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Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Uniper UK Limited

**Connah's Quay Power Station
Kelsterton Road
Connah's Quay
Deeside
Flintshire
CH5 4BP**

Variation number

EPR/NP3037AF/V003

Permit number

EPR/NP3037AF

Connah's Quay Power Station

Permit number EPR/NP3037AF

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

This variation make the following changes to the permit:

- Removal of the fan outlet attenuators from the fan cells in Cooling Towers 3 and 4;
- Amendment of the reference period for emission to air point A11 from a ten minute average to an hourly average; and
- Correction of errors made in the previous variation to the emission limits to water.

The schedules specify the changes made to the original permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit

Description	Date	Comments
Application EPR/ MP3337SH	Duly made 17/03/2006	
Schedule 4 response (additional response)	Received 26/10/2006	
Supplementary Information requested	20/11/2006	
Supplementary Information received	20/11/2006	
Supplementary Information requested (email)	12/01/2007	
Supplementary Information received (email)	12/01/2007	
Permit determined EPR/MP3337SH	09/02/2007	Original permit issued to E.ON UK plc.
Variation Application EPR/MP3337SH/V002	Duly Made 05/06/2008	
Schedule 5 Request for further information	Sent 14/09/2008	
Further information received	01/09/2008	
Variation EPR/MP3337SH/V002 issued	29/09/2008	
Variation application EPR/MP3337SH/V003 issued	18/03/2009	
Variation application EPR/MP3337SH/V004	Duly Made 09/11/2010	
Variation EPR/MP3337SH/V004	07/12/2010	
Variation application EPR/MP3337SH/V005	27/01/2012	
Schedule 5 Request for further information	Sent 29/02/2012	
Further information received	23/03/2012	
Additional information received	22/05/2012	Assessment of further Chlorite Decay Tests
Schedule 5 Request for further information	Sent 04/07/2012	
Further information received	24/07/2012	
Additional information received	09/08/2012	Dosing systems
Additional information received	17/10/2012	Commissioning Information and Emissions Limit Values/Monitoring
Additional information received	26/10/2012	Various responses
Additional information received	19/11/2012	Timescales for staged commissioning programme
Variation EPR/MP3337SH/V005 issued	06/12/2012	

Variation determined EPR/MP3337SH/V006	11/03/2013	Environment Agency Initiated Variation to incorporate Eel Regulations improvement condition
Variation application EPR/MP3337SH/V007	Duly Made 14/01/2013	Application for upgraded combustion system and additional emission point for auxiliary boiler
Variation application EPR/MP3337SH/V007 determined	04/04/2013	Varied permit issued
Variation application EPR/MP3337SH/V008	Duly Made 19/08/14	Application for replacement of single auxiliary boiler with five new auxiliary boilers, permission to operate in double two shifting mode and additional emission point for Old Rockcliffe surface water drain
Schedule 5 Request for further information	Sent 09/10/14	Request for revision of elements of the air quality modelling assessment for new auxiliary boilers and double two shifting mode of operation.
Further information received	17/10/14	Response to queries relating to air quality modelling methodology and provision of risk assessment.
Variation determined EPR/MP3337SH/V008	17/03/15	Varied permit issued
Application EPR/NP3037AF/T001 (full transfer of permit EPR/MP3337SH)	Duly made 09/07/2015	Application to transfer the permit in full to Uniper UK Limited.
Transfer determined EPR/NP3037AF	12/08/2015	Full transfer of permit issued.
Regulation 60 Notice sent to the Operator	14/11/14	Issue of a Notice under Regulation 60(1) of the EPR. Natural Resources Wales initiated review and variation to vary the permit under IED to implement the special provisions for LCP under Chapter III, introducing new Emission Limit Values (ELVs) applicable to LCP, referred to in Article 30(2) and set out in Annex V. The permit is also updated to modern conditions.
Regulation 60 Notice response	26/03/15	Response received from the Operator

Additional information received	30/06/15	Response to request for further information (RFI) dated 09/06/15.
Additional information received	30/10/15	Further information received from the Operator
Variation determined EPR/NP3037AF/V002	30/12/15	Varied and consolidated permit issued in modern condition format. Variation effective from 01/01/2016.
Variation application PAN-000485 (EPR/NP3037AF/V003)	Duly made 12/07/2016	Application to remove noise attenuators from cooling tower fans, change emissions to air reference period and correct errors in emissions to water monitoring requirements.
Additional information requested	24/08/2016	Modelling data files associated with noise impact assessment requested.
Additional information received	27/09/2016	Noise modelling data files received.
Additional information requested	02/11/2016	Clarification of derived sound power and pressure levels requested.
Additional information received	10/11/2016	Clarification of derived sound power and pressure levels received.
Variation PAN-000485 (EPR/NP3037AF/V003) determined	25/11/2016	Variation issued.

