

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
Name of operator	Castle Cement Limited
Location of Installation	Padeswood Works, Padeswood, Mold.
Time and date of the detection	03:10 23-10-2017

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	03:10 23-10-2017
Reference or description of the location of the event	Kiln system over pressurisation.
Description of where any release into the environment took place	Cooler, CV01.
Substances(s) potentially released	Dust and fumes.
Best estimate of the quantity or rate of release of substances	Largely contained within buildings, 50-100kg dust to atmosphere.
Measures taken, or intended to be taken, to stop any emission	Kiln system shut down.
Description of the failure or accident.	Over feeding of kiln feed elevator. This is induced a kiln flush.

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

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

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

Following a kiln stop the residual dust from the main bag filter is normally pneumatically conveyed to a dust silo. In doing this it enables the dust to be blended back with the raw materials and prevent excess feed to the kiln.

On this occasion the return of the dust from the main bag filter to the dust silo was not possible due to two reasons.

- The indicated level in the dust silo was too high.
- There had been a failure of a motor / gearbox combination, which allows emptying of the dust silo.

Due to the above failures the kiln operator had no other option but to run the bag filter return dust directly back to the kiln feed elevator.

The gearbox failure meant that the dust silo could not be emptied once material was fed into it. The high level probe on the dust silo appeared to be reading incorrectly and material could not be fed safely to the silo without the risk of overfilling.

Sequence of events.

The kiln had several stops during the night shift due to blockages.

At 21:53 the kiln stopped due to a blockage on the clinker transport system.

The kiln was restarted at 01:35 once this blockage was cleared. It then was stopped again at 01:40 due to an air slide blockage on the kiln feed

	<p>system.</p> <p>The kiln was restarted again at 02:05 and stopped for a further air slide blockage around 3 minutes later.</p> <p>The operator restarted the kiln at 02:25 once the above air slide blockages had been rectified and ran for 25 with no dust return from the main bag filter (MBF) to allow the kiln to stabilise.</p> <p>At 02:50 the dust return from the MBF was initialised. If this dust return had not started, the MBF could have become damaged due to it filling up.</p> <p>The first 10 minutes, 02:50-03:00 after the introduction of the dust the kiln appeared to be stable. Between 03:00 to 03:10 the kiln became unstable. This instability resulted in a positive pressure in the kiln system with the release of hot gases from the outlet seal.</p> <p>The hot gases in the system caused the safety interlock on the cooler bag filter to initiate which in turn led to the operator stopping the kiln.</p>
Measures taken, or intended to be taken, to prevent a recurrence of the incident	<p>The failed motor on the screw at the bottom of the dust silo has been replaced and is in the process of being commissioned ready for use in 2018.</p> <p>The level probe in the dust silo will be inspected and maintained to ensure that it is providing a correct reading.</p> <p>Once recommission the use of the blowing system and discharge system to the dust silo will be updated in the kiln operating procedure. The updated information will be circulated to the kiln operators to ensure correct use in the event of a kiln stoppage.</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>The entire area below the kiln outlet seal was cleaned to prevent any further fugitive emissions from the material which settled in this location.</p> <p>No dust complaints from neighbours or surrounding properties were reported to the site in the days surrounding this issue.</p>
The dates of any unauthorised emissions from the installation in the preceding 24 months.	<p>07/12/2015</p> <p>02/01/2016</p> <p>13/02/2016</p> <p>26/08/2016</p> <p>24/11/2016</p>

	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

Name*	Robert Keough
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Signature	Robert Keough
Date	16/01/2018

* authorised to sign on behalf of Castle Cement Limited