Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Hydro Aluminium Deeside Ltd

Wrexham Aluminium Works
Bridge Road
Wrexham Industrial Estate
Wrexham
LL13 9PS

Variation application number

EPR/BK3638IF/V003

Permit number

EPR/BK3638IF

Wrexham Aluminium Works
Permit number EPR/BK3638IF

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 allows a continuous homogeniser and sawing line to replace old less efficient equipment. In doing so, six emission points are removed and one emission point is added.

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 BK3638	Received 7/09/01	
Response to Schedule 4 Part1 Notice 11 /12/01	Received 14/01 /02	
Supplementary Information	Received 30/01/02	Map and slight amendment to waste storage information
Supplementary Information	Received 25/02/02	Further slight amendment to waste storage
Supplementary Information	Received 08/03/02	Clarification regarding monitoring details
Variation Notice EA/EPR/BK36381F/V002	Issued 14/07/09	Agency initiated Permit review
Variation Application	Received 19/03/14	
Variation Notice EPR/BK3638/IF/V003	Issued 20/06/14	

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/BK3638IF

issued to
Hydro Aluminium Deeside Ltd ("the operator")

whose registered office is

Bridge Road
Wrexham Industrial Estate
Wrexham
LL13 9PS

company registration number 1786117

to operate a regulated facility at

Bridge Road
Wrexham Industrial Estate
Wrexham
LL13 9PS

to the extent set out in the schedules.

The notice shall take effect from 20th June 2014

Name	Date
	**20 June 2014**

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 shall be amended to:

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The response to question 2.3 given in section B2.3 of the application	7/09/01
Response to schedule 4 Part 1 Notice	Response to questions 29 - 47	14/01/02
Further information attached to telefax message	Answer to question about continuous dust monitor in the new holder discharge stack	30/01/02
Proposed external scrap feedstock storage area 20102/07 and 4/06/07		Agreed 5/06/07
Noise BAT review	Section tilled "Actions to be taken by Hydro Aluminium Deeside"	18/07/08
Improvement Programme Requirement9.9	All	2/02/04
Report on potential environmental improvements to a permitted installation (4.1.3 review)	All	16/03/05
Variation application EPR/BK3638IF/V003	Application part C3 - Answer to Question 3	19/03/2014
Variation application EPR/BK3638IF/V003	supporting document entitled “Information to support an application to vary a bespoke Environmental Permit”	19/03/2014

Table S1.3 shall be amended to:

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
1	The Operator shall carry out a feasibility study into improving effluent monitoring and disposal facilities, including low measurement and representative sampling and shall submit a report of the study to the Agency. Following this study, and no later than 1 October 2002, the Operator shall submit proposals to the Agency for achieving substantial improvements in methods for determination of discharges to controlled water.	Complete
2	The Operator shall (a) install a telephone facility to receive complaint reports from the Agency or the general public during operational hours outside the hours of 9am to 5pm; and (b) instigate a procedure whereby, on receipt of a complaint report, there is no undue delay in undertaking an investigation and feeding the subsequent conclusions back to the Agency in writing.	Complete
3	The Operator shall carry out sufficient emission monitoring as part of Centre 2 commissioning to enable comprehensive and representative plant performance data to be collected on oxides of nitrogen ("NOx"). From the data, the operator shall prepare a report showing representative NOx concentrations and mass flow rates, both peak and averaged over relevant periods such as furnace cycle times, for the centre 2 furnaces. Concentrations and mass flow rates which cannot be measured shall be calculated or estimated, including (for example) in the furnace extract duct before dilution by hood extract air. The report shall also include estimates of maximum annual mass emissions from each release point on the site, and a copy shall be sent to the Agency.	Complete
4	The Operator shall submit a report to the Agency on the commissioning of the main plant and equipment used in Centre 2. The report shall contain full details of the plant configurations and activities tested and of the operating procedures and equipment settings necessary to comply with the conditions of this permit.	Complete
5	The Operator shall submit a report to the Agency, describing how noise readings on the site's continuous monitor are used to indicate (i) likely compliance or otherwise with Conditions 6.6.1 and 6.6.2, and (ii) whether noise levels at noise sensitive premises are likely to conform to Noise Rating Curves 40 (between 21:00 and 07:00 hours) and 50 {between 07:00 and 21:00 hours).	Complete
6	The Operator shall carry out an assessment of whether Centre 2 represents BAT regarding noise emissions and shall report the findings to the Agency.	Complete
7	The Operator shall carry out a review of the site's noise control policy and shall submit a review of the findings to the Agency.	Complete
8	Following the study required under Reference 9.1 above, the Operator shall submit proposals to the Agency for achieving substantial improvements in methods for determination of discharges to controlled water.	Complete

