

Permit Manual (EPR)

Version 08

Produced for GWE Biogas Ltd

Document Reference EPR-B01



Driffield Anaerobic Digestion Facility



A Sustainable Future. Today.

www.wrm-ltd.co.uk

01943 468138

QUALITY CONTROL

| | |
|----------------------------|---------------------|
| Document Title: | Permit Manual (EPR) |
| Version: | 08 |
| Issue Date: | 31/10/2022 |
| Review Date: | 31/10/2023 |
| Document Reference: | EPR-B01 |
| Prepared For: | GWE Biogas Ltd |
| Project Reference: | PR1162/W04 |
| Copyright: | WRM Ltd © 2022 |

| Version | Date | Update Made |
|---------|------------|--|
| 1 | 21/02/18 | Production of permit manual. |
| 2 | 21/02/19 | Annual review. |
| 3 | 30/09/19 | Annual review. Brought in line with annual audit cycle. |
| 4 | 29/09/20 | Annual review. |
| 5 | 14/12/20 | Amended in line with permit variation for gas to grid connection, reception hall extension, new digester and capacity increase. |
| 6 | 14/12/21 | Annual Review |
| 7 | 04/05/2022 | Annual Review |
| 8 | 31/10/2022 | Amended in line with permit variation for CCUS installation, new digesters, site capacity increase, desulphurisation system upgrade and silage clamp erection. |
| 9 | 25/08/2023 | Annual Review |

| Quality Control Sign Off | | |
|--------------------------|------------------|---------------------|
| Document Author | Thomas Broderick | <i>T. Broderick</i> |
| Quality Reviewer | Matthew Stupples | <i>M. Stupples</i> |

Copyright ©

All material on these pages, including without limitation text, logos, icons and photographs, is copyright material of WRM Limited. Use of this material may only be made with the express, prior, written permission of WRM Limited. This document was produced solely for use by the named contractee to whom the document refers.

CONTENTS

| | | |
|------------|--|----------|
| 1.0 | INTRODUCTION..... | 1 |
| 1.1 | Permitted Activities..... | 1 |
| 1.2 | Exempt Activities..... | 1 |
| 2.0 | SITE DETAILS..... | 2 |
| 2.1 | Site Address..... | 2 |
| 2.2 | Operational Locations..... | 2 |
| 2.3 | Description..... | 2 |
| 2.4 | Plans..... | 2 |
| 2.5 | Permits and Licences..... | 2 |
| 2.6 | Planning..... | 2 |
| 2.7 | Aggregation..... | 3 |
| 2.8 | Directly Associated Activities..... | 3 |
| 3.0 | OPERATIONAL OVERVIEW..... | 4 |
| 3.1 | Waste Management Operations..... | 4 |
| 3.2 | Permitted Wastes..... | 4 |
| 3.3 | Hours of Operation..... | 4 |
| 3.4 | Staffing..... | 4 |
| 3.5 | Technical Competence..... | 5 |
| 3.6 | Site Identification Board..... | 6 |
| 3.7 | Site Security..... | 6 |
| 3.8 | Maintenance of Financial Provision..... | 6 |
| 3.9 | Relevant Convictions..... | 6 |
| 3.10 | Reporting to the Environment Agency..... | 6 |
| 4.0 | OPERATIONAL PROCEDURES..... | 7 |
| 4.1 | Waste Acceptance..... | 7 |
| 4.2 | Anaerobic Digestion Treatment Process..... | 7 |
| 5.0 | POLLUTION CONTROL..... | 8 |
| 5.1 | Infrastructure and Plant Maintenance..... | 8 |
| 5.1 | Meteorological Monitoring..... | 8 |
| 5.2 | Dust..... | 8 |
| 5.3 | Mud and Debris..... | 8 |
| 5.4 | Litter..... | 8 |
| 5.5 | Pests..... | 8 |
| 5.6 | Spillages..... | 8 |
| 5.7 | Odour..... | 8 |

| | | |
|------------|----------------------------|-----------|
| 5.8 | Noise and Vibration | 8 |
| 5.9 | Storage of Wastes..... | 9 |
| 5.10 | Biofilter Management | 9 |
| 5.11 | Accident Management | 9 |
| 6.0 | RECORDS | 10 |
| 6.1 | Monitoring..... | 10 |
| 6.2 | Operational Records | 10 |
| 6.3 | Material Records | 10 |
| 6.4 | Calibration | 10 |
| 6.5 | Training Records | 10 |
| 6.6 | Complaints | 10 |
| 6.7 | Site Waste Returns | 10 |

