ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

MANUAL

for

Ystum Colwyn Farms Ltd
Anaerobic Digester Plant
Ystum Colwyn, Meifod, Powys SY22 6XT

Permit Reference EPR/CB3395C

EMS Manager	EMS Assistance

Edward Gittins	

EMS REVISIONS REGISTER

Date	Reference	Revision made
May 2022	Draft	New document
July 2022	Draft-1	Amended Site Boundary as detailed in the Permit Variation Application

EMS CONTENTS INDEX

Appended documents that should be used in conjunction with this EMS:

- Appendix 1: Permit SR2018 No.10 approved for Ystum Colwyn Farms Ltd AD Plant
- Appendix 2: Permit Application documents
- Appendix 3: Environmental Risk Assessment – Aspects, Impacts and Controls
- Appendix 4: Register of Statutory Controls
- Appendix 5: Anaerobic Digester User Operations Manual
- Appendix 6: HAZOP (Hazardous Operations) Report
- Appendix 7: Standard Operating Procedures, Records and Templates
- Appendix 8: H4 Odour Management Guidance
- Appendix 9: Quarterly Waste Return electronic template

PREFACE

P1. The Site

The site and 'on-farm' Anaerobic Digestion Facility is located at:

YSTUM COLWYN
MEIFOD
POWYS
SY22 6XT

OS Grid Ref: SJ 1917116420

and is managed and operated under Permit No EPR/CB3395C

by:

Mr EDWARD GITTINS of Ystum Colwyn Farms Ltd (AD facility), Mobile 07976 028716

This Environmental Management System relates to the Anaerobic Digestion (AD) facility at

YSTUM COLWYN MEIFOD, POWYS SY22 6XT

The 'Controlling' statutory document for the facility is the Environmental Permit SR2018 No.10

A copy of the Environmental Permit is appended.

Anaerobic Digestion (AD) facility process summary:

The facility utilises farm animal manure and energy crops such as maize and silage, to generate electricity and heat. The residual digestate is a high-value fertiliser. The process and facility of this type is known as Anaerobic Digestion.

Ystum Colwyn Farms Ltd is >xxx m from nearby neighbours.

The AD facility comprises an enclosed circular above-ground insulated concrete tank plus ancillary equipment. The AD tank is near, and supplied with, feedstock from the nearby feedstock stores at the farm.

The feedstock is processed through a macerator prior to being loaded into the digester. The digester (circular tank) is the central part of the processing facility and wherein the feedstock is broken down by bacteriological processes to liberate biogas. The biogas is piped to the gas holder, which is a double-membrane structure located on top of the post-store and serves as the post-store roof to prevent rainwater ingress. Once the AD process is complete, the digestate is transferred from the digester to the post-store prior to the digestate being put back on the land.

The biogas

- Is burnt in a Combined Heat and Power (CHP) unit, which is an engine connected to an electrical generator. The electricity and heat generated is used on site and the residual electricity is exported to the National Grid.
- Fuels biogas boilers to generate heat for use by the farm business

P2. Introduction to this Environmental Management System (EMS)

To manage the risks of emissions and environmental impacts arising from the facility, this Environmental Management System (EMS) considers a wide range of aspects and responds to each of the significant impacts with specifically designed systems and procedures for ensuring safety and security of the facilities.

Information and assistance has been sought from the Environment Agency's 'Horizontal Guidance Documents'. The design of this EMS refers to: Horizontal Guidance Note H6 - Environmental Management Systems

As well as giving due consideration to potential environmental affects, the EMS also sets out plans for Operator Responsibilities, Training, Systems Management and Maintenance, Process and Environmental Monitoring and Record Keeping; and the regular reviewing and updating of the EMS itself.

Where appropriate, the EMS also cross references other Guidance Documents, Risk Assessments and Operating Systems and the technology providers USER OPERATIONS MANUAL.

IMPORTANT: The operation of the AD Plant is detailed in the **Anaerobic Digestion USER OPERATIONS MANUAL** issued by the AD technology provider and forms part of, and should be used in conjunction with, this **EMS**.

