

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

Site	Tremorfa Anaerobic Digestion Facility	Permit Ref	AB3093CA		
Operator/Permit holder	Kelda Organic Energy (Cardiff) Limited				
Regime	Installations				
Date of assessment	16/01/2019	Time in	14:30	Out	17:15
Assessment type	Audit				
Parts of the permit assessed	As detailed below				
Lead officer's name	Griffiths, Toby				
Accompanied by					
Recipient's name/position	Steve Churches/ Site Manager	Date issued	24/01/2019		

## 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
A1 - Specified by permit	X	
	X	
B1 - Infrastructure - Engineering for prevention and control of emissions	A	
B4 - Infrastructure - Containment of stored materials	A	
C2 - General Management - Management system and operating procedures	A	
F1 - Amenity - Odour	A	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	X	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	A	

**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.

<b>Number of breaches recorded</b>	<b>0</b>	<b>Total compliance score</b> (see section 5 for scoring scheme)	<b>0</b>
------------------------------------	----------	---	----------

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

### Visit of 16th January 2019

Ian Kemmery, Steve Churches, Bleddyn Escott of Welsh Water Organic Energy Ltd (WWOEL)

#### 1. Introduction

A routine visit was planned to review actions from the previous visit and to undertake a compliance inspection.

#### 2. Business update

Following the issues relating to bags blocking up the AD system, an additional screening unit has been installed to prevent bags being carried through. This was reported to be working well and the process is now running normally. The gas engine is also now running.

#### 3. Last visit actions (LVA)

Reply received on 2nd Nov 2018.

LVA1: Venting records received. Tanks left open to maintain ambient conditions. NRW will assess the potential impact of the venting episodes and respond in due course. **Ongoing.**

LVA2: Door closure on side of reception hall. A spring-loaded door closure has been fitted. This improvement is commended. **Complete.**

LVA3: The rationale for choice of biofilter media i.e. clay or woodchip. This has not yet been clarified by WWOEL. The reported media is coconut husk. **Ongoing.**

LVA 4: Recommended media change frequency. This was not answered in the email reply, but WWOEL considered that the media has a lifespan of several years. **Ongoing.**

LVA5: Air curtains: rationale given for this and previously discussed with NRW and accepted, providing no odour issues detected. **Complete.**

LVA6: Inspection and maintenance for containment systems. Arrangements provided in response, but no

further detailed inspection arrangements were included e.g. tank integrity testing, inspections of interior for corrosion etc. WWOEL considered that engineering inspections are undertaken when the tanks are emptied at 5 year intervals. The reception tank is inspected more regularly (annually) due to the fault detected with the floor. NRW requests that the management system documents relating to the inspection of all containment (tanks, bunds, flooring, pipework etc) are forwarded for review. This can be a summary document, listing each item of plant, with the associated type of inspection and its frequency. E.g. visual – daily, full internal inspection 5 yearly or as appropriate. **Ongoing.**

LVA7: Process Controls (Table S3.3). Some parameters listed, but not all. Process monitoring Table S3.3.

- Biofilter: Temp, moisture, thatching/compaction. Not included.
- Digester: gas flow, methane, H<sub>2</sub>S, CO not included
- Odour – daily odour checks
- Biogas use per day – not included.

During discussion on site, the indications were that all the required parameters are being checked. However, it would be useful if the checks are formally detailed in site procedures. Please submit a document showing that all process monitoring requirements in Table S3.3 of the permit are being carried out. **Ongoing [see Action 3]**

LVA8: WWOEL confirmed that olfactory tests to be done by office person. Records of these checks were seen during the visit. However, there remains some uncertainty over the validity of the “sniff” tests in determining the performance of the biofilter. NRW recommends that the H4 Odour Guidance is used to determine whether current arrangements are suitable. **Ongoing.**

**Action 1:** Please response to the ongoing LVAs listed above.

#### **4. Waste Treatment BREF**

WWOEL have received correspondence from NRW on the forthcoming permit review associated with the latest Waste Treatment BREF, which defines Best Available Techniques (BAT) for the sector. A formal request for the site to be compared against these standards will be sent by NRW in due course.

#### **5. Flies**

There were very few flies noted on site, or in the reception hall which is encouraging. It is noted that temperatures were low during the visit, and this will tend to reduce fly numbers. WWOEL confirmed that the fly suppression spray is still in use overnight in the reception hall. Previous issues have been

exacerbated by rejected food waste material which has remained on site long enough to produce flies, although these are contained within the reception hall.

