

Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2016

CeramTec UK Ltd

**Ruabon Electroceramics
Vauxhall Industrial Estate
Ruabon
Wrexham
LL14 6HY**

Variation number

EPR/PP3834CB/V003

Permit number

EPR/PP3834CB

Ruabon Electroceramics

Permit number EPR/PP3834CB

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.
The changes applied to the permit are:

1. *Changes to monitoring methods at air emission points B6 and B24*

Historically there has been significant variability in emission monitoring results for emission point B6 and B24. Changes have been proposed to provide a more consistent approach to monitoring at these points.

Annual monitoring for emission point B6 will be completed while the plant is processing a specific formulation. The formulation used will be representative of the lead formulations produced on site.

Annual monitoring for emission point B24 will occur over two days; particulate testing will occur on one day and lead testing will occur on the other.

2. *Changes to the Emission Limit Values for Lead and Particulates at emission points B6 and B24*

Historic monitoring results for emission points B6 and B24 show variable emission and indicates routine exceedance of the permitted limits. The sector guidance relevant to the installation's activities (EPR 4.03) sets BAT limits for lead and particulate emissions at 10 times and 2.5 higher than the permit's current limits.

Emission limits for emission points B6 and B24 have been aligned to those in the sector guidance.

3. *Change the Emission Limits from concentration to mass emission limits at air emission points B6 and B24*

Activities at the installation are performed in batch processes, and site emissions are therefore not continuous.

Emission limits for emission points B6 and B24 have changed from concentration based limits to total mass emission limits. Long term (annual) mass emission limits for these points are based on sector guidance emission limits and have been calculated on a pro rata basis based on prior equipment running data.

4. *Rationalisation of positioning and number of kilns*

Since 2010 a programme to rationalise the number and location of kilns has lead to the net reduction of 8 kilns at site. The issued permit does not clearly reflect this change.

An update has been provided as to the location of site equipment in relation to their emission points.

5. *Addition of emission point B31 to the Kiln Department*

A new emission point has been added to the site layout following the kiln rationalisation.

6. *Change of activity classification site's existing Effluent Treatment Plant*

The process treating the site's waste through the effluent treatment plant has been assessed as surpassing the threshold for this regulated activity and is now classed as a listed activity (under EPR).

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 BY0354IB (BY0364IB/A001)	Received 03/12/2004	
Request for further information	28/04/2005	17/08/2005
Permit determined BY0364IB (BY0364IB/A001)	31/08/2005	
Application for variation NP3338LX (BY0364IB/V002)	Received 13/03/2006	
Request for further information	12/05/2006	30/05/2006 and 03/07/2006
Provision of supplementary information	Received 18/07/2006	
Variation determined NP3338LX (BY0364IB/V002)	18/07/2006	
Application for variation FP3838MT (BY0364IB/V003)	Received 11/10/2006	
Request for further information	22/12/2006	22/01/2007 and 01/02/2007
Variation determined FP3838MT (BY0364IB/V003)	26/02/2007	
Application for variation QP3232UM (BY0364IB/V004)	Received 13/06/2007	
Provision of supplementary information	Received 22/08/2007	
Variation determined QP3232UM (BY0364IB/V004)	23/08/2007	
Application EPR/BY0364IB/V005	Duly made 01/12/2010	
Variation issued	25/01/2011	
Transfer application EPR/PP3834CB/T001	Duly made 21/03/2012	Full transfer of permit EPR/BY0364IB
Transfer issued	15/05/2012	
Application EPR/PP3834CB/V002 (Variation and consolidation)	15/05/2012	
Variation determined EPR/PP3834CB/V002	26/09/2012	Varied and consolidated permit issued in modern condition format.
Transfer application EPR/PP3834CB/T002	Duly made 06/04/2017	
Transfer Issued EPR/PP3834CB/T002	12/5/2017	Transfer from Morgan Technical Ceramics Ltd to CeramTec UK Ltd
Variation Application EPR/PP3834CB/V003	Duly Made 02/08/2017	Variation improve monitoring quality, update air emission limits, and update kiln positions within permit.
Variation Issued EPR/PP3834CB/V003	21/12/2017	