P3. The Scope and Aims of the Environmental Management System

The purpose of the Environmental Management System is to provide documented procedures to enable the safe operation of the facility so that managers, operatives and third parties can readily understand and undertake or monitor the day-to-day activities in an organised fashion.
The Environmental Management System has regard to the environmental impacts of the facility and requires that infrastructure, equipment and operational management systems are put in place to ensure that there is minimal risk of any adverse impact to the local environment.

This includes consideration to nearby sensitive receptors including people, dwellings and workplaces, water courses and groundwater, plants and animals and any specific sites that are identified for their environmental sensitivity.

Consequently, any activity, operation or material that occurs or is generated within the activities of the site that may have an adverse impact on the environment is identified and measures implemented to maintain the integrity of the environment as appropriate.

P4. Drivers for the EMS

This **Environmental Management System** (EMS) is driven by the **Permit** that is approved and issued for the facility to operate and is the Controlling Document.

The Environmental Policy responds to the requirements of the 'Controlling Document' being the **Environmental Permit**.

A copy of the Permit is appended and listed within the 'Statutory Compliance' section.

Reference to **Permit Conditions** criteria is acknowledged throughout the EMS to Procedures implemented and the respective with Permit Clauses the Procedure relates to, to address compliance.

The NRW guidance **How To Comply With Your Environmental Permit** has been used as the framework for this EMS along with guidance notes H4 and H5, to reflect identification and minimisation of risks of pollution, including risks arising from operations, maintenance, accidents, incidents, and non-conformances, as well as management competence and record keeping.

P5. Structure of the EMS

The Environmental Management System (EMS) details the structure of the facility that is to comply with the Environmental Permit criteria.

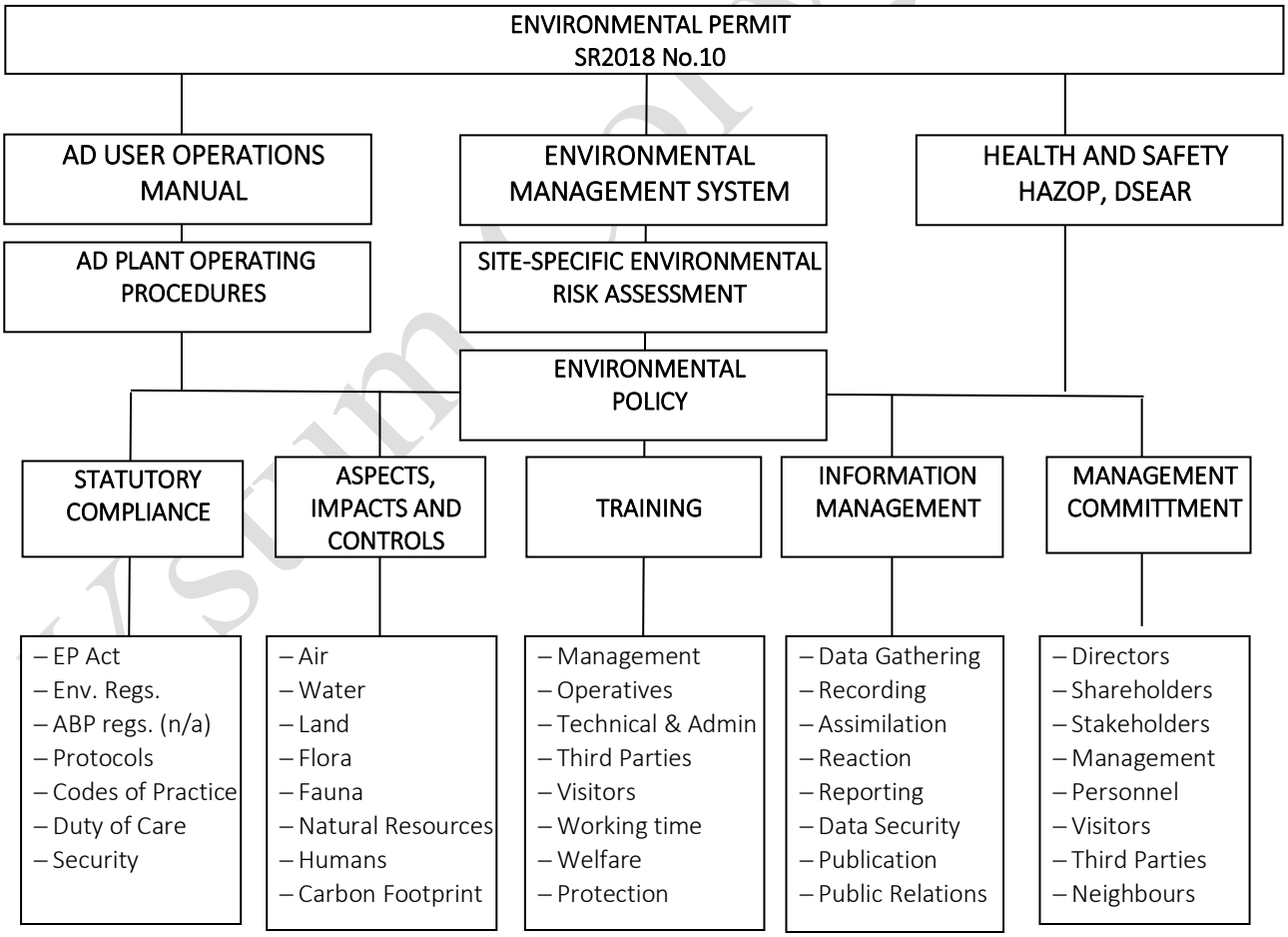
This is achieved by implementing specific procedures designed to meet regulatory and legislative responsibilities, and by adhering to plant and equipment manuals to operate and maintain the plant correctly.