1.0 INTRODUCTION

This Management System has been prepared in accordance with the Environmental Permitting Regulations and sets out the considerations and operational details that are relevant to the operation of an anaerobic digestion facility operated by GWE Biogas Ltd (GWE) at Driffield, East Yorkshire. It details the nature of the site, relevant site and infrastructure works, methods of operation and environmental controls. Please note, the site will also be operated in accordance with the requirements of the animal by-products regulations and of the PAS110 certification scheme.

1.1 Permitted Activities

GWE is currently permitted to treat a number of non-hazardous biodegradable wastes in liquid or solid form at the Driffield anaerobic digestion facility under a bespoke installation environmental permit (EPR/TP3835KE). Permitted activities are as stated below:

- Recovery of non-hazardous organic waste (<211,000 tonnes per annum).

1.2 Exempt Activities

GWE do not currently undertake any exempt activities.

2.0 SITE DETAILS

2.1 Site Address

GWE Biogas Ltd
Sandhill
Garton Road
Kirkburn
Driffield
East Yorkshire
YO25 9DR

2.2 Operational Locations

Site Grid Reference: Easting 498707, Northing 456582

2.3 Description

The anaerobic digestion facility is located approximately 1.25km North of the village of Kirkburn and approximately 3.1km West of the town of Driffield. The site has one main access point located off Station Road via the A614. The site, wholly owned by GWE Biogas Ltd, contains a weighbridge, site office, reception hall, five primary digesters, one secondary digester, negative aeration system, biogas cleaning system, four combined heat and power (CHPs) units, and a biomethane upgrading system with gas to grid connection.

2.4 Plans

Reference Drawing: GWE Site Plan

2.5 Permits and Licences

GWE possess the following permissions:

- Bespoke environmental permit, reference EPR/ TP3835KE granted by the Environment Agency on 09/09/2010; (Please note. latest permit version is V009 issued 07/01/2022) to operate an anaerobic digestion facility to produce digestate.
- Approval 51/115/8002/ABP/BIO granted by the Animal Health to treat Category 3, category 2 exempt material and category 3 glycerine, animal-by products (08/06/2020); and
- PAS110 Certificate of Compliance (BCS Number – BCS0412C9) approved by OF&G on the 24/01/2022.

2.6 Planning

The site has full planning permission for the operations from East Riding of Yorkshire Council under reference DC/09/00511. Planning secured 06/05/2009.

2.7 Aggregation

The aggregation of biowaste recovery activities with other non-hazardous waste recovery treatment have been considered.

All waste streams have been accounted for in the supplied information.

2.8 Directly Associated Activities

The associated activities with the main activity are as follows (the A codes relate to Table S1.1 within latest permit variation):

- Storage of waste pending recovery or disposal (A2)
- Physical treatment for the purpose of recycling (A3)
- Steam and electrical power supply (A4)
- Emergency flare operation (A5)
- Raw material storage (A6)
- Gas storage (A7)
- Digestate storage (A8)
- Surface water collection and storage (A9)
- Air treatment (A10)

3.0 OPERATIONAL OVERVIEW

3.1 Waste Management Operations

The waste management operations at the site are carried out in line with *section 6.0 of the Integrated Standard Operating Procedures*. The currently permitted waste activities, including operational limits and permitted wastes by scheduled activity, are identified within the Environmental Permit (EPR/ TP3835KE).

3.2 Permitted Wastes

Waste shall only be accepted if it is a type and quantity specified in the permitted list of wastes, if it is present on the list of acceptable EWC codes stated in Appendix B of the Quality Protocol (PAS110 requirement) and if it conforms to the description in the documentation supplied by the producer and holder. Please see *section 5.0 of the Integrated Standard Operating Procedures* for full list of wastes to be accepted at site.

Any wastes that are not categorised as permitted materials should be considered contrary/non-conforming and dealt with appropriately.

