Compliance Assessment Report

Report ID: CAR_NRW0000049

This form will report compliance with your permit as determined by an NRW officer					
Site	Uskmouth Power Plant EPR/LP3131SW	Permit Ref	LP3131SW		
Operator/Permit holder	Uskmouth Power Co Ltd				
Regime	Installations				
Date of assessment	04/02/2016	Time in	09:30	Out	15:30
Assessment type	Audit				
Parts of the permit assessed	General Operation				
Lead officer's name	Richards, Gareth (Rivers House)				
Accompanied by	Chris O'Brien				
Recipient's name/position	Mike James/ Environment Manager	Date issued	23/03/2016		

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**

KEY: See Section 4 for breach categories, suspended scores will be indicated as such.
A = Assessed or assessed in part (no evidence of non-compliance), **N** = Not Assessed, **X**= Action only

Number of breaches recorded	**0**	**Total compliance score** (see section 5 for scoring scheme)	0

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

Review of actions

- Further information on reported emission breaches in March 2015 had been provided.
- A comprehensive programme of work was being implemented in response to the high CO and carbon-in-ash (CIA) issues. It was noted that a rigorous approach to CIA would lead to higher NOx releases and at present the need to reduce NOx emissions is a higher priority. One known issue is the restricted air throughput in the boiler. There are concerns about working the ID fans too hard and it is considered that the FGD is the limiting factor for air flow. FGD improvement works are currently in progress and will be completed by the end of March. In addition there are plans for an external contractor to undertake a detailed inspection of the FGD system, this is currently out for tender. Further boiler and combustion test work is also planned to be undertaken by Babcocks. **Action (1):** UPC to provide an update on progress by 1st May 2016.
- UPC had written a new procedure to ensure contaminants do not accumulate in the boiler water feed during extended outage periods. Some further aspects of this need to be finalised before implementation.
- Prospective developments at UPC had been described but as yet no decisions had been taken.
- The latest permit variation incorporated the correct route for the Nash water supply.

Current operational patterns and issues

The current operational status of each unit was reviewed:

U13: Unit came back on line in December. Installation work for the SNCR trial is complete, additional soot blower installation planned for this week. Basic SNCR training for the operators had been completed and Fueltech were expected to remain on site for a further two months from commencement of trial. The unit was typically achieving 105MWelec. Generating time remained low due to market conditions. Wet coal was proving problematic.

U14: Ongoing FGD issues. Generation typically 85MWelec due to problems with boiler air throughput. Condenser back pressure problems had been less evident recently. UPC admitted that they do not have the necessary expertise to effectively resolve technical issues and they will be procuring external assistance as necessary. Atkins had already been hired to complete a programme of technical reviews during the summer outage.

U15: Last operated March 2014 (when SSE ceased operation with the expectation that the whole station

would be decommissioned). SIMEC purchased the station as a three unit facility and have plans to reinstate U15 following completion of the necessary preservation/maintenance work. The current plans are to make the unit available for generation at the end of 2016.

Coal movements from Liberty Steel

With recent dryer weather the roadway had been repaired and movements recommenced. 29Kt were estimated to remain and this was being removed at a rate of approx. 1000t/day. The work was expected to be completed by the end of February.

QAL2 schedules

U13 QAL2 assessment was completed Wednesday 3rd February. It is understood that in the event SNCR is adopted on a permanent basis a repeat QAL2 will be necessary. It has been agreed by NRW that the same assessment on U14 will be delayed until SNCR is installed, this will avoid the need for a repeat assessment following SNCR installation.

UPC raised a query related to when a revised calibration factor can be applied. It was confirmed by Email that a new factor can be adopted as soon as the QAL2 assessment is completed. This also needs to be recorded on the relevant reporting form (see TNP Guidance document).

IC 11 response

Response was due by the end of January 2016. Paper copy was viewed but UPC will provide an electronic copy. **Action (2): UPC**

Disposal/recovery routes for pfa/fgd residues

All ash was currently being temporarily stored on site. There had been no transfers since SIMEC became the owners. The store area is nearly full (see comment under 'Site Inspection'). It was noted that ash generated during the SNCR trial will be stored separately from the non-SNCR ash due to the potential for differences in properties. There had been some contact with two potential interested parties but this had not yet progressed to contracts. For one of these test results are expected to be available next week.

It was appreciated that the high carbon content may be detrimental for specific uses, however, it may also make the ash suitable as a gasification feedstock. A specific action has been added below to ensure UPC progress identification of recovery/disposal options as a priority.

SNCR Trial Programme

Subsequent to the visit UPC provided a written SNCR trial test plan.

It is noteworthy that most of the equipment installed for the SNCR trial would not be suitable for permanent use e.g. hosing would need to be replaced by steel tubing.

