

Compliance Assessment Report

Report ID:
CAR_NRW0034046

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

Site	Severn Power Station	Permit Ref	HP3737UE		
Operator/Permit holder	Siemens plc				
Regime	Installations				
Date of assessment	20/09/2018	Time in	10:00	Out	13:00
Assessment type	Audit				
Parts of the permit assessed	As detailed				
Lead officer's name	Griffiths, Toby				
Accompanied by	Peppicelli, Claudia				
Recipient's name/position	Huw Edwards/ EHS Manager	Date issued	12/10/2018		

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	A	
B1 - Infrastructure - Engineering for prevention and control of emissions	A	
B4 - Infrastructure - Containment of stored materials	A	
E1 - Emissions - Air	A	
E5 - Emissions - Waste	A	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	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.

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

Siemens Visit, 20th September 2018

Huw Edwards, Claudia Peppicelli (NRW)

1. Business update

A routine compliance visit was arranged at the power station. The focus this year is the review of the Large Combustion Plant BREF and the associated permit review. Dan England was introduced as the new station manager, replacing Sean Grundy who has moved within Siemens. Both units (10 and 20) have had minor outages recently. These picked up a potential blade defect on Unit 20 GT, which is now being addressed via a blade change out via a second outage. Both units were off line during the visit. Generation has been good over the summer, where the station has been primarily base loading. The Annual Surveillance Test (AST) of the continuous monitoring systems (CEMS) was carried out in June.

2. Last visit actions (12th December 2018) and ongoing actions

2017 AST review (received on 22/12/2017) The contractor noted that the NOx converters were below 95% efficiency required under EN14181 and EN14792, however it was considered acceptable accounting for variability in the analyser at the range used for the NOx converter test. The subsequent 2018 AST (19/09/2018) indicated both were at 98+ % efficiency. The catalysts are being changed every 6 months to ensure their optimal operation. NRW will keep this aspect under review and any further queries will be sent separately.

Waste battery storage arrangements – these have now been relocated for improved containment and protection from weather.

Improvement Condition IC7

The onsite treatment options are currently on hold. However, discussions with Welsh Water on potential treatment locally are ongoing. NRW will keep this item under review.

3. BREF review

Siemens are supporting Calon Energy and Ramboll (Consultants) in compiling a response to the Reg 61, which is due by November. Three stations under the same ownership will provide a joint response. A document of responses was seen during the visit and appeared to be comprehensive and Siemens were confident that the information will be supplied on time. The interpretation of some of the aspects of the BREF has been compiled by the UK regulators, and these are available as guidance. Several specific areas of the BREF and related standards were discussed including:

BREF AELs and associated ELVs

The emission limit values (ELVs) will be set at point at which DLN is effective. This should be straight forward for the permit review if NOx profiles are consistent between start up and full load, and Siemens may need to submit supporting profile data of NOx vs load. Should the exercise prove successful, it should avoid need to include part load ELVs in the permit.

Monitoring changes: The standard for data acquisition software PREN17255, requires calculations to be made to the raw data e.g. minute averages, prior to corrections to create the validated hourly average. This was raised with Siemens to ensure that the Envirosoft software can meet this requirement. To confirm:

* Hourly averages are to be compiled from base data (1 min averages or similar) before corrections are applied, so the final validated hourly average will only be known after the hour has passed. This makes real-time adjustment of plant performance to ensure compliance more difficult.

* Oxygen corrections currently applied to base data translate in a non-linear way when applied to the final hourly average, so the new hourly data sets will not be comparable to the "old" data.

In summary, EnviroSoft may need to be updated to reflect the new standard. NRW recommends that Siemens checks that the software will be compliant with the standard.

Changes to M20 Guidance

As part of EN 14181, the requirement to include O2 and moisture in the QAL2 tests has been formalised in the latest M20

Technical Guidance "Quality assurance of continuous emission monitoring systems - application of EN 14181 and BS EN 13284-2". This was highlighted to ensure that the contractors undertake these tests at the next QAL2. It was considered that these additional determinands would not be onerous to include, as they can be completed concurrently with the other QAL2 tests.

EMS

A new asset management standard ISO55001 is being developed for the site and the EMS (still accredited to ISO14001) is part of an integrated system. There have been no internal EMS audits this year, though there have been other types. EMS objectives include projects such as energy saving, which are being implemented using timers, and optimising pumps and compressors.

4. Site Tour

As noted above, both units were off line during the visit. The main process areas were visited including the control room, turbine hall, HRSG, CEMS unit, raw materials and waste storage areas. Chemicals were stored in bunded areas, with incompatible materials kept apart. A new storage unit for bulk ammonia IBCs was seen. Bund containment was in good order. There were no significant issues found.

END

EPR Compliance Assessment Report

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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 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.