



Environmental Permitting (England and Wales) Regulations 2016

Variation Notice

To: Morgan Technical Ceramics Certech Ltd
92c-d Brunel Road
Earlstrees Industrial Estate
Corby
Northamptonshire
NN17 4JW

Corby Borough Council ("the Council"), in the exercise of the powers conferred upon it by regulation 20 of the Environmental Permitting Regulations 2016 (as amended) (the Regulations) hereby gives you notice as follows:

The Council has decided to vary the conditions of Permit Reference Number 38 in respect of the operation of an installation at Morgan Technical Ceramics Certech Ltd 92c-d Brunel Road, Earlstrees Industrial Estate, Corby, Northamptonshire, NN17 4JW

The variation of the conditions of the permit and the date on which they are to take effect are specified in [Schedule 1] to this notice. A consolidated permit as varied by this notice is set out in [Schedule 2].

Signed on behalf of Corby Borough Council

A handwritten signature in blue ink, appearing to be "A. A. A.", written over a horizontal line.

Date 24th August 2017

Environmental Protection and Private Sector Housing Manager
Authorised Officer of the Council

Schedule 1

The variations to the Permit which the Council has decided to make:	Date(s) on which the variation of the permit is to take place:								
<p>Update Regulations from Environmental Permitting (England and Wales) Regulations 2010 to Environmental Permitting (England and Wales) Regulations 2016</p> <p>Remove extraneous descriptive wording.</p> <p>Revise process description.</p> <p>Remove all conditions and replace with:</p> <p>1. <u>Emissions and Monitoring</u></p> <p>1.1 There shall be no visible emissions from the permitted installation.</p> <p>1.2 Emissions from the permitted installation, other than steam or condensed water vapour, shall be free from persistent mist and free from persistent fume.</p> <p>1.3 The introduction to dilution to air to achieve compliance with Emission Limit Values (ELV) shall not be permitted.</p> <p>1.4 Emissions from any combustion processes shall, in normal operation be free from smoke and in any case shall not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742:2009.</p> <p>1.5 There shall be no offensive odour emitted from the installation detected beyond the installation boundary marked as perceived by the Regulator.</p> <p>1.6 If visible or offensive odour emissions are detected, immediate action shall be taken to determine the cause of the emission and to resolve the malfunction responsible for the emission. Contingency arrangements shall be instigated to prevent or reduce to a minimum any further odour emissions caused by the malfunction. The regulator shall be notified of any such occurrence as soon as practicable.</p> <p>1.7 The number of start – up and shut – downs shall be kept to a minimum that is reasonably practicable and all appropriate precautions must be taken to minimise emissions.</p> <p>1.8 Emissions requirements and methods and frequency of monitoring are set out within Table 1 below:</p> <p>Table 1</p> <table border="1" data-bbox="134 1868 1235 2072"> <thead> <tr> <th>Pollutant and Source</th> <th>Emissions Limits / Provisions</th> <th>Type of monitoring</th> <th>Monitoring Frequency</th> </tr> </thead> <tbody> <tr> <td>Particulate Matter for kilns with a thermal input of less than 2MW</td> <td>Shall not exceed Ringelmann Shade1</td> <td>Operator observations</td> <td>During abnormal operations</td> </tr> </tbody> </table>	Pollutant and Source	Emissions Limits / Provisions	Type of monitoring	Monitoring Frequency	Particulate Matter for kilns with a thermal input of less than 2MW	Shall not exceed Ringelmann Shade1	Operator observations	During abnormal operations	<p>With immediate effect.</p>
Pollutant and Source	Emissions Limits / Provisions	Type of monitoring	Monitoring Frequency						
Particulate Matter for kilns with a thermal input of less than 2MW	Shall not exceed Ringelmann Shade1	Operator observations	During abnormal operations						

Particulate Matter to all emissions to air	No visible emission < 10 mg/m ³	Operator observations	Daily checks
Particulate Matter to arrestment equipment with an exhaust flow rate of >100 m ³ /min	50 mg/m ³	Indicative Monitoring	Continuously
Fluoride (expressed as hydrogen fluoride) in all kilns with a thermal input on 2MW or more.	10 mg/m ³	Manual extractive testing	Annually

- 1.9** The concentrations of the substances listed in Table 1 shall be expressed at reference conditions 273K, 101.3kPa, without correction for water vapour content and averaged over a 15 minute mean.
- 1.10** All continuous monitoring readings shall be on display to appropriately trained operating staff. Instruments shall be fitted with audible and visual alarms, situated appropriately to warn the operator of arrestment plant failure or malfunction, and these shall be automatically recorded.
- 1.11** All continuous monitors shall be operated, maintained and calibrated (or referenced, in the case of indicative monitors) in accordance with the manufacturers' instructions, which shall be made available for inspection by the Regulator, and shall be recorded.
- 1.12** For extractive testing, exhaust flow rates shall be consistent with efficient capture of emissions and good operating practice.
- 1.13** The Operator shall notify the Regulator at least 7 days before any periodic monitoring exercise to determine compliance with emission limit values. The Operator shall state the provisional time and date of monitoring, pollutants to be tested and the methods to be used.
- 1.14** The results of non-continuous emission testing shall be forwarded to the Regulator within 8 weeks of completion.
- 1.15** Adverse results from any monitoring activity (both continuous and non-continuous) shall be investigated by the Operator as soon as the monitoring data has been obtained. The Operator shall identify the cause and take corrective action, clearly record as much detail as possible regarding the cause and extent of the problem, the remedial action taken, and re-test to demonstrate compliance as soon as possible. The Regulator shall be informed of the steps taken and the re-test results.
- 1.16** The Regulator shall be informed without delay, whether or not there is related monitoring showing an adverse result if there is an emission that is likely to have effect on the local community, or in the event of failure of key arrestment plant.

