

# Notice of variation and consolidation with introductory note

**The Environmental Permitting (England & Wales) Regulations 2010**

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Steetley Dolomite Limited

Thrislington Lime Works  
West Cornforth  
Ferryhill  
Co Durham  
DL17 9EY

**Variation application number**

EPR/BM0699ID/V013

**Permit number**

EPR/BM0699ID

# Thrislington Lime Works

## Permit number EPR/BM0699ID

### Introductory note

#### **This introductory note does not form a part of the notice.**

Under the Environmental Permitting (England & Wales) Regulations 2010 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

#### **Brief description of the changes introduced by this variation notice:**

This is an Environment Agency initiated variation and consolidation – consolidating previous variations of environmental permit EPR/BM0699ID. This variation incorporates a number of changes as a result of:-

- a statutory review of permits in the Cement and Lime sector following the publication of “Best Available Techniques (BAT) conclusions” for the production of cement, lime and magnesium oxide – published 26 March 2013.

#### **Brief description of the process:**

Thrislington Lime Works (multi-operator installation) is operated by both Steetley Dolomite Limited and Tarmac Aggregates Limited. Steetley Dolomite (operator of this permit) operate the lime kiln process, and Tarmac Aggregates (associated permit) operate the quarry – supplying the limestone to Steetley Dolomite.

The Installation is located at national grid reference NZ30813270 – within 2km of Ferryhill, which is situated to the west of the Installation.

The site is currently mothballed (not operational). This notice includes condition 2.1.2 which prevents the operator from operating the activities listed within table S1.1 of this permit until they have demonstrated compliance with the Best Available Techniques (BAT) conclusions under Directive 2010/75/EU of the European Parliament and of the Council on Industrial Emissions for the Production of Cement, Lime and Magnesium Oxide.

The main purpose of the activities that take place at the Installation is the production of Dolomitic Lime which is a listed activity under ‘The Environmental Permitting (England and Wales) Regulations 2010’:

Section 3.1 part A(1)(b) Producing lime or magnesium oxide in kilns with a production capacity of more than 50 tonnes per day.

The installation includes:

- All raw material handling and preparation operations (including processing of dolomite).
- All lime storage, blending, packing and loading operations.
- All associated fuel handling, storage and preparation operations including Waste Derived Fuel.
- Heat Recovery from kiln exhaust gases

The site operates a single ‘pre-heater’ Long Rotary Kiln (LRK) – referred to as Kiln T3, which is of stepped construction, approximately 3.6m in diameter and 70m long - installed in 1978.

The main raw material is dolomite limestone from the adjacent quarry – dolomitic limestone has a higher content of magnesium carbonate than ordinary limestone. For certain products, an iron oxide additive (mill scale) is also added to the feed. Fuel used to fire the kilns comprises petroleum coke (Petcoke) and Solvent Derived Fuel (SDF). SDF is used as a partial substitute fuel (up to 40%) from that of the use of traditional fuels (petroleum coke). Gas oil is used as start-up fuel or during periods of low production rates. Coal may also be used as an alternative to Petcoke.

Feed stone enters the preheater and travels along a grate in a counter current flow to hot exhaust gases arising from the kiln. This allows the material to be pre-heated which in turn greatly improves the process efficiency. The feed stone then passes down the kiln and is heated to a high temperature to produce the required products. Products exit the kilns and after cooling are stored in designated bunkers prior to dispatch from site. The kiln has a capacity of around 350,000 tonnes of lime per annum.

Water for use in the kiln plant is mainly taken from a licensed groundwater abstraction plant (make-up water for kiln cooling water) and from the sites potable water supply by Northumbrian Water (general site use).

### Fuel Handling Operations

SDF is delivered by sealed road tanker and transferred into a dedicated bunded storage and handling facility. The SDF feed to the kiln is taken off the relevant feed tank and associated re-circulation system, which ensures consistent composition. The tanks are nitrogen blanketed and any nitrogen vented to air (e.g. during offloading) is discharged via a carbon filter (Emission Point A8). SDF is fed directly to the kiln burners via special pipelines.

### Releases

Gases leaving the kiln are drawn into an Electrostatic Precipitators (ESP) before being released via a common 76m high chimney- emission point (A1).

The main emissions released to air include particulate matter, oxides of nitrogen and sulphur dioxide. The heating process drives off moisture and carbon dioxide.

The permit includes Emission Limit Values (ELVs) and monitoring [schedule 3] together with specific conditions which apply when using SDF as a substitute fuel in order to comply with chapter IV of the Industrial Emission Directive (IED) relating to the co-incineration of waste.

Dust collected from the ESPs is stored in designated silos. Tarmac aggregates use this material either in lime based products or quarry restoration. There are no other significant releases to land from the process.

There is no effluent produced by the process and all surface water runoff collects to a system managed by Tarmac Aggregates (permit EPR-BK4069).

There are a number of ecological receptors within relevant screening distances from the Installation : 1 SAC, 2 SSSI's, 1 NNR, 1 LNR, 6 LWS (*as defined in Schedule 6 of this permit*) and 3 Ancient Woodlands.

