

Compliance Assessment Report

Report ID:
CAR_NRW0036788

This form will report compliance with your permit as determined by an NRW officer

Site	Aberthaw Works EPR/BL3986ID	Permit Ref	BL3986ID		
Operator/Permit holder	Tarmac Cement and Lime Limited				
Regime	Installations				
Date of assessment	01/07/2020	Time in	11:00	Out	12:00
Assessment type	Report/Data Review				
Parts of the permit assessed	Emissions control and management, amenity, dust and noise				
Lead officer's name	Leakey, Antony				
Accompanied by					
Recipient's name/position	Georgina Taubman/ HSE Business Partner	Date issued	16/07/2020		

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
C2 - General Management - Management system and operating procedures	C3	1.1.1
E1 - Emissions - Air	C3	3.1.2
E3 - Emissions - Surface water	A	
F2 - Amenity - Noise	A	
F3 - Amenity - Dust/fibres/particulates and litter	C3	3.2.1
	C3	3.2.1
	C3	3.2.1
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	A	

KEY: See Section 5 for breach categories, suspended scores will be indicated as such.

A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,

O = Ongoing non-compliance, not scored.

Number of breaches recorded	5	Total compliance score (see section 5 for scoring scheme)	20
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If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

Aberthaw Cement Works

Emissions and reporting review and site incident update – 16 July 2020

Noise assessment

Noise complaints have been received from residents relating to both the quarry and cement works operations.

Quarry noise appears to be caused by conveyor warning alarms and stone handling. Potentially intrusive off-site noise was witnessed on Fonmon Road on 1 July 2020 between 11:05 and 11:10h including stone tipping and conveyor or mobile plant noise. A reversing or conveyor beeping (not white-noise type) alarm was also heard on one occasion.

Tarmac confirm that noise relating to the conveyor alarms has been addressed by installation of directional sounders and reducing volume. Some improvement has been reported by a resident at Fonmon Road.

Quarry noise controls are under review. Rubber lining of plant has been considered, although effectiveness relies on regular replacement and Tarmac currently considers the cost of this measure to be excessive. Drop heights are already minimised, and this was verified by remote unannounced inspection from Port Road on 1 July 2020 between 11:15 and 11:20h. Working time constraints particularly in the early morning have been implemented but maintenance of stone stock for overnight kiln operation limits applicability of this measure.

Preliminary review of historic noise reports, recently collected data and observations made at sensitive receptors off site, suggest that the activities undertaken at the works are not free from noise at levels likely to cause pollution. This shall be taken as notification under condition 3.5.2 that a noise and vibration management plan must be submitted to NRW.

ACTION: Tarmac shall review any existing noise and vibration management plan, update or produce a new noise and vibration management plan and submit the plan to NRW by 31 August 2020 for approval.

Recent incidents summary and non-compliance scoring

18/10/19 – coal mill bag filter tear detected, and plant shut down. No significant offsite impact reported. No further action taken.

4/11/19 – 200 litre diesel spill following HGV fuel tank rupture caused by collision with crash barrier. No impact reported and full clean up completed. It is unclear if site access layout contributed or only driver error.

ACTION: Tarmac to provide an update on any actions arising from incident RCA by 30 September 2020.

7/12/19 - packing plant dust filter seal failure - dust filter is now installed with a burst bag detector.

Dust at the bag filter outlet will trigger the detector and shut down the fan which in turn shuts down the packing plant. It is understood that only dust filters with an exhaust flow above a certain threshold are routinely fitted with burst bag detection and the packing plant filter was not above the threshold. The potential for off site impact would seem a more appropriate criterion for installation of burst bag detection. Air quality impact is likely to have been limited as deposition rate of 87 mg/m²/day measured during the period is elevated but not significant for the location and weather conditions. Consequently, the lack of burst bag detection is a minor impact category 3 non-compliance with permit condition 3.2.1.

ACTION: Tarmac to review burst bag detection provision on filter plant across site to ensure that potential for offsite impacts are minimised and provide an update by 30 September 2020.

11/2/20 – high winds during clinker loading resulted in entrainment of dust - clinker loading of trailers has stopped at Aberthaw and if it were to resume then control measures such as water sprays could be used to suppress the clinker dust. Deposition rates for period are relatively high at 90 mg/m²/day but not significant and is a minor impact category 3 non-compliance with permit condition 3.2.1.

ACTION: Tarmac to notify NRW if clinker loading resumes.

