

Compliance Assessment Report

Report ID:
CAR_NRW0036207

This form will report compliance with your permit as determined by an NRW officer

Site	Barry Energy Production Facility	Permit Ref	AB3790ZB		
Operator/Permit holder	Biomass UK No. 2 Ltd				
Regime	Installations				
Date of assessment	13/01/2020	Time in	10:30	Out	13:00
Assessment type	Audit				
Parts of the permit assessed	1.1, 2.1, 2.5, 3.2, 3.3, 3.4, 3.5, 4.2				
Lead officer's name	Taylor, Richard				
Accompanied by	Leakey, Antony				
Recipient's name/position	Randall Smith/ PCML	Date issued	21/01/2020		

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
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KEY: See Section 5 for breach categories, suspended scores will be indicated as such.

A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,

O = Ongoing non-compliance, not scored.

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
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If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

Barry Biomass site inspection 13th Jan 2020.

Present; Randall Smith (PCML), Chris Lewis (Site manager), Sophie Perrin (Sol Environmental), Antony Leahey (NRW Technical Specialist), Richard Taylor (NRW Site Inspector), Geraint Harris (NRW SC Industry and waste team).

The site hosted a site inspection to enable Officer from NRW to carryout a check of the Continuous emissions Monitoring system (CEMS) in place at site. An agenda was sent prior to the meeting.

1. Business Update.

Site is currently working through a period of final testing and optimising the efficiency of the installed equipment after the first introduction of waste wood material on Nov 18th, 2019. This is currently centering on the fuel conveyance system. On the day of the inspection the plant was offline through a boiler tube leak, therefore a clean down and cool down of the equipment was underway.

On restart the plant will recommence 30-day operational test. Currently the testing has ramped up the process to 100% but not yet at a sustained level.

2. Removal of tramp material, fly ash, and APCR procedure.

The process does not produce a bottom ash as conventional incinerators do. Instead, the gasification process produces tramp material, mainly a large particle size aggregate, a light beige coloured fly ash with the consistency of talcum powder, as well as an air pollution control residue (APCR) which is hazardous due to the high lime content. Ferrous metal removal pre-waste wood feed is also carried out using a band magnet.

The tramp oversize accumulates in the fluidised bed and is removed by an extraction screen and cooling system. It consists of some stones and large agglomerations that form in the fluidised bed. The fly ash is

removed through the boiler system and by the multi-clone unit before the acid gas abatement system. APCR is collected by the bag filter plant.

The procedure for the removal of these substances was checked. All residue substances are controlled via storage on site in dedicated skips or enclosed silos. These are emptied by scheduled transport direct to the waste receiver via skip lorry or tanker and not stored by a third party. At the time of the inspection, the silos were not full enough, and were awaiting their first waste collection. The process had not generated enough residue to warrant being collected. The contents are emptied on demand. The process involves the truck pulling up underneath the dedicated hoppers. A tube is connected directly into the back of the receiving lorry. This process ensures any dust is minimised as well as exposure to airborne moisture. The trucks go directly to the waste receiver without the need for third party storage.

3. Residence Time.

The procedure is now approved by NRW. We are awaiting the final report following a verification exercise during the CEM QAL2 testing period.

4. Noise

Site are carrying out follow up noise assessments on the previously measured sensitive receptor locations at night as part of a continuous 48-hour study.

5. Stack Height

Final 'as-built' drawings were shown which stated the stack height as 42.92m as opposed to a design of 43m.

Action – Site to forward a copy of the final drawings to NRW.
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6. Public Engagement

Site were encouraged to engage the public through their website and by hosting periodic meetings with local representatives. The level of detail currently on the company website was not seen as being in depth enough to address local concerns and does not carry a point of contact. Site agreed to raise this issue within the company with a mind to progressing both issues.

