

Compliance Assessment Report CAR_NRW0039501

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 carried out: Report/Data Review, Reason: Other.

On 03/03/2022.

Parts of permit assessed: Condition 3.5.1

NRW Lead Officer: Ieuan Davies, accompanied by Lee Mills.

Report sent to: Simon Thomas, Plant Manager on 03/03/2022.

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	C3 Minor	3.5.1

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

Total number of 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
G1	Unit has been repaired, no further action.	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

Introduction

This CAR form has been produced to make note of Western Bioenergy recent Continuous Emissions Monitoring System (CEMS) outage.

Background on permit requirement/s

Condition 3.5.1 of the Operators permit states:

The operator shall, unless otherwise agreed in writing by the Agency, undertake the monitoring specified in the following tables in schedule 4 to this permit:

- a. *point source emissions specified in tables S4.1, S4.2 and S4.3;*

The following table is a part of *Schedule 4 Emissions and monitoring* extracted from the Operators environmental permit:

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit) ⁽¹⁾	Reference period	Monitoring frequency	Monitoring standard or method ⁽²⁾
A1 [Point A1 on site plan in schedule 2]	Boiler plant fired on biomass	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	250 mg/m ³	Daily average ⁽³⁾	Continuous	MCERTS ⁽⁴⁾
		Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	250 mg/m ³	95% of validated hourly averages within a calendar year do not exceed 200% of daily ELV ⁽³⁾	Continuous	MCERTS ⁽⁴⁾
		Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	300 mg/m ³	Periodic sample over a minimum 1 hour period ⁽⁵⁾	Bi-annual ⁽⁶⁾	EN 14792
		Particulate matter	10 mg/m ³	Daily average ⁽³⁾	Continuous	MCERTS ⁽⁴⁾
		Particulate matter	10 mg/m ³	95% of validated hourly averages within a calendar year do not exceed 200% of daily ELV ⁽³⁾	Continuous	MCERTS ⁽⁴⁾
		Particulate matter	15 mg/m ³	Periodic sample over a minimum 1 hour period ⁽⁵⁾	Bi-annual ⁽⁶⁾	EN 13284-1 & and MID for EN 13284-1
		Carbon monoxide (CO)	250 mg/m ³	Daily average ⁽³⁾	Continuous	MCERTS ⁽⁴⁾
		Carbon monoxide (CO)	250 mg/m ³	95% of validated hourly averages within a calendar year do not exceed 200% of daily ELV ⁽³⁾	Continuous	MCERTS ⁽⁴⁾
		Carbon monoxide (CO)	250 mg/m ³	Periodic sample over a minimum 1 hour period ⁽⁵⁾	Bi-annual ⁽⁶⁾	EN 15058
		Ammonia (NH ₃)	10 mg/m ³	Periodic sample over a minimum 1 hour period ⁽⁵⁾	Bi-annual ⁽⁶⁾	EN ISO 21877
		Nitrous oxide (N ₂ O)	No limit set	Periodic sample over a minimum 1 hour period ⁽⁵⁾	Bi-annual ⁽⁶⁾	EN ISO 21258
		Sulphur dioxide (SO ₂)	No limit set	Periodic sample over a minimum 4 hour period ⁽⁵⁾	Bi-annual ⁽⁶⁾	EN 14791
		Hydrogen Chloride (HCl)	No limit set	Periodic sample over a minimum 1 hour period ⁽⁵⁾	Bi-annual ⁽⁶⁾	EN 1911

Schedule 4 – Emissions and monitoring above details Emission Limit Values (ELVs) monitored via Continuous measurement (CEMS). To maintain compliance with the Operators environmental permit (DP3137EG) the ELVs specified above shall not be exceeded as stated in condition 3.1.2 - *the limits given in Schedule 4 shall not be exceeded.*

In accordance with the Operators environmental permit, Natural Resources Wales (NRW) must be notified of all permit breaches as per the following condition/s:

4.3.1 *The Agency shall be notified without delay following the detection of:*

(a) *any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution;*

(b) *the breach of a limit specified in the permit; or*

(c) *any significant adverse environmental effects.*

4.3.2 *Any information provided under condition 4.3.1(a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.*

CEMS Outage

Western Bioenergy notified NRW via a phone call on the 7th of February 2022 (Outage actually occurred on the 6th February 2022) stating both local and remote CEMS signal loss due to adverse weather causing water ingress to stack mounted CEMS panel containing sensitive electronic equipment. Following this initial discussion Western Bioenergy submitted an email and Schedule 6 notification which included a description of measures to be taken. The CEMS maintenance contractor was notified and attended on the 6th of February 2022 but was unable to affect a repair due to lack of spares. The following are excerpts from the Western Bioenergy notification:

No breach pre loss of CEMs and plant in steady state.

We have mapped the plant conditions pre signal loss in order to fingerprint a baseline in order to compare process variables that will impact on any emission potential from the plant and therefore utilise these Process variables in order to control the emissions of the plant to these pre condition values and subsequent emission limits.

Namely,

- *Combustion Air,*
- *Fuel Moisture*
- *Secondary Air Pressure*
- *Boiler Load*
- *Bag filter operation*
- *Bag filter Differential Pressures.*
- *Plant output reduced*
- *SNCR manually controlled at 45% valve position reducing likelihood of Nox breach whilst minimising Ammonia slip*
- *RCF Fuel blend reduced*

We have taken a number of measures such as reduction of plant output along with reduction of RCF fuel blend in order to avoid any potential breaches going forward.

Western Bioenergy had also stationed a standalone CEMS system for the short term monitoring of NOx and CO in the interim before a permanent fix of the primary CEMS was fulfilled.

The Operator as of the 17th of February 2022 notified NRW of the CEMS being fully back online with all monitored parameters within specified limits.

Compliance: As a result of this non-compliance a CCS Score of CCS3 has been recorded against compliance sub-criteria G1 Monitoring of emissions and environment.

The Operator have stated that an increase in the service level agreement on the CEMS contract is currently being discussed of which NRW would like to be kept informed. The Operator have also 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.

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.