

## Compliance Assessment Report CAR\_NRW0044756

**Permit being assessed:** AP3139FT.

**For:** Five Fords WWTW Gas to Grid Facility, **held by:** Dwr Cymru Welsh Water

**At:** Cefn Rd, Marchwell, Wrexham, Wrexham, LL13 0PA.

**Type of assessment:** Site Inspection,

**Reason:** Routine.

**On:** 20/06/2024 between 10:15 and 12:30.

**Parts of permit assessed:** See Below.

**NRW Lead Officer:** Philip Harper, accompanied by Kathryn Bradshaw.

**Report sent to:** Head of Energy, Head of Energy, on 17/07/2024.

### 1. Summary of our findings (full details in section 4)

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR1A - Installations - Management - General Management	Assessed (A)	
IR2A - Installations - Operations - Permitted activities	Assessed (A)	
IR2B - Installations - Operations - The site	Assessed (A)	
IR1A - Installations - Management - General Management	C3 Minor	1.1.1.
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	C3 Minor	3.1.1

Result types are explained in more detail in the 'Important Information' section below.

Total non-compliances recorded	Total non-compliance score
2	8

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

### 2. What action is required?

Criteria	Action needed	Complete by
IR1A	See actions in main text	09/08/2024

Criteria	Action needed	Complete by
IR3A	See actions in main text	09/08/2024

Compliance criteria codes are listed in the 'Important information' section below.

### 3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecution and/or suspension or revocation of your permit.

#### **You are non-compliant with your permit.**

**At this time, we are issuing you with a warning for the non-compliance recorded above. Warnings may influence future enforcement response for continued or further non-compliance.**

This statement does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue.

### 4. Details of our assessment

At 10:15 on the 20<sup>th</sup> June 2024 an announced site inspection was undertaken at Five Fords Gas to Grid Facility by NRW officers Phil Harper and Kathryn Bradshaw, Senior Industry and Waste Regulation.

#### **General Site Observations**

A general site walk round was undertaken. Internal roadways were clear from debris and the site was visually in a good condition. The sludge storage area was being cleaned at the time of the inspection following increased use due to planned digester maintenance which had been completed prior to the inspection.

Officers were provided with an overview of upgrades to the foam suppression system which will help to prevent a reoccurrence of the gas loss event which is described later in the compliance assessment report.

An overview was provided of the Scada system. The system showed that a digester was experiencing a foaming event at the time of the inspection. However, internal foam suppression systems were operating and foam was not observed to be exiting the digester.

#### **Digestate Analysis**

Data collected from in process monitoring was shown to officers. Analysed parameters included pH, ammonia, alkalinity and fatty acid content of the digestate. The digesters operate of a 12 day average holding time and digestate liquor is not recirculated through the digester.

All parameters appeared to be within the limits specified by the operator.

#### **Schedule 5 Notification received 7<sup>th</sup> February 2024**

A schedule 5 notification was received on the 7<sup>th</sup> February 2024. Part A of the notification described the release of biogas from the foam, mitigation/ gas pressure safety release box at digester 1. Biogas composition was provided as 60 % methane, 40 % carbon dioxide and up to 50 ppm hydrogen sulphide. It was estimated that 2800 m<sup>3</sup> of biogas was lost over a 15-20 minute period.

A description of the release was provided as follows;

*“Planned maintenance was being carried out on the two digester mixing pumps. Mixer 1 maintenance was carried out, as planned, without incident in the hours leading up to the gas release.*

*Mixer 2 was isolated and around 10 minutes later alarms were announced on the on site telemetry system alerting the operators that the ultimate pressure release (UPR) system had activated and alarms were also announced with regards to the foam mitigation/gas pressure safety release box.*

*Elevated pressure (peak 26.68 mbar) was seen within the digester, this led to the loss of the water seal (as design) in the foam mitigation/gas pressure safety release box and the release of biogas.*

*Biogas was lost from the two onsite gas storage bags.”*

Permit condition 3.1.1 states **“There shall be no point source emissions to water, air or land except from the sources and emission points listed in Schedule 3 tables S3.1, S3.2 and S3.3.”**

The loss of biogas has the potential to have a minor environmental effect. A **category 3 score** has been applied.

Permit condition 1.1.1 states **“The operator shall manage and operate the activities in accordance with a written management plan that identifies and minimises risk of pollution.”** The loss of biogas had the potential to result in an amenity impact relating to odour to nearby receptors. Whilst it is difficult to ascertain how high the impact from this loss was at the time, the amount lost (2800 m<sup>3</sup>) had the potential to cause an impact.

A **category 3 score** has been applied.

**Action 1:** Continue to monitor biogas and investigate any trends.

During the inspection NRW officers were informed of improvements that had been made to the foam suppression system.

Part B of the schedule 5 notification is still outstanding.

**Action 2:** Complete and send part B of the application by the 9<sup>th</sup> August 2024.

**Action 3:** Detail the improvements that have been made to the foam suppression system in writing by the 9<sup>th</sup> August 2024.

Kind Regards

**Phil Harper**

**Senior Industry and Waste Regulation Officer NE**

**03000 65 3717/ 07890025506**

**[philip.harper@cyfoethnaturiolcymru.gov.uk](mailto:philip.harper@cyfoethnaturiolcymru.gov.uk)**

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

## Important information

### Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

### Assessment results and non-compliance categories (used in section 1):

Assessment result	Description
Assessed (A)	Assessed or assessed in part, no evidence of non-compliance found
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description	Score
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property	60
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property	31
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property	4
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property	0.1

### How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator

Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

**If your assessment result in Section 1 is suspended, what does this mean?**

In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

**Full list of Industry compliance criteria** (used in section 1 and 2):

**1. Management**

- IR1A – General management
- IR1B – Finance (only applicable to Landfill)
- IR1C – Energy efficiency
- IR1D - Efficient use of raw materials
- IR1E - Avoidance, recovery and disposal of wastes produced by the activities
- IR1F - Multiple operator installations

**2. Operations**

- IR2A – Permitted activities
- IR2B – The site
- IR2C – Operating techniques
- IR2D – Technical requirements
- IR2E – Improvement programme
- IR2F – Pre-operational conditions
- IR2G – Landfill engineering (only applicable to Landfill)
- IR2H – Waste acceptance (only applicable to Landfill)
- IR2I – Leachate levels (only applicable to Landfill)
- IR2J – Closure and aftercare (only applicable to Landfill)
- IR2K – Landfill gas management (only applicable to Landfill)

**3. Emission and Monitoring**

- IR3A – Emissions to water, air or land
- IR3B – Emissions of substances not controlled by emission limits
- IR3C – Odour
- IR3D – Noise and vibration
- IR3E – Monitoring
- IR3F – Pests
- IR3G – Air quality management plans
- IR3H – Monitoring for the purposes of the Industrial Emissions Directive (this heading includes Large Combustion Plants)
- IR3I – Fire

**4. Information**

- IR4A – Records
- IR4B – Reporting
- IR4C – Notification

**Enforcement response**

Any non-compliance with a permit condition is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or

suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

### **Data protection notice**

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, local authorities) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law
- assessing customer service satisfaction and improving our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

### **Disclosure of information – this report will be available to view on-line**

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within twenty working days to let you know if we agree to your request.

### **What do I do if I disagree with the report or have a complaint?**

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 to 18:00), or email [enquiries@naturalresourceswales.gov.uk](mailto:enquiries@naturalresourceswales.gov.uk) for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at [ask@ombudsman.wales](mailto:ask@ombudsman.wales)

### **Welsh Language Standards**

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.