

Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	RP3133LD
Name of operator	RWE Generation UK plc
Location of Facility	Aberthaw Power Station
Time and date of the detection	Saturday 21 st May 2016 01:13

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution

To be notified immediately

Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit

To be notified immediately unless otherwise specified below

Emission point reference/ source	W2
Parameter(s)	pH
Limit	5.6 minimum 5.8-8.5 95%ile of instantaneous measurements
Measured value and uncertainty	3.2 pH Uncertainty +/-0.1 pH

(b) Notification requirements for the breach of a limit	
To be notified immediately unless otherwise specified below	
Date and time of monitoring	Main Troll 1 continuous pH monitoring probe in seal pit before outfall towers. On the 21/05/16 the pH dropped below 5.6 at 01:13 to 3.2 at 01:24 and returned above 5.6 at 01:37. The Backup Troll 2 continuous pH monitoring probe in the same location showed similar readings suggesting it was a 'real' event.
Measures taken, or intended to be taken, to stop the emission	On receiving the low pH alarm the CW system was restarted to increase the pH. In addition, the discharge from the site drainage system and Celtic Ash were shutdown. At the time of the event there would have been very little flow as the CW system was not operational, this combined with the short period of time with low pH effluent present (24mins) and long outfall tunnel (547m) is likely to have meant that the pH was above the limit when discharged at the outfall. An investigation will be undertaken.
Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified immediately	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	There is currently a temporary pH probe installed at the western outfall. The data from this probe shows the pH at the outfall was compliant with the limit at 8.2 and does not reflect the drop in pH seen in the seal pit. Low tide was at 01:13. The possible sources of low pH effluent were investigated as follows: 1. <u>Drainage of the 7 CW pump</u> The pH drop begins to occur shortly after the drain down starts at 00:28. The pH drops to 3.2 which is lower than would likely be achieved by an anaerobic acidogenic biological reaction, and there is no reason
---	--

	to consider anything else would be within the pump (and a metal oxidation reaction would have increased the pH). It is possible that draining the CW pump displaced low pH discharge water within the seal pit. 2. <u>Celtic ash discharge</u> Celtic Ash was shutdown for the weekend. The discharge was either pumped cooling water (pumps shut off at some point during night shift) or drain down. This would not have caused a sudden spike in pH and has been discounted. 3. <u>Site drainage discharge</u> The quality of this water was unknown at the time of the event, however it is unlikely to have caused a sudden spike in pH. 4. <u>SWTP discharge</u> The CW pumps were shut down 90 minutes after the final FGD absorber was taken out of service, so it is unlikely that there was any low pH material within the CW system. 5. <u>WTP effluent discharge</u> There is an electronic interlock in place to ensure WTP effluent can't discharge when CW pumps are off and the WTP was confirmed as isolated, therefore, this has been discounted. From the above RWE is of the opinion that the low pH water was not discharged from site.
Measures taken, or intended to be taken, to prevent a recurrence of the incident	Guidance has been issued that in future if a CW pump is to be drained down with no CW flow that the site discharge is shutdown for the duration of the drain-down and to have another CW pump in service if feasible to do so.
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	No release to the environment.
The dates of any unauthorised emissions from the facility in the preceding 24 months.	N/A

Name*	Amy Lavisher
Post	Environmental Compliance Engineer
Signature	
Date	18/08/16

* authorised to sign on behalf of the operator

Part C Malfunction or Breakdown of LCP abatement equipment

Permit Number	
Name of operator	
Location of Facility	
LCP Number	
Malfunction or breakdown	
Date of malfunction or breakdown	

(a) Notification requirements for any malfunction and breakdown of abatement equipment as defined by the Industrial Emission Directive*.

To be notified within 48 hours of abatement equipment malfunction and breakdown

Time at which malfunction or breakdown commenced	
Time at which malfunction or breakdown ceased	
Duration of the breakdown event in hours and minutes	
Reasons for malfunction or breakdown	
Where the abatement plant has failed, give the hourly average concentration of all measured pollutants.	
Cumulative breakdown operation in current year (at end of present event)	
Cumulative malfunction operation in current year (at end of present event)	
Name**	
Post	
Signature **	
Date	

* See section 3.6 and Appendix E of ESI Compliance Protocol for guidance

** authorised to sign on behalf of the operator