End of introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2016

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 2016 varies

Permit number
EPR/PP3834CB

issued to:

CeramTec UK Ltd ("the operator")

whose registered office is:

**Antelope Park
Bursledon Road
Thornhill
Southampton
SO19 7TG**

company registration number **00851165**

to operate a regulated facility at:

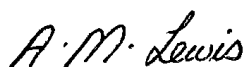
**Ruabon Electroceramics
Vauxhall Industrial Estate
Ruabon
Wrexham
LL14 6HY**

to the extent set out in the schedules.

The notice shall take effect from 21 December 2017.

Signed

Date



21 December 2017

Anna Lewis, Principal Permitting Officer

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 S1.1 shall be amended to:

Table S1.1 Activities		
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
Section 4.2 Part A(1)(a)(v) Producing inorganic chemicals such as non-metals, metal oxides, metal carbonyls or other inorganic compounds	Manufacture of electroceramic materials using antimony trioxide, gallium oxide and lead oxide	Receipt of raw materials to storage of finished product, including storage of raw materials, preparation of raw materials, powder milling, drying, calcine firing, spray drying and blending, powder pressing, binder burn-out, sinter firing, cleaning of equipment, waste storage
Section 5.3 Part A(1)(a)(ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment	Processing of Waste water at Effluent Treatment plant. D09 Physico-chemical treatment of waste water prior to any other disposal operation	Wastewater is expected to arise from material storage areas, ceramic production areas, aerial scrubbers, and equipment cleaning activities. Separation of suspended solids from waste water through pH manipulation and forced coagulation. Contaminants shipped off site for metal recovery.
Directly Associated		
Directly Associated Activity	Process control and material development areas	

Table S1.2 shall be amended to:

Table S1.2 Operating Techniques		
Description	Parts	Date Received
Application	The response to questions 2.1 given in Section 4 of the application (In-process controls) and 2.2 given in Section 5 of the application (Emissions control and abatement).	03/12/04
Application for Variation	The response given in sections C2.1 (in-process controls) and C2.2 (emissions control and abatement) of the Application for Variation.	13/03/06
Re-submission of Schedule 7 in response to letter dated 27 June 2006 requesting further clarification of original response made 30 May 2006.	The response to questions 1 to 6 of the Schedule (pages 1 — 27) and the response to question 10 of the letter.	03/07/06
Supplementary information provided by the Operator.	Points 1, 5 and 6.	18/07/06
Application for Variation.	The response given in sections C2.1 (in-process controls), C2.2 (emissions control and abatement) and C2.10 (emissions monitoring) of the Application for Variation.	11/10/06
Schedule 7 response	The response to questions 2, 5, 6, 8, 9 and 11-23 of the Schedule.	22/01/07

Table S1.2 Operating Techniques		
Description	Parts	Date Received
Additional information provided by the Operator	The response to points, iv and v of the letter dated 24 January 2001 requesting clarification of Schedule 7 response	01/02/07
Application for Variation	The response given in section C2.1 (in-process switch controls), C2.2 (emissions monitoring) of the Application for Variation (excluding pg42 and the response regarding point B24/B28).	13/06/07
Supplementary Information sent by operator	The information on pages 2-3 (emission hours), 41-42 (mould firing and spray dryer change), 45 (binder use) of the response.	22/08/07
Application for Variation	The response given in form C2 table 1, form C3 table 2, non-Technical Summary, Technical Summary, and Revised Drawing PPC 05.	01/12/10
Variation and consolidation application	The responses given in form C2 table 1, form C3 table 2, 3 & 5, Non-Technical Summary, Technical Summary, and Revised Drawing PPC 05.	21/03/2012
Request for additional information	Responses to questions 1, 2 and 4	05/07/2010
Application for Variation EPR/PP3834CB/V003	The 'Supporting Information' document , specifically, Section 2; 7. Changes to the monitoring at point B6 and B24; 8. Changes to the Compliance Limits for Lead and Particulates at points B6 and B24; and 9. Rationalisation of Positioning and Number of kilns.	15/06/2017

