

Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Holyhead Aluminium Smelter

Anglesey Aluminium Metal Ltd
Penrhos Works
P.O. Box 4
Holyhead
Anglesey
LL65 2UJ

Variation notice number
EPR/BL1100IX/V004

Permit number
EPR/BL1100IX

Holyhead Aluminium Smelter

Permit number EPR/BL1100IX

Introductory note

This introductory note does not form a part of the permit

The following notice, which is issued pursuant to regulation 20 and Part 1 of Schedule 5 of the Environmental Permitting (England and Wales) Regulations 2010 S.I.2010 No. 675 (the Regulations), gives notice of the variation of an environmental permit to operate a regulated facility.

This variation has been undertaken to impose Emission Limit Values (ELVs) on emission points 43A4, 43A8, 43A11 and 43A19 and to add template conditions relating to monitoring requirements. ELVs have been derived from monitoring data that were not available at the time of the previous variation to the permit. They are considered to represent BAT and are in line with the relevant BREF and Sector Guidance Notes.

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions, Schedule 3 lists any conditions that have been added and Schedule 4 shows any changes to the plan.

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

Status Log		
Detail	Date	Response Date
Response to Schedule 4 Part1 Notice	Notice dated 15/04/02	Response received 24/06/02
Supplementary Information	Received 02/09/02	Amended earlier Schedule 4 Part 1 Notice Responses
Response to Schedule 4 Part1 Notice	Notice dated 03/05/02	Response received 02/09/02
Supplementary Information	Received 05/11/02	Amended earlier Schedule 4 Part 1 Notice Responses
Permit BL1100	Determined 30/05/03	
Application for variation	Received 25/04/05	
Variation JP3532SB	Determined 29th June 2005	
Variation Application (DP3532KF) Duly Made	15/12/09	
Variation Notice EPR/BL1100IX/V003 issued	18/12/09	
Variation EA/EPR/BL1100IX/V004 initiated	Approved 10/06/10	
Variation EA/EPR/BL1100IX/V004 issued	19/11/10	

End of Introductory Note

Notice of variation

Environmental Permitting
(England and Wales) Regulations 2010

Permit number

EPR/BL1100IX

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2007 (SI 2000 No 3538) varies the permit as set out below.

Anglesey Aluminium Metal Ltd ("the operator"),

whose registered office is

2 Eastbourne Terrace

London

W2 6LG

company registration number **00909645**

holds a permit to operate a regulated facility at

Penrhos Works

PO Box 4

Holyhead

Anglesey

LL65 2UJ

and that permit is varied to the extent set out in Schedules 1 to 3 of this notice.

The notice shall take effect from 19-11-10

Name	Date
M. Bischer	19-11-10

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

Conditions are amended as follows:

Table S2: Reporting of monitoring data (except for emission points 43A4, 43A8, 43A11 and 43A19 for which reporting requirements are set out in Table S2.1)

Parameter	Units	Emission point	Reporting period	Period begins
Gaseous fluoride by laser monitoring, as HF	kg/day and kg/week	41A21-41A24, 42A1, 33A1	Quarterly	1 July 2003
Gaseous fluoride by extractive monitoring, as HF	kg/day and kg/week	41A23, 42A1	Quarterly	1 July 2003
Total fluoride by extractive monitoring, as F	kg/day and kg/week	41A23, 42A1, 33A1	Quarterly	1 July 2003
Gaseous fluoride (as HF)	12-monthly rolling means, kg/t of Al smelted	41A21-24 & 42A1 taken together	Quarterly	1 July 2003
Particulate fluoride (as HF)	12-monthly rolling means, kg/t of Al smelted	41A21-24 & 42A1 taken together	Quarterly	1 July 2003
Total fluoride (as F)	12-monthly rolling means, kg/t of Al smelted	41A21-24 & 42A1 taken together, 33A1	Quarterly	1 July 2003
Sulphur dioxide	12-monthly rolling means, kg/t of Al smelted	41A21-24, 42A1 & 33A1 taken together	Quarterly	1 July 2003
Total particulate matter	Monthly mean kg/day	41A23, 42A1, 33A1 41A26	Quarterly Annually	1 July 2003
Total particulate matter	mg/m ³	41A26, 31A4	Annually, Quarterly	1 July 2003
Total particulate matter	kg/quarter And 12-monthly rolling means, kg/t of Al smelted	41A21-24, 41A26, 42A1, 31A4, 33A1, and all other release points in total	Quarterly (41A26 Annually)	1 July 2003
Particulate Fluoride	kg/quarter	41A26, All release points in total, other than 41A21-24, 41A26, 42A1, 31A4, and 33A1.	Annually, Quarterly	1 July 2003
Total PAH [EPA 16] Total PAH [OSPAR11] and Benzo-a-Pyrene	mg/m ³	31A4, 33A1	six monthly	1 July 2003

