

# 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	20/03/18 14:00

(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 within 24 hours	
Date and time of the event	20/03/18 05:57 & 06:30
Reference or description of the location of the event	Kiln cooler building
Description of where any release into the environment took place	Release of fugitive dust and fumes from the cooler building into near area
Substances(s) potentially released	Fugitive dust and fumes
Best estimate of the quantity or rate of release of substances	50-100kg of dust
Measures taken, or intended to be taken, to stop any emission	<p>The kiln feed was reduced to allow the temperature to increase.</p> <p>Alternative fuels were removed and replaced with coal, to stabilise the temperatures.</p> <p>The cooler fans were decreased to decrease the air flow to the cooler bag filter which increases the negative pressure to reduce potential emissions</p> <p>The rotation of the kiln was reduced to reduce the material flow rate.</p> <p>An investigation is ongoing and a root cause analysis will be carried out following this.</p>
Description of the failure or accident.	The heat input to the kiln system was insufficient for the amount of material being fed. This resulted in an increased material flow rate and over pressurisation of the system. This overpressure led to a release of fugitive material.

(b) Notification requirements for the breach of a permit condition	
To be notified within 24 hours	
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	
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Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(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

Any more accurate information on the matters for notification under Part A.	<p>An investigation into the event was carried out and the timeframe of the incident is described below.</p> <p>00:00 A fault on the crane system meant that the kiln feed tonnage was reduced from 180 to 155tph to enable raw mill production match kiln feed.</p> <p>02:15 – The shift crew were unable to resolve the issues with the crane and therefore switched to manual crane operation.</p> <p>0245-0315 – The kiln operator increased the kiln feed back to 180tph over a 30 minute period due to the availability of material from manual crane operation</p> <p>0245-0315 – Coal usage was increased by 1.25t over this period to account for the additional feed</p> <p>0245-0315 Cemfuel was reduced by approximately 1t per hour to comply with chloride quality control strategy</p> <p>03:10 Kiln Torque started to drop off slightly</p> <p>05:20 Coal increased by 0.2t</p> <p>05:45 Coal increased by 0.2t</p> <p>05:50 Torque started to lift</p> <p>05:59 Torque died – Kiln speed dropped to 0.85 to hold material</p> <p>06:00 Kiln hood pressure became positive for approximately 2 minutes causing the release of fugitive dust</p> <p>06:10 Torque looked to be lifting again</p> <p>06:26 Kiln hood pressure was positive for approximately 2 minutes causing the release of fugitive dust</p>
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	<p>A root cause analysis of the incident found operator error was the reason for the release, due to the following reasons</p> <ul style="list-style-type: none"> <li>- Kiln feed being increased too fast</li> <li>- Additional fuel not added to match an increase in production</li> <li>- Slow decrease in Cemfuel flow reduced overall kiln fuel for increased production</li> </ul> <p>The kiln operator failed to add sufficient fuel to the system at the same time as increasing feed this created kiln instability.</p> <p>Control of fuels to kiln main burner is always carried out manually by operators and automating this process is not recommended.</p>
Measures taken, or intended to be taken, to prevent a recurrence of the incident	<p>All shift managers and all kiln controllers will be under taking training from the manufacture of kiln and control system to develop a further understanding of the kiln process.</p> <p>The site is currently exploring other suitable roles for the operator who was on duty at the time so that he is no longer involved in the kiln control process.</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	It is anticipated that there would have been limited environmental impact from this emission.
The dates of any unauthorised emissions from the facility in the preceding 24 months.	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 28/02/2018 03/03/2018

<b>Name*</b>	Robert Keough
<b>Post</b>	Q&E Manager
<b>Signature</b>	Robert Keough
<b>Date</b>	04/05/2018

\* authorised to sign on behalf of the operator