2. Storage of Raw Materials

- 2.1** Storage areas where there is vehicular movement shall have a consolidated surface which shall be kept in good repair.

2.2 Raw materials including dusty material and dusty wastes shall be stored in closed containers located in designated areas.

2.3 A procedure to deal with spillage of raw materials shall be made available to the Regulator on request.

3. Loading, Unloading of Road Vehicles

3.1 The loading and unloading of road vehicles shall be carried out so as to minimise emissions.

4. Roadways and Transportation

4.1 All areas where there is regular movement of vehicles shall have a consolidated surface capable of being cleaned, and these surfaces shall be kept clean, or kept wet, and in good repair.

5. Techniques to Control Fugitive Emissions

5.1 The Operator shall ensure that relevant stacks or ducts are fitted with facilities for sampling which allow compliance with the sampling standards.

5.2 Flues and ductwork shall be cleaned to prevent accumulation of materials, as part of the routine maintenance programme.

5.3 The final efflux velocity of all emissions to air from any contained source must not be less than 15 m/sec.

5.4 Dusty wastes shall be stored in closed containers.

6. Records and Training

6.1 The Operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments for at least two years and make them available to the Regulator on request.

6.2 In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the Operator shall, investigate and undertake remedial action immediately, adjust the process to minimise those emissions, and promptly record the events and actions taken and make the records available to the Regulator on request.

6.3 The Operator shall have a written procedure for dealing with any failure of key arrestment plant and make it available to the Regulator on request

6.4 The Operator shall have a written maintenance programme for all pollution control equipment and a record of maintenance that has been undertaken and make it available to the Regulator on request.

6.5 Staff at all levels shall receive the necessary formal training and instruction in their duties relating to control of the process and emissions to air. A record of each person's training and instruction shall be kept for the duration of their employment connected with the equipment described

within this Permit.

7. Best Available Techniques

- 7.1** The best available techniques shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition in this Permit.
- 7.2** If the Operator proposes to make a change in the operation of the installation, he must, at least 14 days before making the change, notify the Regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this Permit has been made and the application contains a description of the proposed change. In the condition 'change in operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.
- 7.3** Spares and consumables, in particular those to continual wear, shall be held on site, or shall be available at short notice so that plant breakdowns can be rectified rapidly.

Permit Reference Number 38
Variation ref: 08/38/VAR001

Schedule 2.

Permit reference number 38 as varied by this notice is hereby attached.

Corby Borough Council
Environmental Services
Working towards a Cleaner Environment

ENVIRONMENTAL PERMIT

Environmental Permitting Regulations (England and Wales) 2016

Installation Address

Morgan Technical Ceramics Certech Ltd
92c-d Brunel Road
Earlstrees Industrial Estate
Corby
Northamptonshire
NN17 4JW

Morgan Advanced Ceramics Limited is hereby permitted by Corby Borough Council to carry on a Refractory Goods manufacturing process prescribed in Section 3.6, Schedule 1 of the Environmental Permitting (England and Wales) Regulations 2016 as described below and within the installation boundary as marked red on the attached plan and in accordance with the conditions detailed in Section 2 of this Permit.

Signed.....
Environmental Protection and Private Sector Housing Manager
An Authorised Officer of the Council

Date.....

24 August 2017

Contact Details: Corby Borough Council
Environmental Services
Deene House
New Post Office Square
Corby
Northants, NN17 1GD

Tel: 01536 464052 Fax: 01536 464644

Permit Holder:	Morgan Technical Ceramics Certech Ltd
Installation Address	92 C-D Brunel Road Earlstrees Industrial Estate Corby Northamptonshire NN17 4JW
	Morgan Advanced Ceramics Limited Stourport-on-Severn Worcestershire DY13 8QR
Provenance	Date
Application for Authorisation (EPA 90)	18 th May 2007
Permit 'deemed' application	12 th October 2007
Permit issued	31 st March 2008
Permit revised issued (P38/1)	1 st October 2012
Permit varied	24 th August 2017

Process Description

The raw materials for the process consist of ceramic powder and wax in solid block form and are delivered to the site in 25kg bags or 65kg drums and stored in the warehouse area.

Mixing

The mixing of ingredients is carried out in 38 litre capacity mixing vessels, which are heated to 65°C by water jackets. The wax is placed in to electrically heated melting tanks and weighed in to buckets before being transferred into the mixers. The powder raw materials are weighed and transferred in to the mixers, where it is mixed under vacuum.

