

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

Site	Uskmouth Power Plant			Permit Ref	LP3131SW		
Operator/ Permit holder	Uskmouth Power Co Ltd						
Date	16/06/2015			Time in	09:30	Out	12:30
What parts of the permit were assessed	Emissions, monitoring						
Assessment	Site Inspection	EPR Activity:	Installation	X	Waste Op	Water Discharge	
Recipient's name/position	Environmental Officer						
Officer's name	Tony Leahey			Date issued	15/09/2015		

Section 1 - Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations. A detailed explanation and any action you may need to take are given in the "Detailed Assessment of Compliance" (section 3). 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

Condition(s) breached

a) Permitted activities	1. Specified by permit	N	
b) Infrastructure	1. Engineering for prevention & control of pollution	N	
	2. Closure & decommissioning	N	
	3. Site drainage engineering (clean & foul)	N	
	4. Containment of stored materials	N	
	5. Plant and equipment	N	
c) General management	1. Staff competency/ training	N	
	2. Management system & operating procedures	C3	1.1.1
	3. Materials acceptance	N	
	4. Storage handling, labelling, segregation	N	
d) Incident management	1. Site security	N	
	2. Accident, emergency & incident planning	N	
e) Emissions	1. Air	A	
	2. Land & Groundwater	N	
	3. Surface water	C3	3.1.2;
	4. Sewer	N	
	5. Waste	N	
f) Amenity	1. Odour	N	
	2. Noise	N	
	3. Dust/fibres/particulates	N	
	4. Pests, birds & scavengers	N	
	5. Deposits on road	N	
g) Monitoring and records, maintenance and reporting	1. Monitoring of emissions & environment	A	
	2. Records of activity, site diary, journal & events	N	
	3. Maintenance records	N	
	4. Reporting & notification	A	
h) Resource efficiency	1. Efficient use of raw materials	N	
	2. Energy	N	

KEY: C1, C2, C3, C4 = CCS breach category (* suspended scores are marked with an asterisk),

A = Assessed (no evidence of non-compliance), N = Not assessed, NA = Not Applicable, O = Ongoing non-compliance – not scored

Number of breaches recorded	2	Total compliance score (see section 5 for scoring scheme)	8
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If the Total No Breaches is greater than zero, then please see Section 3 for details of 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 (e.g. 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 suspended or consolidated scores.
- details of advice given
- any other areas of concern
- all actions requested
- any examples of good practice.
- a reference to photos taken

This report should be clear, comprehensive, unambiguous and normally completed within 14 days of an assessment.

Uskmouth power station site visit 16/6/15

Plant condition update

Prior to restart of unit 14 a repair programme of boiler shell and ducting was undertaken. During the site inspection there were no signs of boiler skin holes.

Sulphur dioxide and other air emissions

Emissions performance since re-start has been reviewed. It appears that the sulphur dioxide ELV breach due to degraded lime remaining in the FGD silos since the unit was mothballed 12 months previously may be due to the calibration function established during the QAL2.

It is understood that during the QAL2 test line 10 NID was out of service due to ongoing NID differential pressure issues, because of this line 20 NID was being driven harder to ensure emissions were maintained below the ELV value, this has resulted in an unrealistic calibration for line 20 which will require retesting.

Pending confirmation of the actual emissions during the initial re-commissioning period no ELV breach will be recorded.

ACTION: UPC to provide a report confirming causes of reported emissions breach during March 2015 and final reported emissions data.

It was noted during review of CEMs data to confirm start-up and shut down thresholds that U14 carbon monoxide emissions were variably high in the range 400-4000 mg/m³. It is understood that carbon in ash levels are also high at around 20%.

ACTION: UPC to confirm action being taken to address the high CO and CIA issues and underlying causes.

Emissions monitoring and AST report

The issues with U14 oxygen measurements have predominantly been on line 10 with a number of analysers failing, line 20 has been far more consistent and accurate. UPC hired a portable oxygen analyser in order to confirm this accuracy and found the fixed unit reading comparable with the portable unit. The oxygen readings for line 20 were used to correct line 10 but UPC believe that this has had little impact on mass emissions or ELV compliance.

