

Compliance Assessment Report CAR_NRW0039397

Permit being assessed: EP3738NG.

For: Bridgend Paper Mill EPR/EP3738NG, held by WEPA UK Ltd

At: BRIDGEND PAPER MILLS , LLANGYNWYD, MAESTEG, MAESTEG, MID GLAMORGAN, CF34 9RS.

Type of assessment carried out: Report/Data Review, Reason: Routine.

On 31/12/2021 between 09:00 and 17:00.

Parts of permit assessed: Emissions, monitoring and waste

NRW Lead Officer: Antony Leakey.

Report sent to: Richard Lewis, Energy & Environment Manager on 16/02/2022.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
B3 - Infrastructure - Site drainage engineering (clean and foul)	Assessed (A)	
E1 - Emissions - Air	Assessed (A)	
E3 - Emissions - Surface water	Assessed (A)	
E5 - Emissions - Waste	Assessed (A)	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	Assessed (A)	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	Assessed (A)	
H2 - Resource Efficiency - Energy efficiency	Assessed (A)	

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

Total number of 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?

No action required.

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**Bridgend Paper Mill****Emissions and reporting review and update – 31 December 2021**Eel Regulation compliance proposals

Details of the planned screening improvements were discussed on site on 12 August 2021. Abstraction screening preparatory works is complete, and installation of the screen is planned during a shutdown in the next few weeks.

ACTION: WEPA to provide an update with eel screening progress at next compliance meeting.

CHP GT NOx emissions – Improvement Condition ref. IC9 Update

Wet NOx control is 90% complete with pure water supply installed and commissioning of the system expected shortly.

ACTION: WEPA to provide an update on progress with GT NOx emissions reduction and boiler NOx emissions review at next compliance meeting.

NOx mass emissions calculations for PR-TR reporting were previously reviewed and appeared too low for the rating of the GT, unless the GT was running all year at part load. Estimates using total annual fuel gas usage suggest that the calculated NOx mass emissions are of the right order.

Flue gas fuel factors are defined in Annex E of EN ISO 16911-1 Stationary Source Emissions - Manual and automatic determination of velocity and flow rate in ducts – Part 1 Manual reference methods.

The fuel factor for gas turbines firing natural gas is 0.845 m³/MJ at 273 K, 101.325 kPa and 15% oxygen.

The fuel factor for boilers and the paper m/c hood exhaust (assuming that measured concentrations for the latter are reported at 3% oxygen) firing natural gas is 0.280 m³/MJ at 273 K, 101.325 kPa and 3% oxygen.

WEPA should investigate using fuel factors and total annual fuel use data as a more accurate estimate of NOx mass emissions.

ACTION: WEPA to review and provide an update on NOx mass emissions estimation at next compliance meeting.

Flow Measurement

The 5-yearly MCERTS self-monitoring of effluent flow site inspection raised a recommendation that the weir plate no longer complies with the MCERTS requirements because it doesn't allow a fully ventilated flow over it. A new weir plate has been manufactured and installed. Additionally, WEPA have replaced the existing flow meters with new at the same time, all of which are on the MCERTS approved list. The flow measurement arrangements were recertified and the new MCERTS certificate has been provided to NRW.

Waste review

Most of the paper sludge is reported as being sent for disposal via animal bedding (being used under a U8 exemption), it is not clear if some continues to go to direct land spreading.

ACTION: WEPA to confirm if any direct land spreading of paper sludge is taking place and provide an update at next compliance meeting.

Emissions review

The mill has operated normally during 2021, with relatively high demand.

2021 sludge analysis – it is noted that dry matter content was particularly low in January. As part of the Neptune new paper machine project the old screw press building was demolished, and the screw press re-located. During this period a mobile screw press was utilised, and the high moisture result is likely to be due to the sub-optimal process. The new screw press is now providing improved dry matter content.

Monitoring data and annual performance indicators for 2020 and 2021 and the annual reports for 2020 and 2021 (condition 4.2.2 compliance) has been reviewed and no breach of permit conditions was identified.

Metals release reporting to water do not have units, which presumably should be in µg/l.

Energy usage per tonne of product is stated to be around 3000 mWh/tonne, this appears to be the incorrect unit and should be 3000 kWh/tonne.

ACTION: WEPA to check metal concentration and energy usage units and update reports if necessary.

Copper, zinc, and nickel releases are noted to be higher than other metals. Are these metals higher in the incoming abstracted water or is some concentration occurring due to water recycle? Metal bioavailability can be assessed and calculated using MBAT (Metals Bio-Availability Tool) and may need to be considered for the WEPA effluent after dilution in the river.

ACTION: WEPA to consider the need for review of effluent metals bioavailability and provide an update at next compliance meeting.

It is noted that the effluent pH rises close to the upper limit of 8.5 during the summer months, when temperatures are also high. In combination high pH and temperature will result in

increases in unionised ammonia in the receiving water. The WEPA ammonia discharge is generally very low, so will not contribute significantly to unionised ammonia impacts, however existing ammonia levels in the river may result in increased unionised levels if the WEPA effluent increases river pH and temperature.

Reduction in temperature is likely to be difficult, especially with the addition of the new paper machine. However, tighter pH control should be possible. WEPA should investigate the cause of the higher pH effluent during the summer period and propose actions to prevent or minimise pH deviations.

ACTION: WEPA to review options to improve effluent pH control and provide an update at next compliance meeting.

All emissions and reporting are compliant with the permit requirements.

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 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.