Other Part A installation permits relating to this installation

Operator	Permit number	Date of issue
Uniper UK Limited, Westwood Way, Westwood Business Park, Coventry, CV4 8LG	24/67/10/124/E ver 1 (Licence to abstract water)	25/06/1996
Uniper UK Limited, Westwood Way, Westwood Business Park, Coventry, CV4 8LG	24/67/10/124/E ver 2 (Licence to abstract water)	03/01/1997
Uniper UK Limited, Connah's Quay Power Station, Kelsterton Road, Connah's Quay, Deeside, Flintshire, CH5 4BP	EU-ETS:GB-EA- EACO ₂ -0179 (Emissions trading scheme)	

End of introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2010

The Natural Resources Body for Wales (“Natural Resources Wales”) in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies

Permit number
EPR/NP3037AF

issued to:
Uniper UK Limited (“the operator”)

whose registered office is

**Westwood Way
Westwood Business Park
Coventry
CV4 8LG**

company registration number **02796628**

to operate a regulated facility at

**Connah’s Quay Power Station
Kelsterton Road
Connah’s Quay
Deeside
Flintshire
CH5 4BP**

to the extent set out in the schedules.

The notice shall take effect from 25/11/2016.

Signed

Date

	25 November 2016
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Holly Noble
Authorised on behalf of Natural Resources Wales

Schedule 1 – conditions to be deleted

None.

Schedule 2 – conditions to be amended

The following conditions are amended as a result of the application made by the operator:

Table S1.2 in Schedule 1 shall be amended to:

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Sections 2.1 & 2.2 of the application as well as other sections of the application	06/03/2006 (Received) 17/03/2006 (Duly Made)
Response to Schedule 4 Notice Request issued on 29/09/2006	Response to question 5, 6, 7, 8, 9, 10, 14, 15, 16, 29, detailing process control, 30 detailing emissions limits	26/10/2006
Supplementary Information	Email from Bill Smith at E.ON – Connah’s Quay Power Station dated 12/01/2007	12/01/2007
Supplementary Information	Letter dated 20/11/2006 regarding two-shifting	22/11/2006
Standard Variation Application (EA/EPR/MP3337SH/V003)	Variation application Duly Made 05/06/2008	20/05/2008
Standard Variation further information request	EPR Schedule 5 Variation Further Information request dated 14/09/2008	01/09/2008
Variation Application EPR/MP3337SH/V004	Response to questions in Application Form EPC – Part C	09/11/2010
Standard Variation Application EPR/MP3337SH/V005	Sections 2.1 to 2.6 of the application “Connah’s Quay Power Station Application to Vary Permit MP3337SH – Chlorine Dioxide Dosing System Modification – October 2011.	09/12/2011
Response to Schedule 5 Notice requiring further information	The answer to question 10 of the Schedule 5 Notice (issued 29/02/2012) regarding monitoring methods and standards	23/03/2012
Additional information received	Assessment of further Chlorite Decay Tests	22/05/2012
Response to Schedule 5 Notice requiring further information	Response to Schedule 5 Notice	24/07/2012
Additional information	Response to Schedule 5 Notice	24/07/2012
Additional information	Appendix 1 – Additional Commissioning Information:- 1. Cooling tower dosing system description 2. Water commissioning 3. Chemical commissioning 4. Stage 1 of Proposed Chlorine Dioxide Introductory Dosing Plan 5. Stage 2 of Proposed Chlorine Dioxide Introductory Dosing Plan 6. Stage 3 of Proposed Chlorine Dioxide Introductory Dosing Plan Additional information supplied for clarification B5, Monitoring Methods Confirmation	17/10/2012
Additional information	Responses (Points 1 and 2)	26/10/2012
Additional information	Appendix 1 – Timescales (including durations)	19/11/2012
Variation application EPR/MP3337SH/V007	Section 3.1 of the DLN 2.6+ Upgrade Supporting Document entitled “Connah’s Quay Safety and Environmental Management System”	20/12/2012