The Operator holds an ISO 14001 certificate for their Environmental Management System which is also verified under the BSI system. The installation is covered by a Climate change levy agreement and this permit therefore includes no specific targets relating to energy usage.

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 EPR/BM0699ID/A001	Received 29/08/01	
Permit EPR/BM0699ID issued	12/09/03	

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Variation EPR/BM0699ID/V002 (EP3739PF) issued	23/03/04	
Variation EPR/BM0699ID/V003 (DP3035SE) issued	28/02/05	
Variation EPR/BM0699ID/V004 (FP3032SF) issued	07/12/05	
Variation EPR/BM0699ID/V005 (CP3435LE) issued	15/03/06	
Variation EPR/BM0699ID/V006 (GP3030XZ) issued	21/01/08	
Application for Variation EPR/BM0699ID/V007 (QP3338GM)	27/11/08	
Variation EPR/BM0699ID/V007 determined	23/01/09	
Application for Variation EPR/BM0699ID/V008	14/06/10	
Schedule 5 Notice	Issued 15/07/10	Response dated 10/09/10
Variation EPR/BM0699ID/V008 issued	10/09/10	
Environment Agency Cement and Lime Sector Review – Variation EPR/BM0699ID/V009 issued	Issued 11/05/11	
Variation application EPR/BM0699ID/V010	Duly made 15/06/11	
Additional Information Received	Determined 29/07/11	Proposal to use biofuel including storage arrangements.
Variation determined EPR/BM0699ID/V010	29/07/11	
Withdrawn application (EPR/BM0699ID/V011)	17/12/12	
Variation application EPR/BM0699ID/V012	Duly made 04/09/13	
Variation EPR/BM0699ID/V012 issued	02/10/13	
Variation with consolidation EPR/BM0699ID/V013 determined (PAS billing reference AP3737WH)	05/04/2017	Agency initiated variation following the Cement and Lime sector permit review.

<b>Other Part A installation permits relating to this installation</b>		
<b>Operator</b>	<b>Permit number</b>	<b>Date of issue</b>
Tarmac Aggregates Limited	EPR/BK0469IT	12/09/03

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/BM0699ID**

### Issued to

**Steetley Dolomite Limited** (“the operator”)

whose registered office is

**Southfield Lane  
Whitwell  
Worksop  
Nottinghamshire  
S80 3LJ**

company registration number **4071554**

to operate part of a regulated facility at

**Thrislington Lime Works  
West Cornforth  
Ferryhill  
Co Durham  
DL17 9EY**

to the extent set out in the schedules.

The notice shall take effect from 05/04/2017

Name	Date
<b>SIMON HEWITT</b>	<b>05/04/2017</b>

Authorised on behalf of the Environment Agency

**Schedule 1**

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

**Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.

# Permit

## The Environmental Permitting (England and Wales) Regulations 2010

### Permit number

**EPR/BM0699ID**

This is the consolidated permit referred to in the variation and consolidation notice for Environment Agency initialled variation EPR/BM0699ID/V013 authorising,

**Steetley Dolomite Limited** ("the operator"),

whose registered office is

**Southfield Lane  
Whitwell  
Worksop  
Nottinghamshire  
S80 3LJ**

company registration number **4071554**

to operate part of an installation at

**Thrislington Lime Works  
West Cornforth  
Ferryhill  
Co Durham  
DL17 9EY**

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

Name	Date
<b>SIMON HEWITT</b>	<b>05/04/2017</b>

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 recovered with a high level of energy efficiency and 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.



## **1.5 Multiple operator installations**

- 1.5.1 Where the operator notifies the Environment Agency under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator(s) of the installation of the same information.

## **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”).
- 2.1.2 No activities authorised by this permit shall take place until the operator has submitted a report in writing to the Environment Agency demonstrating compliance with the Best Available Techniques (BAT) as described in BAT conclusions (BATc) under Directive 2010/75/EU of the European Parliament and of the Council on Industrial Emissions for ‘The Production of Cement, Lime and Magnesium Oxide’, and has obtained written approval from the Environment Agency.

### **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, which is within the area edged in red on the site plan that represents the extent of the installation covered by this permit and that of the other operator of the installation.