UPC enquired if it remained an option to move from the TNP to LLD. It was confirmed that this is not an option. The TNP guidance states (Section 3.1, para 12) that once the TNP has commenced the options are:

- Continue to comply with mass based emission values as set out in the TNP
- Leave the TNP and be subject to full ELV compliance (IED Annex V), or, Annex V 1500h derogation.
- Close the whole LCP or reduce the net thermal input to less than 50MWth (i.e.drop below LCP threshold).

Action (3): UPC to review the new IED reporting requirements and make the necessary changes to the data acquisition and reporting system such that emissions data is generated in accordance with the correct averaging periods.

Site inspection

The following parts of the site were visited and comments provided.

A dedicated urea solution steel storage tank with integral bund has been installed as part of the SNCR process. The tank and bund capacity are stated on the structure. There is no roof structure to prevent the accumulation of rainwater in the bund so regular emptying is likely to be required. It was noted that two drain valves for the tank contents were not locked and could be inadvertently opened. These need to be locked as a matter of urgency. In addition a drip tray should be provided to ensure any spillage during delivery is retained.

Action (4): UPC to fit lockable valves or prevent unauthorised opening of the drain valves and a suitable drip tray. Completion of this work to be confirmed with NRW.

Action (5): UPC to provide a copy of the tank filling procedure to NRW by 31st March 2016.

The control room was visited (there was no generation in progress but preparation for coming on line in a few hours was in hand). Uskmouth had not yet made the appropriate changes to the monitoring data display system so 48h average data was still on display for the Operators, although they had all been informed about the change to a 24h averaging period. To avoid confusion Uskmouth should remove all reference to the previously reported 48h average data. **Action (6):** Uskmouth Power. In addition there was a poster above a doorway near the main entrance to the control room that made reference to 48h average monitoring data and the Environment Agency. This should also be removed. The control room operator was questioned about the procedure in the event of an ID fan trip. It was noted that a copy of the procedure was readily available on the desk. Trends in NOx monitoring data for previous operating

periods were reviewed. There was noteworthy variations in NOx levels throughout the generation period.

The fuel oil fill point spill containment bund contained a significant quantity of fuel oil, presumably from recent deliveries. This should be emptied on a regular basis to ensure the capacity for further spill containment is not compromised. The site EMS should ensure this is done on a regular basis. **Action (7):** Uskmouth Power.

The installed SNCR pipe work and associated infrastructure was viewed on Unit 13. It was noted that most of the installed pipework would need to be replaced if it was decided to opt for SNCR on a permanent basis.

The coal stock inventory was low and consequently it was proving difficult to manage the stockpile in a manner that ensured coal that was too wet was not used for combustion. However, in consideration of the recent very wet weather it was fortunate that there still remained a significant quantity of dry coal that was being brought in from Liberty Steel.

Carpet coal in the area adjacent to the diesel fill point had been dug out and replaced, however, the possibility for ongoing intermittent diesel contamination remained. It was recommended that samples should continue to be taken from the adjacent borehole on an annual basis to provide confirmation that the measures in place were appropriate. It was also noted that Uskmouth Power no longer needed to arrange a complete set of borehole monitoring data on an annual basis.

The temporary ash store (for bottom ash and pfa/fgd residues) was in regular use as currently no ash was being removed from the installation. In some parts the ash was above the level of the retaining wall/dust shield and at one point the wall had been damaged and there was spillage outside the boundary. It was noted that a small area within the store had been cleared in preparation for receipt of ash produced during the SNCR trial (as this may have potential to have a higher residual ammonia level).

The current generation pattern was typically 4-6h a day consequently ash generation was not large but no ash had been consigned for a significant period, consequently the inventory had built up. This is an unsustainable situation and an outlet for the ash needs to be identified. **Action (8):** Uskmouth Power need to identify disposal/recovery options for the ash and commence its removal from the installation. Progress to be reported to NRW by 31st March 2016.

AOB

OMA

An Operator Monitoring Assessment (OMA) audit will need to be completed during 2016. NRW need to decide whether the existing OMA v4 process will be used or it v5, currently being developed by the EA is used. **Action(9):** NRW to advise UPC of audit plans.

Pollution Inventory Reporting

NRW can no longer access the EA reporting portal and is setting up a separate system. Operators will be advised when this is available for use. It is likely that the range of pollutants that need to be reported will be reduced, however the data will remain based on calendar year emissions.

Decision Document

The DD that accompanies the update permit will be released by NRW in the next few weeks (copy provided to UPC subsequent to the inspection).

Cyfoeth Naturiol Cymru Natural Resources Wales	**EPR Compliance Assessment Report**	**Report ID: CAR_NRW0000049**

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Site	Uskmouth Power Plant EPR/LP3131SW	Permit Ref	LP3131SW
Operator/Permit holder	Uskmouth Power Co Ltd	Date	04/02/2016

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.