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
9	The Operator shall investigate means of improving energy efficiency of the site's homogenising furnaces and reducing their NOx emissions, and shall submit a report of findings to the Agency.	Complete
10	The Operator shall submit a report which reviews the potential impact of the site's total releases of oxides of nitrogen on sensitive habitats and their maximum contribution towards environmental NOx concentrations close to the installation.	Complete
11	The Operator shall carry out a review of the suitability of the noise monitor location and setting of monitoring periods during the night. A report of the review shall be sent to the Agency. If monitoring periods any greater than 5 minutes are proposed between the hours of 21:00 and 07:00, the report must include a justification for this proposal.	Complete
12	A report shall be sent to the Agency on establishing an Environmental Management System having regard to section 2.1 of the relevant IPPC Sectoral or other Technical Guidance. The report shall include any proposals to implement such a programme.	Complete
13	The Operator shall submit a report of a feasibility study into the elimination of all releases to air and water that could result from ingress of water into the dross storage area.	Complete
14	The Operator shall carry out a comprehensive audit of the efficiency of water use.	Complete
15	The Operator shall carry out an assessment of the quality of the Redwither Brook, in collaboration with the Agency. The Operator shall then assess the potential impact of emissions from the site on the Redwither Brook and submit a report to the Agency.	Complete
16	The operator shall submit a report reviewing the effectiveness of bag filtration plant performance monitoring. If the report identifies improvements that represent BAT, the report shall contain a timetable for implementing by 1 April 2004 the improvements to bag plant performance monitoring.	Complete
17	The operator shall submit a report on the potential concentration and mass release of dioxins and furans into air and land from the installation. The report shall include all relevant available emission data (for A 1, A 12 and waste lime) and shall identity what steps are necessary to keep releases to air below 0.1ngm•3. The report shall also contain a timetable for reducing, by 1 April 2004, emissions of dioxins and furans if the techniques for reduction represent BAT.	Complete
18	The operator shall submit a report which:- i identifies sources of ammoniacal nitrogen and BOD in discharges to water; ii reviews options for reducing these emission through minimisation at source or treatment, to below 2.5mgA for BOD and 1/5mgi1 for ammoniacal nitrogen; and iii assesses options for reducing emissions of metals, suspended solids and COD. If one of the options represents BAT the report shall contain a timetable for implementing by 1st June 2005 that option.	Complete

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
19	The operator shall submit a report reviewing the options for reducing the emissions of the pollutants listed below to below the concentrations indicated: oxides of nitrogen (as N02) 100mgm•3 at standard conditions for releases from the melting furnaces prior to dilution with hood air. Particulate matter 5mgm.J as monthly average of continuous monitor readings, from A1, A12 and A13. If one of the options represents BAT the report shall contain a timetable for implementing that option by 1 June 2005.	Complete
20	The Operator shall review the costs and benefits of installing continuous emission monitors on release points A 1 and A 12, for measuring NOx, 802, HCI, HF and VOCs. A report of the review shall be sent to the Agency.	Complete
21	The Operator shall submit a report detailing investigations into the feasibility of treating and re-using casting cooling water and site surface water.	Complete
22	The operator shall submit a report reviewing the effectiveness of dross handling, the extraction from storage areas and the containment standards required for export to dross processors. If the identified improvements represent BAT, the report shall contain a timetable for implementing the improvements by 1 June 2005.	Complete
23	The Operator shall produce and implement a noise management plan in line with Agency 30th November Guidance. (Horizontal Guidance Note IPPC H3). Confirmation shall be sent in writing to 2009 the Agency that a plan has been formulated and implemented.	Complete
24	The Operator shall carry out a review of the surface water drains on site and ensure that only clean and uncontaminated rain water is entering them. A summary report including any improvements highlighted shall be submitted to the Environment Agency.	Complete
25	The Operator shall provide the Environment Agency with a timetable for producing and implementing robust and clear procedures I works instructions to ensure that activities are carried out by all relevant staff in a manner that will secure compliance with the conditions of this Permit.	Complete
26	The Operator shall analyse the casting pit water prior to the next four releases. The determinands to be analysed for are BOD, COD, chloride, ammoniacal nitrogen, suspended solids, total petroleum hydrocarbons, aluminium , pH, temperature and discharge volume. A report summarising the results of the monitoring shall be submitted to the Agency.	Complete
27	The Operator shall submit a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution. This review shall be carried out based on the relevant BREF note.	Not required
28	The Operator shall investigate the feasibility of upgrading all continuous and extractive monitoring to air and water to ensure it is MCERTs compliant. A report summarising the findings, including a timescale for carrying out any improvements highlighted shall be provided to the Environment Agency.	Complete

