

## Compliance Assessment Report

**Report ID:**  
**CAR\_NRW0032411**

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

Site	Aberthaw Power Station	Permit Ref	RP3133LD		
Operator/Permit holder	RWE Generation UK plc				
Regime	Installations				
Date of assessment	05/10/2017	Time in	10:00	Out	16:00
Assessment type	Report/Data Review				
Parts of the permit assessed	Monitoring, impact assessment, abatement performance				
Lead officer's name	Leakey, Antony				
Accompanied by					
Recipient's name/position	Richard Powell/ Station Chemist	Date issued	08/11/2017		

### 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
B1 - Infrastructure - Engineering for prevention and control of emissions	A	
E1 - Emissions - Air	A	
E3 - Emissions - Surface water	A	
F3 - Amenity - Dust/fibres/particulates and litter	A	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	C4	3.5.1

**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>1</b>	<b>Total compliance score</b> (see section 5 for scoring scheme)	<b>0.1</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

### **Aberthaw Power Station site visit and report review Q3 2017**

#### Site Visit - 5 October 2017

Commissioning of units using HVMC had not commenced at the time of the visit as pre-start up troubleshooting was still in progress. The station has not operated since March 2017.

#### Future Flow AST and CEM QAL2

The potentially low load factor future operation of the station is expected to make scheduling of AST and QAL2 work problematic. Opportunities to undertake the work may arise during commissioning and optimisation runs of the modified units following completion of the conversion to high volatile matter coal (HVMC) and during Capacity Market proving runs. However, it is recognised that unit operation may not be sufficiently stable or of sufficient duration. The current IED Compliance Protocol accepts that units operating <500 hours per annum are unlikely to be able to maintain BS EN 14181 compliance due to scheduling difficulties. Station operating hours will be kept under close review.

An examination of sensitivity of the reported mass emissions to efficiency line calculation thermal efficiency value has been undertaken. The reported emissions do not vary significantly when base load and intermittent load efficiency values are used.

#### FGD water discharge monitoring

The issues associated with mercury sample preservation (as identified during the last Water OMA) in composite sampling systems were discussed. In general, it is considered that spot sampling for mercury will give more stable results.

However, review of the LCP Bref BAT conclusions suggests that BAT for FGD effluent monitoring is a daily composite (flow or time proportional if appropriate) sample as stated in the "General Considerations" section, with a minimum of a monthly frequency, as stated in BAT5.

There are also considerations relating to FGD effluent dilution in CW discharge flow. IED Article 15(1) seems to require dilution to be disregarded, but BAT AELs should be applied at the point of discharge from the installation.

At Aberthaw the CW dilution flow is an integral part of the FGD effluent treatment process and so it might be argued that the appropriate monitoring location is the seal pit prior to discharge into the outfall system.

**ACTION: RWE to consider LCP Bref BATC for water monitoring and make proposals for future arrangements.**

#### Black start OCGTs

A review of the air quality impact assessment for the current black start GT flue design has been undertaken to confirm the expected low process contribution to ambient pollutant levels. There is

no advantage in changing the flue configuration and pollutant ground level concentrations are predicted to be well below Air Quality Standards. It is not clear what emission levels were assumed in the modelling.

**ACTION: RWE to confirm the source term details used in the ADMS modelling.**

#### FGD inlet dust data

A review of U8 electrostatic precipitator (EP) inspection report indicates that there are some outstanding issues requiring rectification. The plans for addressing these and the implications for dust abatement performance on the unit in the meantime are unclear. This is particularly important for mercury and trace element emissions minimisation in the FGD seawater discharge.

The original examination of FGD inlet dust data that resulted in a review of EP performance was the deterioration in FGD inlet dust levels on U7. An equivalent report for U7 has not been seen and similarly for U9.

**ACTION: RWE to provide copies of U7 and U9 EP outage inspection reports.**

#### Ammonia release

The release associated with the tank venting during preparation for inspection was not notified to NRW as this was a routine procedure that was not expected to cause any impact.

There appears to be potential for some off-site odour impact based upon the complaint received. Therefore, ahead of any future activities of this type estimates of the quantity of ammonia likely to be released should be made and an impact assessment associated with the ammonia venting (short term only) may also then need to be carried out depending upon quantity and duration.

**ACTION: RWE to update procedures for ammonia tank preparation for inspection to include quantification of release and potential impact.**

#### Low S coal specification

The fuel diet change to bituminous coals will necessitate stocking of the appropriate low sulphur coal if the IED Chapter III malfunction and breakdown provisions are to be utilised at Aberthaw.

The specification for bituminous coal plants is an average as received sulphur content of 0.4% by mass (p. 20, IED Compliance Protocol, December 2015).

**ACTION: RWE to confirm the low S coal specification to be held at Aberthaw.**

#### DO measurement data loss

Several days of CW outlet dissolved oxygen data were lost due to the instrument back up battery running low. A software update is planned to ensure this does not recur and installation of a second back up DO probe will also be carried out.

As with previous loss of DO data, temporary loss of this process monitoring data is not considered to be of significance, but is a further administrative category 4 non-compliance with permit condition 3.5.1.

#### High CW suspended solids

The elevated suspended solids result during August 2017 was not associated with CW discharge flow and is thought to have occurred due to build-up of material during the outage period. The drains interceptor had not been cleaned out for 2 years and may have contributed.

**ACTION: RWE to confirm that interceptor cleaning is scheduled on PM system at an appropriate frequency.**

#### Deposition gauge composition

The unusually high deposition data around Aberthaw quarry for the period 1/9-3/10/17 is associated with a deposit colour not associated with PFA. Also, the filter media was missing from the top of the rain water collector, which may have increased the quantity particulate matter being collected. Analysis of the filter paper is not currently available.

#### Building glazing replacement

It is apparent that some building infrastructure requires replacement and alternative materials are proposed as substitution for old wired glazing panels. RWE will need to ensure that replacement materials provide the same level or better noise attenuation.

**ACTION: RWE to confirm that glazing panel replacement materials will provide sufficient noise attenuation.**

#### Improvement Programme

The latest IC21 response Marine Monitoring report is noted. Considering the expected reduction in load factor and the likely long term nature of the monitoring programme, including post-closure surveys to demonstrate return to background levels of contamination, a reduced survey frequency is now considered to be appropriate.

**ACTION: RWE to consider alternative survey frequency.**

#### Emissions review

The station has not operated since the end of March 2017 and there are no emissions to review against permit limits and there are no current trends that require review.

END

## EPR Compliance Assessment Report

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Site	Aberthaw Power Station	Permit Ref	RP3133LD
Operator/Permit holder	RWE Generation UK plc	Date	05/10/2017

### 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			
G1	C4	A software update is planned to ensure this does not recur and installation of a second back up DO probe will also be carried out.	31/12/2017

## 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.