The following is a summary of comments on the recent U14 AST report:

- Permit numbers do not match up on the Executive Summary Cover Sheet

(VP3530LS) and on all the Footers (LP3131SW)

- Job reference number (286944E-1) doesn't not match the number on the bottom left-hand side of the footer (3514067A-1-U14-001R) on the Footer.
- No Version number of the report included on Footer.
- No email address for test laboratory on Executive Summary Cover Sheet.
- Section 2.3.2 on Monitoring platform and site provisions – it states that homogeneity was carried out (and passed the relevant criteria) by RPS Consultants. However, it does not state which substances were demonstrated to be compliant with the homogeneity testing (presumably it was NO_x, oxygen and SO₂) and how it was carried out. It may be worth, in the future, referencing the relevant reports directly (job number, date, etc.), and to what standards (i.e. BS EN 15259) the assessment was carried out.
- Section 5.3 on Documentation and Records. The report states there are no QAL3 checks in place, as the systems are calibrated every 6 months by Enviro Technology Services (ETS). The current and IED ESI Protocol suggests that best practice is to have more frequent (not more frequently than monthly) zero and span checks on the CEMS to demonstrate their accuracy and precision, these can be performed by UPC staff or the CEM manufacturer.
- As per Parsons Brinckerhoff's Comments, Line 20 will require re-calibration on SO₂ (QAL2 rather than AST), due to issues with the previous calibration function derived during previous QAL2 campaign (when process conditions during that time resulted in an unrealistic calibration function).
- As per PB's comments, due to all the NO results being above the valid calibration range derived from previous QAL2 campaign, a new QAL2 test would be required on the NO CEM (If certain requirements are met, which are detailed in EN 14181, Section 6.5 (i) – this would require the availability of more CEM NO data for above requirement checks).

These requirements will be reviewed as part of an updated Operator Monitoring Assessment which is also required prior to implementation of the new IED Protocol which must be followed from 1 January 2015. The JEP report "Electricity Supply Industry – IED Compliance Protocol for Utility Boilers and Gas Turbines" is now hosted on the Energy UK website at:

<http://www.energy-uk.org.uk/publication/272-governmentdocuments.html>

Emissions to water

The elevated copper and nickel emissions from release point W2 in April 2015 are understood to be attributed to stagnation of STW cooling tower feed water in the pumping sump during the period that the station was mothballed. High concentrations of metals were then transferred to the cooling system and resulted in elevated discharges with the blow down.

The current pumping arrangements, downtime and start up procedures do not allow purging of the sump to prevent accumulation of contaminants or their transfer into the cooling system.

The breaches of permit condition 3.1.2 due to the exceeded ELVs are considered to be minor (Category 3) due to the high dilution and saline nature of the receiving water and relatively short duration of the problem. Assessment of the releases suggests that there were no breaches of the relevant Environmental Quality Standards.

A secondary breach of permit condition 1.1.1 (a) due to the apparent absence of process or procedural controls on accumulation of contaminants in the cooling feed water sump or their transfer into the cooling system is also considered to be minor (Category 3).

ACTION: UPC to provide written proposals and timescale for implementation of procedural and, if necessary, engineering modifications to prevent future accumulation of contaminants in the cooling feed water pumping sump by 31 December 2015.

Station future

Biomass-firing conversion is still under consideration and some design and costing work is being undertaken.

Early engagement with the regulator is advised to ensure that proposals take account of developments in the IED regulatory framework and LCP BRef.

ACTION: UPC to provide a written update on proposals for future station development.

IED permit review progress

The responses to the Regulation 60 notice and follow up information request were reviewed. Verification of the declared U14 start-up and shut down thresholds was undertaken by review of emissions profiles. The 70 and 60 MWe respective thresholds are considered to be representative. Thresholds for other units may need to be verified separately if they are brought on line.

The installation boundary needs to be updated as part of the permit IED variation to reflect the route of the water supply pipe route from Nash STW. An updated installation plan needs to be provided.

ACTION: UPC to provide an updated installation plan showing the route of the water supply from Nash STW by 31 October 2015.

Groundwater - oil contamination at BH208s

Remediation by removal of carpet coal from refuelling point area adjacent to tank bund and backfilling with inert material to be followed up at next inspection.

Ash loading

No loading operations were taking place during the site inspection. This will be carried over to the next station visit.

Disposal and recovery routes for ash arisings will also be reviewed at the next visit.

END

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Operator/ Permit	Uskmouth Power Co Ltd	Date	16/06/2015

Section 3- Enforcement Response

Only one of the boxes below should be ticked

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.	X
In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.	
We will now consider what enforcement action is appropriate and notify you, referencing this form.	

Section 4- Action(s)

Where non-compliance has been detected and an enforcement response has been selected above, this section summarises the steps you need to take to return to compliance and also provides timescales for this to be done.

Criteria Ref.	CCS Category	Action Required/Advised	Due Date
See Section 1 above			
C2	C3	See action in main report text.	31/12/15
E3	C3	See action in main report text.	31/12/15

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 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 which 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 fulfill 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 (e.g. 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 and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Information 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 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 the officer's line managers. 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.