The EMS refers to readily available generic information such as the Guidance Notes provided by the regulatory authorities.

The Operator is advised of the following core documents and that they should be used in conjunction with each other:

- Environmental Permit SR2018 No.10 (Appendix 1)
- Environmental Management System
- Site Specific Environmental Risk Assessment (Appendix 3)
- Anaerobic Digestor User Operations Manual (Appendix 5)
- Standard Operating Procedures, Records and Controls (Appendix 7)

The following illustrates the scope and relationship of the core documents



Company Details and Organisational Management

Registered No. 05662695
YSTUM COLWYN FARMS LTD
YSTUM COLWYN, MEIFOD, POWYS
SY22 6XT

COMPANY DIRECTOR designate
Edward Gittins

FACILITY MANAGER
Edward Gittins

Technical Support
AD: Fre-energy Ltd
CHP: 2G Energy Ltd
Biogas Boilers: Shaw Renewables Ltd

Roles/ Responsibilities

Name	Role	Responsibility
Edward Gittins	Facility Manager	Statutory and Regulatory Compliance Business Management Operations Health and Safety Commercial Contracts
Edward Gittins	AD Manager	Manages day-to-day operations regarding feedstock inputs, materials handling, feedstock analyses, delegation and supervising. Daily checks, biogas & CHP management daily Records and EMS System records
Fre Energy Ltd	Technical Support	AD operations provided by commercial contract service
2G Energy Ltd	Technical Support	CHP Maintenance; annual emissions testing
Shaw Renewables Ltd	Technical Support	Biogas boiler maintenance

ENVIRONMENTAL POLICY

Ystum Colwyn Farms Ltd
On-Farm Anaerobic Digestion Facility

Environmental Policy

Ystum Colwyn Farms Ltd is an environmentally aware green-energy and biofertiliser generation company, working alongside and in harmony with agriculture providing resources and activities for environmental benefit.

Our aim is to improve environmental sustainability by seeking and implementing systems that reduce the environmental impact of our business.

At Ystum Colwyn Farms Ltd. as well as conducting our operations with due regard to the environment, we intend that the outcome of our farming activities shall have a wider beneficial impact on the global environment.

As such, the work of Ystum Colwyn Farms Ltd. is guided by the following principles:

- To comply with the relevant legislation and to prevent pollution
- To adopt practices and procedures in keeping with industry good practice.
- To embrace the management principles of Renewable Energy Generation
- Wherever possible to commit to waste reduction, recovery and recycling of energy and natural resources e.g. fertilisers and organic matter
- To continue to minimise our environmental impacts, including our company's carbon footprint, by reduction in fossil fuel fertiliser usage and generation of renewable energy.
- To establish procedures to improve our environmental performance
- To make our policy and environmental information available to the public, schools, other interested third parties and to all employees.
- To demonstrate our commitment to employee involvement through training and environmental awareness raising.

