

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	EPR/BL1096IB/V014
Name of operator	Castle Cement Limited
Location of Facility	Padeswood Works, Padeswood, Mold.
Time and date of the detection	00:01hrs 01/03/18

(a) Notification requirements for any activity that gives rise to an incident or accident which significantly affects or may significantly affect the environment	
To be notified Immediately	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or Accident.	

(b) Notification requirements for the breach of a permit condition	
To be notified immediately	
Emission point reference/ source	Main Stack
Parameter(s)	HCL
Limit	10mg/m3
Measured value and uncertainty	11mg / m3
Date and time of monitoring	0000hrs to 1055hrs 28/2/18
Measures taken, or intended to be taken, to stop the emission	The raw mill was unstable during this period, causing the HCL emissions to rise, as the mill acts as a partial scrubber for HCL. The decision was taken to stop the kiln on account of the raw mill reliability issue. When the emissions data were checked, it was noted that the limit had been breached.

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period
0000hrs to 1055hrs 28/2/18	24hrs of 28/2/18

(c) In the event 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:

To be notified immediately	
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

<p>Any more accurate information on the matters for notification under Part A.</p>	<p>The Padeswood raw mill is a vertical roller mill, in which material is ground between a rotating table and three rollers. Such mills require a stable bed of material: the material needs to be of a certain particle size distribution in order to achieve this.</p> <p>The size distribution of the material is measured periodically by carrying out grading analysis of the limestone (the main constituent of raw meal).</p> <p>During operation on the 28/02/18, the material bed was unstable, causing the mill to trip eight times due to excessive vibration.</p> <p>Excessive vibration triggers the mill to trip due to the risk of damage to the mill internals (vibration is indicative of metal on metal contact).</p> <p>An investigation was carried out to find the cause of the vibration issues.</p> <p>On visual inspection, the limestone feed was found to contain an excessive level of fine material. This material would increase the likelihood of vibration problems in the mill</p> <p>Due to the repeated raw mill trips, the decision was taken to stop the kiln and raw mill systems for the remainder of the day.</p>
<p>Measures taken, or intended to be taken, to prevent a recurrence of the incident</p>	<p>An investigation was undertaken at Cefn Mawr quarry to determine the source of the fine material in the raw mill feed.</p> <p>As well as supplying limestone to Padeswood for cement production, Cefn Mawr also processes limestone for Hanson aggregates.</p> <p>At a certain point, the aggregates production had</p>

	<p>moved from one part of a quarry to another. Following the move some “dead stock” was left behind, this was undesirable crushed material from the aggregates operation.</p> <p>This material had been spread over the area for blasting, so it could be utilised by the cement work. As this material had already been crushed by the aggregates operation it proved to be a source of the fine material which appeared in the raw mill feed.</p> <p>The layer of fine material was cleared before any further blasting took place. Any other areas discovered to have unwanted fine material will be cleared before limestone is prepared for cement production. The fine material will be used at the quarry for bunding maintenance.</p>
<p>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</p>	<p>It is anticipated that there would be little environmental pollution from the incident.</p> <p>The mass emissions from the stack on the day in questions were less than those that would have been permitted if the site ran at the HCl ELV for the duration of the day.</p> <p>The mass emissions from the stack if running at the ELV of 10mg/Nm3 would equate to 67kg per day (based on a stack flow of 280,000 m3/hr)</p> <p>As the kiln only ran for just under eleven hours, the mass emissions would only be around 31kg. This is less than half of the permitted level for the day.</p>
<p>The dates of any unauthorised emissions from the facility in the preceding 24 months.</p>	<p>26/08/2016 24/11/2016 03/02/2017 30/03/2017 21/04/2017 08/05/2017 24/07/2017 14/08/2017 27/09/2017 28/09/2017 19/10/2017 23/10/2017 03/11/2017 04/11/2017 13/12/2017 21/12/2017 14/01/2018 21/02/2018</p>

Name*	Robert Keough
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Signature	Robert Keough
Date	09/07/18

* authorised to sign on behalf of the operator