate heat and electricity that would be used by the AD plant. Once the parasitic load has been met, any excess biogas will be processed by a gas upgrading plant to National Gas Grid criteria and injected into the gas grid. Alternatively, excess biogas will be processed by the CHP engines to generate electricity that will be exported to the National Grid. Each of the two CHP engine will have a capacity of 1.2MW and therefore it's considered that the CHP engines will be subject to the Medium Combustion Plant Directive (MCPD) and therefore will comprise 2 x 1.2MW MCP with a specified generator (SG).

1.1.8 To facilitate the installation and operation of the AD facility, SUEZ are seeking to demolish the existing buildings and site infrastructure and redevelop the whole site.

1.1.9 In addition to the AD Facility, SUEZ will continue to operate a waste transfer station as well as maintain the materials recycling facility within the environmental permit, there is currently no intention to operate Material Recycling Facility and therefore has not been included as part of the new site layout. Nevertheless,

SUEZ would like to keep this activity within the environmental permit for future proofing purposes. These activities will be situated across both the Waste Transfer Station building and canopy building according to their suitability. The waste transfer station building will be used for the acceptance, bulking and treatment of general municipal/residual black bag and bulky waste prior to treatment via shredding. The canopy building will be used solely for the bulking of non-hazardous waste prior to transfer off site for recovery and/or disposal.

1.1.10 The proposed AD facility will have an annual throughput of 100,000 tonnes and therefore the AD facility will fall under following Schedule 1 activity of the Environmental Permitting (England and Wales) Regulations 2016 (as amended): -

- Section 5.4 A(1)(b)(i) - 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 biological treatment.

1.1.11 In addition to the above, the AD facility will have the following Directly Associated Activities (DAAs): -

- Storage of waste pending recovery or disposal;
- Physical treatment for the purpose of recovery;
- Heat and electricity power supply (i.e. CHP);
- Emergency flare operation;
- Gas upgrading;
- Raw material storage;
- Gas storage; and,
- Digestate storage.

1.1.12 As a result, this proposal will change the nature of the facility from a waste operation to a waste installation.

1.1.13 The permitted glass bulking facility is currently not operational as a separate, distinct activity and would be incorporated into the waste transfer station through variation to the permit. The activity and waste codes which are accepted through the glass bulking activity are currently permitted within the HCL Waste Transfer Station and as such this activity is unnecessary as a separate aspect of the permit.

1.1.14 In accordance with Table S1.1 of the environmental permit, the operation of the waste transfer station will fall under the following Recovery and Disposal codes (R and D codes) shown in Table 1, provided for in Annex II to Directive 2008/98/EC of the European Parliament and The Council of 19th November 2008 Waste.

Table 1: R/D Codes for the Household, Commercial and Industrial Waste Transfer Station Facility

R/D Code	Activity Description
R3	Recycling/reclamation of organic substances which are not used as solvents
R4	Recycling/reclamation of metals and metal compounds
R5	Recycling/reclamation of other inorganic materials
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).
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)
D14	Repackaging prior to submission to any of the operations numbered D1 to D13

D9	Physico-chemical treatment not specified elsewhere in Annex IIA which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D8 and D10 to D12

1.1.15 In accordance with Table S1.1 of the environmental permit, the operation of the materials recycling facility will fall under the following Recovery and Disposal codes (R and D codes) shown in Table 2, provided for in Annex II to Directive 2008/98/EC of the European Parliament and The Council of 19th November 2008 Waste.

Table 2: R/D Codes for the Materials Recycling Facility

R/D Code	Activity Description
R3	Recycling/reclamation of organic substances which are not used as solvents
R4	Recycling/reclamation of metals and metal compounds
R5	Recycling/reclamation of other inorganic materials
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)

1.1.16 There is no intention to operate Material Recycling Facility and therefore this activity has not been included as part of the new site layout. Nevertheless, SUEZ would like to keep this activity within the environmental permit for future proofing purposes.