Signed :…….. ……..Reviewed Dated……
Facility Manager Ystum Colwyn Farms LTD

PART A INTRODUCTION TO THE SITE

A1.1 SITE LOCATION and NEARBY SENSITIVE RECEPTORS

The site and 'on-farm' Anaerobic Digestion Facility is located at

YSTUM COLWYN
MEIFOD
POWYS
SY22 6XT

OS Grid Ref: SJ 1917116420

Figure 1: Location Map for Ystum Colwyn Farms Ltd

The site is located at Ystum, Colwyn Farm, located to the North of Welshpool. The AD plant is located within the central area of the main farm complex, with the farm surrounded by open fields. It is screened to the North, South, East and West by existing mature hedgerows and existing farm buildings.

The current activities at the farmstead are described as poultry and sheep farming.

The site may be approached (heavy goods) from the _____

Potential receptors in relative proximity:

- The River Vyrnwy lies approximately 120m to the South East and the A490 is located at the North East of the farm site. There are no water abstraction points nearby.
- There are no SSSI's or National Nature Reserves within 5km.

There are no nearby sensitive receptors

Figure 2. Site Plan Showing Access and location of Anaerobic Digester.
Local Plan which details Site Plan with Permit Boundary

A1.2 Introduction to the Anaerobic Digestion Process

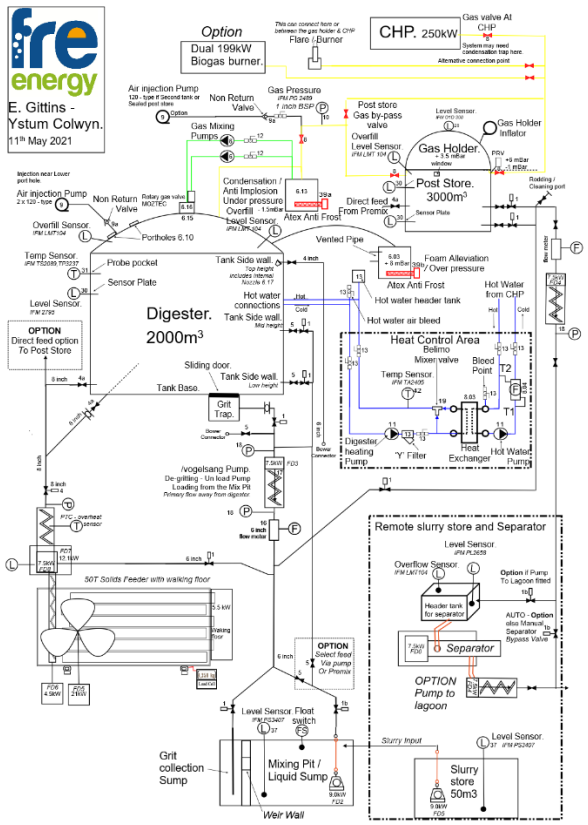
Anaerobic digestion is a natural process that occurs in the absence of oxygen by bacteria that enables the biological breakdown of organic matter to transform carbohydrates into water carbon dioxide (CO_2) and methane (CH_4). The water stays within the closed environment and the mixture of CO_2 and CH_4 is known as 'biogas'.

The process utilises agricultural crops, manures and farm vegetable residues and liquids as 'feedstocks'. These are blended in a pre-specified ratio and macerated if required to form a 'soup' that is readily pumped into the closed tank called 'the digester vessel (or digester tank)'. The digester is warmed to the optimum temperature for the anaerobic bacteria to biologically transform the feedstock into methane and carbon dioxide and a nutrient-rich biofertilizer (digestate).

Digested material and biogas are transferred to the Post-store. The Post-store has a double membrane roof that stores the biogas prior to it being transferred to the CHP and biogas boilers to generate electricity and heat respectively. The digestate is transferred from the Post-store as required to spread to the farms land.