3.3 Hours of Operation

Site operational hours for the facility will be typically as identified below:

| | |
|--------------------------|---------------|
| Monday to Friday | 07:00 – 19:00 |
| Saturday | 07:00 – 19:00 |
| Sunday and Bank Holidays | Closed |

In accordance with the conditions of the planning permission for the site, there will be no deliveries to or from the site outside the hours of 07:00-19:00 (Monday to Saturday), and at no time on a Sunday or Bank Holiday unless otherwise agreed in writing with the local planning authority and the EA informed.

3.4 Staffing

GWE shall ensure that sufficient personnel, who are suitably trained and competent, are present to manage and operate the on-site recycling activities safely and without causing pollution. Personnel will be fully familiar with the requirements of the Permit as is relevant to their specific duties. Personnel shall have clearly defined roles and responsibilities. Any contractors used on site will be provided with necessary information before commencing work. The site will also have a technically competent manager to ensure the plant is operated in compliance with regulations, see section 3.5 below. The staff numbers are presented below.

Table 2 - Site Operational Staff

| Personnel | Management | Administration | Operators | Other | TOTAL |
|------------------|-------------------|-----------------------|------------------|--------------|--------------|
| Number | 3 | 4 | 18 | 0 | 25 |

Operational responsibilities for the site rest with the Site Manager. Staff numbers will be maintained at a level sufficient to operate and supervise the site effectively and throughout periods of employee sickness and holidays.

3.5 Technical Competence

The manager and operatives will be appropriately trained and will be conversant with the requirements of the Environmental Permit and Management System, with particular regard to:

- Waste acceptance/rejection procedures;
- Operational controls;
- Maintenance procedures;
- Record keeping;
- Awareness of regulatory implications of the permit;
- Awareness of all potential environmental effects from the operations;
- Emergency action plan and prevention; and
- Notification to the Environment Agency and other regulatory authorities.

A printed copy of the Environmental Permit and Management System will be kept at the site office and will be readily available for reference by site staff, other company staff, Environment Agency and other regulatory authorities.

A designated person will hold a suitable qualification in order to operate the site compliantly (see Table 3 below). The suitably qualified person's actual attendance hours on site will be recorded in the Site Diary.

Table 3 – Technical Competence Qualifications

| Name | Qualification |
|-------------|----------------------|
| Mike Walter | Level 4 WAMITAB |

Any changes in technically competent management at the site, and/or the name of any incoming personnel, together with any evidence that such personnel has required technical competence, shall be submitted to the Environment Agency within 5 working days of change in management. No site operations shall take place unless there is sufficient, trained and competent staff on site as per SGN page 76, points 3-7.

3.6 Site Identification Board

In conformance with permitting regulations and the Management System, GWE shall display a clear, all-weather, easily readable Site Notice at or near the entrance to the site. The Site Sign/Notice shall contain the following information:

- Company Name
- The Permit Number
- Permit Holder's Name
- Emergency Contact Name
- Permit Holder's Telephone Number
- Statement that the site is permitted by the Environment Agency (EA)
- EA National Telephone Numbers

3.7 Site Security

The site is located in a rural area largely surrounded by farmland and security is aimed at preventing easy or accidental access by humans or livestock. The perimeter of the site is made up of security fencing and site entrances are protected by lockable steel gates which will be kept locked outside of operational hours.

Site staff will be briefed that in the event of evidence suggesting unauthorised access or vandalism being found, the matter must be reported to the police. If the incident involved unauthorised tipping or spillage of any waste, the Environment Agency will be informed.

All visitors to the permitted area will be required to sign in at reception on arrival and exiting the site.

3.8 Maintenance of Financial Provision

The company (GWE) will make financial provision to meet the obligations of the Permit.

3.9 Relevant Convictions

There are no existing convictions in place.

3.10 Reporting to the Environment Agency

All reporting required by the following shall be carried out in accordance with *section 10.4 of the Integrated Standard Operating Procedures*. This shall include but is not limited to:

- Relevant convictions
- Change of operator's or holders details
- Notification of preparatory works
- Commencement or cessation of waste operations
- Site performance

4.0 OPERATIONAL PROCEDURES

Site operations involving non-hazardous organic wastes are carried out as per Section 4.0. The operational procedures are deemed appropriate for the waste types to be processed. Where appropriate, guidance has been derived from sections of SGN S5.06.