Table S3.1 shall be amended to:

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference period	Monitoring frequency	Monitoring standard or method
B1	Calcine Kiln: PZT Material (Gas)	No Parameter Set	No Limit Set	-	-	-
B4	Calcine Kiln: Flue no 1 Dielectric (Gas)	No Parameter Set	No Limit Set	-	-	-
B5	Calcine Kiln: Flue no 2 Dielectric	No Parameter Set	No Limit Set	-	-	-
B6	Wet Process Spray Drier: Dielectric Material (Gas)	Lead	4.0 kg/year	Spot Monitoring	Annual	BS EN 14385
		Particulates	22.6kg/year			BS EN 13284-1:2002
B7	Press Area Dust Collector: PZT & Dielectric	Lead	0.2 mg/Nm3	Spot Monitoring	Annual	BS EN 14385
		Particulates	2.0 mg/Nm3			BS EN 13284-1:2002
B8	Binder Burn Off Oven: PZT	No Parameter Set	No Limit Set	-	-	-
B9	Binder Burn Off Oven: Dielectric	No Parameter Set	No Limit Set	-	-	-
B11	Sinter Fire Kiln: PZT	No Parameter Set	No Limit Set	-	-	-
B12	Sinter Fire Kiln: Dielectric	No Parameter Set	No Limit Set	-	-	-
B13	Building Ventilation	No Parameter Set	No Limit Set	-	-	-
B14	Calcine Kiln (Dielectric) GemcoPre-Fire Kiln (PZT) Elino O2 Sinter Kiln (PZT)	No Parameter Set	No Limit Set	-	-	-
B15	Calcine Kiln (Dielectric),	No Parameter Set	No Limit Set	-	-	-
B17	Sinter Fire Kiln: PZT (Gas)	No Parameter Set	No Limit Set	-	-	-
B18	Sinter Fire Kiln: PZT (Gas), KF4 Calcine Kiln (Dielectric)	No Parameter Set	No Limit Set	-	-	-

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference period	Monitoring frequency	Monitoring standard or method
B22	Lead dust collector for PZT Area, Powder Preparation Department	No Parameter Set	No Limit Set	-	-	-
B23	Lead dust collector for bead mill and dry process powder preparation dept.	No Parameter Set	No Limit Set	-	-	-
B24	Spray Dryer: PZT (Gas)	Lead	1.3 kg/year	Spot Monitoring	Annual	BS EN 14385
		Particulates	3.3 kg/year			BS EN 13284-1:2002
B25	2 Laboratory Kilns (mixed)	No Parameter Set	No Limit Set	-	-	-
B26	Calcine Kilns, Drying ovens and Linn 1300 Sinter 02 Kiln (PZT)	No Parameter Set	No Limit Set	-	-	-
B27	General Dust Collector, Weigh Station etc, Powder Preparation Dept	No Parameter Set	No Limit Set	-	-	-
B29	Govt Contract Dust Collector	No Parameter Set	No Limit Set	-	-	-
B30	Binder Burn Off Oven, Sinter Fire Kiln: PZT	No Parameter Set	No Limit Set	-	-	-
B31	Binder Burn Off Oven PZT	No Parameter Set	No Limit Set	-	-	-

Table S4.3 shall be amended to:

Table S4.3 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form Air 1 or other form as agreed in writing by the Environment Agency	21/12/2017
Sewer	Form Sewer 1 or other form as agreed in writing by the Environment Agency	21/09/2012
Water usage	Form Water usage 1 or other form as agreed in writing by the Environment Agency	21/09/2012
Energy usage	Form Energy 1 or other form as agreed in writing by the Environment Agency	21/09/2012
Waste Disposal and Recovery	Form Waste 1 or other form as agreed in writing by the Environment Agency	21/09/2012
Other performance indicators	Form Performance 1 or other form as agreed in writing by the Environment Agency	21/09/2012

Schedule 3 – conditions to be added

None

Schedule 4 – amended plan

