

Accident prevention and management plan

Facility Name: Maesydd AD Facility

Permit Number : AB3791FG

Site address: Maesydd AD Facility, The Maesydd, Pool Quay, Welshpool, Powys, SY21 9LA

Grid Ref : SJ269138

Date of next review: 19/07/2027

This plans covers any incidents or events that could result in:

- Pollution
- Not being able to comply with the permit

Table of Contents

1.	Risk Assessment of potential Accidents as specified in the permit EMS guidance	2
2.	List of Emergency Contacts	3
3.	Health & Safety Procedure	4
4.	Substances stored onsite & storage facilities	5
5.	Spill Management Plan	5
6.	Accident Reports & Procedure	7
7.	Near Miss Report & Procedure	9

Maesydd AD Facility

1. Risk Assessment of potential Accidents as specified in the permit EMS guidance

Accident Type	Likelihood	Severity	Risk Level	Key Mitigation Measures
Enforced Shutdowns	Low	High	Medium	in this event lease see 13h Site closure plan
Fires	Low	High	Medium	Fire detection, ATEX compliance The site is operated in accordance with the Fire Prevention and Mitigation Plan and all combustible feedstocks are managed in accordance with the approved fire management procedures.
Vandalism	Low	Medium	Low	The gates at the entrance are electric and we have 24hrt CCTV also.
Flooding	Low	High	Low	The site is fully bunded and in the occurrence of a flood, the failsafe measures would occur, with all valves reverting to closed.
Biogas Leaks	Low	High	Medium	Routine methane leak detection surveys are undertaken together with regular inspection of pipework, valves and gas handling equipment. Any defects identified are repaired immediately and recorded within the Environmental Management System.
Digestate Leaks	Low	Medium	Low	Digestate storage infrastructure is routinely inspected and maintained. The operational area is fully bunded and constructed on an impermeable concrete base. Any spillages are managed in accordance with the Spill Prevention Plan and recorded within the Environmental Management System.
Equipment Failure	Medium	Medium	Medium	Critical spare parts are maintained on site wherever practicable and preventative maintenance records are retained as part of the Environmental Management System.
Power Outages	Medium	Medium	Medium	Under power failure conditions the loading and unloading valves automatically return to their fail-safe closed position and pumping operations are inhibited until power is restored.

2. List of Emergency Contacts

Haydn Langford	Site Operator	07980 684738
Fe Energy Office	Fe Energy	01289 270397
Chris Morris	Fe Energy	07798 913128
Martin Piece	Electrician	07967 820118
Natural Resources Wales	Statutory Body	0300 065 3000

Figure 1: Poster found in AD Control room on Notice Board

3. Health & Safety Procedure

Fire

- In the event of a fire, immediately raise the alarm and contact the Fire and Rescue Service by dialling 999.
- Where it is safe to do so, activate the emergency stop to shut down plant operations and isolate equipment.
- Evacuate all personnel to the designated assembly point and make sure everyone is accounted for.
- Do not attempt to tackle a fire unless it is safe, you have received appropriate training, and the correct fire extinguisher is available.
- CO₂ extinguishers shall be used on electrical equipment and foam extinguishers used for suitable combustible materials where safe to do so.
- Roof or elevated fires shall not be approached. Personnel must remain at a safe distance and await the arrival of the Fire and Rescue Service.
- The Site Manager shall notify Natural Resources Wales within 48 hours of the fire.

Explosion or Major Incident

- Immediately contact the emergency services by dialling 999.
- Evacuate all personnel to the designated assembly point and ensure everyone is accounted for.
- Prevent unauthorised persons from entering the site until the emergency services declare it safe.
- Isolate plant and equipment where safe to do so using the emergency stop procedures.
- Notify Fre-Energy technical support if specialist assistance is required.
- Notify Natural Resources Wales.

Gas.

- No smoking, naked flames or hot works shall be permitted within hazardous gas zones.
- Any suspected gas leak shall be investigated using an approved gas detector where it is safe to do so.
- Small gas leaks shall be isolated where possible and the affected area ventilated.
- Major gas leaks shall result in immediate evacuation of the affected area and activation of the emergency procedures.
- Any gas leak shall be reported to the Site Manager and recorded within the Environmental Management System.

