

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

Site	Five Fords WWTW Gas to Grid Facility	Permit Ref	AP3139FT	
Operator/Permit holder	Dwr Cymru Cyfyngedig (Welsh Water)			
Regime	Installations			
Date of assessment	22/11/2016	Time in	10:30	Out 16:10
Assessment type	Audit			
Parts of the permit assessed	1.1.1			
Lead officer's name	Frost, Julia			
Accompanied by	Ellis, Rhys, Roberts, Anthony			
Recipient's name/position	Jonathon Dean/ Site Manager	Date issued	04/01/2017	

### Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations. 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	A	
C1 - General Management - Staff competency/training	A	
C2 - General Management - Management system and operating procedures	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>
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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

The audit at Five Fords covered three areas - recent VOC emissions, Environmental Management System and a review of AD Plant.

### VOC Emissions

Discussions were held regarding the recent VOC emission limit value breaches on the CHP engines.

The main points discussed are summarised below:

- Crank case breather emissions can be a significant emission and best practice is to re-circulate the emission back into the combustion process. Can you please confirm what you do with the crank case emissions for each engine?
- Please confirm whether the monitoring is carried out post or pre servicing? Has monitoring ever been carried out to assess the drift caused between servicing?
- Oil changes are occurring significantly less frequently than 1000 hours, which shows that the process is very clean.
- Siloxanes are stripped to reduce engine wear which also reduces emissions of metals.
- The H1 risk assessment was re-run this year using the highest recorded VOC emissions from site. The assessment concluded that the VOC emissions from the CHP engines are not significant.
- The H2S emissions are low from Five Fords, as a result there does not appear to be an issue with acid gas emissions from Five Fords.
- No testing is carried out on the flare, which currently is only used approx. once a year. Please can you provide details on the frequency of the servicing of the flare and copies of the last two service records. How often has the flame arrestor been checked? Were there any issues noted with the flare in recent services?
- There is only induction air flow with no control over the air inlet in the form of louvres. Please provide details of the manufacturer and what the capacity of the flare is as this is important when it comes to determining if the flare will have poor emission.
- The process efficiency had been reduced due to the formation of vivianite. As a result the gas to grid had been turned off and only the CHP system was operating. You advised that you believe that if the site moves to AAD the conditions that favour the formation of vivianite will be removed. Is there anything that DCWW can do in the short term to stop the formation?
- DCWW need an action plan in place to prevent reaching the 3000+ ppm VOC that were recorded in 2015.
- Please provide NRW with flow and quality records for the biogas from the AD plant as it enters the installation.

Discussions are to be held internally, within NRW, over the best way to move forward with respect to DCWW demonstrating that the CHP engines are operating in a manner which does not cause an environmental impact. NRW will feed back to you once a conclusion is reached. In the meantime if monitoring highlights a VOC exceedance DCWW should continue to notify NRW in line with the permit conditions.

### **Environmental Management System (EMS)**

DCWW have an ISO 14001 EMS for the waste water side of the business. The permitted installation is not currently included in the scope of the accredited system. An audit is planned in February 2017, following which it is intended that the EMS for the permitted installation will become part of the accreditation.

Three documents were reviewed prior to the audit - Environmental Management Plan, Emergency Procedures and Permit Notification and Investigation.

A number of improvements had been made to these documents following recommendations made by NRW following a previous audit.

A list of environmentally critical equipment has been added to the Environmental Management Plan. It is recommended that for those pieces of equipment included in this list DCWW also detail any agreed response times / spare parts / impact of equipment failure on the operation of the plant. The typical maintenance frequencies are listed within this table, a number of checks are made on the plant to ensure that the equipment is operating effectively.

The "Gateway" system is used when changes are proposed on sites. Stage 3 would include an assessment of the environmental impacts and whether a variation is required to the environmental permit.

All site managers with AD or CHP sign into a weekly telecom. Andrew Dixon chairs these meetings. Permit compliance is an agenda item. These meetings are an opportunity to discuss any issues experienced on the site and share lessons learned / good practice.

It was recommended that DCWW set up a system to track submissions to NRW (both scheduled i.e. monitoring returns and unscheduled i.e. as a result of an audit). DCWW said that it may be possible to do this via SAP, which would then send a prompt to the relevant team to make the submission.

### *Training*

All operational staff have carried out an e-learning course on environmental awareness. This is required to be refreshed every three years. Bespoke training relating to the site's permit has been given to relevant staff this year. All training is documented on the SAP system. When procedures / works instructions are updated and training required, staff are notified via the SAP system that the training needs to take place. Training is also given to contractors working on the permitted installation prior to commencing activities.

### *Maintenance*

All planned maintenance carried out by DCWW is scheduled via the SAP system.

Edina carry out all of the maintenance on the CHP plant. Monthly updates are sent to DCWW on the findings of this work. Weekly oil samples are taken to ensure that the engines are working

efficiently.

DCWW have a 2 hour response time with Scottish Power if there is a power cut on site.

Any unplanned maintenance, that is required as result of a specific issue, is also added to the SAP system.

The SAP system sends out reminders to the relevant operative that the maintenance is required. On a monthly basis a list of outstanding tasks is sent to the Site Manager.

### **AD Plant**

The AD plant at Five Fords is currently operated under T21 exemption. This allows the storage and treatment of up to 100,000 cubic metres a year of specific waste streams. This exemption is also used to import septic tank / cess pit waste into the head of the works.

A number of queries were raised during the audit in relation to the exemption and NRW will feed back to DCWW once we have received clarification.

## EPR Compliance Assessment Report

**Report ID:  
CAR\_NRW0026686**

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Operator/Permit holder	Dwr Cymru Cyfyngedig (Welsh Water)	Date	22/11/2016

### 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			

## 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 reports should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within twenty 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.