Once the AD is fully operational it operates as a self-perpetuating mesophilic process. The electricity and heat generated from the biogas provides the energy requirement of the system, to maintain a temperature of between 38°- 40° Celsius. The AD technology is Fre-energy Ltd.'s patented combined de-gritting and gas-actuated mixing system. This system enables silt to be removed from the digester whilst maintain a continual operational process, i.e., the inorganic material that is inherently mixed with the feedstock settles out and is removed routinely as required. This feature enables the plant to retain maximum operational process capacity and eliminates the need to periodically shut down the AD plant to remove excessive build-ups of silt.

Figure 3 shows a schematic for the process.



The products of the process are the digested material 'digestate' and biogas.

Digestate is a fertiliser (organic by process), is stored in the post-store and used to spread on the land as required. The biogas is burnt through the combined heat and power (CHP) biogas engine to produce electricity, and through biogas boilers to produce heat. Bot the electricity and heat are used on site. Excess electricity is exported to the National Grid.

A1.3 Site Safety and Security

The main access to the site is via the weighbridge entrance.

The site is easily accessible by full-sized lorries and other vehicles.

Containerised plant and equipment are kept secure.

Fire-fighting facilities are available: water supplies and small extinguishers.

There is open-stair access to the working area at the top of the anaerobic digester tank.

There is a ladder to the roof level of the Combined Heat and Power Unit (CHP).

The site is monitored by CCTV operational 24/7.

A1.4 Fire and Explosion Safety

The biogas system operates at very low pressure as detailed in the HAZOP report (Appendix 5) and DSEAR documentation.

The pressure of biogas within the digester tank is closely monitored and controlled.

Biogas is cooled to remove moisture and piped to the CHP. Gas storage, located on top of the post-store, is a sealed double-membrane covers and provides storage of the biogas prior to it being pumped to the CHP.

Biogas is piped to the engine container and is only compressed as it is used within the engine that drives the electricity generator.

TO BE ADDED

IMPORTANT: A copy of the gas zoning schematic (above) should be located in the Control Room

A1.5 Introduction to the Environmental Context

It is generally accepted that the anaerobic digestion technology has many environmental, social, and economic benefits.

Processing farm slurries, manures and vegetable waste by anaerobic digestion can be considered to operate a closed-loop nutrient cycle: an efficient waste management process, reduces greenhouse gas emissions, generates energy, recycles organic wastes into a high-quality fertiliser (digestate) that is organic by process and contains valuable minerals and trace elements that can be spread back onto the land.

Digestate delivers nutrients in a form readily available to plant roots. This significantly reduces run-off into sensitive receptors, e.g. water courses, thus reduces pollution that could potentially impact on BOD levels. Processing high-nitrogen wastes by AD reduces the odour by typically 75%.

However, it is accepted that in any system where large volumes of liquid are stored or processed in tanks, there are potential environmental risks.

The environment is defined as: Air, water, land, flora, fauna, natural resources and humans, and the way in which these interact.

Sensitive receptors may include:

1. Watercourses (surface water) including ditches, streams and (leading to) rivers.
2. Groundwater
3. Dwellings
4. Humans (footpaths etc.)
5. Flora/fauna

The primary hazards (sources or potential sources of risk) for this facility include:

1. Large quantities of potentially polluting liquid in above ground tanks (albeit the digestate is less polluting than neat slurries)
2. Generation and management of biogas
3. Mobile and static equipment including engines (noise/vibration, fuel, coolant, lubricants, waste)
4. Emission from engine exhaust

The secondary hazards (potential sources of risk) for this facility include:

1. Fugitive emissions
2. Breakdowns, failures,
3. Management control systems
4. Human error

An initial **Environmental Risk Assessment** identified there are no significant close-proximity sensitive receptors.