The finished mixture is then transferred into heated holding pots or taken direct into the injection area.

Injection

The mixture is manually poured in to a reservoir on top of each machine where it is injected in to a mould and cooled to form the ceramic core. The cores are then manually removed and either placed on a resin block to cool further, or placed in a reformer.

Once the cores have cooled sufficiently they are manually packed in to "Saggers", which are ceramic brick boxes, filled with Kaolin clay based packing media. The Saggers are then placed on to trolleys to be transferred to the kiln area for firing.

Firing

The brick Saggers are stacked on to trolleys on the kiln tracks, the cores are then fired for up to three days.

Dumping

The Saggars are manually tipped in to a booth extracting to air through cartridge filters and the cores are manually picked out. Excess packing media is blown off the ceramic core using a compressed air line. The cores are then loaded on to trays and transferred to the finishing area.

Finishing

Finishing of the cores involves different processes dependant on the product being manufactured, these include:

- Machining
- Line removal
- Grinding
- Spraying
- Filling
- Impregnation
- Drying
- Waxing

The conditions contained within this Permit are based upon Guidance Note PG 3/02 (12) 'Manufacture of Heavy Clay Goods and Refractory Goods' dated September 2012

The requirements of the conditions contained in this permit shall come into effect on the date indicated in the individual condition or if no date is indicated shall take effect forthwith.

1. Emissions and Monitoring

- 1.1 There shall be no visible emissions from the permitted installation.
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Pollution Prevention & Control Act 1999
Permit Reference Number 38

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Pollutant and Source	Emissions Limits / Provisions	Type of monitoring	Monitoring Frequency
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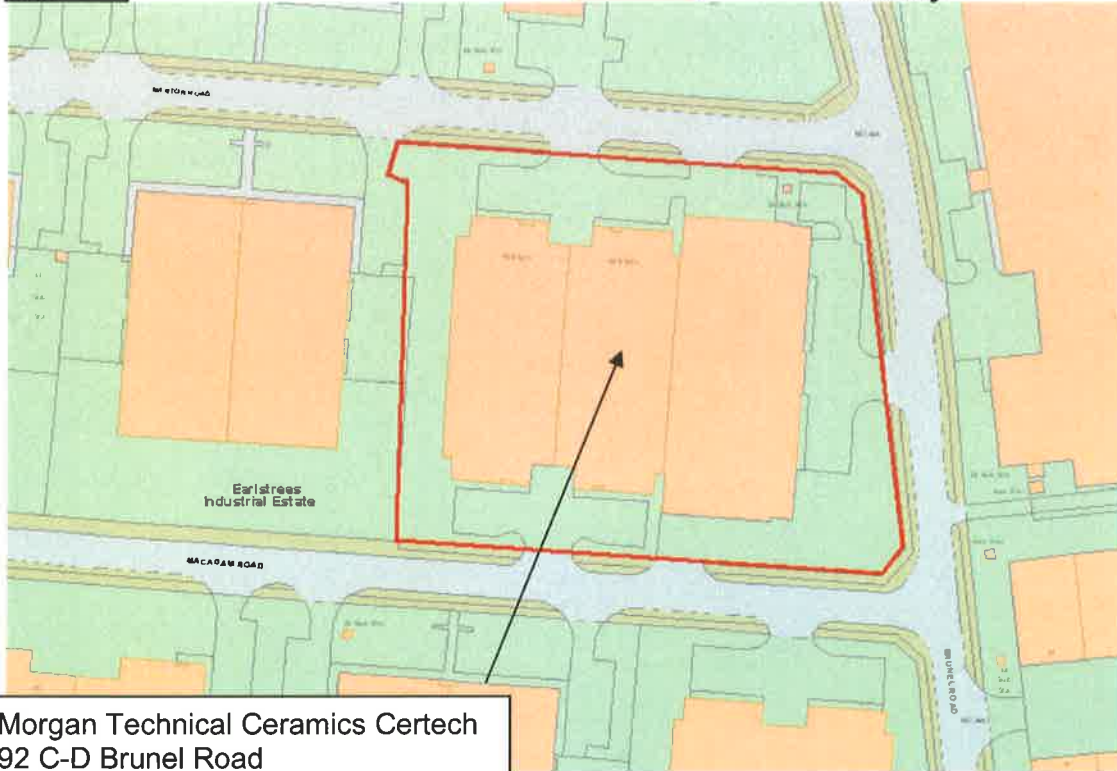
Right to appeal

You have the right of appeal against this permit within 6 months of the date of the decision. The Council can tell you how to appeal. You will normally be expected to pay your own expenses during an appeal. You will be liable for prosecution if you fail to comply with the conditions of this permit. If found guilty, the maximum penalty for each offence if prosecuted in a Magistrates Court is £50,000 and/or 6 months imprisonment. In a Crown Court it is an unlimited fine and/or 5 years imprisonment.

Our enforcement of your permit will be in accordance with the Regulators' Compliance Code.

Site Plan

Site boundary in red



Morgan Technical Ceramics Certech
92 C-D Brunel Road
Earlstrees Industrial Estate
Corby
Northamptonshire
NN17 4JW

Location Plan