Variation application EPR/MP3337SH/V008	Section 3.2 of the variation application document entitled 27/06/2014 EPR/MP3337SH/V008 'Connah's Quay Power Station EPR/MP3337SH Environmental permit variation application for the operation of five new auxiliary boilers at Connah's Quay Power Station' which describes the operation of the four main CCGT units and five new auxiliary boilers in double two shifting mode.	27/06/2014
Response to regulation 60(1) Notice – request for information dated 14/11/14	Compliance route and operating techniques identified in response to questions 2 (LCP compliance route), 3 (TNP evidence of notification), 4 (LCP configuration), 5 (LCP net rated thermal input), 6 (MSUL/MSDL), 9 (Proposed ELVs) and 11 (Monitoring requirements).	26/03/15
Receipt of additional information to the regulation 60(1) Notice. requested by letter dated 09/06/15	Further information received in response to questions 5 (LCP net rated thermal input), 6 (MSUL/MSDL) and 9 (Proposed ELVs).	30/06/15
Receipt of additional information to the regulation 60(1) Notice.	Further information received in response to questions 5 (LCP net rated thermal input), 6 (MSUL/MSDL) and 9 (Proposed ELVs). Including mandatory operation of gas turbines in lean pre-mix mode 6.3 after start up completed and until shut down begins.	30/10/15
Variation application EPR/NP3037AF/V003	The removal of noise attenuators from the fans in cooling towers 3 and 4 shall be carried out in accordance with Section 2.4 of the variation application report 'Application to vary the Environmental Permit at Connah's Quay Power Station to allow the removal of cooling tower attentuators and amendment to monitoring protocols.'	29/07/16

Table S1.3 in Schedule 1 shall be amended to:

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>A written plan shall be submitted to the Agency for approval detailing the results of an investigation to determine a method of gathering and storing data from the continuous pH monitoring of discharges of water from W2. The plan shall include but not be limited to a timetable for implementing the plan. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure.</p> <p>The procedure shall be implemented by the operator from the date of approval in writing by the Agency</p>	Completed
IC2	<p>The Operator shall undertake a review report of the drainage on site and shall include but not be limited to the identification of all emission points to water. The review shall include all potential discharge points on site. Where appropriate, the plan shall contain a timetable for improvements to be made. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The plan shall be implemented by the operator from the date of approval by the Agency.</p>	Completed

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC3	<p>The Operator shall undertake a written review of the best available techniques (BAT) listed within the Combustion Sector TGN IPPC S1.01 Section 2 for the emissions of oxides of nitrogen. The review shall include, but not be limited to, all of the relevant techniques listed within the TGN, the reduction in the level of pollutants (for each option) and the costs of achieving the reduction (for each option). The review shall build upon the information provided in the Schedule 4 response. The report shall include a timetable to implement any proposed changes as appropriate. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The Operator shall implement the proposals as agreed in writing with the Environment Agency.</p>	Completed
IC4	<p>A written site noise management plan detailing the measures to be used to control emissions of noise shall be submitted to the Agency for approval. This shall comply with Horizontal Guidance note H3. Where appropriate the reviewed, updated version of the plan shall include but not be limited to, a timetable for achieving the improvements to comply with the requirements of the guidance. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The updated procedure shall be implemented by the operator from the date of approval in writing by the Agency.</p>	Completed
IC5	<p>A written updated and reviewed preventative maintenance and inspection plan shall be submitted to the Agency for approval to encompass all plant whose failure could lead to an impact on the environment. The procedure shall include but not be limited to, a timetable for achieving any improvements identified. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure.</p> <p>The procedure shall be implemented by the operator from the date of approval in writing by the Agency</p>	Completed
IC6	<p>A written plan shall be submitted to the Agency for approval detailing the measures to be taken so that monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme shall have either MCERTS certification or accreditation in accordance with condition 3.6.3. The plan shall include but not be limited to, a timetable for achieving this standard for any elements that are not MCERTS certified. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure.</p> <p>The procedure shall be implemented by the operator from the date of approval in writing by the Agency</p>	Completed
IC7	<p>A written accident management plan shall be submitted to the Agency for approval to encompass all relevant aspects and measures as appropriate. This shall also include a flood protection risk assessment for the site and a review and assessment of firewater hazards. The procedure shall include but not be limited to, a timetable for achieving the improvements to comply with the requirements of the Combustion Sector Technical Guidance Note (TGN) where appropriate. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure.</p> <p>The procedure shall be implemented by the operator from the date of approval in writing by the Agency</p>	Completed