The ERA details environmental aspects, impacts and controls for the AD facility and forms the basis of the Management System for Ystum Colwyn AD facility and includes:

- Information
- Procedures
- Templates
- Records
- Reviews (as shown in the schematic)

PART B ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

1.0 Introduction

This written management system provides information, procedures, and templates to enable the operator to manage and operate the activities of Ystum Colwyn Farms Ltd AD Facility to ensure it meets the requisite regulatory and legislative criteria, as described in the Conditions, of the regulatory Permit SR2018 No.10 approved for the operation of the facility.

Methodology, as used in a typical ISO14001 EMS approach, has been referenced to implement the Environmental Management System for Ystum Colwyn Farms Ltd AD Facility

Appended documents that should be used in conjunction with this EMS:

- Appendix 1: Permit SR2018 No.10 approved for Ystum Colwyn Farms Ltd AD
- Appendix 2: Permit Application documents
- Appendix 3: Environmental Risk Assessment – Aspects, Impacts and Controls
- Appendix 4: Register of Statutory Controls
- Appendix 5: Anaerobic Digester User Operations Manual
- Appendix 6: HAZOP (Hazardous Operations) Report
- Appendix 7: Standard Operating Procedures, Records and Templates
- Appendix 8: H4 Odour Management Guidance
- Appendix 9: Quarterly Waste Return electronic template

1.2 Environmental Management Procedures

In consideration of Permit clause 1.1, Management Procedures have been developed for this Environmental Management System and are detailed within this and/or appended documents.

Management Procedure Templates are provided within this and/or appended documents which are designed to collate a record of the AD facility operational activity.

1.3 Site Condition.

The Site History and consideration of historic incidents is maintained as the Site Condition Report (refer to H5 Guidance).

The history of the site is described in the Site Condition Report that formed part of the Permit Application documentation appended.

- Appendix 2: Permit Application documents

The original site condition report may be summarised in the following:

Ystum Colwyn Farms Ltd AD Facility: Site Condition Report November 2021
At the location of the proposed digester plant, the site is reasonably level, with a slight fall towards the river at the Southeast and is free of any substantial trees and shrubs. The farm sits in a very remote location, within agricultural land. The geotechnical survey reported there are no obvious signs of ground contamination. The natural conditions of the underlying soils do not suggest that any deposits of hazardous materials have occurred at the test locations. The landowners are not aware of any pollution incidents. There are no regulatory records of any pollution incidents. (Ref Horizontal Guidance H5)

1.4 Environmental Risk Assessment – Aspects, Impacts and Controls

SR2018 No.10 Risk Assessment for on-farm AD Facilities[1] is provided with the Permit Application (Appendix 2) and via the footnote link

On approval and issue of the permit, the permit operator is required to carry out further risk assessments as required by the criteria set out in the Permit Conditions, Clause 1 Management.

Guidance to manage this is provided as detailed in the following link https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit (supersedes the previous H1 guidance note which was withdrawn on 01 February 2016) and is integral to this EMS.

An Environmental Risk Assessment (ERA) has been undertaken for Ystum Colwyn Farms Ltd AD Facility to address '**Environmental Aspects'** the '**Impact of the Environmental Aspects'** and the '**Controls**' implemented.

This information has been compiled as an "active" document that is intended be reviewed, amended, updated as applicable throughout the operational activity of the AD facility, to uphold compliance with the Permit requirements, and is appended to this EMS with Management Procedure Templates referred to in section 1.2

- Appendix 3: Environmental Risk Assessment – Aspects, Impacts and Controls

  For reference the contents of the ERA comprises:

[1] https://cdn.cyfoethnaturiol.cymru/media/693667/generic-risk-assessment-for-sr2018-no-10-v1.xls

1.4 Register of Statutory Controls.

This EMS utilises the NRW, EA, gov.uk, HSE.gov.uk and other databases for the Register of Statutory Controls

Those that are relevant to this site are appended.