### **2.3 Operating techniques**

- 2.3.1 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.
- 2.3.2 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 or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, 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.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table(s) S2.1 and S2.2
  - (b) it conforms to the description in the documentation supplied by the producer and holder.
  - (c) it having been separately collected for recycling, it is subsequently unsuitable for recovery by recycling.
- 2.3.5 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.
- 2.3.6 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.
- 2.3.7 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.
- 2.3.8 The operator shall burn only those waste derived fuels at the locations specified within table S2.2 of Schedule 2 and within the usage ranges specified within that table.
- 2.3.9 All waste derived fuels used at the installation are subject to the following conditions:
- (a) No radioactive materials or radioactive wastes (as defined by sections 1 and 2 of the Radioactive Substances Act 1993) shall be included.
  - (b) No substances with PCB concentrations greater than 10mg/kg shall be included.
  - (c) No substances with PCP concentrations greater than 100mg/kg shall be included.
  - (d) No pharmaceutical products, pesticide products, biocide products and iodine compounds shall be included except as constituents of other materials and at levels that are minimised as far as reasonably practicable.
  - (e) No dioxins or furans shall be included except as constituents of other materials and at levels that are minimised as far as reasonably practicable.
  - (f) No medical/clinical waste shall be included.
- 2.3.10 No new waste derived fuels shall be used for the purpose of carrying out a feasibility trial without obtaining the Environment Agency's prior written approval in each case. Any such feasibility trials will be limited to a maximum of 100 tonnes of the fuel and a maximum duration of 14 days.
- 2.3.11 No new waste materials shall not be used as raw materials in the process except with the prior written approval of the Environment Agency, and shall be subject to the specification in table S2.1 of schedule 2 or otherwise agreed in writing with the Environment Agency.
- 2.3.12 The operator shall ensure that prior to accepting waste derived fuels subject to condition 2.3.3 at the site, it has obtained sufficient information about the wastes to be burned as fuel to demonstrate compliance with the characteristics described in condition 2.3.3.
- 2.3.13 The operator shall take representative samples of all waste derived fuels delivered to the site unless otherwise agreed in writing with the Environment Agency and test a representative selection of these samples to verify conformity with the information obtained as required by condition 2.3.12. These samples shall be retained for inspection by the Environment Agency for a period of at least 1 month after the material is burned and results of any analysis made of such samples will be retained for at least 2 years after the material is burned.
- 2.3.14 Waste derived fuels shall not be burned, or shall cease to be burned, if:
- (a) the kiln is in start up (as agreed in writing with the Environment Agency); or
  - (b) the kiln is in the process of shutting down (as agreed in writing with the Environment Agency); or
  - (c) during non-cleaning periods the back end temperature is below, or falls below 650°C; or
  - (d) during periods of high pressure cleaning the over-grate temperature is below, or falls below 650°C; or
  - (e) the pre-heater grate speed is less than 0.08 rpm; or

- (f) any continuous emission limit value in schedule 3 table S3.1b is exceeded due to disturbances or failures of the abatement systems, other than under “Chapter IV abnormal operating conditions”; or
  - (g) monitoring results required to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1b are unavailable other than under “Chapter IV abnormal operating conditions”
- 2.3.15 The operator shall record the beginning and end of each period of “Chapter IV abnormal operating conditions”, and shall restore normal operation of the failed equipment or replace the failed equipment as rapidly as possible.
- 2.3.16 Where, during “Chapter IV abnormal operating conditions”, any of the following situations arise, the operator shall, as soon as is practicable, cease the burning of waste derived fuels until normal operation can be restored:
- (a) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1b due to disturbances or failures of the abatement systems, or continuous emission monitor(s) for a total of four hours uninterrupted duration;
  - (b) the cumulative duration of “Chapter IV abnormal operating conditions” periods over one calendar year exceeds 60 hours on each kiln.
- 2.3.15 The operator shall interpret the end of the period of “Chapter IV abnormal operating conditions” as the earliest of the following:
- (a) when the failed equipment is repaired and brought back into normal operation;
  - (b) when the operator initiates a shut down of the waste derived fuels, as described in the application or as agreed in writing with the Environment Agency;
  - (c) when a period of four hours has elapsed from the start of the “Chapter IV abnormal operating conditions”;
  - (d) when, in any calendar year, an aggregated period of 60 hours “Chapter IV abnormal operating conditions” has been reached for a given kiln.

## **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.

## **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 S3.1a, S3.1b, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Where a substance is specified in schedule 3 table S3.2 or S3.3 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

- 3.1.4 Process wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S3.5. Additional samples shall be taken and tested and appropriate action taken, whenever:
- (a) disposal or recovery routes change; or
  - (b) it is suspected that the nature of composition of the waste has changed such that the route currently selected may no longer be appropriate.
- 3.1.5 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

## **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 which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (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 Odour**

- 3.3.1 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.
- 3.3.2 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 which identifies and minimises the risks of pollution from odour;
  - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## **3.4 Noise and vibration**

- 3.4.1 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.

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 which identifies and minimises the risks of pollution from noise and vibration;

- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### 3.5 Monitoring

3.5.1 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 S3.1a, S3.1b, S3.2, S3.3;  
(b) process monitoring specified in table S3.4; and  
(c) process waste specified in table S3.5.

3.5.2 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.

3.5.3 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. Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification and have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in schedule 3 table S3.1. The CEM shall also be able to measure instantaneous values over the ranges which are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges.

3.5.4 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 S3.1a, S3.1b, S3.2 and S3.3 unless otherwise agreed in writing by the Environment Agency.

3.5.5 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1; the Continuous Emission Monitors shall be used such that;

- (a) the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed the following percentages:
- |   |     |
|---|-----|
| • Carbon monoxide   | 10% |
| • Sulphur dioxide   | 20% |
| • Oxides of nitrogen (NO & NO <sub>2</sub> expressed as NO <sub>2</sub> ) | 20% |
| • Particulate matter  | 30% |
| • Total organic carbon (TOC)  | 30% |
| • Hydrogen chloride   | 40% |
- (b) valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.5.5;
- (c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour period, the half-hourly average shall in any case be considered valid if measurements are available for a minimum of 20 minutes during the half-hour period. The number of half-hourly averages so validated shall not exceed 5 per day;
- (d) daily average values shall be determined as the average of all the valid half-hourly average values within a calendar day. The daily average value shall be considered valid if no more than five half-hourly average values in any day have been determined not to be valid;
- (e) no more than ten daily average values per year shall be determined not to be valid.