## **6. Permit name change**

The site permit is still in the name of Kelda Organic Energy (Cardiff) Ltd. WWOEL were asked to confirm whether an application has been submitted to change the name to WELSH WATER ORGANIC ENERGY (CARDIFF) LTD Company No. 08356859. The legal entity has remained (company number) the same, hence this would be a free administrative permit variation. **Action 2.**

## **7. Monitoring and ELV compliance, Conditions 3.3.1, 4.2.2, 4.2.3**

The permit requires annual reporting of emissions and the following forms are due before 31st January 2019: Air 1, Performance 1 and Water usage 1. This includes the annual monitoring of the gas engine emissions. NRW notes that the 2017 emissions data (reported 27/01/2018) showed exceedances for SO<sub>2</sub> at A2 and VOCs and A5 (flare). Both are only marginal and are likely to be within the uncertainty range of the methods used (standard uncertainty for SO<sub>2</sub> and VOCs is typically 20%). These SO<sub>2</sub> value is therefore not a breach of permit, and the VOCs are a very marginal exceedance and likely to be within the uncertainty quoted on the form. However, in future, all exceedances of the limit should be submitted on a Schedule 5 Notification. The monthly and quarterly monitoring (Table S3.2) are being completed as stated by WWOEL, however, it would be beneficial to demonstrate that all the permit monitoring requirements are stated in site procedures. **Action 3.**

## **8. Site Tour**

All main process areas were visited including the reception hall, biofilter, digester tanks, gas engine, bund areas and plant rooms. The reception hall was seen, with the additional screen unit in operation. No significant quantities of flies were seen. The biofilter is comprised of 3 units, which are run in turn to allow others to recover. Each is dosed to a biofilter "food" to maintain healthy biological activity. Media temperature, moisture and pH are monitored. Pressure is also measured to ensure sufficient air flow through the units. Staff undertake a daily "sniff" test of emissions to ensure the odour unit is functioning. As noted above, the arrangements for assessing odour need to be reviewed against the H4 Guidance. There were no significant issues detected.

## **9. Conclusion and Actions**

Overall, there was evidence that the site is well operated, and no significant issues were found, although

There are a number of areas requiring clarification as requested in the following actions:

**Action 1:** Please respond to the ongoing LVAs listed below:

LVA1: NRW will assess the potential impact of the venting episodes and respond in due course.

LVA3 & LVA4: Please review the rationale for the choice of biofilter media, in terms of its suitability and predicted lifespan and provide a response to NRW.

LVA6: NRW requests that the management system documents relating to the inspection of all containment (tanks, bunds, flooring, pipework etc) are forwarded for review. This can be a summary document, listing each item of plant, with the associated type of inspection and its frequency.

LVA7: See Action 3.

LVA8: Please refer to the H4 Guidance [see link] for odour, to determine whether current arrangements are suitable.

<https://naturalresources.wales/media/1214/how-to-comply-with-your-environmental-permit-additional-guidance-for-h4-odour-management.pdf>

**Action 2:** Please submit an application to vary the permit to account for the change in operator name.

**Action 3:** Please submit documents to demonstrate that all the monitoring requirements of the permit are being carried out. This includes Permit Tables S3.1, S3.2, S3.3, S4.1, S4.2, S4.3, S4.4.

Please provide a response to Action 1 and 3 by **8th March 2019**. Please submit an application (Action 2) as soon as possible and before **31/01/2019**.

END

## EPR Compliance Assessment Report

**Report ID:  
CAR\_NRW0034508**

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

Site	Tremorfa Anaerobic Digestion Facility	Permit Ref	AB3093CA
Operator/Permit holder	Kelda Organic Energy (Cardiff) Limited	Date	16/01/2019

### 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.

### 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			
G1	X	Action 3: Please submit documents to demonstrate that all the monitoring requirements of the permit are being carried out. This includes Permit Tables S3.1, S3.2, S3.3, S4.1, S4.2, S4.3, S4.4.	08/03/2019
A1	X	Action 2: Please submit an application to vary the permit to account for the change in operator name.	31/01/2019
A1	X	Action 1: Please response to the ongoing LVAs listed.	08/03/2019

## 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](mailto: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.