1.1.17 This application is accompanied by all relevant documentation, as required by the aforementioned Regulations, and in the format set out in the Environment Agency's (EA) guidance documents. Details of the supporting documents are provided in the following section.

2.0 SUPPORTING INFORMATION

2.1 PRE-APPLICATION DISCUSSIONS

Part B2, Question 1a

2.1.1 A request for enhanced pre-application advice (EPR/BB3609KA/P001) was requested from the EA for this application. A copy of the advice letter is provided as Appendix B of the Environmental Permit Application.

2.2 APPLICATION FORMS

2.2.1 As detailed in the enhanced pre-application advice letter, it was advised that the Plastics Physical Treatment Facility (Activity Reference A2) and Glass Bulking Facility (Activity Reference A3) activities can be removed from the permit and the AD activity can be added under one permit variation application. It was further advised that application forms Part A, B2, B3, C2.5, C4 and F1 would be required as part of the proposed application. The forms are provided as Appendix A of this application.

2.3 TYPE OF VARIATION

Part C2.5, Question 1e

2.3.1 According to the enhanced pre-application advice letter, the EA have advised that the variation would comprise a substantial variation due to the level of assessment and consultation requirements for AD activities.

2.3.2 It was also acknowledged that the removal of the Plastics Physical Treatment Facility and Glass Bulking Facility will constitute as minor variations as these have not been operational.

2.4 ABILITY AS AN OPERATOR

Part B2, Section 3

2.4.1 According to the guidance notes that accompany the Part B2 application form, all of Section 3 needs to be provided if the proposal involves the addition of a waste installation or waste operations to a permit that has not previously had them. As such, details regarding SUEZ's technical competence, relevant offences and management systems are provided in an additional sheet titled 'Operator Ability' which is provided as part of Appendix A of this Environmental Permit Application.

2.5 SITE PLAN

Part B2, Question 5a

2.5.1 In accordance with the guidance notes provided in Part B2 application form, a site plan is required if the proposal involves any changes to the permitted area. As such, a site layout plan (Drawing Reference 1446_PL101_B) has been prepared which details the proposed site layout for the operation of the site.

2.5.2 In addition, a permit boundary plan (Drawing Number SUEZ/B043732/PER/01) has been prepared to show the permit boundary of the site.

2.6 SITE CONDITION REPORT

Part B2, Question 5b

2.6.1 As a result of the variation to add the AD Facility to the permit, the existing permit boundary is being extended to the north and southeast therefore a Site Condition Report (Appendix I) has been prepared to detail the condition of the land and groundwater within the application area. The document has been prepared in accordance with EA's H5 Site Condition Report Template.

2.7 FIRE PREVENTION PLAN

Part B2, Questions 5d

2.7.1 According to Table S1.2 of the environmental permit, the site benefits from an approved Fire Prevention Plan (FPP). As mentioned in Section 1.1, SUEZ are seeking to redevelop the site to facilitate the installation of the proposed facility.

2.7.2 According to Section 3 of the guidance, a Fire Prevention Plan is only required for dry AD processes. The proposed AD process at the site will comprise a wet process and therefore it's considered that the EA's FPP guidance does not apply to the proposed AD facility and therefore has not been included in the revised FPP.

2.7.3 Pre-application advice was received from the EA (Appendix B), the advice stated that a Fire Prevention Plan "will not be required at the time of application for this activity. However, the FPP condition is included in the permit."

2.7.4 As such, no FPP has been provided in connection with the Anaerobic Digestion Facility and the existing, approved document for the site will remain.

2.8 ENVIRONMENTAL RISK ASSESSMENT

Part B2, Question 6

2.8.1 An Environmental Risk Assessment (Appendix D) has been prepared to consider the potential impact of the proposed activity. The Environmental Risk Assessment (ERA) is concerned with the nature and extent of any linkages between the source of any environmental hazards and the receptors which may be susceptible to harm; such linkages being termed pathways. Where potential for harm is identified, the assessment identifies the management techniques which will be utilised to mitigate such impacts.

