

## **Environment Agency**

### **Review of an Environmental Permit for an Installation subject to Chapter II of the Industrial Emissions Directive under the Environmental Permitting (England & Wales) Regulations 2010 (as amended)**

#### **Decision document recording our decision-making process following review of a permit**

The Permit number is:                   EPR/BM0699ID  
The Operator is:                         Steetley Dolomite Limited  
The Installation is:                     Thrislington Lime Works  
This Variation Notice number is:     EPR/BM0699ID/V013

#### **What this document is about**

Article 21(3) of the Industrial Emissions Directive (IED) requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication by the European Commission of updated decisions on BAT conclusions.

We have reviewed Installation permits within this sector (to which this Installation falls within) against the revised BAT Conclusions for the Cement, Lime and Magnesium Oxide industry sector published on 9<sup>th</sup> April 2013 in the Official Journal of the European Union.

For this particular Installation, a review has not been carried out as the Installation is currently 'mothballed' (whereby production has ceased and the plant is currently non-operational). Should the operator wish to re-commence operations, they will be required to provide information to the Environment Agency in order for a fill review to be carried out prior to re-commencing operation. Following such review the permit will be required to be varied prior to operations re-commencing.

In this decision document, we set out the reasoning for the consolidated variation notice (which includes conditions for such review to take place prior to re-commencing operations – should this be desired by the operator) that we issue. It explains how we have reviewed and considered the techniques used by the Operator in the operation and control of the plant and activities of the installation. This review has been undertaken with reference to the decision made by the European Commission establishing best available techniques (BAT) conclusions (BATc) for the Manufacture of Cement, Lime and Magnesium Oxide as detailed in document reference \*\*\*2013/163/EU. It is our record of our decision-making process and shows how we have taken into account all relevant factors in reaching our position.

As well as considering the review of the operating techniques used by the Operator for the operation of the plant and activities of the installation, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issue. Where this has not already

been done, it also modernises the entire permit to reflect the conditions contained in our current generic permit template.

The introduction of new template conditions makes the Permit consistent with our current general approach and with other permits issued to installations in this sector. Although the wording of some conditions has changed, while others have been deleted because of the new regulatory approach, it does not reduce the level of environmental protection achieved by the Permit in any way. In this document we therefore address only our determination of substantive issues relating to the new BAT Conclusions.

We try to explain our decision as accurately, comprehensively and plainly as possible. Achieving all three objectives is not always easy, and we would welcome any feedback as to how we might improve our decision documents in future.

## **How this document is structured**

1. Our proposed decision
2. How we reached our decision
3. The legal framework
4. Annex 1– Review of operating techniques within the Installation against BAT Conclusions.
5. Annex 2 – Review and assessment of changes that are not part of the BAT Conclusions derived permit review.

# 1 Our decision

We have decided to issue the Variation Notice to the Operator. This will allow it to continue to operate the Installation, subject to the conditions in the Consolidated Variation Notice that updates the whole permit.

We consider that, in reaching our decision, we have taken into account all relevant considerations and legal requirements and that the varied permit will ensure that a high level of protection is provided for the environment and human health.

The Consolidated Variation Notice contains many conditions taken from our standard Environmental Permit template including the relevant annexes. We developed these conditions in consultation with industry, having regard to the legal requirements of the Environmental Permitting Regulations and other relevant legislation. This document does not therefore include an explanation for these standard conditions. Where they are included in the Notice, we have considered the techniques identified by the operator for the operation of their installation, and have accepted that the details are sufficient and satisfactory to make those standard conditions appropriate. This document does, however, provide an explanation of our use of “tailor-made” or installation-specific conditions, or where our Permit template provides two or more options.

## 2 How we reached our decision

### 2.1 Requesting information to demonstrate compliance with BAT Conclusion techniques

We issued a Notice under regulation 60(1) of the Environmental Permitting (England and Wales) Regulations 2010 (a Regulation 60 Notice) on 01/04/2014 requiring the Operator to provide information to demonstrate where the operation of their installation currently meets, or how it will subsequently meet, the revised standards described in the relevant BAT Conclusions document.

The Notice required that where the revised standards are not currently met, the operator should provide information that

- Describes the techniques that will be implemented before 09/04/2017, which will then ensure that operations meet the revised standard, or
- justifies why standards will not be met by 09/04/2017, and confirmation of the date when the operation of those processes will cease within the installation or an explanation of why the revised BAT standard is not applicable to those processes, or
- justifies why an alternative technique will achieve the same level of environmental protection equivalent to the revised standard described in the BAT Conclusions.

Where the Operator proposed that they were not intending to meet a BAT standard that also included a BAT Associated Emission Level (BAT AEL) described in the BAT Conclusions Document, the Regulation 60 Notice required that the Operator make a formal request for derogation from compliance with that AEL (as provisioned by Article 15(4) of IED). In this circumstance, the Notice identified that any such request for derogation must be supported and justified by sufficient technical and commercial information that would enable us to determine acceptability of the derogation request.

