

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Morgan Technical Ceramics Ltd

Ruabon Electroceramics
Vauxhall Industrial Estate
Ruabon
Wrexham
LL14 6HY

Variation application number
EPR/PP3834CB/V002

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 and consolidation of an environmental permit.

The consolidation is to include a series of previous permit variations into one consolidated permit at the request of the operator. At the same time, the permit has been varied to include the following new equipment:

1. an electro-coagulation plant to treat site effluent prior to discharge via discharge point S1 (this replaces the existing effluent treatment plant);
2. a small sintering kiln; this is back-up equipment for a manufacturing process undertaken at another site owned by the operators company, and should only be operated as a contingency to cover short-term production disruption at the other site. This kiln will discharge through an existing discharge point, B14.

The schedules specify the changes made to the 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 BY0364IB (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.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

permit number
EPR/PP3834CB

issued to
Morgan Technical Ceramics Ltd (“the operator”)

whose registered office is

Bewdley Road
Stourport-on-Severn
Worcestershire
DY13 8QR

company registration number 262938

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 26/09/2012

Name	Date
Eirian MacDonald	26/09/2012

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Morgan Technical Ceramics Ltd

Ruabon Electroceramics
Vauxhall Industrial Estate
Ruabon
Wrexham
LL14 6HY

Permit number

EPR/PP3834CB/V002

Ruabon Electroceramics

Permit number EPR/PP3834CB

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows. The operator manufactures electroceramic materials; the activity is relevant under Schedule 1, Part 2, Section 4.2 A(1) (d) of the Environmental Permitting Regulations 2010 due to the use of lead, gallium and antimony in the manufacture of the electroceramic materials. The process includes receipt and storage of raw materials including lead oxide, antimony trioxide and gallium oxide, preparation of powder, powder milling, drying, calcine firing, spray drying and blending, powder pressing, binder burn-out, sinter firing, cleaning of equipment, and waste storage. Associated activities include laboratory and process support activities and effluent treatment. Maximum annual production of electroceramic materials is in the region of 250 tonnes. Releases are made to air (particulates including lead and VOCs), to sewer (from effluent treatment plant to Five Fords Sewage Treatment Works) and to a controlled water. The release to the latter is uncontaminated surface water drainage via a drainage ditch to Aberderfyn Brook. Releases to air are via 22 stacks, of which 4 give rise to the majority of the air emissions. These 4 release points are abated.

The nearest Site of Special Scientific Interest (SSSI) is Nant-y-Belan and Prynella Woods, which is at a distance of 4.3 km from the Installation. There are a further 7 SSSI's within a distance of 10km. There are two Special Area of Conservation within 10 km of the site, one at 113 m (Johnstown Newt Sites) and one at 4.3 km (Berwyn a Mynyddoedd De Clwyd/Berwyn and South C1). The Agency has concluded that the operation has no adverse effect on any Natura 2000 sites and is not considered to have an adverse effect on any important ecological sites.

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

Status log of the permit

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Application BY0364IB (BY0364IB/A001)	Received 03/12/2004	
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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.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number
EPR/PP3834CB

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010

Morgan Technical Ceramics Ltd (“the operator”),

whose registered office is

Bewdley Road
Stourport-on-Severn
Worcestershire
DY13 8QR

company registration number 262938

to operate an installation at

Ruabon Electroceramics
Vauxhall Industrial Estate
Ruabon
Wrexham
LL14 6HY

to the extent authorised by and subject to the conditions of this permit.

Name	Date
Eirian MacDonald	26/09/2012

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
- (b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
- (b) maintain records of raw materials and water used in the activities;
- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
 - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
 - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 (a) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- (b) If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan specified in schedule 1, table S1.2 or otherwise required under this permit, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.3 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

2.5 Pre-operational conditions

- 2.5.1 The operations specified in schedule 1 table S1.4 shall not commence until the measures specified in that table have been completed.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1, S3.2 and S3.3;

- 3.3.2 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.
- 3.3.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.3.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3 unless otherwise agreed in writing by the Environment Agency.

3.4 Odour

- 3.4.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.4.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Noise and vibration

- 3.5.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.5.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan;
 - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

- 4.1.1 All records required to be made by this permit shall:
- (a) be legible;

- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data; and
- (b) the performance parameters set out in schedule 4 table S4.2 using the forms specified in table S4.3 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.3 ; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

4.3.1 The Environment Agency shall be notified without delay following the detection of:

- (a) 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;

- (b) the breach of a limit specified in the permit; or
 - (c) any significant adverse environmental effects.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
 - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (a) any change in the operator's name or address; and
 - (b) any steps taken with a view to the dissolution of the operator.
- 4.3.4 In any other case:
- (a) the death of any of the named operators (where the operator consists of more than one named individual);
 - (b) any change in the operator's name(s) or address(es); and
 - (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
- (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
- (a) a decision by the Secretary of State not to re-certify the agreement;
 - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and

- (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made “without delay”, in which case it may be provided by telephone.