- 3.5.6 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1b:
- a QAL2 test as specified in BS EN 14181 shall be performed at least every three years or whenever there are significant changes to either the process, the fuel used or to the CEMs themselves;
  - an Annual Surveillance Test (AST) shall be performed at least annually, as specified within BS EN 14181;
  - the operator shall have a procedure to apply the QAL3 requirements of BS EN 14181.

## **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;
  - (b) the performance parameters set out in schedule 4 table S4.2 using the forms specified in table S4.3 of that schedule.
  - (c) the functioning and monitoring of the plant involved with the burning of waste derived fuels, in a format agreed with the Environment Agency. The report shall, as a minimum requirement (as required by Chapter IV of the Industrial Emissions Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the IED.
- 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.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter, if during that quarter the total amount accepted exceeds 100 tonnes of non-hazardous waste or 10 tonnes of hazardous waste.

### 4.3 Notifications

- 4.3.1 In the event:
- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
    - (i) inform the Environment Agency,
    - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
    - (iii) take the measures necessary to prevent further possible incidents or accidents;
  - (b) of a breach of any permit condition the operator must immediately—
    - (i) inform the Environment Agency, and
    - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
  - (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 where the information relates to the breach of a limit specified in the permit, 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.
- 4.3.5 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 "immediately", in which case it may be provided by telephone.



# Schedule 1 – Operations

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity</b>	<b>Limits of specified activity</b>
AR1, AR2	Section 3.1 Part A(1)(b)	Producing lime in kilns with a production capacity of more than 50 tonnes per day.	<u>Kiln T1</u> Kiln currently mothballed.
			<u>Kiln T3</u> Kiln currently mothballed
AR3	Section 3.5 Part B(a)	Unless falling within Part A(1) or Part A(2) of any Section, the crushing, grinding or other size reduction, other than the cutting of stone, or the grading, screening or heating of any designated mineral or mineral product except where the operation of the activity is unlikely to result in the release into the air of particulate matter.	Crushing of over oversize maglime from stockpiles within the installation and blending with precipitator dust.
<b>Directly Associated Activity</b>			
AR4	All fuel handling, storage and preparation.	Coal and petcoke storage, handling and blending systems.	Receipt on site through crushing, blending, other processing and feeding materials to the kiln system. This includes the use of gas oil as a start-up and shutdown fuel.
AR5	All lime storage, blending, packing and loading.	Lime handling, storage, packing and dispatch.	Storage, crushing, screening, processing, packing and loading to transport.
AR6	All waste derived fuels	Waste derived fuel storage and handling systems	Receipt on site, storage and feeding to the kiln system burners.
AR7	Recovery of heat	Recovery of heat from kiln exhaust gases	Transfer of heat from exhaust gases to the generation of electricity

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application	The response to question 2.3 given in section LLT3/1	29/08/01
Response to Schedule 4 Part 1 Notice 1C	2.3	28/02/02
Application for Variation FP3032SF (EPR-BM0699ID/V004)	The response to questions given in section C2.1, C2.7 and C2.10 of the Application for variation	31/03/05
Schedule 4 notice (dated 19/05/05)	The response to questions 1, 2, 3 and 4.	15/06/05

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application for Variation CP3435LE (EPR-BM0699ID/V005)	Section B. Operation capabilities.	25/01/06
Schedule 4 notice (dated 16/02/06)	The response to questions 1, 2 and 3 under Operational Capabilities	24/02/06
Application for Variation EPR/BM0699ID/V009	All information as part of the variation submission	27/11/08
Schedule 5 notice (dated 15/07/10)	The response to questions 1 and 2	10/09/10
Application for Variation EPR/BM0699ID/V010	Parts C2 and C3 and the supplementary information supplied with these parts. Additional information relating to Biofuel.	15/06/11 12/07/11
Application for Variation EPRBM0699ID/V012	The response to question 3 in application form C3. Application document, sections titled non-technical summary and project detail.	04/09/13
Response to 'Regulation 60(1) Notice (dated 01/05/2014)	Technical standards in relation to Best Available Techniques as described in BAT conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for the production of cement, lime and magnesium oxide – published 26 March 2013. BAT Conclusions Numbers <<1,2,30-54>>	Received 09/01/2015
Response to 'Request for further information – dated 22/05/2015) relating to original Regulation 60(1) response.	All information submitted in response.	Received 03/07/2015

