

Compliance Assessment Report CAR_NRW0039335

Permit being assessed: ZP3032KQ.

For: Afan Combined Heat And Power Facility, held by Dwr Cymru Cyfyngedig
At: Afan Combined Heat And Power Facility, Phoenix Walk, Port Talbot, SA13 1RA.

Type of assessment carried out: Check Monitoring/Sampling, Reason: Routine.
On 31/12/2021.

Parts of permit assessed: See part 4

NRW Lead Officer: Ffion Thomas.

Report sent to: Andrew Dixon, Energy Operations Manager (Generation) on 10/02/2022.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	Action only (X)	
E1 - Emissions - Air	C3 Minor	3.1.2 Table S3.1 emission Point A2
E1 - Emissions - Air	C3 Minor	3.1.2 Table S3.1 emission point A4

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
G4	Follow up testing with complete hour run time to be completed and included into the annual performance reporting. Review 2022 emission monitoring scheduling preparations and communications with test company to avoid potential future issues.	31/03/2022
E1	Follow up testing with complete hour run time to be completed.	31/03/2022
E1	Follow up testing with complete hour run time to be completed.	31/03/2022

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.

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

The purpose of this Compliance Assessment Report (CAR) is to confirm receipt of the emissions monitoring for the 2021 period and to review and assess compliance.

Condition 3.5.1 states:

The operator shall unless otherwise agreed in writing by Natural Resources Wales undertake the monitoring specified in the following tables in schedule 3 to this permit:

- a. Point sources emissions specified in table S3.1; and
- b. Process monitoring specified in table S3.2.

An emissions monitoring report was received on the 18th September 2021 providing the testing results for emission points A1 and A2 (sample taken on 3rd August 2021) and A3 and A4 (sample taken on 4th August 2021)

Emission testing results:

Condition 3.1.2 of the permit states: The limits given in Schedule 3 shall not be exceeded.

Schedule 3 table S3.1:

Table S3.1 Point source emissions to air – emission limits and monitoring requirements					
Emission point ref. & location (as identified onsite plan at Schedule 7)	Source	Parameter	Limit (mg/Nm ³) ¹	Reference period	Monitoring frequency
A1- CHP unit 1 A2- CHP unit 2	Exhaust of spark ignition engines via individual, 24m unimpeded vertical stacks	Nitrogen Oxides (NOx expressed as NO ₂)	500	Hourly Mean	Annually. The first annual monitoring to be undertaken as part of the engine commissioning
		Carbon Monoxide	1,400		
		Sulphur dioxide	339		
A3 - Boiler unit 1 A4 - Boiler unit 2	Combustion products from boilers emitted via individual, 24m unimpeded vertical stacks	Nitrogen Oxides (NOx expressed as NO ₂)	170	Hourly Mean	Annually ²
		Carbon Monoxide	75		
		Sulphur dioxide	160		
A5 - biogas flare with a combustion temperature of at least 1,000 °C and a residence time of at least 0.3 seconds	Combustion products from biogas flare via a 7.5m unimpeded vertical stack	Nitrogen Oxides (NOx expressed as NO ₂)	150	Hourly Mean	Annually ³
		Carbon Monoxide	50		
		Sulphur dioxide	339		
		Operational temperature	>1000°C	Instantaneous reading	Annually ³

¹ These limits do not apply during start up and shut down.

² Annual monitoring of the boilers is only required if notified by the Agency, (based on a percentage usage of supplementary firing on biogas).

³ Annual monitoring is only required when flare operates in excess of 10% of the time, taken on an annual assessment period.

A Schedule 5 notification submitted to NRW on 18th September 2021 gives the measured Nitrogen Oxides result at emission point A2 on 3rd August 2021 as 1402.74mg/m³ with a 2% uncertainty, and Nitrogen Oxides

result at emission point A4 on 4th August 2021 as 187.88mg/m³ at 2% uncertainty.

This is an exceedance of permitted emission limits and represents **non-compliance** with the environmental permit.

As a result of these non-compliance 2x CCS Score C3 has been recorded against compliance sub-criteria (E)(1)

Condition 4.3.1 of the environmental permit states:

The Environment Agency (sic) shall be notified without delay following the detection of:

- (a) any malfunction, breakdown or failure of equipment or techniques, accidents or emissions of substance not controlled by an emission limit which has caused, is causing or may cause significant pollution*
- (b) The breach of a limit specified in the permit.*
- (c) any significant adverse environmental effects.*

Condition 4.3.2 of the environmental permit states:

Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

Part A of schedule 5 to the environmental permit requires NRW be notified **within 24 hours of detection** of an exceedance of permitted limit.

A schedule 5 Part A notification was received 18th September 2021, within 24hrs of DCWW being made aware of the emission breach at A2 and A4 and compliance with the condition. This was evidenced by the emission report dated 17th September 2021 with email confirming it's receipt by DCWW on the 18th September 2021.

Part B of schedule 5 to the environmental permit is required "to be submitted as soon as practicable. DCWW submitted this notification on 20 January 2022 following some prompting. The notification confirmed "Engine and boiler retested post emissions limitation measures implemented & believed to be successful from site appraisal. Awaiting report"

Further communication was received on 31 January 2022 stating "*Disappointingly we have been informed today by the emissions testing Company that the re-tests were recording emissions within the stipulated Emission Limit Values but due to intermittent running of the engines they did not complete a full hour of testing and as such have not provided as an updated report to close out the Part B. There was a miscommunication within the emissions testing Company as, until today, we were informed we would be provided a report to demonstrate their meeting the permit requirements. We are now in the process of arranging further testing*"

As DCWW were unable to confirm the retest results the above non-compliance score under criteria E1 remains.

ACTION Under G4 criteria Follow up testing with complete hour run time to be completed and included into the annual performance reporting. Review 2022 emission monitoring scheduling preparations and communications with test company to avoid potential future issues.

Note: This CAR report and assessment was undertaken on 3rd February 2022. However to ensure that the CCS score is attributed to the correct financial year (for billing) the date on CARS system has been altered to 31 December 2021.

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.