

Compliance Assessment Report CAR_NRW0049939

Permit being assessed: AB3097FU.

For: Asgard Renewables Ltd, **held by:** Asgard Renewables Limited

At: Unit 2, Crugmawr Farm, Penparc, Cardigan, Ceredigion, SA43 1QY.

Type of assessment: Site Inspection,

Reason: Routine.

On: 14/11/2025 between 12:00 and 13:30.

Parts of permit assessed: All.

NRW Lead Officer: Malcolm Dines, accompanied by Luke Taylor.

Report sent to: Tom Chaloner, Technically Competent Manager, on 17/03/2026.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
W1A - Waste - Management - General management	Action only (X)	
W2A - Waste - Operations - Permitted activities	Assessed (A)	
W2C - Waste - Operations - Operating techniques	Assessed (A)	
W2E - Waste - Operations - Waste acceptance	Assessed (A)	
W3A(2) - Waste - Emissions and monitoring - Emissions to air	Action only (X)	
W3A(2) - Waste - Emissions and monitoring - Emissions to air	Action only (X)	
W3A(2) - Waste - Emissions and monitoring - Emissions to air	Action only (X)	
W3B - Waste - Emissions and monitoring - Emissions of substances not controlled by emission limits	Assessed (A)	
W3E - Waste - Emissions and monitoring - Monitoring	Assessed (A)	
W3C - Waste - Emissions and monitoring -	Assessed (A)	

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
Odour		
W4A - Waste - Information - Records	Assessed (A)	
W1A - Waste - Management - General management	Action only (X)	

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

Total non-compliances recorded	Total non-compliance score
0	0

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
W1A	Submit version of the Management System in use when you received the Stack Emission Monitoring Report in April 2025	01/02/2026
W3A(2)	Submit a report that investigates the Approach To Limit for emissions of VOCs and which considers: <ul style="list-style-type: none"> - the engine maintenance schedules and engine oil analysis with the aim of identifying potential problems with the operation of engine that may affect the emissions - potential impacts due to inlet gas composition - the condition of internal engine parts such as cylinder heads and seals - the engine management system and engine set-up 	01/02/2026
W3A(2)	Review your current air quality risk assessment using site specific emissions data to determine the process contribution (PC). You should use the Process Contribution in conjunction with the background concentration to determine the predicted environmental concentration (PEC) and determine whether the non-compliance has resulted in either a short term or long term breach of air quality standards for protecting human health and ecosystems	01/02/2026
W3A(2)	Produce an action plan detailing how you intend to rectify the non-compliance and the timescales for completion of any works required. You should include consideration of the following options: <ul style="list-style-type: none"> - refurbishment or replacement of plant or elements of plant - revised engine maintenance schedules - operational changes both in the gas extraction system and engine management systems - pre-treatment of the inlet gas 	01/02/2026
W1A	Submit a copy of the Continuing Competency certificate for Tom Chaloner and the qualifications and details of anyone else acting as the technically competent person at the site	01/02/2026

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

This was a pre-arranged routine compliance visit undertaken by Malcolm Dines (Waste Regulation Officer) and Luke Taylor (Senior Waste Regulation Officer) who was attending to gain an understanding of this site and anaerobic digestion in general. The officers met with Tom Challoner (Site manager) and Iestyn Gordon (Compliance Manager).

UPDATE

Emissions to Air

Following discussions with a colleague in our Air Quality Monitoring team I was incorrect to assess the VOC emissions from the A2 engine as a breach of permit. The company has complied with the compliance actions that were originally set out for non-compliance, and the required actions were sufficient to investigate an Approach To Limit result. Therefore the actions have been left in this revised compliance report but the non-compliances that were recorded for the breach and the failure to notify the breach have been removed. I would like apologise for any inconvenience caused.

Permit Breaches

None

Other Matters

UPDATED - W3A(2) - Emissions - COMPLIANT; Permit Condition 3.6.1

You were given a category 3 breach under the above permit condition because the emissions of VOCs from gas engine A2 - Edina exceeded the emission limit value set out in Table S3.1. However, this assessment was incorrect and should have been assessed as Approach To Limit.

Following this compliance visit you provided copies of the stack emission monitoring for 2025 for both A1 and A2 engines. These were assessed using the document, "*Guidance for monitoring landfill gas engine emissions LFTGN08 v2 2010*". In Table S3.1 of your permit, the Emission Limit for VOCs is 1000 mg/m³ and the results show a measured concentration of 1,293 mg/m³. Due to the annual monitoring requirement it is understood

that it may not be possible to calculate the representative uncertainty element for the total uncertainty of the monitoring and so these results should have been assessed using the uncertainty allowance in table 4.7 of "*Guidance for monitoring landfill gas engine emissions LFTGN08 v2 2010*". For the reported VOC emissions, taking into account the uncertainty allowance of 40%, this results in a lower confidence limit of 775.8 mg/m³ which means the result is Approach To Limit.

LFTGN08 v2 2010 sets out that when a result is Approach To Limit the company must provide information on how uncertainty will be reduced on subsequent monitoring. When sites rely on the uncertainty allowance set out in table 4.7 it is not possible to reduce the uncertainty, but given that this is the third consecutive year that the emissions result for the A2 engine has been Approach To Limit, I expect that the monitoring results and emission profiles are reviewed and some investigation is made as to why this engine is repeatedly returning results that are Approach To Limit.