9/3/20 - electrical fault on the main ID fan resulted in plant trips and pressurisation of the kiln cooler area. Tarmac replaced the associated control unit module of the variable speed drive system and investigation has subsequently found that the fault was caused by overheating of the VSD module due to a replacement cooling fan with slight dimensional differences to the original. The fan was supplied as a direct replacement in 2018 but allowed cooling air to bypass due to a gap between the fan suction inlet and the VSD module cooling air outlet. The cause of the kiln trips was extensively investigated without any obvious outcome. However, it was only when production pressures were reduced due to the COVID-19 pandemic that sufficient testing was carried out that enabled the cooling defect to be discovered. Therefore, all appropriate measures were not taken to prevent or minimise dust emissions.

Dust extraction was installed in the clinker cooler area to capture dust during kiln trips and this has provided some mitigation during recent events.

Deposition rates for some of the period were relatively high at 170 mg/m²/day and some analysis shows high levels of cement dust. Multiple kiln trips are associated with this cooling fault and during 2019 deposition rates were relatively high at 124-324 mg/m²/day on numerous occasions. The cumulative impact of repeated high deposition rates potentially amounts to a category 2 non-compliance with permit condition 3.2.1. However, because individual historic impacts due to related kiln trips have previously been addressed as non-compliances of permit conditions, this approach of scoring discrete events separately as a category 3 non-compliance has been applied to this latest set of events in order to avoid double counting non-compliance. NRW do not propose to take further action in relation to this non-compliance as the issue has been resolved, although Tarmac is required to consider learning points and actions that might be relevant to other critical electrical and control systems at the works.

ACTION: Tarmac to review critical electrical and control systems that have potential to cause environmental impact if reliability is compromised and provide an update, including any actions proposed by 30 September 2020.

11/3/20 - extraction hood works to improve dust capture. No permit condition non-compliance scored as this was proactive work to improve emissions performance.

16-17/3/20 -ID fan trip as above.

17/3/20 - quarry noise - drop heights minimised and directional conveyor alarm installed. Quarry operating hours to be kept under review. Updated noise management plan required to ensure that

all appropriate measures are being taken to prevent or minimise off-site noise impacts.

3/4/20 – dust deposits overnight at Rhoose are not related to a kiln trip or dust release identified at the time but may have been as a result of deposition of accumulated dust in the atmosphere over the preceding weeks.

16/4/20 – dust from pre-heater tower. Cooler tube extraction implemented to reduce fugitive dust emission. ID fan trip as above. Deposition rate of 60 mg/m²/day is typical and not significant for the location and weather conditions.

3/6/20 - SO₂ ELV exceeded – lime feed flexible hose failure. Improved inspection and maintenance regime will be implemented. Re-engineering of more permanent pipework is currently considered to be unnecessary due to potential for reduced blockage visibility. Air quality impact is likely to have been limited as previous operation with an ELV double the current value was protective. Consequently, the exceeded ELV is a category 3 non-compliance with permit condition 3.1.2 and the associated failure to maintain abatement plant in operational order a category 3 non-compliance with permit condition 1.1.1.

Emissions review

The works has operated with scheduled shut downs in February-March and April-May.

Monitoring data for Q4 2010 to Q1 2020 and the annual report for 2019 has been reviewed and no breach of permit conditions was identified other than those already addressed in previous sections of this report.

All emissions and reporting are compliant with the permit requirements.

END

EPR Compliance Assessment Report

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Site	Aberthaw Works EPR/BL3986ID	Permit Ref	BL3986ID
Operator/Permit holder	Tarmac Cement and Lime Limited	Date	01/07/2020

Section 3 – Enforcement Response

You must take immediate action to rectify any non-compliance and prevent repetition. Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			
F3	C3	Review critical electrical and control systems that have potential to cause environmental impact if reliability is compromised and provide an update, including any actions proposed.	30/09/2020
F3	C3	Cease clinker loading operations.	31/07/2020
F3	C3	Review burst bag detection provision on filter plant across site to ensure that potential for offsite impacts are minimised.	30/09/2020
E1	C3	Improved inspection and maintenance regime will be implemented.	31/10/2020
C2	C3	Improved inspection and maintenance regime will be implemented.	31/10/2020

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/services relating to environmental matters
- Consulting with the public, public bodies and other organisations (eg. Health and Safety Executive, local authorities) on environmental issues
- Carrying out statistical analysis, research and development on environmental issues
- Providing public register information to enquirers
- Investigating possible breaches of environmental law
- Assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.