

Schedule 5 -Notification Form

To be completed in the event of breach of Permit as required by Condition 4.3.1.

1. Complete section (a), (b) or (c) as relevant;
2. Sign and date the form
3. Scan and email or fax the form using the contact details below
4. Put signed copy in post and give copy to Environment Coordinator

Part A

Permit Number	EPR/ BL3986ID
Name of operator	Tarmac Cement & Lime Limited
Location of Regulated Facility	Aberthaw Works, East Aberthaw, Barry, CF62 3ZR
Time and date of the detection	03/10/23@14:57

(a) Notification for any malfunction, breakdown or failure of equipment, accident, or fugitive emission that could or is causing significant pollution

To be notified within 24 hours of detection

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 limit

To be notified within 24 hours of detection unless otherwise specified below

Emission point reference/ source	Main Stack
Parameter(s)	Particulates
Limit	10mg/m3
Measured value and uncertainty	20.90 mg/m3 (provisional results) received from CES at 14:57 on 3/10/23
Date and time of monitoring	21/09/23. Tony Leakey informed upon receipt of CES results on morning of 4/10/23 – agreed that full schedule 5 to be submitted following RCA.
Measures taken, or intended to be taken, to stop the emission	Kiln taken off. Probe checked for alignment, and then replaced with kiln hood filter probe (identical model). Bag filter inspection – replaced damaged bags.

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	CES visited site from 20th - 22nd September 2023 to conduct dust instrument servicing and 6 monthly extractive monitoring of particulate emissions. Provisional results were returned on 3rd October 2023 and showed that the average result of 20.9mg/m3 was in breach of the ELV of 10mg/m3. The full report was received on 16th October which confirmed this. The results differed from the TDM data at the time of the monitoring which showed that particulates were well below the ELV and were reading between 0-1 mg/m3. However, following servicing of the probe by CES on 20th September a step change was observed in the particulates readings of between 2-6 mg/m3 on TDM, which because the indicated concentration was still below the ELV the kiln was kept running. When the provisional results of CES' testing were received the kiln was off for an unrelated issue, so the opportunity was taken to remove the probe at this time to inspect, with no obvious defects noted, and then replaced. After kiln restart on 03/10/23 particulates
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	measurements increased above 20mg/m3 overnight, so on the morning of 4/10/23 a decision was made to swap over the probe with the identical model on the kiln hood filter to identify whether there was an issue with the probe. When the probe from the kiln hood filter was installed, particulates readings came down to ~20mg/m3 in line with the provisional results received from CES. The kiln was then taken off immediately for inspections of the bag filter. Five damaged bags were identified in a number of compartments. Prior to this no indicators were noted that suggested the bag filter was compromised in any way. It is suspected that the probe may have become misaligned leading to the damped/low signal. Subsequent interrogations of data have revealed a small increase in mA signal around 31st August, which is backed up by a similar increase in the bag filter differential pressure at the same time, indicating that this is when the bag filter lost performance. Due to the compromised performance of the monitor at this time the change was not identified as significant, but in hindsight, knowing that the monitor was reading incorrectly, it can be concluded that this when the ELV breach manifested due to bag filter loss of performance.
Measures taken, or intended to be taken, to prevent a recurrence of the incident	RCA completed on 17th October 2023. Actions to be completed: • CES to inspect probe alignment • Install air line to purge flange/probe • Install permanent standby probe for cross checks • Confirm monthly checks being done of probe to prevent dust build up on monitor head • For future visits, stipulate start time of testing to CES if kiln recently restarted • Replace damaged bags – complete • Plan rebag work during Winter Turn Around • Preventative bag filter inspections using visualite when kiln down for >72 hours • Ensure checks in place to install new bags with seam facing away from air flow

	• Ensure bags in service within recommended life span - change out time • Remove cladding and inspect external structure during Winter Turn Around • Use control charts to set levels to warn and indicate when action/inspection may be required
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	Kiln bag filter isolated and fully inspected on 05/10/23. Five damaged bags were identified and replaced. Full rebag to be considered during Winter Turn Around in early 2024.
The dates of any unauthorised emissions from the regulated facility in the preceding 24 months	22.11.21, 22.03.22, 21.04.22, 30.07.22. 12.04.23, 31.07.23, 14.08.23, 20.09.23

Name	Daniel Bound
Date	17/10/2023
Post	Environmental Coordinator
Signatory authorised to sign on behalf of Tarmac Cement and Lime Ltd.	

Incident notification: 0800 807060 (Freephone, 24 hour service)

Send completed form to:

Natural Resources Wales
Rivers House
St. Mellons Business Park
Cardiff
CF30EY

Email: elizabeth.parr@naturalresourceswales.gov.uk
Antony.leakey@naturalresourceswales.gov.uk