Schedule 1 - Operations

Table S1.1 activities

Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
S4.2 A(1)(d)	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.
Directly Associated Activity		
Directly Associated Activity	Process control and material development areas	
Directly Associated Activity	Effluent Treatment Plant	Treatment of wastewater from floor drains

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
Additional information provided by the Operator	The response to points, iv and v of the letter dated 24 January 2007 requesting clarification of Schedule 7 response.	01/02/07
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 (excluding pg42 and the response regarding point B24/28).	13/06/07
Supplementary Information sent by Operator	The information on pages 2-3 (emission hours), 41-42 (mould firing and spray drier 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,	01/12/10

		Non-Technical Summary, Technical Summary, and Revised Drawing PPC 05,	
Variation and consolidation application		The responses given in section form C2, table 1, form C3 tables 2, 3 & 5, Non-Technical Summary, Technical Summary, and Revised Drawing PPC 05,	21/03/2012
Request for additional information		Response to questions 1, 2 and 4	05/07/2012

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC1 (previously 15)	<p>The Operator shall conduct commissioning trials and monitoring to demonstrate that the new equipment is operating as expected and in accordance with Best Available Techniques. Monitoring of emission points B7, B14, B26, B18 and B24 shall include, but not be exclusive to, lead (vapour and particulate), particulate matter and total Volatile Organic Compounds (as carbon). The Operator shall use monitoring standards as required by condition 3.3.3.</p> <p>The Operator shall submit a report detailing the outcome of the commissioning trials and monitoring to the Environment Agency. The report shall include, but not be exclusive to, the results of the monitoring, and any measures required to optimise these units.</p>	Submitted
IC2 (previously 16)	<p>The Operator shall carry out an investigation into surrogate measures that could be employed to demonstrate correct operation of the scrubbers used to abate emissions from the Ruabon and Eindhoven spray driers. Following completion, the Operator shall submit a report to Agency detailing the assessment and proposals for any improvements identified.</p>	15/12/12
IC3 (previously 17)	<p>The Operator shall carry out a review of unabated emissions of lead (vapour and particulate), particulate matter and volatile organic compounds (as carbon) from the Installation and identify emission points that are priorities for control. Following completion, the Operator shall submit a report to Agency detailing the assessment and proposals for any improvements identified.</p>	Completed
IC4 (previously 19)	<p>The operator shall complete a BAT assessment of the emission control measures employed for the priority emission points that are identified by the outcome of improvement programme item IC3.</p>	Submitted
IC5 (previously 20)	<p>The Operator shall undertake a programme of monitoring for emission points B26, B27 and B30 for emissions of Lead, Particulate Matter (Pm) and Volatile Organic Compounds (VOCs) in accordance with the latest relevant Environment Agency Monitoring Technical Guidance Notes and Sector Guidance for the Inorganic Chemicals Sector (EPR 4.03).</p> <p>Following completion of the monitoring, a report shall be submitted to the Environment Agency detailing:-</p> <ul style="list-style-type: none"> • Results from the monitoring specified above, together with details of the methodologies and standards used. • Results of Lead, Pm and VOC emissions from all other relevant emission points (table S3.1) excluding B10 - based on either estimation (by utilising any previous monitoring results) or from a new programme of monitoring. Details of the methodologies and standards used shall be provided. • An impact assessment (for example Environment Agency H1, Air Quality Modelling, or Mass Balance Calculation) of total emissions of Lead, Pm and VOCs from the Installation as a whole, based upon the results obtained above. <p>The Environment Agency may impose additional emission limit values or monitoring requirements to those specified in table S3.1 following completion of this improvement condition.</p>	Submitted

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC6	The operator shall propose, in writing to the Environment Agency, a programme to monitor aluminium in effluent discharged from the electro-coagulation plant. Once the proposed monitoring programme is agreed in writing with the Environment Agency, the operator shall carry out the monitoring programme and shall report results to the Environment Agency within 1 month of the end of the agreed monitoring programme. The Environment Agency shall review the report and determine whether further controls and/or monitoring of aluminium in the discharged effluent are required.	30/10/12- Submit proposal
IC7	The operator shall review and revise the report submitted to the Environment Agency to address IC1, to include the results of monitoring emissions to air from the new sinter kiln discharging via emissions point B14, added by variation EPR/PP3834CB/V002	Within 4 months of the new sinter kiln being installed at the site.
IC8	The operator shall review the findings of IC1, IC3, IC5 and IC7, in discussion with Environment Agency, and identify emissions points which require further monitoring in order to characterise operational emissions. The operator shall then propose, in writing, a monitoring programme to characterise operational emissions to air. This will provide the Environment Agency with sufficient data on which to base a review of emissions to air and permitted emission limit values.	30/04/2013 submit proposal.