7. CEMS data

NRW toured the plant and viewed the real time data set up of the CEMS. Data is available from the early firing on wood since November, but real time data was not available because the plant was in shut down at the time of the inspection. NRW therefore need to verify some of the data available. At the meeting we requested that we send a date at random for site to send a copy of the CEMS data to us. That date has been chosen as 4th Jan 2010 – or the nearest day the plant was operating to this NRW will verify the CEMS installation data for this day (emissions first level data (FLD) 1-minute averages).

ACTION; Site are required to send the un adjusted CEMS data for 4th Jan 2010 (or nearest date) ASAP.

8. CEMS installation and breakdown response.

Site have contracted CBISS to carry out training to site staff, servicing, and response to malfunctions. The contract in place covers spares and on-site presence within 24 hours, and component replacement within 48 hours.

9. Site Tour

The site tour specified viewing the location of the CEMS and the data collection systems. At the same time NRW witnessed that there was no excess noise coming from site, or odour. There were no pests, rodents, or birds present. No waste was observed. No cracks in the concrete infrastructure were seen. There was no wood chip waste seen on site. Deliveries of wood chip were seen to be delivered into the designated area. These were uncovered at the weighbridge and delivered on site. The delivery hall was viewed with the water sprinkling system and hot spot thermal cameras in place. The roller doors were open due to deliveries taking place.

10. Pre-Operational Conditions (PO's)

The permit was sued with 6 PO conditions which needed to be satisfied. NRW have now come to the point where these can now be signed off. The PO5 and PO6 conditions were satisfied with the certificate of completion for the effluent/sewer system hook up to the main intersection, and the 2 second residence time methodology approved by NRW on 19th Nov 2019.

ACTION – Site to send copy of the sewer connection certificate through to NRW ASAP.

PO1 – Permit condition 3.1.4 – requirement for a written monitoring plan for soil and groundwater. This was accepted by NRW on 14th Apr 2018 following consultation with NRW geosciences.

PO2 – Under Permit condition 1.1.1(a) – requirement for a written environmental management system. Site submitted the EMS in Sept 2017. The outline plan was accepted by NRW as fulfilling the requirement of the PO.

PO3 – Commissioning Plan. This was sent by site prior to the pre-commissioning work on 23rd Dec 2017 with an updated version on 12th Feb 2018. This was updated several times to reflect the changes in the operational timetable but followed the Industrial Emissions Directive (IED) Chapter IV requirements. NRW received the latest version on 18th Nov 2019. The plan was accepted, and the PO condition met has met this PO condition.

PO4 – Sampling and testing protocol. This was required to be in place at least 1 month before the commencement of the commissioning. Site sent their report on 6th Oct 2017 and subsequently on 9th Feb 2018. The protocol was examined against the M4 guidance for ash sampling and analysis and approved by NRW within the timescale.

PO5 – Water discharge Consent. NRW were shown the discharge consent at a site meeting on 12th Jan 2020. Site have documents S104 (adoption of new sewers) and S106 (Consent to connect terms and conditions) in place and are currently using the sewer network for their discharge. Site need to send a copy of the final document to NRW for our records. However, the PO has been accepted on the evidence seen by NRW Officers.

ACTION – Site to send copy of final sewer connection document to NRW to satisfy PO5.

PO6 – Temperature 2 sec residence time. Under the IED Chapter IV art 50, waste co-incineration plants are required to hold combustion chamber gases for at least 2 seconds at over 850°C. The final plan was agreed by NRW on 18th Nov 2019 after we received additional information from site. We were content that the additional information provided addressed all the points of clarification we have raised at the site meeting on 14th Nov 2019 following the adoption of suction pyrometer temperature measurement.

END.

EPR Compliance Assessment Report

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Operator/Permit holder	Biomass UK No. 2 Ltd	Date	13/01/2020

Section 3 – Enforcement Response

You must take immediate action to rectify any non-compliance and prevent repetition. Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/services relating to environmental matters
- Consulting with the public, public bodies and other organisations (eg. 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 its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.