The Regulation 60 Notice response from the Operator was received on 09/01/2015.

We considered that the response did not contain sufficient information for us to commence determination of the permit review. We therefore issued a further information request to the Operator. Suitable further information was provided by the Operator on 03/07/2015.

We considered it was in the correct form and contained sufficient information for us to begin our determination of the permit review.

The Operator made no claim for commercial confidentiality. We have not received any information in relation to the Regulation 60 Notice response that appears to be confidential in relation to any party.

## 2.2 Review of our own information in respect to the capability of the installation to meet revised standards included in the BAT Conclusions document

The Environment Agency exchanged communications with the operator on 26/01/2016 (by letter) :-

We have recently announced the mothballing of the T3 kiln at our Thrislington Plant. This is due to the SSI Steel Works closure, for which the T3 kiln supplied Dolomite. Therefore the business has made a decision to mothball the kiln for the immediate future.

We have considered the Installations' status as "mothballed" alongside the Reg60 response. As the site is none operational it is not appropriate to assess the Installations performance against BATc emission limit values, or to revise any ELVs whilst the site is non-operational. We have included a condition within the permit which prevents the Installation from operating until compliance with BATc is met. (See key issues – within Annex 1 of this document).

## 3 The legal framework

The Consolidated Variation Notice will be issued under Regulations 18 and 20 of the EPR. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- an *installation* as described by the IED;
- subject to aspects of other relevant legislation which also have to be addressed.

We consider that in issuing the Consolidated Variation Notice, it will ensure that the operation of the Installation complies with all relevant legal requirements and that a high level of protection will be delivered for the environment and human health.

We explain how we have addressed specific statutory requirements more fully in the rest of this document.

### **Annex 1: decision checklist regarding relevant BAT Conclusions**

BAT Conclusions for the *production of Cement, Lime and Magnesium Oxide*, were published by the European Commission on 09/04/2013. There are \*\*\*69 conclusions included in the BATc Document BAT Conclusions: 1 – 1.2 relevant to all sites, 1.2 – 29 associated with production of cement, 30 – 54 associated with the production of Lime and 55 – 69 associated with the production of Magnesium oxide. This annex provides a record of decisions made in relation to each relevant BAT Conclusion applicable to the installation. This annex should be read in conjunction with the Consolidated Variation Notice.

The overall status of compliance with the BAT conclusion is indicated in the table as	
NA	Not Applicable
CC	Currently Compliant
FC	Compliant in the future (within 4 years of publication of BAT conclusions)
NC	Not Compliant

BATc No	Summary of BAT Conclusion requirement for the production of cement, lime and magnesium oxide	Status NA / CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
1	<p><u>Sector wide BATc</u> In order to improve the overall environmental performance of the plants/installations producing cement, lime and magnesium oxide, production BAT is to implement and adhere to an environmental management system (EMS) <i>(further detail specified in BATc)</i></p>		<p>Steetley Dolomite Limited operate in accordance with an EMS which was certified to ISO 14001 in March 2006.</p> <p>The Lime Kiln is currently mothballed (non-operational) and will remain non-operational for the foreseeable future</p> <p>As this is the case we have included condition 2.1.2 within the permit which will prevent the activities listed within the permit being operated. <i>Further detail on this condition is stated within "Key Issues" of this document.</i></p> <p>In order for operations to resume in the future (should this be desired by the operator) they will need to demonstrate compliance with BATc by application for variation.</p>
2	<p><u>Sector wide BATc</u> In order to reduce/minimise noise emissions during the manufacturing processes for cement, lime and magnesium oxide, BAT is to use a combination of techniques <i>(further detail specified in BATc)</i></p>		<p>As stated above, the site is currently mothballed. <i>The operator will be required to demonstrate compliance with BATc (in accordance with condition 2.1.2) prior to recommencing any operations on site.</i></p>
3 - 29	BAT conclusions for the cement industry		
30	<p>In order to reduce all kiln emissions and use energy efficiently, BAT is to achieve a smooth and stable kiln process, operating close to the process parameter set points by using the following techniques: <i>(further detail specified in BATc)</i></p>	N/A	As detailed above
31	<p>In order to prevent and/or reduce emissions, BAT is to carry out a careful selection and control of the raw materials entering the kiln.</p>	N/A	As detailed above
32	<p>BAT is to carry out monitoring and measurements of process parameters and emissions on a regular basis and to monitor emissions in accordance with the relevant EN standards or, if EN standards are not available, ISO, national or other international</p>	N/A	As detailed above

