Beddington Lane AD Facility

784-B049185

Non-Technical Summary

Environmental Permit Application

SUEZ Recycling and Recovery UK Ltd

March 2024

Document prepared on behalf of Tetra Tech Limited. Registered in England number: 0195970



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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 an area of land located off Beddington Lane (the site), at 79 83 Beddington Lane, London Borough of Sutton, CR0 4TH at approximate National Grid Reference TQ 29657 66505. The site location and permit boundary are presented on Drawing Number SUEZ/B042242/PER/01.
- 1.1.3 Currently, a permit exists at Beddington Lane (reference EPR/CB3309TJ) for the operation of a waste transfer station. The permit was originally issued in July 2002 and is currently registered to DRENL Limited (DRENL).
- 1.1.4 In 2017, the site was acquired by SUEZ and then planning permission was granted to develop a Resource Recovery Facility with an annual throughput of 350,000 tonnes per annum (ref: DM2018/01865). To facilitate the operation of the Resource Recovery Facility, discussions were undertaken with DRENL to discuss the potential transfer of the existing permit from DRENL to SUEZ. Further to these discussions, an agreement was not secured to transfer the permit. Subsequently, SUEZ consulted with the Environment Agency (EA) in 2018 who confirmed that they will be able to issue a new permit to SUEZ to facilitate the operation of the Resource Recovery facility at Beddington Lane.
- 1.1.5 Operations previously undertaken on site have since ceased and the site has been cleared and comprises predominantly of concrete hardstanding with a former residential property, a redundant picking station in the south-western corner, and a portacabin. DRENL have no rights of access to the site since it was acquired by SUEZ.
- 1.1.6 SUEZ are now seeking to apply for an environmental permit which would allow the operation of an Anaerobic Digestion (AD) plant to process food waste from household waste collections as well as industrial and commercial customers. The process will generate biogas which will mainly be processed by a Combined Heat and Power (CHP) engine 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.
- 1.1.7 The CHP engine will have a capacity of 1.2MW and therefore it's considered that the CHP engine will be subject to the Medium Combustion Plant Directive (MCPD) and therefore will comprise a 1.2 MW MCP with a specified generator (SG).
- 1.1.8 The Operator also seeks to implement a wastewater treatment plant on site which will be used to treat the liquor extracted during the dewatering process of the digestate. Having been treated, the remaining liquid will be clean enough to either be used for washing down or within the process. Excess liquid will be discharged to public sewer in accordance with a trade effluent discharge consent. The treatment capacity of the wastewater treatment plant is over 50 tonnes per day, causing it to be a Schedule 1 activity.
- 1.1.9 In addition, SUEZ seek to agree to undertake the process of carbon capture as a function of this application.
- 1.1.10 This application is accompanied by all relevant documentation, as required by the aforementioned Regulations, and in the format set out in the 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/EP3125SW/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 application forms Part A, B2, B3, B6, and F1 would be required as part of the proposed application. The forms are provided as Appendix A of this application.

2.3 ABILITY AS AN OPERATOR

Part B2, Section 3

2.3.1 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.

2.4 SITE PLAN

Part B2, Question 5a

2.4.1 In accordance with the guidance notes provided in Part B2 application form, a site plan (Drawing Reference 1452 PL100) has been prepared which details the proposed site layout for the operation of the facility.

2.5 SITE CONDITION REPORT

Part B2, Question 5b

2.5.1 A Site Condition Report (Appendix F) 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.

2.6 FIRE PREVENTION PLAN

Part B2, Question 5d

2.6.1 According to the EA's 'Fire Prevention Plans: Environmental Permits' guidance (updated in January 2021), Section 3 indicates that a Fire Prevention Plan is not required for wet AD processes. The proposed AD process at the site will comprise a wet process and therefore it's considered that a Fire Prevention Plan is not required to support this application. This was agreed by the EA as part of their pre-application advice.

2.7 ENVIRONMENTAL RISK ASSESSMENT

Part B2, Question 6

- 2.7.1 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.
- 2.7.2 In addition, the operation of the AD Plant will comprise emission points to air. As such, an Air Quality Assessment (Appendix H of the Environmental Permit Application) has been undertaken to assess the potential impact on air quality associated with the proposed activity.