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC1	The Operator shall submit a written report for approval by the Environment Agency on the cost and feasibility of installing temperature monitoring probes or other devices to monitor and record temperature in the kilns combustion chambers.	Complete
IC2	The operator shall produce and submit a project plan setting out how releases of particulates in the exhaust gases from the kilns will be minimised and at least reduced to <20 mg/m <sup>3</sup> as daily averages when using EPs or equivalent, by the target date of 31st December 2014. The project plan will be based on consideration of costs and benefits of all relevant options and using options appraisal methodology H1 or equivalent.	Complete
IC3	The operator shall produce and submit a project plan setting out how releases of particulates from all significant non-kiln sources will be minimised and at least reduced to <10 mg/m <sup>3</sup> for bag filters averaged over the sampling period (spot measurements for at least half an hour), by the target date of 31st December 2014. The plan will have a prioritised approach for reducing particulate releases from these sources, and will be based on consideration of costs and benefits of all relevant options and using options appraisal methodology H1 or equivalent.	Complete
IC4	The operator shall produce and submit a project plan setting out how releases of NO <sub>x</sub> in the exhaust gases from the kilns when not burning waste will be minimised and at least reduced to <800 mg/m <sup>3</sup> as a daily average by the target date of 31st	Complete

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	December 2014. The project plan will be based on consideration of costs and benefits of all relevant options and using options appraisal methodology H1 or its equivalent.	
IC5	The operator shall produce and submit a project plan setting out how releases of HCl in the exhaust gases from the kilns will be minimised and at least reduced to less than 10 mg/m <sup>3</sup> as a daily average by the target date of 31st December 2014. The project plan will be based on consideration of costs and benefits of all relevant options and using options appraisal methodology H1 or equivalent.	Complete
IC6	The operator shall produce and submit a project plan setting out how releases of Group III metals in the exhaust gases from the kilns will be minimised and at least reduced to less than 0.5 mg/m <sup>3</sup> as a daily average by the target date of 31st December 2014. The project plan will be based on consideration of costs and benefits of all relevant options and using options appraisal methodology H1 or equivalent.	Complete
IC7	The Operator shall carry out a technical evaluation of the burning of ROFIRE Subcoal pellets as a waste derived fuel in kiln T3. The technical evaluation programme shall be agreed in writing with the Environment Agency, and carried out as soon as possible following the first use of the fuel on the kiln after allowing a short period to optimise process conditions and reach stability. The technical evaluation must be completed within six months from the first use of the fuel.	Complete
IC8	The Operator shall submit a written report for approval by the Environment Agency on the technical evaluation of the burning of ROFIRE Subcoal pellets as a waste derived fuel in kiln T3. The report shall explain how the use of ROFIRE Subcoal pellets on a permanent basis, at the levels used during the evaluation, represents the use of Best Available Techniques. It will also include an assessment of the environmental performance of the kiln while burning ROFIRE Subcoal pellets and a comparison of emissions with and without using ROFIRE Subcoal pellets. Data obtained during routine operation prior to the evaluation, or in previous technical evaluations of other waste derived fuels in the same kiln since December 2005 may be included for comparison.	Complete
IC9	The Operator shall carry out a technical evaluation of the burning of Rubber Crumb (Tyre Derived Fuel) as a waste derived fuel in kiln T3. The technical evaluation programme shall be agreed in writing with the Environment Agency, and carried out as soon as possible following the first use of the fuel on the kiln after allowing a short period to optimise process conditions and reach stability. The technical evaluation must be completed within six months from the first use of the fuel.	Complete
IC10	The Operator shall submit a written report for approval by the Environment Agency on the technical evaluation of the burning of Rubber Crumb (Tyre Derived Fuel) as a waste derived fuel in kiln T3. The report shall explain how the use of Rubber Crumb (Tyre Derived Fuel) on a permanent basis, at the levels used during the evaluation, represents the use of Best Available Techniques. It will also include an assessment of the environmental performance of the kiln while burning Rubber Crumb (Tyre Derived Fuel) and a comparison of emissions with and without using Rubber Crumb (Tyre Derived Fuel). Data obtained during routine operation prior to the evaluation, or in previous technical evaluations of other waste derived fuels in the same kiln since December 2005 may be included for comparison.	Complete

## Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels		
Raw materials and fuel description	Specification (maximum unless otherwise stated)	
Gas Oil	Sulphur Content	0.1% (w/w)
Biofuel	Compliant with Environment Agency/WRAP Biodiesel Quality Protocol and BS EN 14213	
Coal	Sulphur Content	7.0% (w/w)
Petroleum coke	Sulphur Content	6.1% (w/w)
Waste Liquid Fuel (SDF)	EWC Number	19 02 08*
	Gross CV	10 – 42 MJ/kg
	Sulphur	2.0%
	Chlorine	2.0%
	Total Fluorine, Bromine & Iodine	1.5%
	Mercury	20 mg/kg
	<b>Group III Metals :-</b>	
	Copper	1000 mg/kg
	Lead	800 mg/kg
	Total Group III Metals	1800 mg/kg
Non hazardous combustible fuel (NCF)	EWC Number	19 02 10
	Gross CV	10 – 40 MJ/kg
	Sulphur	2.00%
	Chlorine	2.00%
	Total fluorine, bromine and iodine	1.5%
	Mercury	10.0 mg/kg
	Group II Metals :- (Total Cadmium & Thallium)	30 mg/kg
	<b>Group III Metals :-</b>	
	Copper	500 mg/kg
	Lead	300 mg/kg
	Total Group III Metals	800 mg/kg
	Copper	500 mg/kg
ROFIRE Subcoal pellets	EWC Number	19 12 10
	Gross CV	10 – 40 MJ/kg
	Sulphur	2.00%
	Chlorine	2.00%
	Total fluorine, bromine and iodine	1.5%