- Appendix 4: Register of Statutory Controls

Of Primary importance are:

a). The Environmental Protection Act	Due consideration to management of Waste and of ways in which the processes may affect the environment; for example, the impacts on neighbours and air quality, including noise, emissions, and odours.
b). The Environmental Permitting Regulations - Environmental Permit	Due consideration to the Environmental Permit for this site as described above; responding to each of the clauses and maintaining compliance regarding the feedstocks used, the management of the processes and management of environmental aspects.
c). The Environmental Permitting Regulations Classification of Waste	Due consideration to other aspects of the Environmental Permitting Regulations where they are not defined within the Permit, including the deliberate use of Non-wastes (i.e. livestock manures), or materials that are not waste, such as silage and vegetable matter as feedstocks for the Anaerobic Digester.
d). The DSEAR Regulations	The HAZOP Report provided by the AD technology provider enables the owner to complete the DSEAR with the aid of qualified consultants.
e). The Water Resources Act	Due consideration to the protection of water
f). The Health and Safety at Work Act	Compliance with the H&S Act and the associated requirements and regulations for employed personnel. Due consideration of third-party Visitors Health and Safety as described by the H&S Policy.
g). The Duty of Care Regulations	Compliance with the Duty of care regulations regarding Waste Transfers as required.

In accordance with Permit clause 1.2.2 the operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

The key controlling document for this site is the **Environmental Permit.**

An annual subsistence charge applies to this permit.

The Environmental Permit for Ystum Colwyn Farms Ltd AD Plant is:

SR2018 No.10 – On-farm anaerobic digestion facility using farm wastes only, including use of the resultant biogas.

Waste Recovery Operation – treatment capacity no more than 100 tonnes of waste per day.

Waste Acceptance Criteria for this AD plant is detailed in the Environmental Permit Conditions Section 2, clause 2.3.

Each permissible waste type is identified by the Waste Code as detailed in Table 2.3 Waste Types.

Only materials listed are permitted to be processed through the AD Plant.

It is a mandatory requirement to submit a **Quarterly Returns Form**, provided as an electronic template (Appendix 9)

The Permit holder is responsible the implementation of, and compliance with, the permit. Failure to maintain compliance is an offence could lead to the site being fined, closed or, in serious cases, prosecution.

2.0 OPERATIONS AND MAINTENANCE

Site-specific written operating instructions in the form of the Anaerobic Digester USER OPERATIONS MANUAL are provided (appended) that are required to operate and maintain the AD plant and equipment present onsite by the trained operators and contractors working on the facility.

The instructions provide direction on how equipment is to be used to achieve the work objective and address any precautions which are to be taken as part of that work to ensure any risks to the environment posed in using the equipment are minimised or eliminated.

These instructions include details of what to do when things go wrong, that is, in the event of plant or equipment malfunction and how to stop a malfunction causing an adverse environmental impact.

Standard Operating Procedures, Records and Templates are provided in

- Appendix 5: Anaerobic Digester User Operations Manual
- Appendix 7: Standard Operating Procedures, Records and Templates

Activity/works should be documented as a record of work carried out on the AD facility.

Completed records should be retained and filed in accordance with the Permit Conditions

For reference the Anaerobic Digester USER OPERATIONS MANUAL comprises:

Section 1 Health and Safety information guidelines

- 1.1 Substances Hazardous to Health
- 1.2 Hazard Assessment Biological-Mechanical-Electrical
- 1.3 COSHH Assessment
- 1.4 Properties of Biogas
- 1.5 Explosion Risk Management
- 1.6 Safety Equipment-Overpressure Protection
- 1.7 Plant Operating Instructions Initial Start Up/Restart of Biogas System
- 1.8 Operation under Normal Conditions
- 1.9 Operation Instructions in case of malfunction
- 1.10 Operation Instruction for Shutting Down a Plant
- 1.11 Visitor and Contractor Control: Risk Assessment
- 1.12 Method Statement-Hot Work Permit/Confined Space
- 1.13 Emergency Procedure for Fire or Explosion and accident

Section 2 Important information: Commissioning of the Fre-energy Anaerobic Digester

The operator is required to sign to confirm that they have read and acknowledge the information

Section 3 Operating the Fre-Energy Anaerobic Digester

- 3.1 Fre-Energy Interface Control Panel (ICP)
- 3.2 Feeding the Anaerobic Digester
- 3.3 Feedstock Consistency
- 3.4 Procedure: Feedstock Loading
- 3.5 Removing Digestate from the Digester
- 3.6 Rotating Arm and Gas Indexing on Top of the Digester

3. DOCUMENTAION and RECORDS

The EMS manager maintains a record of any applicable environmental obligations, permits, exemptions, codes of practice, legislation and any other requirements they are signed up to.