2.8.2 In addition, the operation of the AD Plant will comprise emission points to air. As such, an Air Quality Assessment (Appendix G of the Environmental Permit Application) has been undertaken to assess the potential impact on air quality associated with the proposed activity.

2.9 OPERATING TECHNIQUES

Part B3, Table 3

2.9.1 An Operating Techniques and Best Available Techniques (BATOT) document has been prepared that describes both the operating techniques that will be implemented at the AD facility and also demonstrate how BAT will be employed in accordance with the following: -

- Environment Agency - Biological waste treatment: appropriate measures for permitted facilities (September 2022);
- European Commission's BAT Reference (BREF) Document for Waste Treatment (August 2018); and,

- European Commission's BAT Conclusion for Waste Treatment (August 2018). European Commission – Industrial Emissions Directive (Directive 2010/75/EU); and,
- European Commission – Medium Combustion Plant Directive (Directive 2015/2193).

2.9.2 A copy of the BATOT is provided as Appendix C of the Environmental Permit Application.

2.10 GENERAL REQUIREMENTS

Part B3, Table 3b

2.10.1 In accordance with the EA's 'Control and monitor emissions for your environmental permit' guidance, a Dust Management Plan (Appendix E of the Environmental Permit Application) has been prepared to describe the measures that will be in place to prevent occurrence of dust at the site.

2.10.2 An Odour Management Plan (Appendix F of the Environmental Permit Application) has been prepared in accordance with the EA's Odour Management Plan' template (Version 2, May 2021).

2.10.3 In accordance with pre-application discussions with the EA (Appendix B), it has been determined through a basic noise screening assessment that was carried out by the EA that the site does not require a Noise Impact Assessment or a Noise Management Plan to be submitted as part of this variation application.

2.10.4 Pre-application discussions with the EA further indicated that a Pest Management Plan does not need to be provided as part of this Environmental Permit Variation Application.

2.11 MONITORING

Part B3, Question 4

2.11.1 As noted in Section 2.7, the proposal will comprise emission points to air. Details regarding the proposed monitoring arrangement are provided in the BATOT (Appendix C of the Environmental Permit Application).

2.12 BIOAEROSOL RISK ASSESSMENT

2.12.1 A Bioaerosol Risk Assessment (Appendix H) has been prepared to accompany the bespoke environmental permit application. The abatement plant will comprise of two stages consisting of a closed biofilter and a carbon filter.

2.12.2 Due to the composition of the abatement plant, and the proximity of the nearest sensitive receptor to the site, a residential caravan park (45m southwest), a bioaerosol risk assessment is required.

2.13 APPLICATION FEES

Part F1, Question 1

2.13.1 Based on the advice that was provided in the pre-application advice letter and the additional documents that have been prepared to support this application, it's considered that the application fee will comprise the following: -

Table 3: Summary of Application Fees

Activity Reference	Description	Application Type	Fee
1.16.2.1	Section 5.4(b)(i) - non-hazardous waste installation-biological treatment	New - addition of activity to permit	£13,984
1.19.6	Odour Management Plan	-	£1,246
1.19.5	Dust Management Plan	-	£1,241
1.16.12	Plastics Physical Treatment	Removal of activity from permit where not put into operation	£770
1.16.12	Glass Bulking Facility	Removal of activity from permit where not put into operation	£770
		Total	**£18,011**

DRAWINGS

Environmental Permit Boundary - SUEZ/B043732/PER/01
Proposed Site Layout – 1446_PL101_B

APPENDICES

APPENDIX A - APPLICATION FORMS

APPENDIX B – PRE-APPLICATION DISCUSSIONS WITH THE EA

APPENDIX C – BATOT DOCUMENT

APPENDIX D – ENVIRONMENTAL RISK ASSESSMENT

APPENDIX E – DUST MANAGEMENT PLAN

APPENDIX F– ODOUR MANAGEMENT PLAN

APPENDIX G – AIR QUALITY ASSESSMENT

APPENDIX H – BIOAEROSOL RISK ASSESSMENT

APPENDIX I – SITE CONDITION REPORT