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
29	The operator shall, following commission of the continuous homogeniser, submit to Natural Resources Wales a stack emissions monitoring report for the continuous homogeniser as described in section 4.2 of the document entitled " Information to support an application to vary a bespoke Environmental Permit"	31 December 2014

Table S4.1 shall be amended to:

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 As shown on drawing number CL(50)011B Rel5	Sulphur dioxide	Vent from bag filter plants 1 and 2	25 mg/m^3	4 hour average	Six monthly	BS EN 14791
	Volatile Organic Carbons (as Carbon)		20 mg/m^3		Six monthly	BS EN 12619:1999
	Gaseous fluorides (as HF)		1 mg/m^3		Six monthly	BS ISO 15713
	Hydrogen chloride		10mg/m^3	Minimum4 hr	Six monthly	BS EN 1911
	Dioxins		0.1 mg/m^3		Six monthly	BS EN 1948
	Carbon Monoxide		100 mg/m^3	4 hours	Six monthly	BS EN 15058
	Oxides of nitrogen (as $N0_{2)}$		60 mg/m^3	4 hours	Six monthly	BS EN 14792
	Particulate		For calibration purposes – no limit	Monthly average	Annual	BS EN 13284-1
	Particulate		5 mg/m^3	Daily average	Continuous	BS EN 15267-3(1)
	Particulate		10 mg/m^3	4 hour average	Continuous	BS EN 15267-3(1)
A12 As shown on drawing number CL(50)01/B Ref6	Sulphur dioxide	Vent from bag filter plant 3	25 mg/m^3	4 hour average	Six monthly	BS EN 14791

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
	Volatile Organic Carbons (as Carbon)		20 mg/m3		Six monthly	BS EN 12619:1999
	Gaseous fluorides (as HF)		1 mgIm3	-	Six monthly	BS ISO 15713
	Hydrogen chloride		10mg/m 3	Minimum4 hr	Six monthly	BS EN 1911
	Dioxins		0.1 mgIm3	-	Six monthly	BS EN 1948
	Carbon Monoxide		100 mg/m3	4 hours	Six monthly	BS EN 15058
	Oxides of nitrogen (as NO:J		60 mglm3	4 hours	Six monthly	BS EN 14792
	Particulate		For calibration purposes – no limit	Monthly average	Annual	BS EN 13284-1
	Particulate		5 mg/m3	Daily average	continuous	BS EN 15267-3(1)
	Particulate		10 mg/m3	4 hour average	Continuous	BS EN 15267-3(1)
A13 As shown on drawing number CL(50)01/B Ref4	Carbon Monoxide	Vent from holding furnace	150 mg/m3		Annual	BS EN 15058
	Oxides of nitrogen (as NO_2)		60 mg/m3		Annual	BS EN 1492
	Particulate		10 mg/m3		Continuous	BS EN 1567-3(1)
	Particulate		For calibration purposes – no limit		Annual	BS EN 1328-1
A15 As shown on drawing number CL(50)01/B Ref3	N/A	Vent from casting pit	N/A	N/A	N/A	N/A
A16 (NGR SJ 376 492)	N/A	Continuous homogeniser	N/A	N/A	N/A	N/A

Note 1: certification to the MCERTS performance standards indicates compliance with BS EN 15267-3

Schedule 3 – conditions to be added

None