Confined Spaces

- Entry into confined spaces shall only be undertaken by trained and authorised personnel.
- Suitable gas monitoring equipment and personal protective equipment shall be always used.
- Confined space entry shall never be undertaken by a lone worker.
- Appropriate rescue arrangements shall be in place before entry begins.

Maesydd AD Facility

Safe Working Practice.

- No smoking, naked flames or hot works shall be permitted within hazardous gas zones.
- Any suspected gas leak shall be investigated using an approved gas detector where it is safe to do so.
- Small gas leaks shall be isolated where possible and the affected area ventilated.
- Major gas leaks shall result in immediate evacuation of the affected area and activation of the emergency procedures.
- Any gas leak shall be reported to the Site Manager and recorded within the Environmental Management System.
- Environmental incidents, including spillages, shall be managed in accordance with the approved Spill Prevention Plan.

4. Substances stored onsite

Figure 2 Diagram of Points of interest onsite

Type of Combustible Waste	Max Quantity		Stored
Paper/cardboard	Minimal		Office use only
Plastics	Minimal		Office use only
Rags/ textiles	Minimal		Maintenance use only
Compost and plant material	Poultry Litter	350 tonnes	Above ground concrete pad
	FYM	100 tonnes	Above ground concrete pad
	Raw cow slurry	10000 cm ³	Above ground storage tank
	Liquid digestates	25cm ³ per day	Above ground metal tank
WEEE	Minimal from operational maintenance		Office or hardstanding ready to be sent for recover/ disposal
Diesel / petrol	On Maesydd Farm – not on AD site		None on site
Gas bottles			None on site
Aerosols			None on site
Batteries	Batteries are not stored on site other than those in Atex rated torches and sfety equipment and those in computers and backup systems for the scada system No car batteries are stored on site		
Oil	Engine Oil		Stored within bund area
Chemicals	Ferric Chloride	10000 litres	Stored in IBC’s within bund area
Wood			None on site
scrap metals contaminated or mixed with other waste such as oils or plastics			None on site

Maesydd AD Facility

de-polluted and un-depolluted ELVs	None on site
refuse derived fuel (RDF) and solid recovered fuel (SRF)	None on site
biomass	None on site
mixed waste containing any combustible wastes	None on site
Confirm if any are stored on site	Confirm if any are stored on site - if any used ensure they are itemised here and on a separate sheet with the MSDS sheet

5. Spill Management Plan

All spillages and accidental releases at the Maesydd AD Facility shall be managed in accordance with the separate Spill Prevention and Management Plan, which forms part of the sites Environmental Management System.

The Spill Prevention and Management Plan sets out the detailed procedures for:

- Minor and major spillages
- Failure or leakage from the digester, digestate storage tank, pipework, pumps and associated infrastructure
- Isolation of affected plant equipment
- Containment within the reinforced concrete bund and impermeable concrete surface
- Protection of drains and prevention of releases beyond the site
- Recovery and appropriate reuse or disposal of spilled material
- Use and replenishment of spill response equipment
- Notification of the site manager, emergency services and Natural Resource Wales where required
- Recording, investigating and implementation of corrective actions following and incident.

In the event of a spill, the source shall be stopped and isolated where it is safe to do so. The emergency stop shall be activated where necessary to close relevant valves and inhibit pumping. Spill kits, absorbent materials, pumps and other suitable equipment shall be used to contain and recover material.

All spillages, including minor incidents and near misses, shall be reported to the Site Manager and recorded within the Environmental Management System. Any incident that causes or has the potential to cause significant environmental pollution or a breach of the Environmental Permit shall be reported to Natural Resources Wales without delay.

The detailed Spill Prevention and Management Plan shall be readily available to site personnel and reviewed following any significant incident or change in operating procedures.

