

## Compliance Assessment Report CAR\_NRW0048974

**Permit being assessed:** ZP3939GL.

**For:** Western Wood Energy Plant, **held by:** Western Bio-energy Ltd

**At:** Longland Lane , Margam, PORT TALBOT, West Glamorgan, SA13 2NR.

**Type of assessment:** Report/Data Review,

**Reason:** Routine.

**On:** 28/07/2025 - 06/08/2025.

**Parts of permit assessed:** Q2 2025 Monitoring Submission.

**NRW Lead Officer:** Elliot Jones.

**Report sent to:** Operations & Maintenance Manager, Western Bio-Energy Limited, on 06/08/2025.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	Assessed (A)	
IR3A(3) - Installations - Emissions and monitoring - Emissions to land	Assessed (A)	
IR4B - Installations - Information - Reporting	Assessed (A)	
IR4C - Installations - Information - Notification	Assessed (A)	
IR3E - Installations - Emissions and monitoring - Monitoring	C3 Minor	3.6

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

Total non-compliances recorded	Total non-compliance score
1	4

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
IR3E	Repair fault and perform validation tests prior to	Already

Criteria	Action needed	Complete by
	recommission of the monitoring equipment.	completed

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.

#### **At this time, we do not intend to take any further action.**

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

#### **Western Bio Energy Limited**

Western Bio Energy (WBE) operates Western Wood Energy Plant in Margam in accordance with EPR/ZP3939GL/V006

The WBE Plant is a co-incineration power plant for the generation of electrical power by the combustion of biomass fuel. Plant has capacity for burning approximately 160,000tonnes of biomass per annum, providing 14MW of electrical power supplied to the national grid. The plant has capacity to consume both virgin wood material and waste wood biomass.

#### **Purpose of Compliance Assessment**

The following monitoring returns and report have been assessed within this Compliance Assessment Report (CAR):

- Quarter 2 (Q2) April – June 2025 Continuous monitoring Returns, Emissions to Air.
- Biannual 1 2025 Periodic Monitoring campaign
- Q2 April – June 2025 Bottom Ash TOC, Metals, Dioxins/Furans.
- Q2 April – June 2025 Fly Ash, Metals, Dioxins/Furans.
- Q2 Waste Returns

#### **Compliance Assessment**

The operator submitted Q2 2025 monitoring returns via email on 18<sup>th</sup> July 2025, this falls within the specified reporting window. Compliant with permit condition 4.2.3.

Monitoring submissions have been submitted on the appropriate reporting form as action requested in CAR\_NRW0048249.

#### **Q2 2025 Continuous Monitoring Returns**

Continuously monitored parameters stated in the environmental permit, Schedule 3(b) S3.1 have been monitored and assessed. Reported results are compliant with the associated emission limits with no breaches noted.

### Biannual 1 2025 Periodic Monitoring Emissions to Air

Biannual 1 2025 Periodic monitoring was undertaken on multiple days between the 28<sup>th</sup> April and the 30<sup>th</sup> May 2025. Monitoring results issued in conjunction with the Q2 monitoring returns.

Monitoring report has been reviewed and all parameters stated in permit have been monitored. Monitoring results are compliant the associated emission limits stated in Schedule 3(b) Table S3.1 with no breaches noted.

### Q2 2025 Bottom Ash TOC, Metals, Dioxins/Furans

Operator has submitted all the monitored parameters required for the quarterly analysis of the bottom ash, as stated In Schedule 3(b) Table S3.5.

Bottom ash TOC concentration below the emission limit, and therefore compliant with environmental permit.

### Q2 2025 Fly Ash, Metals, Dioxins / Furans

Operator has submitted all the monitored parameters required for the quarterly analysis of the fly ash, as stated In Schedule 3(b) Table S3.5.

### Q2 Waste Returns

Operator submitted Q2 Waste returns in conjunction with Q2 monitoring submissions. Waste returns were submitted within the required timeframe and on the appropriate reporting form as stated in environmental permit.

### **Q2 Continues Emission Monitoring - Failure to monitor**

Operator contacted NRW notifying of a failure of the Continuous Emission Monitoring Equipment (CEMS) on stack A1. Monitoring equipment failed on the 16<sup>th</sup> April and was repaired on the 27<sup>th</sup> April, a total outage period of 12 days. During the outage no accurate monitoring data was retrievable.

Following the initial discussion, Western Bio Energy submitted a Schedule 5 notification.

Operator issued a Schedule 5, notifying NRW of the monitoring equipment failure on the 22<sup>nd</sup> April 2025. The CEMS maintenance contractor determined that the dryer element of the monitoring equipment had failed and therefore lead to incorrect monitoring results. Failure of the dryer element was deemed unforeseeable.

CEMS maintenance contractor repaired the monitoring equipment and performed linearity tests prior to recommissioning the monitoring equipment. A delay in the delivery of the replacement part, lead to the extended duration of the CEMS outage, originally expected to be 8 days.

In order to mitigate against the impact of the failed monitoring equipment, the plant was operated in a stable condition with fixed operating parameters. The boiler output was also reduced to prevent significant load swings. A consistent fuel blend was incinerated during the duration of the outage.

The breakdown of the CEMS monitoring equipment, prevented accurate continuous monitoring for an extended period. The inability to monitor the stack emissions is contrary to permit condition 3.6.

As a result of this, a non-compliance score of **C3** has been allocated against compliance sub-criteria **IR3E (Monitoring)**.

The Operator has since confirmed replacement parts for this particular issue are now held on site.

NRW would like to remind the Operator that to prevent a recurrence of this failure, the Operator must take the measures necessary to ensure that compliance is restored within the shortest possible time.

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.