

## Compliance Assessment Report CAR\_NRW0050885

**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:** Audit,

**Reason:** Routine.

**On:** 11/02/2026 between 10:30 and 13:15.

**Parts of permit assessed:** FPMP Audit and Site Inspection.

**NRW Lead Officer:** Elliot Jones.

**Report sent to:** Plant Manager, Western Bio Energy Ltd, on 03/03/2026.

### 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	C3 Minor	1.1.1
IR1A - Installations - Management - General Management	Action only (X)	
IR2C - Installations - Operations - Operating techniques	C3 Minor	2.3.1
IR3I - Installations - Emissions and monitoring - Fire	C3 Minor	3.7.1
IR3I - Installations - Emissions and monitoring - Fire	Action only (X)	
IR3I - Installations - Emissions and monitoring - Fire	Action only (X)	
IR4A - Installations - Information - Records	Assessed (A)	

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

Total non-compliances recorded	Total non-compliance score
3	12

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	Review and update the FPMP in line with current NRW guidance to accurately reflect site operations, layout, and personnel.	31/07/2026
IR1A	All staff personnel to understand and be aware of the requirements of that stated in the current FPMP and revised FPMP.	24/03/2026
IR2C	Operator must comply with the sites operating techniques, Fire Prevention and Mitigation Plan.	03/03/2026
IR3I	Reduce the “Adjacent to fuel barn (North)” stockpile to FPMP compliant dimensions.	Already completed
IR3I	Review the quarantine area’s location and capacity to ensure compliance with FPMP requirements.	31/03/2026
IR3I	Relocate biomass awaiting reprocessing to a compliant storage area.	13/03/2026

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

### Western Bio Energy Site Inspection February 2026

Western Bio Energy Limited (WBE) operates the Western Wood Energy Plant in Margam under Environmental Permit **EPR/ZP3939GL/V006**.

The installation is a co-incineration power plant generating electrical power through the combustion of biomass fuel. The plant has the capacity to process approximately **160,000 tonnes of biomass per annum**, producing **14 MW** of electricity for export to the National Grid. The facility is permitted to process both virgin wood and waste wood biomass.

#### Attendees

- NRW Senior Industry Regulation Officer
- WBE Site Manager

- WBE Plant Manager
- WBE Environmental Compliance Officer
- WBE Environmental Consultant

### Introduction

A scheduled site inspection of Western Bio Energy biomass plant was undertaken on 11<sup>th</sup> February 2026. An agenda was issued to the operator in advance to allow relevant documentation to be prepared.

### General update

The operator provided a performance update for 2025. Plant availability has been excellent since April 2025, averaging 93%, a significant improvement compared with the previous year. The operator attributes this improvement to the removal of the arboreal biomass fuel blend, which previously caused increased unplanned maintenance due to its abrasive qualities.

The removal of the arboreal blend has also improved fuel efficiency, resulting in an estimated reduction of 30,000 tonnes of biomass consumption and reduced ash production. The previous blend has been replaced with chipped whole tree.

### Improvement Conditions (IC)

Operator has submitted documentation and reports for the discharge of IC11, IC12 and IC13. These documents will be reviewed in due course and further comment provided where required.

### Climate Change Risk Assessment

NRW requested amendments to the previously submitted CCRA. The operator expects to submit a revised version before the required deadline.

### AOB

The operator intends to replace the site's aging continuous emissions monitoring system and is obtaining quotes from suppliers for suitable equipment and its installation.

IBCs of concern during the previous inspection found to be stored appropriately double stacked. NRW recommended storing them individually due to available space.

### **Fire Prevention and Mitigation Plan Audit**

During the inspection, NRW carried out an audit of the site's compliance with the written FPMP (Document Reference: 2203/FPMP, October 2021), which is listed as an operating technique under Table S1.2a of the permit.

### Fuel Acceptance

The FPMP states that daily deliveries of wood fuel must not exceed 1,200 tonnes. The

operator provided delivery records covering the week of the inspection and the preceding week, which demonstrated full compliance. The highest recorded delivery during this period was 1,095 tonnes per day.