<b>Table S2.1 Raw materials and fuels</b>		
	Mercury	10.0 mg/kg
	Group II Metals :- (Total Cadmium & Thallium)	30 mg/kg
	<b>Group III Metals :-</b>	
	Copper	500 mg/kg
	Lead	300 mg/kg
	Total Group III Metals	800 mg/kg
Rubber Crumb (Tyre Derived Fuel)	EWC Number	16 01 03
	Gross CV	15 - 42
	Sulphur	2.0% (w/w) monthly average
<b>New waste derived fuel for feasibility trials</b>	Specification to be agreed in writing with the Environment Agency	
<b>Waste generated on-site in connection with the handing and soring of waste derived fuels</b>	Burnt with waste derived fuels at a rate that constitutes less than 1.0% by mass of the waste derived fuels feed rate.	

<b>Table S2.2 Raw materials and fuels</b>		
<b>Waste Liquid Fuel</b>	<b>Where used and % of Total Thermal Input</b>	<b>Total Usage Rates</b>
Waste Liquid Fuel	Main burner kiln T3 only 40%	0 – 40% thermal input
		0 – 8.4% tonnes/hour
		0 – 50,000 tonnes/year
NCF (waste)	Main burner kiln T3 up to 100%	0 – 100% thermal input
		0 – 6.0 tonnes/hour
ROFIRE Subcoal pellets	Main burner kiln T3 up to 100%	0 – 100% thermal input
		0 – 9,500 tonnes/year
Rubber Crumb (Tyre Derived Fuel)	Main burner kiln T3 up to 100%	0 – 100% thermal input
		0 – 20,000 tonnes/year

## Schedule 3 – Emissions and monitoring

**Table S3.1a Point source emissions to air – emission limits and monitoring requirements for kiln exhaust(s) when burning Coal / Petcoke only**

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1	Kiln T3 EP Exhaust	Particulate Matter	Compliance with condition 2.1.2 of this permit will result in emission limits being set within this permit.	-	-	
		Oxides of Nitrogen				
		Sulphur Dioxide				
		Carbon Monoxide				
		Total Organic Carbon (TOC)				
		Hydrogen Chloride				
Dioxins / furans (i-TEQ)						

**Table S3.1b Point source emissions to air – emission limits and monitoring requirements for kiln exhaust(s) when burning Waste Fuels**

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1	Kiln T3 EP Exhaust	Particulate Matter	Compliance with condition 2.1.2 of this permit will result in emission limits being set within this permit.	-	-	-
		Oxides of Nitrogen				
		Sulphur Dioxide				
		Carbon Monoxide				
		Total Organic Carbon (TOC)				
		Hydrogen Chloride				
		Hydrogen Fluoride				
		Cadmium & thallium and their compounds (total)				
		Mercury and its compounds				
		Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)				
Dioxins / furans (i-TEQ)						

<b>Table S3.2 Point source emissions to air – emission limits and monitoring requirements for non-killn sources</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A2	Coal Mill Intensive filter	Particulate matter	Compliance with condition 2.1.2 of this permit will result in emission limits being set within this permit.	-	-	-
A3	SDF tank farm vent	Volatile organic carbon	No limit set	-	-	-
Vents on storage silos and conveyor lines	Storage silos and conveyor lines	No parameter set				

<b>Table S3.3 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. Unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
E1 site run off	Process plant surface water discharge	No parameter set	None	-	-	-

<b>Table S3.4 Process monitoring requirements</b>					
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>	
A3	Temperature (°C)	Compliance with condition 2.1.2 of this permit will result in monitoring requirements being set within this permit.	-	-	
	Pressure				
	Oxygen content				
	Water vapour content				
Back end temperature measuring position	Temperature (°C)				
Over-grate temperature measuring point					

Table S3.5 Process waste				
Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Lime Kiln Dust and / or By-pass dust.	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds	Compliance with condition 2.1.2 of this permit will result in monitoring requirements being set within this permit.		-
	dioxins / furans and dioxin-like PCBs			-
	Halides (Chlorine, Bromide, and Fluorine)			-
	Total soluble fraction for metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc)			-



## Schedule 4 – Reporting

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

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
No parameters set  Compliance with condition 2.1.2 of this permit will result in reporting requirements being set within this permit.			

<b>Table S4.2 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
None	-	-

<b>Table S4.3 Reporting Forms</b>		
<b>Media/parameter</b>	<b>Reporting format</b>	<b>Date of form</b>
None	-	-

## 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	<b>EPR/BM0699ID</b>
Name of operator	<b>Steetley Dolomite Limited</b>
Location of Facility	<b>Thrislington Lime Works</b>
Time and date of the detection	

<b>(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</b>	
<b>To be notified within 24 hours of detection</b>	
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>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
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	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

<b>(c) Notification requirements for the detection of any significant adverse environmental effect</b>	
<b>To be notified within 24 hours of detection</b>	
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

“*abatement equipment*” means that equipment dedicated to the removal of polluting substances from releases from the installation to air or water media.

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

“*annual average*” means the average of all daily averages in a calendar year.

“*annually*” means once every year.