2.8 H1 ENVIRONMENTAL RISK ASSESSMENT

- 2.8.1 As noted in Section 1.1.8, SUEZ are seeking to implement a wastewater treatment plant on site which will be used to treat the liquor extracted during the dewatering process of the AD facility. Once treated, the remaining liquid will be clean enough to either be used for washing down or within the process. Excess liquid will be discharged to public sewer in accordance with the Trade Effluent Discharge Consent.
- 2.8.2 In accordance with the EA's pre-app advice, a H1 Environmental Risk Assessment has been prepared to assess the potential impact of the effluent. A copy of the H1 is provided as part of the Environmental Risk Assessment (Appendix D of the Environmental Permit Application)

2.9 BIOAEROSOL RISK ASSESSMENT

- 2.9.1 The proposed AD facility will comprise abatement plant consisting of a closed biofilter and a carbon filter. Due to the composition of the abatement plant, and the proximity of the nearest sensitive receptor to the site (commercial and industrial properties, 30m), a bioaerosol risk assessment is required. This was agreed by the EA as part of their pre-application process.
- 2.9.2 As such, a Bioaerosol Risk Assessment (Appendix I) has been prepared to accompany the Environmental Permit Application.

2.10 OPERATING TECHNIQUES

Part B3, Section 3a

- 2.10.1 A Best Available Techniques and Operating 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).
- 2.10.2 A copy of the BATOT is provided as Appendix C of the Environmental Permit Application.

2.11 GENERAL REQUIREMENTS



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Part B3, Section 3b

- 2.11.1 According to the EA's 'Control and monitor emissions for your environmental permit' guidance, a dust management plan is only required for biowaste treatment facilities if the waste is kept and treated in the open.
- 2.11.2 For the proposed AD process, the waste will be stored and treated within the confines of a building. In addition, the AD plant will comprise a wet process and therefore the risk of dust is expected to be low.
- 2.11.3 In light of the above, it's considered that the risk of dust is not expected to increase and therefore a dust management plan has not been prepared to support this application. This was agreed by the EA as part of their pre-application advice.
- 2.11.4 An Odour Management Plan (Appendix G of the Environmental Permit Application) has been prepared in accordance with the EA's Odour Management Plan' template (Version 2, May 2021).
- 2.11.5 As detailed in the enhanced pre-application advice letter, it was advised that a Noise Impact Assessment (NIA) and a Noise Management Plan (NMP) are not required to accompany the application. Nevertheless, noise has been addressed as part of the Environmental Risk Assessment (Appendix D of the Environmental Permit Application).
- 2.11.6 Due to the nature of the proposed facility, a Pest Management Plan has been prepared and is provided as Appendix E of the Environmental Permit Application.

2.12 MONITORING

Part B3, Question 4

- 2.12.1 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).
- 2.12.2 As stated in Section 2.8, the proposal will comprise of emissions points to sewer. Details regarding the proposed monitoring arrangement are provided in the BATOT (Appendix C of the Environmental Permit Application). As detailed within Form B6, the maximum volume of effluent to be discharged per day is 350m³. The H1 Assessment, provided within the Environmental Risk Assessment, concludes that all substances within the effluent pass at Test 2, and therefore no further monitoring 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 1: Summary of Application Fees

Activity Reference	Description	Fee
1.16.2.1	Section 5.4 (b)(i) - non-hazardous waste installation- biological treatment	£13,984
1.16.2.2	Section 5.4 A(1)(a)(ii) – Effluent Treatment Plant (90% reduction)	£1,344.30
1.19.4	Pest Management Plan	£1,241

1.19.6	Odour Management Plan	£1,246
1.19.2	Habitats Assessment	£779
	Total	£18,594.30

Drawings

Boundary Plan – SUEZ/B042242/PER/01 Proposed Site Layout – 1452 PL100

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Appendices

APPENDIX A - APPLICATION FORMS

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APPENDIX B - PRE-APPLICATION DISCUSSIONS WITH THE EA

APPENDIX C – BATOT DOCUMENT

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APPENDIX D - ENVIRONMENTAL RISK ASSESSMENT

APPENDIX E – PEST MANAGEMENT PLAN

APPENDIX F - SITE CONDITION REPORT

APPENDIX G – ODOUR MANAGEMENT PLAN

APPENDIX H - AIR QUALITY ASSESSMENT

APPENDIX I – BIOAEROSOL RISK ASSESSMENT SAI

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