Table S2: Reporting of monitoring data – continued (except for emission points 43A4, 43A8, 43A11 and 43A19 for which reporting requirements are set out in Table S2.1)

Parameter	Units	Emission point	Reporting period	Period begins
Total particulate matter	kg	All to air	Annual	1 July 2003
Total particulate fluoride (as F)	kg	All to air	Annual	1 July 2003
Total oxides of nitrogen as NO ₂	kg	All to air	Annual	1 July 2003
Carbon monoxide	kg	All to air	Annual	1 July 2003
Gaseous fluoride (as HF)	kg	All to air	Annual	1 July 2003
Total fluoride as F	kg	All to air	Annual	1 July 2003
Total fluorocarbons	kg	All to air	Annual	1 July 2003
Total PAH [EPA 16]	kg	All to air	Annual	1 July 2003
Total PAH [Borneff 6]	kg	All to air	Annual	1 July 2003
Benzo-a-pyrene	kg	All to air	Annual	1 July 2003
Carbon dioxide	t	All to air	Annual	1 July 2003
Total oxides of sulphur as SO ₂	t	All to air	Annual	1 July 2003
Flow	l/s	53W1, 53W2	Quarterly	1 July 2003
Flow	m ³ /day	53W1, 53W2	Quarterly	1 July 2003
Fluoride	mg/l	53W1, 53W3	Quarterly	1 July 2003
Total PAH [EPA 16]	mg/l	53W1, 53W3	Quarterly	1 July 2003
Suspended solids	mg/l	53W1 - 53W3	Quarterly	1 July 2003
pH	-	53W1 - 53W3	Quarterly	1 July 2003
pH minimum	-	53W1 - 53W3	Quarterly	1 July 2003
Total hydrocarbon oil	mg/l	53W1, 53W3	Quarterly	1 July 2003
Biochemical oxygen demand	mg/l	53W2	Quarterly	1 July 2003
Total fluoride (as F)	kg	All to water	Annual	1 July 2003
Total PAH [EPA 16]	kg	All to water	Annual	1 July 2003
Total PAH [Borneff 6]	kg	All to water	Annual	1 July 2003
Fluoride deposition / ambient air concentration	µgcm ⁻² /week µg/m ³	At sites as detailed in application	Every 6 months	1 July 2003
Fluoride in herbage	mg/kg		Every 6 mths	1 July 2003
Fume collection efficiency	%	based on monitoring 41A23	Quarterly	June 2005
Fume treatment efficiency	%	based on monitoring 41A23	Quarterly	June 2005

Table S3 Reporting forms		
Medium / Parameter	Form Number	Date of Form
Air	A1,A2,A3,A4,A5,A6	28/06/05
Air	A7	19/11/10
Water	W1,W2,W3	28/06/05
Energy	E1	28/06/05
Waste return	R1	28/06/05
Water Use Return	R2	28/06/05
Out-plant monitoring return	M1	28/06/05
Performance Indicators	P1,P2	28/06/05
Release summaries	S1,S2	28/06/05

Schedule 3 – conditions to be added

Conditions are added as follows:

- 2.10.4 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 2.10.5 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 2.10.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