4.1 Waste Acceptance

Please refer to *section 5.0 of the Integrated Standard Operating Procedures* for procedures covering:

- Pre-acceptance
- Acceptance at site
- Visual inspection
- Waste rejection

4.2 Anaerobic Digestion Treatment Process

Please refer to *section 6.0 of the Integrated Standard Operating Procedures* for procedures covering the processing of non-hazardous organic wastes through the anaerobic digestion facility.

5.0 POLLUTION CONTROL

5.1 Infrastructure and Plant Maintenance

Please refer to *section 10.1 and 10.2 of the Integrated Standard Operating Procedures* for details around infrastructure and plant maintenance.

5.1 Meteorological Monitoring

Please refer to *section 10.3 of the Integrated Standard Operating Procedures* for details specific to meteorological monitoring.

5.2 Dust

Please refer to *section 10.4 of the Integrated Standard Operating Procedures* for details specific to dust management.

5.3 Mud and Debris

Please refer to *section 10.5 of the Integrated Standard Operating Procedures* for details specific to management of mud and debris.

5.4 Litter

Please refer to *section 10.6 of the Integrated Standard Operating Procedures* for details specific to management of litter arising at site.

5.5 Pests

Please refer to *section 10.7 of the Integrated Standard Operating Procedures* for details specific to pest control.

5.6 Spillages

Please refer to *section 10.8 of the Integrated Standard Operating Procedures* for details specific to management of any spillages arising at site.

5.7 Odour

Please refer to *section 10.9 of the Integrated Standard Operating Procedures* for details specific to odour management at site.

5.8 Noise and Vibration

Please refer to *section 10.10 of the Integrated Standard Operating Procedures* for details specific to management of noise and vibration arising at site.

5.9 Storage of Wastes

Please refer to *section 10.12 of the Integrated Standard Operating Procedures* for details specific to storage locations of wastes to minimise environmental harm.

5.10 Biofilter Management

Please refer to *section 10.13 of the Integrated Standard Operating Procedures* for details specific to biofilter management.

5.11 Accident Management

The site has implemented a full *Accident Management Plan (August 2023 – Issue 08)* detailing potential accident and emergency situations that could occur on site, control measures to minimise potential occurrence and procedures should accidents occur on site.

6.0 RECORDS

6.1 Monitoring

Please see *section 4.2.1 of the Integrated Standard Operating Procedures* for details of monitoring covered by the Environmental Permit.

6.2 Operational Records

Please see *section 4.2.2 of the Integrated Standard Operating Procedures* for details which shall be recorded for the purpose of permit compliance.

6.3 Material Records

Please see *section 4.2.3 of the Integrated Standard Operating Procedures* for details of what records are maintained in relation to materials accepted on to and leaving site as well as how long they are to be retained.

6.4 Calibration

Please see *section 4.2.4 of the Integrated Standard Operating Procedures* for details regarding the calibration of equipment required to satisfy conditions set out within the permit and effectively operate the site.

6.5 Training Records

Each person, whose duties affect product quality shall be trained, instructed and supervised commensurate with those duties, such that he/she is competent. Training records for personnel who affect site procedures, operations and quality shall be maintained in line with *section 11.1 of the Integrated Standard Operating Procedures*.

6.6 Complaints

GWE shall decide and implement any necessary action in response to any complaints or concerns expressed by interested parties, including operatives, customers, clients and regulatory authorities. Complaints are to be dealt with in line with *section 11.3 of the Integrated Standard Operating Procedures*.

6.7 Site Waste Returns

Quarterly returns shall be provided and stored at the site office in line with Environment Agency regulations. The reporting requirement shall be addressed through *section 11.4 of the Integrated Standard Operating Procedures*.

WRM Limited

18 Manor Square, Otley, LS21 3AY

Tel: 01943 468138

Email: info@wrm-ltd.co.uk Web: www.wrm-ltd.co.uk

Copyright and Non-Disclosure Notice

The contents and layout of this report are subject to copyright owned by WRM (©WRM Limited), save to the extent that copyright has been legally assigned by us to another party or is used by WRM under licence. To the extent that we own the copyright in this report, it may not be copied or used without our prior written agreement for any purpose other than the purpose indicated in this report.

The methodology (if any) contained in this report is provided to you in confidence and must not be disclosed or copied to third parties without the prior written agreement of WRM. Disclosure of that information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests.



A Sustainable Future. Today.

www.wrm-ltd.co.uk

01943 468138