

Compliance Assessment Report CAR_NRW0041860

Permit being assessed: AB3191FR.

For: Parc Stormy Anaerobic Digestion Facility, held by Severn Trent Green Power (Bridgend) Limited

At: Stormy Down, Porthcawl, Bridgend, Mid Glamorgan, CF33 4RS.

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

On 16/05/2023 between 15:30 and 17:00.

Parts of permit assessed: Activities

NRW Lead Officer: Mostyn Wall.

Report sent to: Maria Priestley , Permits and Accreditation Officer on 19/05/2023.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
G3 - Monitoring and Records, Maintenance and Reporting - Maintenance records	Action only (X)	

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?

Criteria	Action needed	Complete by
G3	Once the tanks are part of the AD process and producing biogas, ensure that an Optical Gas Imaging survey is undertaken to inspect the new tank roofs and to see if there are any fugitive emissions.	30/09/2023

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

Severn Trent Green Power (STGP) sent a reply to CAR_NRW0040902 in response to an odour complaint that was substantiated by an NRW officer on the 5.01.2023.

The actions of the CAR form were:

- Immediately investigate the observed odour using leak detection and repairs methods (BAT 14) to check that the installation is not leaking biogas. Conduct an Optical Gas Imaging Survey of the installation. Check the gas engines for methane slippage
- Expand the daily odour survey to include the road leading to the adjacent properties and outer perimeter fence. Ensure a downwind check is taken outside the permit boundary.
- Site to send details of how the site meets BAT 14 part h, leak detection and repair. In the document submitted as part of the WT Bref process (BAT Assessment review STGP Final) states that “leak detection system which is fitted to all tanks enabling site operatives to assess whether tanks are beginning to leak”.

STGP used an external consultant, Inspectahire, to undertake an inspection for fugitive VOC's and Methane using an optical gas imaging camera, a BAT method outlined in BAT 14 of the Waste Treatment BAT conclusions.

A site inspection and OGI survey was completed under direction and guidance from the operations staff on the 17th Jan 2023. The online plant and associated pipework was surveyed. The Camera & Gas Monitor were both energised and tested in a safe area prior to being taken out on site.

The Inspectahire team member using the FLIR camera began the survey in HSM, (High Sensitivity Mode) and the area to be inspected was assessed at a stand-off distance to ensure no major leaks were initially identified. Following confirmation of no major leaks, a more comprehensive inspection of the plant / pipework, was conducted.

The survey concluded that no fugitive emissions of biogas was identified on the 17th January 2023. The videos and report were sent to NRW for review and can confirm that no gas emissions could be identified from the site. Only methane slippage from the CHP exhausts could be seen on the camera. VOC emissions from the CHP's are tested each year and have been compliant with the permit.

The site has updated their odour management plan and expanded the daily odour survey to include the perimeter fence.

STGP has purchased an optical gas imaging camera to undertake yearly leak detection and repair surveys of their AD plants. The site has updated the maintenance schedule to include the optical gas imaging surveys and is now compliant with BAT 14 part h.

The actions from CAR_NRW0040902 are complete.

Site visit 16.5.23

Mostyn Wall visited the site to discuss maintenance and replacement of the tank roofs with Neil Pollington, operations director, and Shane Fallon Regional operations manager.

Following Storm Eunice in 2022 STGP have decided to replace all digester and storage tank roofs at their AD sites in England and Wales. The new design is to protect the tanks against deformation and roof detachment during extreme weather and to replace older tank membranes and covers coming to the end of their life cycle. The current roofs will be replaced by a new model by Baur. The new waterproof membrane is now supported by additional strapping that is attached to the tank by ratchet straps. The straps will go over the inflatable ring tube that holds the roof and membrane in place. The strap design forms a back up if the ring tube system fails. The roof design will also form a much lower and rounder profile that will not be affected or deformed by high winds.

STPG also plan to clean and inspect each digester once the roofs are removed. Digestate will be moved into an adjacent tank. The flare will be used to burn off any remaining biogas in the tank. During roof removal, a de odouriser will be in place in case a biogas odour is encountered. This process is established and currently ongoing for STGP AD installations in England. The de odouriser would only mask the smell of any biogas.

Once emptied, each tank will be inspected by a chartered surveyor and the internal components in the tanks will be cleaned and inspected, for example the heating coils. A jetting system will be used to suck up any removing slurry from the tanks. The removed slurry will be put into a separation process to remove the water from the solid fraction. The remaining solid fraction will be sent to landfill. The separation process removes a high majority of the volume of material sent to landfill. Once a tank has been cleaned and with its new roof installed, digestate from an adjacent tank will be pumped in to restart the digester. Tanks 1, 2 & 3 will have new roofs, de-drit and tank inspections in 2023 while tanks 4 & 5 will have the work done in 2024.

Action

Once the tanks are back in operation and producing biogas, ensure that an Optical Gas Imaging survey is undertaken to inspect the new tank roofs and to see if there are any fugitive emissions and that the new roofs are sealed.

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.