The legislation which is relevant to the permit holder's activities is kept, on a register along with the names of those people in the organisation who are responsible for ensuring it is complied with.

The website Gov.uk has been used to help identify which legislation is applicable to this site.

The requirements of any permit or authorisation that the facility has from NRW is also included in this register, along with who has responsibility for ensuring that it is complied with.

4. OPERATOR COMPETENCE and TRAINING

4.1 Competence

In accordance with Permit, person(s) operating the AD facility should be trained to a competent level as provided by the WAMITAB qualification.

4.2 Training

All persons operating and/or working at the AD facility shall be trained in accordance with the training checklist and a training record should be maintained.

- Appendix 7: Standard Operating Procedures, Records and Templates

All contractors must be trained to complete the scope-of works in accordance with the associated risk assessment and method statement provided by the contractor prior to the work being carried out. (Appendix 5: User Operations Manual; Section 1) Documents to be retain as a record.

Any person (staff and contractors) having duties that are controlled by or may be affected by the matters set out in, the permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out. (Appendix 1: Permit)

In addition to regulatory requirement in 3.1, all Staff must be competent in the activities they are expected to carry out, including in abnormal situations, such as plant failures or accidents. (Appendix 5: User Operations Manual)

Staff roles and responsibilities must be clearly defined, and names must be placed against each role and responsibility for example, who is the technically competent person for the site. (Appendix 7: Standard Operating Procedures, Records and Templates)

Documentation stating who oversees the facility, ensuring compliance with each part of the permit and other relevant legislation and guidance must be kept. (Appendix 3: ERA Table 11)

These documents must be updated at regular intervals.

5. SITE CLOSURE PLAN

The EMS should detail a plan for closure of the site in the event the NRW receives an application to surrender a permit, it is necessary to show that the site has been returned to its original state.

The management system should ensure that processes are in place to record details of:

The state (baseline) of the land prior to when the permitted activities started should be held on file.

Checks undertaken and recorded (relevant spills and incidents and remedial clean up measures) to determine if there is historic contamination.

Regulatory and legislative protective measures taken in the design, construction, commissioning and operations of the permitted site. This shall be recorded on the site map or plan as applicable.

6. ODOUR, NOISE AND EMISSIONS MANAGEMENT PLANS

The Environmental Permitting Regulations may require the control of pollution including odour, noise and emissions. The potential impacts of these are managed and controlled as they may have serious adverse impacts on the environment and human health. Odour, noise and emissions management plans are included as part of the site's EMS. The plans include information on how to minimise adverse impacts arising from any odour, noise or emissions produced as part of the activities carried out on the site.

Guidance on NOISE management was taken from Horizontal Guidance document H3.

Guidance on ODOUR management was taken from Horizontal Guidance document H4.

- Appendix 3: ERA – Aspects, Impacts and Controls
- Appendix 7: Standard Operating Procedures, Records and Templates
- Appendix 8: H4 Odour Management

7. EMS MANAGEMENT and REVIEW

7.1 EMS Management

The EMS is managed by the responsible person with assistance from third party environmental consultants.

Currently the Responsible person is Edward Gittins

7.2 EMS Review

The EMS shall be reviewed at least once per year (12 months) and the following key components checked:

- Environmental Management Policy and responsibilities
- Site records
- Digestate Production records
- Environmental Incidents and Accidents
- Equipment condition, fitness for purpose and maintenance records
- Training Records
- Complaints
- Statutory Register – Statutory compliance.
- Environmental Risk Assessment – Aspects, Impacts and Controls
- Standard Operating Procedures

8. SECURITY AND AVAILABILITY OF RECORDS

All records pertinent to the operation of the digestion facility will be securely stored and protected from adverse conditions.

The site office (house) is either manned or locked during the working day and records will be within a safe environment.

All site records will be filed in the site office, where they will be securely retained. These are to include the EMS and all documents as on the register.

Storage of such information will be controlled by management and will be available for inspection on request.