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC8	<p>A written energy efficiency plan shall be submitted to the Agency for approval detailing the results of an assessment to identify the energy efficiency priorities across the site and for building services measures. The plan shall include but not be limited to a timetable to implement any proposed changes as appropriate. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The plan shall be implemented by the Operator from the date of approval by the Agency.</p>	Completed
IC9	<p>A written site closure plan shall be submitted to the Agency for approval. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure.</p> <p>The procedure shall be implemented by the operator from the date of approval in writing by the Agency.</p>	Completed
IC10	<p>A written plan shall be submitted to the Agency for approval detailing the results of a survey to determine the integrity, adequacy and suitability of existing hard-standing, kerbing and secondary containment for above and below ground structures for raw material, chemical and oil as well as waste storage areas and the measures to comply with the requirements of the Combustion Sector TGN. This shall include but not be limited to an inspection and maintenance program for all relevant equipment identified and inspected every 3 years. Where appropriate the plan shall contain dates for the implementation of individual measures. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The plan shall be implemented by the operator from the date of approval by the Agency.</p>	Completed
IC11	<p>The Operator shall undertake a review report of the copper identified and monitored in the purge discharge to the Dee Estuary over the past 4 years. The review shall include all potential sources of copper on site. Where appropriate, the plan shall contain a timetable for the implementation of individual measures. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The plan shall be implemented by the operator from the date of approval by the Agency.</p>	Completed
IC12	<p>The Operator shall undertake a review report of the trihalomethanes identified and monitored in the purge discharge to the Dee Estuary over the past 4 years. The review shall include all potential sources on site. Where appropriate, the plan shall contain a timetable for the implementation of individual measures. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The plan shall be implemented by the operator from the date of approval by the Agency.</p>	Completed

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC13	<p>A written waste management plan shall be submitted to the Agency for approval detailing the results of an assessment to identify the best environmental options for waste recovery or disposal, waste minimisation, waste management including handling, storage and waste retention times as well as a waste management audit to comply with the requirements of the Combustion Sector TGN. The plan shall include but not be limited to a timetable to implement any proposed changes as appropriate and shall include a clause to be reviewed every 4 years. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The plan shall be implemented by the Operator from the date of approval by the Agency.</p>	Completed
IC14	<p>A written water efficiency plan shall be submitted to the Agency for approval detailing the results of an assessment to identify the water efficiency priorities across the site. The plan shall include but not be limited to a timetable to implement any proposed changes as appropriate. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The plan shall be implemented by the Operator from the date of approval by the Agency.</p>	Completed
IC15	<p>The operator shall update the site monitoring and protection plan (SPMP) to reflect the changes listed in the application for variation received 20th May 2008.</p>	Completed
IC16	<p>The site noise management plan detailing the measures to be used to control emissions of noise shall be updated to reflect the variation received on 20th May 2008 in terms of routine (quarterly) noise and continuous vibration monitoring and be submitted to Natural Resources Wales for approval. This shall include but not be limited to linking in with the maintenance systems. The plan shall also be updated to include notifying Natural Resources Wales of the results of each routine quarterly monitoring exercise. This shall comply with Horizontal Guidance note H3.</p>	Completed

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC17	<p>The operator shall undertake a review in the form of a report detailing the results of the four month dosing with chlorine dioxide trial as per duly made simple standard variation 11/12/08. The review shall include, but not be limited to, all of the methods and techniques employed in the trial, monitoring, results, plus an evaluation of the effectiveness of the trial and the quality of the final effluent, including residual by-products and benefits. The report shall include a timetable of any future proposed changes.</p> <p>The notification requirements of condition 2.4.2 shall be deemed to have been complied with on submission of the report.</p>	Completed
IC18	<p>Submit a written procedure to the Environment Agency for approval.</p> <p>The procedure must contain appropriate measures to minimise or prevent excessive plume generation from the cooling towers.</p> <p>The notification requirements of condition 2.5.2 will be deemed to have been complied with on submission of the procedure.</p> <p>You must implement the procedure as approved, and from the date stipulated by the Environment Agency.</p>	Completed
IC19	<p>Submit a written report to the Environment Agency for approval.</p> <p>The report must contain a detailed review and comparison of tower performance and plume generation before and after wet louver removal.</p> <p>If unacceptable levels of plume generation are identified post removal, appropriate remedial actions will be agreed with the Environment Agency which may include re-installation of the removed louvers.</p> <p>The notification requirements of condition 2.5.2 will be deemed to have been complied with on submission of the plan.</p>	Completed
IC20	<p>Following the completion of Stage 1 of the Chlorine Dioxide Introductory Dosing Plan, the Operator shall provide a written commissioning report to Natural Resources Wales on its implementation. The report shall include, but not be limited to:-</p> <ul style="list-style-type: none"> • monitoring results for residual chlorine dioxide and chlorite ions at the point of entry to the purge pond (from the cooling tower tanks) and exit of the purge pond (at the point of discharge to the River Dee), • an analysis of the monitoring data with consideration for the decay rates taking place within the purge pond under a range of operating conditions which are likely to occur, and • an assessment of whether additional controls are required to further minimise emissions to the River Dee. <p>The report shall identify any required improvements together with a proposed timetable for their implementation.</p>	Completed