Table 6.1.3 Emission limits into air – emission points 43A4, 43A8, 43A11 and 43A19						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
43A4 [as specified in table 6.1.1]	Particulate matter	"A" Charger	5 mg/m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 15267-3
43A4 [as specified in table 6.1.1]	Fluoride (total fluoride including boron trifluoride)	"A" Charger	1 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS ISO 15713
43A4 [as specified in table 6.1.1]	Hydrogen chloride	"A" Charger	5 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 1911
43A4 [as specified in table 6.1.1]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	"A" Charger	60 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 14792
43A4 [as specified in table 6.1.1]	Sulphur dioxide	"A" Charger	50 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 14791
43A4 [as specified in table 6.1.1]	Carbon monoxide	"A" Charger	150 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 15058
43A4 [as specified in table 6.1.1]	VOC	"A" Charger	50 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 13526

Table 6.1.3 Emission limits into air – emission points 43A4, 43A8, 43A11 and 43A19 (continued)						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
43A8 [as specified in table 6.1.1]	Particulate matter	“B” charger and holding furnace	5 mg/m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 15267-3
43A8 [as specified in table 6.1.1]	Fluoride (total fluoride including boron trifluoride)	“B” charger and holding furnace	1 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS ISO 15713
43A8 [as specified in table 6.1.1]	Hydrogen chloride	“B” charger and holding furnace	5 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 1911
43A8 [as specified in table 6.1.1]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	“B” charger and holding furnace	60 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 14792
43A8 [as specified in table 6.1.1]	Sulphur dioxide	“B” charger and holding furnace	50 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 14791
43A8 [as specified in table 6.1.1]	Carbon monoxide	“B” charger and holding furnace	150 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 15058
43A8 [as specified in table 6.1.1]	VOC	“B” charger and holding furnace	50 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 13526

Table 6.1.3 Emission limits into air – emission points 43A4, 43A8, 43A11 and 43A19 (continued)						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
43A11 [as specified in table 6.1.1]	Particulate matter	"C" charger	5 mg/m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 15267-3
43A11 [as specified in table 6.1.1]	Fluoride (total fluoride including boron trifluoride)	"C" charger	1 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS ISO 15713
43A11 [as specified in table 6.1.1]	Hydrogen chloride	"C" charger	5 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 1911
43A11 [as specified in table 6.1.1]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	"C" charger	60 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 14792
43A11 [as specified in table 6.1.1]	Sulphur dioxide	"C" charger	50 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 14791
43A11 [as specified in table 6.1.1]	Carbon monoxide	"C" charger	150 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 15058
43A11 [as specified in table 6.1.1]	VOC	"C" charger	50 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 13526

Table 6.1.3 Emission limits into air – emission points 43A4, 43A8, 43A11 and 43A19 (continued)						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
43A19 [as specified in table 6.1.1]	Particulate matter	Continuous homogenising unit	5 mg/m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 15267-3
43A19 [as specified in table 6.1.1]	Fluoride (total fluoride including boron trifluoride)	Continuous homogenising unit	1 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS ISO 15713
43A19 [as specified in table 6.1.1]	Hydrogen chloride	Continuous homogenising unit	5 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 1911
43A19 [as specified in table 6.1.1]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Continuous homogenising unit	60 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 14792
43A19 [as specified in table 6.1.1]	Sulphur dioxide	Continuous homogenising unit	50 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 14791
43A19 [as specified in table 6.1.1]	Carbon monoxide	Continuous homogenising unit	150 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 15058
43A19 [as specified in table 6.1.1]	VOC	Continuous homogenising unit	50 mg/ m ³	Mean value over 4 hour reference period	Bi-annual	BS EN 13526

Table S2.1 Reporting of monitoring data for emission points 43A4, 43A8, 43A11 and 43A19			
Parameter	Units	Reporting period	Period begins
Particulate matter	mg/m ³	Bi-annually	31/12/2010
Fluoride (total fluoride including boron trifluoride)	mg/ m ³	Bi-annually	31/12/2010
Hydrogen chloride	mg/ m ³	Bi-annually	31/12/2010
Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	mg/ m ³	Bi-annually	31/12/2010
Sulphur dioxide	mg/ m ³	Bi-annually	31/12/2010
Carbon monoxide	mg/ m ³	Bi-annually	31/12/2010
VOC	mg/ m ³	Bi-annually	31/12/2010

Schedule 4 – amended plan

None