

Compliance Assessment Report CAR_NRW0041071

Permit being assessed: AP3139FT.

For: Five Fords WWTW Gas to Grid Facility, held by Dwr Cymru Cyfyngedig (Welsh Water)
At: Five Fords WWTW CHP Facility Cefn Road Cefn Road , Marchwiel, Wrexham, LL13 0PA.

Type of assessment carried out: Report/Data Review, Reason: Routine.

On 31/12/2022.

Parts of permit assessed: See Below

NRW Lead Officer: Philip Harper.

Report sent to: Andrew Dixon, Head of Energy on 14/02/2023.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	Assessed (A)	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	Assessed (A)	
E1 - Emissions - Air	C3 Minor	3.1.1
C2 - General Management - Management system and operating procedures	C3 Minor	1.1.1

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

Total number of 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
E1	Continue to monitor digesters;	Already completed
C2	Improve operations	Already completed

Action 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

Annual Report 2022 (1st January 2022 – 31st December 2022).

This Compliance Assessment Report relates to the annual monitoring and reporting requirements in permit no. AP3139FT.

Form Air 1.

Data has been submitted for air monitoring in accordance with permit condition 4.2.

Reported data for emissions points A11 to A12 are within permitted limits.

Data has not been submitted for emissions points A 1 and A2, however, Natural Resources Wales understands that the CHP engines have run for less than 10 % of the time during the reporting period. Therefore, the de-minimis rule applies. Evidence supporting a run time of less than 10 % was received on Wednesday 9th February 2023. The operator is advised to include this evidence in future reports.

No issues have been identified.

Review of Schedule 5 Notifications.**Schedule 5- 19th July 2023.**

A schedule 5 part A notification was received from the operator on the 19th July 2022. The notification describes the potential for a gas release arising from a planned critical safety upgrade and was received in line with permit condition 4.3.

Part B of the notification as received on the 30th January 2023, showing that the works had been completed.

Schedule 5- 10th December 2022.

A schedule 5 notification was received on the 10th December 2022 which described a foaming and gas release event on digester 1 which occurred on the 10th December 2022. The notification as received in accordance with permit condition 4.3. Part A of the report provided the following information:

***“Earlier in the year an ultimate pressure relief system was installed at Five Fords WwTW which includes water spray foam suppression and pressure relief valve to prevent foam and gas release and protect the integrity of the digester following natural foaming events and digester surges.*”**

The last stage of these safety and performance improvements were completed on digester 1 this week upgrading the mixing systems, the digester was brought back online Thursday evening in a controlled manner at reduced throughput which should mitigated any sudden rapid foam expansion as we have done several times before.

On Friday night we experienced a sudden foaming event with triggered the activation of the ultimate pressure relief system on two occasions and resulted in foam and gas release from digester.

Gas seal is in place and measures have been taken to prevent recurrence. We have support on site today from external contractors and digesters biogas specialist and understand the root cause of the event, further updates to follow."

The report estimated that approximately 6441 m³ of biogas was released with the following composition 60 % methane and 40 % carbon dioxide.

The completed part B notification was included within the form and submitted on the 10th December 2022. Part B stated that the foam suppression system had been implemented and that significant operational monitoring was ongoing.

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 could 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 (3700 m³) had the potential to cause an impact.

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

Action: Continue to monitor biogas and investigate any trends.

Kind Regards

Phil Harper

Senior Industry and Waste Regulation Officer NE

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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.

What are suspended scores?

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 and Waste action criteria (used in section 1 and 2):**A: Permitted activities**

- A1 Specified by permit

B: Infrastructure

- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

C: General management

- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

D: Incident management

- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

E: Emissions

- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

F: Amenity

- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

G: Monitoring and records, maintenance and reporting

- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

H: Resources efficiency

- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

Enforcement response

Any permit condition non-compliance 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 20 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 – 18:00), or email 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

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.