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC21	<p>Following completion of Stage 2 of the Chlorine Dioxide Introductory Dosing Plan, the Operator shall provide a written commissioning report to Natural Resources Wales on its implementation. The report shall include, but not be limited to:-</p> <ul style="list-style-type: none"> • monitoring results for residual chlorine dioxide and chlorite ions at the point of entry to the purge pond (from the cooling tower tanks) and exit of the purge pond (at the point of discharge to the River Dee), • an analysis of the monitoring data with consideration for the decay rates taking place within the purge pond under a range of operating conditions which are likely to occur, • an assessment of whether additional controls are required to further minimise emissions to the River Dee, and • a revised environmental impact assessment for the discharge of residual chlorite ions upon the River Dee; <p>Following receipt of the commissioning report, Natural Resources Wales reserves the right to require the operator to conduct a physical survey within the River Dee (as notified in writing by Natural Resources Wales). Under such notification, the Operator shall submit proposals for carrying out such a survey, including but not limited to:-</p> <ul style="list-style-type: none"> • investigations of residual concentrations, • the effects from mixing, • re-assessment of the Predicted No-Effect Concentration „PNEC“ value, and • the zone within which the „PNEC“ is breached. <p>Where such a survey is required, this shall be done in accordance with a methodology and timetable agreed in writing by Natural Resources Wales. Data provided by this condition may be used as a means of imposing or amending permit conditions, including emission limit values for residual chlorite ions, and Residual chlorine dioxide (table S3.2).</p>	28/02/18
IC22	<p>The Operator shall undertake a review of the existing screening measures at the intakes and outfalls which provide and discharge water to and from the Installation. The review shall be undertaken with reference to the Eels (England and Wales) Regulations 2009 (SI 2009/3344) and the Environment Agency "Safe Passage of Eel" Regulatory Position Statement version 1 dated July 2012.</p> <p>The Operator shall submit details of the arrangement suitable to meet the requirements for the safe passage of eels [of the Eels (England and Wales) Regulations 2009 (SI 2009/3344)] by either:-</p> <ul style="list-style-type: none"> • Providing a written proposal for the installation of an eel screen. • Providing a written proposal to the modification of existing screening arrangements. • Providing a written response with an explanation and description of how the existing screening arrangements can be regarded to meet the requirements for the safe passage of eels [of SI 2009/3344] either without change or with mitigation measures. • Providing a written response setting out a case for an exemption <p>In all cases, the proposal shall be submitted in writing for the approval of Natural Resources Wales. Where appropriate, each proposal shall contain an assessment of alternative options considered including impacts on other fish species and an explanation of why the proposed option has been chosen.</p> <p>Where installation of eel screen; modification of existing arrangements; or mitigation measures are proposed, the submission shall contain relevant timescales for installation in accordance with the Safe Passage of Eel Regulatory Position Statement version 1 dated July 2012.</p> <p>The proposals shall be implemented in accordance with Natural Resources Wales' written approval.</p>	Completed