The FPMP also specifies a maximum on-site storage capacity of 4,976 tonnes of wood chip. At the time of the inspection, the site was storing approximately 2,600 tonnes, comfortably within permitted limits. Based on the evidence provided, both the daily delivery volumes and storage levels were compliant with the FPMP.

#### Stockpile and Storage

Most fuel stockpiles inspected on site were found to be compliant with the FPMP requirements. Stockpile heights were below the 4-metre limit, and their dimensions were appropriate. Where necessary, concrete block firewalls had been installed, removing the need for separation distances.

However, an external stockpile located “Adjacent to fuel barn (North)” was not compliant. This stockpile measured approximately 45 metres in length and 8–10 metres in width. According to the FPMP, this designated area should contain two separate fuel piles, each no more than 19 metres long and 10 metres wide, and separated either by a physical firewall or by a 12-metre separation distance if no firewall is present. The observed arrangement did not meet these requirements and was therefore non-compliant.

#### Quarantine Area

The FPMP requires the quarantine area to be kept as bare ground, free from operational activity, and capable of holding 50% of the site’s largest stockpile. Its intended purpose is to store and isolate “hot loads,” with the FPMP specifying that burning material should not be moved for safety reasons.

During the audit, the quarantine area was approximately 20% full of biomass awaiting shredding or chipping. The presence of combustible material in this location introduces a risk of secondary combustion, increasing the likelihood of fire breaking out or re-igniting. As such, this use of the quarantine area was non-compliant. It was also unclear whether the area, in its current configuration, met the required capacity to hold half of the largest stockpile on site.

#### Fire Prevention

The site is equipped with a comprehensive CCTV system, alongside fire detection and suppression systems covering all internal wood storage areas and the entire fuel handling system, including the walking floor, disc screens, shredder, and conveyor.

Following the inspection, the operator provided evidence demonstrating that all fire detection and suppression equipment had been maintained and tested in accordance with manufacturer specifications. This aspect of the FPMP was therefore compliant.

#### WBE Operatives Training

The FPMP requires operatives to receive training on identifying and managing “hot spots,” including recognising signs such as unusual warmth, charring, changes in smell, steam, or smoke.

After the inspection, the operator supplied documentary evidence of the training procedure and its acceptance by WBE operatives. This was deemed compliant with the FPMP.

### **FPMP Audit non-compliances**

The operator’s failure to operate the activity in accordance with the sites written fire prevention mitigation plan in contrary to the following permit condition of the environmental permit.

- **1.1.1 - General Management.** The operator shall manage and operate the activities in accordance with a written management system.

In accordance with noncompliance scoring guidelines a noncompliance score of **C3** has been allocated against the following sub criteria **IR1A – General Management**

- **2.3.1 – Operating Techniques.** Operator has failed to implement the sites operating technique appropriately.

In accordance with noncompliance scoring guidelines a noncompliance score of **C3** has been allocated against the following sub criteria **IR2C – Operating Techniques**

- **3.7.1 – Fire.** The operator failed to adhere to their fire prevention and mitigation plan.

In accordance with noncompliance scoring guidelines, the multiple FPMP non-compliance detected during the audit have been **consolidated** into a single noncompliance score of **C3** against the following sub criteria **IR3I – Fire**

- **Action: Review and update the FPMP in line with current NRW guidance to accurately reflect site operations, layout, and personnel.**
- **Action: Operator must comply with the sites operating techniques, Fire Prevention and Mitigation Plan.**
- **Action: All staff personnel to understand and be aware of the requirements of that stated in the current FPMP and any revised FPMP.**

Operator is required to complete the following actions, providing **appropriate evidence** of the following by the stipulated deadline in order to return to compliance.

- **Action: Reduce the “Adjacent to fuel barn (North)” stockpile to**

**FPMP-compliant dimensions.**

\*Operator acted promptly, immediately reducing the dimension of the stockpile in question to the required dimensions with adequate separation distance.

- **Action: Review the quarantine area's location and capacity to ensure compliance with FPMP requirements.**
- **Action: Relocate biomass awaiting reprocessing to a compliant storage area.**

END

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 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(1) – Emissions to water
- IR3A(2) – Emissions to air
- IR3A(3) – Emissions to 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.

### 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](mailto: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](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.