

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/BK0469IT
The Operator is: Tarmac Aggregates Limited
The Installation is: Thrislington Lime Works
This Variation Notice number is: EPR/BK0469IT/V007

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 the permit for this installation against the revised BAT Conclusions for the production of cement, lime and magnesium oxide industry sector published on 9 April 2013 in the Official Journal of the European Union. Where appropriate, we also considered other relevant BAT Conclusions published prior to this date but not previously included in a permit review for the Installation. In this decision document, we set out the reasoning for the consolidated variation notice that we have issued.

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 production 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 and any changes to the operation of the installation.

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 04 June 2015 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 9 April 2017, which will then ensure that operations meet the revised standard, or
- justifies why standards will not be met by 9 April 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 07/07/2015.

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

Based on our records and previous experience in the regulation of the installation we have no reason to consider that the operator will not be able to comply with the techniques and standards described in the BAT Conclusions.

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 9 April 2013. There are ****69 conclusions included in the BATc Document* BAT Conclusions: 1-29 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

BAT Conclusion 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	<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>	CC	The site operates in accordance with a certified Environmental Management System which is externally audited to ISO 14001 – <i>certification provided with Reg60 response (EMS 56720).</i>
2	<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>	CC	Operations at the site are subject to noise controls regulated by both Environmental Permit and Planning Conditions. Noise monitoring is undertaken on a 6 monthly basis. <i>Monitoring has been used to complete a Noise Impact Assessment in relation to a previous quarry extension plan.</i> Considered that controls in place meet BAT.
3	BAT conclusions for the cement industry	N/A	N/A
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BAT Conclusion 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
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30	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>	N/A	<i>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</i>
31	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.	CC	This permit holder supplies raw material feeds for the lime kiln – to specifications required by the other operator of this Installation (Steetley Dolomite). Any quarried material which is considered unsuitable for this lime kilns is retained and sold as aggregate product instead.
32	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 standards that ensure the provision of data of an equivalent scientific quality, including the following: <i>(further detail specified in BATc)</i>	N/A	<i>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</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>There is no mains electricity connection to the quarry. Crushing, screening and washing operations utilise mobile plant which is powered by liquid fuels (diesel).</i>

BAT Conclusion 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
			<i>Kiln operations (as part of this multi-operator installation) are not covered by this permit.</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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</i>
36	In order to prevent/reduce emissions, BAT is to carry out a careful selection and control of fuels entering the kiln.	CC	Operations at the site are subject to controls for dust – as regulated by both Environmental Permit and Planning Conditions. Dust monitoring is undertaken at multiple locations around the site boundary, and the site operates in accordance with a dust management plan. <i>Control of kiln is not relevant for this permit – as this permit only covers quarrying operations.</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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</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>	CC	Crushing and screening operations are undertaken using standard plant (provided by contractors) – designed to minimise dust emissions. Crushing and screening operations are undertaken within the base of the quarry (beneath the quarry wall). We consider that the measures in place are appropriate for this Installation in meeting BAT.

BAT Conclusion 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	<p>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></p>	CC	<p>Controls (relating to dust) are implemented throughout the Installation in order to meet planning and permit requirements. Dust monitoring is undertaken at multiple locations around the site. The site operates in accordance with a dust management plan which includes the identification and implementation of any remedial actions to control dust emissions.</p> <p>These measures include:</p> <ul style="list-style-type: none"> • Use of a water bowser as required. • Seeding of storage mounds for soils and overburden where they will remain for more than 3 months. <p>Following crushing, screening and washing, the feedstock material is transferred to Steetley Dolomite (other operator of this multi-operator installation) where responsibility also transfers prior to consumption within the lime kilns.</p> <p>Any stockpiles are managed in order to prevent dust emissions.</p> <p>The above controls are considered BAT for this element of this multi-operator installation.</p>
42	<p>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></p>	N/A	<p><i>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations (including channelled dust emissions), and therefore this BATc is not relevant to this permit.</i></p>
43	<p>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></p>	N/A	<p><i>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</i></p>

BAT Conclusion 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
44	In order to reduce the emissions of gaseous compounds (i.e. NO _x , SO _x , 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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</i>
45	In order to reduce the emissions of NO _x 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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</i>
46	When SNCR is used, BAT is to achieve efficient NO _x 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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</i>
47	In order to reduce the emissions of SO _x 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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</i>

BAT Conclusion 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
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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</i>
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>This is a multi-operator Installation, and this Permit covers quarrying operations and not lime kiln operations, and therefore this BATc is not relevant to this permit.</i>
55	BAT conclusions for the magnesium oxide industry	N/A	N/A
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Key Issues

This Installation comprises two permits (as a multi-operator Installation) :-

- *The Lime Kiln – operated by Steetley Dolomite Limited (permit EPR/BM0699ID)*
- *The Quarry – operated by Tarmac Aggregates Limited (this permit)*

This permit relates to quarrying activities along with preparation and storage of materials for process feedstock to the lime kiln as operated by Steetley Dolomite, and therefore most of the above BAT conclusions are irrelevant for this permit (and more appropriate for the operator of the lime kiln).

Mothballed site

The Operator of the lime kiln notified the Environment Agency (by letter dated 26 January 2016) that the lime kiln was to be mothballed from immediate effect. As this is the case, we have included a condition within the permit for the lime works (Condition 2.1.2 within EPR/BM0699ID/V013):-

- 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 Steetley Dolomite 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.

As the lime kiln is none operational, this permit will not be supplying lime to Steetley Dolomite for use within the lime kiln.

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.

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;