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC23	<p>The operator shall provide a report in writing to Natural Resources Wales on the performance of the DLN2.6+ and the Variable Load Path modifications. The report shall include the following:</p> <ul style="list-style-type: none">• Performance of DLN2.6+ in terms of NOx and CO emissions.• Proposed emission limits which apply when the load varies between MSUL/MSDL and base load during the daily reference period, for emission points A1, A2, A3 & A4 for oxides of nitrogen.• An assessment of the impacts of emissions at low load using H1 guidance or equivalent methodology.• A review of current “minimum start-up” and “minimum shut-down” parameters, and any proposed changes (with an appropriate justification), for each LCP in line with the Implementing Decision 2012/249/EU.	30 November 2016
IC24	<p>Following removal of the fan attenuators on the fans Cooling Towers 3 and 4, the operator shall carry out repairs to all malfunctioning fans in those cells to ensure that emissions of tonal noise from the fans is minimised.</p>	For each malfunctioning fan in Cooling Towers 3 and 4, within three months of date removal of that fan's attenuator.
IC25	<p>The operator shall include a procedure for the timely maintenance and monitoring of the fans referred to in IC24 in its Environmental Management System.</p>	Within three months of the date of removal of the first fan attenuator referred to in IC24.

Table S3.1(b) in Schedule 3 shall be amended to:

Table S3.1(b) Point source emissions to air from the Gas Treatment Plant (GTP)						
Emission point ref. & location	Parameter	Source	Limit (including unit)- these limits do not apply during start up or shut down.	Reference period	Monitoring frequency	Monitoring standard or method
Point A11 on site plan in Schedule 7	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	Thermal oxidiser	95mg/m ³	Hourly averaging period	Continuous	To be agreed in writing with Natural Resources Wales, and as set out in M2
Point A12 on site plan in Schedule 7	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	Gas Regen. Heater	95mg/m ³	10 minute averaging period	Every 12 months	To be agreed in writing with Natural Resources Wales, and as set out in M2
Point A11 on site plan in Schedule 7	Carbon monoxide	Thermal oxidiser	10mg/m ³	Hourly averaging period	Continuous	To be agreed in writing with Natural Resources Wales, and as set out in M2
Point A12 on site plan in Schedule 7	Carbon monoxide	Gas Regen. Heater	100mg/m ³	10 minute averaging period	Every 12 months	To be agreed in writing with Natural Resources Wales, and as set out in M2
Point A11 on site plan in Schedule 7	Sulphur dioxide	Thermal oxidiser	9950 mg/m ³	Hourly averaging period	Continuous	To be agreed in writing with Natural Resources Wales, and as set out in M2

The following conditions are amended as a result of an NRW-initiated variation:

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference period	Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 7	Flow	Main cooling water to purge to the River Dee	2.5 m ³ /s	Instantaneous	Continuous	Note 4
	Maximum temperature		25			
	Maximum temperature difference April-October		13			

Table S3.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference period	Monitoring frequency	Monitoring standard or method		
	Maximum temperature difference November-March		13 Note 8					
	Maximum temperature November – March		20					
	Salinity		60 g/l					
	pH Maximum		9					
	pH Minimum		6					
	Residual Chlorine Dioxide Note 7		Note1 Note 7					
	Residual chlorite ion Note 7		10 mg/l (absolute limit) Note 1 Note 7					
	Residual chlorite ion Note 7		5 mg/l Note 1 Note 2 Note 7					Average value Note 3 Note 7
	Total Residual Oxidant (TRO) Note 6		0.2 mg/l					Instantaneous
	Oil and grease		20 mg/l					
W2 on site plan in schedule 7	pH Maximum	Surface water drain	9			Note 4		
	pH Minimum		6					
	Oil and grease		20 mg/					
	Residual chlorine dioxide		Note 1					Note 5
W3 on site plan in schedule 7	pH Maximum	Surface water drain	9			Note 4		
	pH Minimum		6					

Note 1 Limit subject to change by Natural Resources Wales following completion of improvement condition IC21.

Note 2 This limit shall be based upon a rate of 95% compliance of all average values in a 3 monthly period.

Note 3 Average value of all instantaneous readings over a maximum 3 hour discharge period.

Note 4 As described in the answer to Q10 of the Schedule 5 Notice dated 23/03/2012.

Note 5 As detailed within Additional information supplied on 17th October 2012 “B5, Monitoring Methods Confirmation”. Methods and standards are subject to change upon completion of pre-operational measure for future development PO2, Table S1.4.

Note 6 Compliance with Emission Limit Value and Monitoring requirements for Total Residual Oxygen (TRO) effective only during dosing of cooling waters with Sodium Hypochlorite.

Note 7 Compliance with Emission Limit Values and Monitoring requirements for Residual Chlorine Dioxide and Residual chlorite ion effective only during dosing of cooling waters with Chlorine Dioxide.

Note 8 This limit shall be based upon a rate of 95% compliance of all average values in the period November to March