Table S1.4 Pre-operational measures for future development

Reference	Operation	Pre-operational measures
1	Electro-coagulation Effluent Treatment Plant	The operator shall submit a report after commissioning the electro-coagulation effluent treatment plant, demonstrating that the plant will achieve the emission limit values set in Table S3.3 and reporting aluminium concentrations in the discharged effluent. The report shall include an assessment of the environmental impact of emissions to sewer. The report shall be supplied to the EA. The operator shall not commence operating the effluent treatment plant until written notification to commence operation of the effluent treatment plan is received from the Environment Agency.

Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels

Raw materials and fuel description	Specification
-	-

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & source ^[1]	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
B1 Calcine Kiln – PZT Material (Gas)	-	-	-	-	-
B4 Calcine Kiln – Flue No 1 Dielectric Material (Gas)	-	-	-	-	-
B5 Calcine Kiln – Flue No 2 Dielectric Material (Gas)	-	-	-	-	-
B6 Wet Process Spray Drier :Dielectric Material (Gas)	Lead	0.2 mg/m ³	Spot monitoring	Annual	BS EN 14385
	Particulates	3 mg/m ³	Spot monitoring	Annual	BS EN 13284-1:2002
B7 Press Area Dust Collector :PZT & Dielectric Materials	Lead	0.2 mg/m ³	Spot monitoring	Annual	BS EN 14385
	Particulates	2 mg/m ³	Spot monitoring	Annual	BS EN 13284-1:2002
B8 Binder Burn Off Oven : PZT Material	-	-	-	-	-
B9 Binder Burn Off Oven : Dielectric Material	-	-	-	-	-
B11 Sinter Fire Kiln : PZT Material	-	-	-	-	-
B12 Sinter Fire Kiln : Dielectric Material	-	-	-	-	-
B13 Sinter Fire Kiln (Dielectric) + O2 Firing Kiln : PZT Material	-	-	-	-	-
B14 Calcine Kiln (Dielectric) + Gemco Pre-fire Kiln (PZT) + Elino O2 Sinter Kiln (PZT) + Small Sinter Kiln (Ohio, PZT)	-	-	-	-	-
B15 Calcine Kiln (Dielectric)	-	-	-	-	-
B17 Sinter Fire Kiln : PZT Material (Gas)	-	-	-	-	-
B18 Sinter Fire Kiln (PZT Material)+ KF4 Calcine Kiln (Dielectric Material)	-	-	-	-	-
B22 Lead dust collector for PZT Area, Powder Preparation Department	-	-	-	-	-
B23 Lead dust collector for bead mill and “dry process”, Powder Preparation Department	-	-	-	-	-
B24	Lead	0.2 mg/m ³	Spot monitoring	Annual	BS EN 14385

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & source ^[1]	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Spray Drier : PZT Material (Gas)	Particulates	2 mg/m ³	Spot monitoring	Annual	BS EN 13284-1:2002
B25 2 Laboratory Kilns (both materials)	-	-	-	-	-
B26 Calcine Kilns, Drying Ovens and Linn 1300 Sinter O2 Kiln (PZT Material)	-	-	-	-	-
B27 General Dust Collector, Weigh Station etc, Powder Preparation Department	-	-	-	-	-
B29 Government Contract Dust Collector	-	-	-	-	-
B30 Binder Burn Off Oven / Sinter Fire Kiln : PZT Material	-	-	-	-	-

1. Emission point locations are shown on the site plan in Schedule 7

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

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 to Aberderfyn Brook via drain, as shown in Fig 11 of Application.	Uncontaminated surface water	Site surface water drainage	-	-	-	-

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 on site plan in schedule 7 emission to Five Fords Sewage Treatment Works	Lead	Effluent Treatment Plant	0.5 mg/l	Spot sample	6 months	UKAS Approved method
S1 on site plan in schedule 7 emission to Five Fords Sewage Treatment Works	Zinc	Effluent Treatment Plant	2 mg/l	Spot sample	6 months	UKAS Approved method

Schedule 4 - Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.3.1.	B6, B7, B24	Every 12 months	1 January
Emissions to sewer Parameters as required by condition 3.3.1	S1	Every 6 months	1 January, 1 July

Table S4.2 Performance parameters

Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Waste disposal and recovery	Annually	tonnes
Other performance indicators	Annually	-

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	21/09/2012
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 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	PP3834CB
Name of operator	Morgan Technical Ceramics Ltd
Location of Facility	Ruabon Electroceramics
Time and date of the detection	

(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 within 24 hours of detection	
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 within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

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 within 24 hours of detection	
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.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
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	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 - Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit..

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“year” means calendar year ending 31 December.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

END OF PERMIT