“*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.

“*background concentration*” means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

“*bi-annual*” means twice per year with at least four months between tests;

“*CEM*” means Continuous Emission Monitor.

“*CEN*” means Comité Européen de Normalisation.

“*Chapter IV abnormal operating conditions*” means any technically unavoidable stoppages, disturbances, or failures of the abatement plant or the measurement devices, during which the concentrations in the discharges into air or waste water of the regulated substances may exceed the normal emission limit values.

“*Climate Change Agreement*” means an agreement made between the Secretary of State and the operator, either directly or through the offices of any association of which he is a member, in which he agrees to secure energy efficiency improvements as set out in a plan agreed with the Secretary of State in that agreement in return for a discount from the amount he would otherwise pay as a Climate Change Levy.

“*CO trip*” means a de-energisation of electrical precipitators following detection of carbon monoxide in the kiln gases above a pre-determined concentration. This is a safety system.

“*daily*” means a 24 hour period commencing at 12:00 hrs (midday).

“*daily average*” for releases of substances to air means the average of valid half-hourly averages over consecutive discrete period of 24 hours commencing at a time agreed in writing with the Environment Agency during normal operation.

“*dioxin and furans*” means polychlorinated dibenzo-*p*-dioxins and polychlorinated dibenzofurans.

“*ELV*” means emission limit value.

“*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 or background concentration limit.

“*EWC code*” means the code number from the European Waste Catalogue.

“*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.

“*Group II Metals*” means Cadmium (Cd) and Thallium (Tl).

“*Group III Metals*” means Antimony (Sb), Arsenic (As), Chromium (Cr), Cobalt (Co), Copper (Cu), Lead (Pb), Manganese (Mn), Nickel (Ni), & Vanadium (V).

“*half-hour or half-hourly*” means a 30 minute period commencing on the hour or at half past the hour.

“*hourly*” means a 60 minute period commencing on the hour.

“*Hazardous property*” has the meaning in Annex III of the Waste Framework Directive.

“*Hazardous waste*” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

“*Industrial Emissions Directive*” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“ISO” means International Standards Organisation.

“*Kiln flush*” refers to kiln upset due to a surge of feed material into the kiln which passes through without reacting fully.

“List of Wastes” means the list of wastes established by Commission Decision [2000/532/EC](#) replacing Decision [94/3/EC](#) establishing a list of wastes pursuant to Article 1(a) of Council Directive [75/442/EEC](#) on waste and Council Decision [94/904/EC](#) establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive [91/689/EEC](#) on hazardous waste, as amended from time to time.

“LNR” means Local Nature Reserve.

“LWS” means Local Wildlife Site

“*management system*” means Environmental Management System (EMS) complying with the Environment Agency’s Horizontal Guidance Note H6, Environmental Management Systems published April 2010.

“*monitoring*” includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

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

“NNR” means National Nature Reserve.

“*oxides of nitrogen (NO<sub>x</sub>)*” means nitric oxide (NO) plus nitrogen dioxide (NO<sub>2</sub>) expressed as NO<sub>2</sub>

“PAH” means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene, Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenzo[ah]anthracene, Dibenzo[a,i]pyrene, Fluoranthene, Indo[1,2,3-cd]pyrene, Naphthalene

“PCB” means Polychlorinated Biphenyl. Dioxin-like PCBs are the non-ortho and mono-ortho PCBs listed in the table below,

“PCP” means Pentachlorophenol,

“*permitted installation*” means the activities and the limits to those activities described in Table S1.1 of this Permit.

“*quarter*” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“*quarterly periodic monitoring*” for reporting/sampling means after/during each 3 month period, January to March; April to June; July to September and October to December and, when sampling, with at least 2 months between each sampling date.

“SAC” means Special Areas of Conservation.

“SDF” means Solvent Derived Fuel

“*Shut down*” (or shutting down) is any period when the plant is being returned to a non-operational state and there is no waste being burned.

“*Start-up*” means is any period, where the plant has been non-operational, after igniting the auxiliary burner until waste derived fuel has been fed to the kiln in sufficient quantity to initiate steady-state conditions.

“*six monthly periodic monitoring*” means periodic monitoring in each 6 month period (January-June & July –December) with at least 4 months between sampling dates.

“SSSI” means a site of special scientific interest designated under the Wildlife and Countryside Act 1981 being a site in the UK which is of particular importance because of its geology, topography, or ecology.

“SWF” means Solid Waste Fuel.

“*thermal input*” refers to the combined pre-calciner and main kiln burner inputs. Maximum thermal substitution of hazardous waste shall not exceed 40% to comply with IED co-incineration requirements. Hazardous waste may be substituted only as a main kiln burner input due to IED minimum thermal operating requirements.

“TOC” means Total Organic Carbon. In respect of releases to air, this means the gaseous and vaporous organic substances, expressed as TOC.

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk.