6. Accident Reports & Procedure

In the event of an accident the Health and Safety officer needs to contact the employee or employees the accident or incident relates to. Interviews need to be conducted and there is a form that should be filled out by the Health and Safety Officer to ensure all the relevant information has been taken. They can then analyse and draw a conclusion, before putting in place new control measures to ensure any controls put in place will avoid the incident happening again. If this is deemed a serious accident under the rules of RIDDOR then it must be reported to HSE:

- Result in death
- Result in specified injuries to workers
- Result in non-fatal injuries to people other than workers that require hospital treatment
- Result in dangerous occurrences
- Result in work-related violence
- Result in a malfunction of breathing apparatus that causes a significant risk of personal injury

 Book Number	 Page Number	/ Date Completed	 Person Completed sheet handed to
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A SEPARATE SHEET SHOULD BE COMPLETED FOR EACH PERSON INVOLVED IN THE ACCIDENT
 Once completed, the sheet should be removed and passed to the person or department on the front of this book for secure safekeeping. The employee who had the accident, may wish to make a copy of this form for their own records before handing it in.

ACCIDENT REPORT FORM

Details about the person who had the accident

Name:

Address:
 Postcode:

Occupation:

Department:

Details about you, the person completing this record - *Please complete if you are not the person who had the accident*

Name:

Address:
 Postcode:

Occupation:

Department:

About the accident - *Please use the back of this form if you require more space*

Time when the accident occurred: Date of accident: / /

Where the accident occurred - Please include department / room / area

How the accident took place - Include the cause if known

.....

Details of any injury suffered by the person involved

.....

Please tick if a risk assessment is required ☐

The person involved in the accident should tick the box and sign and date below if they consent to their details on this form being disclosed and made available to safety representatives and representatives of employee safety when requested. ☐

Signature Date: / /

Complete this box if the accident is reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)

How was it reported:

Date reported: / / Print Name Signature

This section should be signed by the data protection officer (DPO) or a relevant contact to acknowledge receipt of the record and that it has/will be stored as per GDPR documentation.

Signed Dated

Figure 3: Blank Accident form to be filled out by the Health & Safety Officer

7. Near Miss Report & Procedure

A Near Miss Report is for internal use only so therefore can be completed by the person to whom the near miss occurred, with supervision and assistance of a manager. The analysis and outcomes should be discussed in a meeting with both the employee and manager and the Health & Safety Officer. The new control measures can then be put in place.

AD NEAR MISS FORM

Section 1: General Information

Report Number:	
Date & Time of Near Miss:	
Location of Near Miss:	
Reported by Name: Job Title: Contact Details:	

Section 2: Details

1. Describe the Near Miss:

(Provide a detailed account of what happened, including actions leading up to the incident.)

2. Was Equipment or Material Involved?

- o ☐ Yes (Specify): _____
- o ☐ No

3. Environmental or Safety Hazards Identified:

- o ☐ Gas leakage
- o ☐ Feedstock spillage
- o ☐ Equipment failure
- o ☐ Fire or explosion risk
- o ☐ Other: _____

4. Immediate Actions Taken:

(What was done to control the situation or prevent harm?)

Section 3: People Involved

1. Was Anyone at Risk?

- ☐ Yes
- ☐ No

2. Were There Any Injuries?

- ☐ Yes (Complete an Accident Report Form)
- ☐ No

3. Names and Roles of Individuals Involved or Witnessing:

Section 4: Risk Factors

1. Potential Consequences if the Incident Had Occurred:

- ☐ Environmental contamination
- ☐ Personal injury
- ☐ Damage to equipment
- ☐ Production disruption
- ☐ Other: _____

2. Was PPE Used Properly?

- ☐ Yes
- ☐ No (Explain): _____

3. Contributing Factors (tick all that apply):

- ☐ Human error
- ☐ Inadequate training
- ☐ Poor maintenance
- ☐ Hazardous conditions
- ☐ Other: _____

Section 5: Investigation and Follow-Up

1. **Investigation Conducted By:**

- o Name: _____
- o Job Title: _____

2. **Root Cause Analysis:**

(Identify the underlying cause of the near miss.)

3. **Corrective Actions Implemented:**

(Describe measures taken to prevent recurrence.)

4. **Additional Comments or Observations:**

Section 6: Review and Sign-Off

1. **Date of Review:** _____

2. **Reviewed By:**

- o Name: _____
- o Job Title: _____

3. **Management Sign-Off:**

- o Name: _____
- o Signature: _____
- o Date: _____