Action:

1) Submit a report that investigates the result of the Approach To Limit for emissions of VOCs and which considers:

- the engine maintenance schedules and engine oil analysis with the aim of identifying potential problems with the operation of engine that may affect the emissions.;
- potential impacts due to inlet gas composition.;
- the condition of internal engine parts such as cylinder heads and seals
- the engine management system and engine set-up

2) Review your current air quality risk assessment using site specific emissions data to determine the process contribution (PC). You should use the Process Contribution in conjunction with the background concentration to determine the predicted environmental concentration (PEC) and determine whether the non-compliance has resulted in either a short term or long term breach of air quality standards for protecting human health and ecosystems.

3) Produce an action plan detailing how you intend to rectify the non-compliance and the timescales for completion of any works required. You should include consideration of the following options:

- refurbishment or replacement of plant, or elements of plant
- revised engine maintenance schedules
- operational changes both in the gas extraction system and engine management systems
- pre-treatment of the inlet gas

The report and action plan must be submitted **by 1 February 2026**.

W4C - Notification - COMPLIANT; Permit Condition 4.3.4(a)

You were given this category 3 breach under the above permit condition because you failed to immediately notify Natural Resources Wales of the above breach of emission limits for VOCs and you were not aware of the breach of emission limit until informed of it by myself.

UPDATE - As I incorrectly assessed the emissions as non-compliant, the company does not have a requirement to notify Natural Resources Wales of results that are Approach To Limit.

General Management

Because you failed to notify us of the breach of emission limits for VOCs, please submit the version of your Management System that was in use at the time you received the emission monitoring report from Element in April 2025 **by 1 February 2026**.

UPDATE - There was no breach of emission limit and so this does not apply.

Technical Competence

Please submit a copy of the Continuing Competency certificate for Tom Chaloner and details of any other Technically Competent Person that provides cover for the site **by 1 February 2026**

Waste Returns

Waste returns for the past 12 months have been reviewed and are compliant with permitted waste types and quantities.

Emergency Flare

Following the site visit you provided data to show that the emergency flare was operated for 98 hours between 01/01/2025 and 23/11/2025 which is below 10% of the site operational time and so monitoring of gas emissions is not required.

Process Records

Following this visit you provided data to show the levels of the following, all of which are indicators of the stability of your digestion process.

Methane in the biogas: 52.3 to 61.2% (expected range: 59-64%)
Digestate Ammonia 2.79 kg/m³ (expected range: 1500 to 8000 mg/l)
Alkalinity: 12800 to 15000 mg/l (expected range: 5000 to 20000 mg/l)
VFA: 2249 to 3577 mg/l (expected range: 1000 to 7000 mg/l)
Alkalinity:VFA Ratio: 0.16 to 0.27 (expected: >5:1)
pH: 7.52 to 7.59 (expected range: 6.8 to 8.8)

While some of these parameters are slightly below the expected range for a food waste digester, the results show that the digester is stable and the levels will depend upon the feedstock.

Maintenance Records

You have confirmed that all maintenance tasks are scheduled based on operating hours on a physical T-card system and that you are in the initial stage of digitising this system onto an online platform.

In this document 'Natural Resources Wales' means the Natural Resources Body for Wales established by Article 3 of the Natural Resources Body for Wales (Establishment) Order 2012

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 required for the permit condition assessed to avoid non-compliance. No non-compliance scored at this time
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 Waste compliance criteria (used in section 1 and 2):**1. Management**

- W1A – General management
- W1B – Energy Efficiency (MCP/SG facilities only)
- W1C – Avoidance, recovery and disposal of wastes produced by the activities

2. Operations

- W2A – Permitted activities
- W2B – Waste recovery plan
- W2C – Operating techniques
- W2D – The site
- W2E – Waste acceptance
- W2F – Technical requirements
- W2G – Improvement programme
- W2H – Pre-operational conditions

3. Emission and Monitoring

- W3A(1) – Emissions to water
- W3A(2) – Emissions to air
- W3A(3) – Emissions to land
- W3B – Emissions of substances not controlled by emission limits
- W3C – Odour
- W3D – Noise and vibration
- W3E – Monitoring
- W3F – Pests
- W3G – Fire

4. Information

- W4A – Records
- W4B – Reporting
- W4C – 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.

Disputing the Content of this Compliance Assessment Report Form

If you disagree with the content of this Compliance Assessment Report form, you should submit your concerns, in writing, to the regulating officer who issued it within **15 working days** of its issue. This will be treated as a **Stage 1 review**.

If you are not satisfied with the outcome of the stage 1 review, you may request a **Stage 2 appeal**. This request must be submitted **within 21 working days** of receiving the response from the stage 1 review.

Further details on our review and appeal process are available at: [Natural Resources Wales / Appeal a regulatory decision from Natural Resources Wales](#)

Concerns Not Related to the Content of this Compliance Assessment Report Form

If your concerns do not relate to the content of the Compliance Assessment Report form, you should first attempt to resolve the issue with the regulating officer or their line manager.

If the issue remains unresolved, please contact our **Customer Contact Team**:

- **Telephone:** 0300 065 3000 (Monday to Friday, 09:00–17:00)
- **Email:** enquiries@naturalresourceswales.gov.uk

They will provide details on how to escalate your concerns through our **Complaints and Commendations procedure**.

If you are dissatisfied with our response, you may contact the **Public Services Ombudsman for Wales**:

- **Telephone:** 0300 790 0203
- **Email:** 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.