“*Waste Framework Directive*” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste

“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:

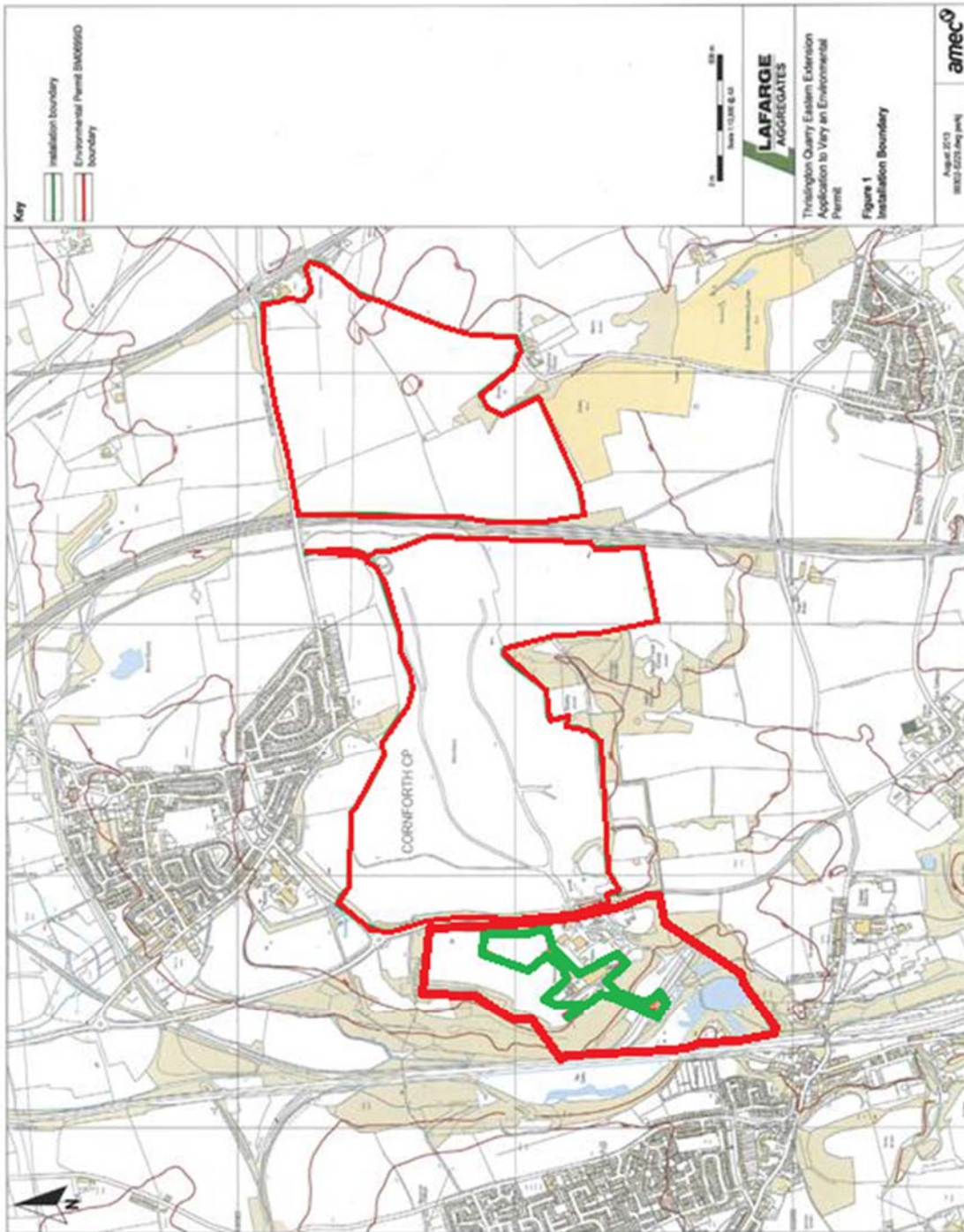
- (a) in relation to emissions from cement kilns, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 10% dry for all fuels;
- (b) in relation to emissions from lime kilns, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry for all fuels;
- (c) in relation to emissions from non-combustion sources, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with no correction required for oxygen.

For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/ or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing.

<b>TEF schemes for dioxins and furans</b>				
<b>Congener</b>	<b>I-TEF</b>	<b>WHO-TEF</b>		
	<b>1990</b>	<b>2005</b>	<b>1997/8</b>	
		<b>Humans / Mammals</b>	<b>Fish</b>	<b>Birds</b>
<b>Dioxins</b>				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.01	0.001	<0.001
OCDD	0.001	0.0003	-	-
<b>Furans</b>				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.03	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.3	0.5	1
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,4,6,7,8-HpCDF	0.01	0.01	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01
OCDF	0.001	0.0003	0.0001	0.0001

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF		
	2005	1997/8	
	Humans / mammals	Fish	Birds
<b>Non-ortho PCBs</b>			
3,4,4',5-TCB (81)	0.0001	0.0005	0.1
3,3',4,4'-TCB (77)	0.0003	0.0001	0.05
3,3',4,4',5 - PeCB (126)	0.1	0.005	0.1
3,3',4,4',5,5'-HxCB(169)	0.03	0.00005	0.001
<b>Mono-ortho PCBs</b>			
2,3,3',4,4'-PeCB (105)	0.00003	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.00003	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.00003	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.00003	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.00003	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.00003	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00003	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.00003	<0.000005	0.00001

# Schedule 7 – Site plan



END OF PERMIT