BATc No	Summary of BAT Conclusion requirement for the production of cement, lime and magnesium oxide	Status NA / CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
	standards that ensure the provision of data of an equivalent scientific quality, including the following: <i>(further detail specified in BATc)</i>		
33	In order to reduce/minimise thermal energy consumption, BAT is to use a combination of the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
34	In order to minimise electrical energy consumption, BAT is to use one or a combination of the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
35	In order to minimise limestone consumption, BAT is to use one or a combination of the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
36	In order to prevent/reduce emissions, BAT is to carry out a careful selection and control of fuels entering the kiln.	N/A	<i>As detailed above</i>
37	In order to guarantee the characteristics of waste to be used as fuel in a lime kiln, BAT is to apply the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
38	In order to prevent/reduce emissions occurring from the use of waste fuels into the kiln, BAT is to use the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
39	In order to prevent accidental emissions, BAT is to use safety management for the storage, handling and feeding into the kiln of hazardous waste materials.	N/A	<i>As detailed above</i>
40	In order to minimise/prevent diffuse dust emissions from dusty operations, BAT is to use one or a combination of the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>



BATc No	Summary of BAT Conclusion requirement for the production of cement, lime and magnesium oxide	Status NA / CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
41	In order to minimise/prevent diffuse dust emissions from bulk storage areas, BAT is to use one or a combination of the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
42	In order to reduce channelled dust emissions from dusty operations other than those from kiln firing processes, BAT is to use one of the following techniques and to use a maintenance management system which specifically addresses the performance of filters: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
43	In order to reduce dust emissions from the flue-gases of kiln firing processes, BAT is to use flue-gas cleaning with a filter. One or a combination of the following techniques can be used: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
44	In order to reduce the emissions of gaseous compounds (i.e. NO <sub>x</sub> , SO <sub>x</sub> , HCl, CO, TOC/VOC, volatile metals) from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
45	In order to reduce the emissions of NO <sub>x</sub> from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
46	When SNCR is used, BAT is to achieve efficient NO <sub>x</sub> reduction, while keeping the ammonia slip as low as possible, by using the following technique: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>

BATc No	Summary of BAT Conclusion requirement for the production of cement, lime and magnesium oxide	Status NA / CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
47	In order to reduce the emissions of SO <sub>x</sub> from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
48	In order to reduce the emissions of CO from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
49	In order to minimise the frequency of CO trips when using electrostatic precipitators, BAT is to use the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
50	In order to reduce the emissions of TOC from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
51	In order to reduce the emissions of HCl and the emissions of HF from the flue-gas of kiln firing processes, when using waste, BAT is to use the following primary techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
52	In order to prevent or reduce the emissions of PCDD/F from the flue-gas of kiln firing processes, BAT is to use one or a combination of the following primary techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
53	In order to minimise the emissions of metals from the flue-gases of kiln firing processes, BAT is to use one or a combination of the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>

BATc No	Summary of BAT Conclusion requirement for the production of cement, lime and magnesium oxide	Status NA / CC / FC / NC	Assessment of the installation capability and any alternative techniques proposed by the operator to demonstrate compliance with the BAT Conclusion requirement
54	In order to reduce the solid wastes from the lime manufacturing processes and to save raw materials, BAT is to use the following techniques: <i>(further detail specified in BATc)</i>	N/A	<i>As detailed above</i>
55 - 69	BAT conclusions for the magnesium oxide industry		

## **Key Issues**

This Installation comprises two permits:-

- The Lime Kiln - operated by Steetley Dolomite Limited (this permit)
- The Quarry - operated by Tarmac Aggregates Limited (EPR/BK0469IT)

### **Mothballed site**

Steetley Dolomite Limited notified the Environment Agency (by letter dated 26/01/2016) that the lime kiln (T3) is non-operational (mothballed) at Thrislington Lime Works. As this is the case, we have not conducted a full assessment of compliance against relevant BAT conclusions. *This will only be required if the operator seeks to bring the plant back into operation.*

This operational change is due to fallen demand from steel works operations – for which this Installation supplied Dolomite to SSI works. To reflect this (and the fact that BATc's have not been fully responded) we have included condition 2.1.2 within the consolidated variation notice.

*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.*

This condition will prevent the operator from operating the lime kiln. In order for the lime kiln to be operated in the future, the operator will need to demonstrate compliance with BATc.

*Kiln T1 has previously been mothballed (and non-operational) however has never been surrendered and therefore remains within the permit until such time (when surrender application is made).*

**Annex 2: Review and assessment of changes that are not part of the BAT Conclusions derived permit review.**

Permit condition 3.1.3 has been included within the permit.

*3.1.3 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.*

This condition has been included in order to comply with Article 16 of The Industrial Emissions Directive (IED) which requires that periodic monitoring is 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.

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Permit condition 4.3.1 has been updated within the permit in order to include IED terminology “immediately” .

- 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;
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We have reviewed emission table S3.2 and updated this to reflect the following :-

<b>Table S3.2 Point source emissions to air – emission limits and monitoring requirements for non-kiln sources</b>						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
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				

Vents and Storage silos and conveyor lines includes the following areas of plant:

- Phastlime mixing plant (no fuels used are used within this plant) – solely concerns mixing and loading of remaining stock. There are no fixed emission points from this process and it is only run for several hours each day.)
- Burnt product silo.
- Fuel storage.