

Compliance Assessment Report CAR_NRW0039245

Permit being assessed: BL1096IB.

For: Padeswood Cement Works , held by Castle Cement Limited

At: PADESWOOD WORKS , PADESWOOD, MOLD, MOLD, CLWYD, CH7 4HB.

Type of assessment carried out: Report/Data Review, Reason: Routine.

On 31/12/2021.

Parts of permit assessed: See report

NRW Lead Officer: Lara Cubley.

Report sent to: David Quick, Plant Manager on 17/02/2022.

1. Summary of our findings (full details in section 4)

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
A1 - Specified by permit	Action only (X)	
E1 - Emissions - Air	C3 Minor	3.1.1
E1 - Emissions - Air	C3 Minor	3.1.1
B5 - Infrastructure - Plant and equipment	C3 Minor	1.1.1
E1 - Emissions - Air	C3 Minor	3.1.2
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	C3 Minor	4.3.2

Result types are explained in more detail in the 'Important Information' section below.

Total number of non-compliances recorded	Total non-compliance score
5	20

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

2. What action is required?

Criteria	Action needed	Complete by
A1	See Action 1 below	30/04/2022
E1	See Action 2 below	30/04/2022
E1	See Action 3 - 5 inclusive below	30/04/2022
B5	See Action 3 - 5 inclusive below	30/04/2022
E1	Abatement system fault repaired - see below.	Already completed
G4	See Action 6 below	28/02/2022

Action criteria codes are listed in the 'Important information' section below.

3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecution and/or suspension or revocation of your permit.

You are non-compliant with your permit.

We are currently considering taking enforcement action against you for the non-compliance recorded above. We will contact you in due course.

4. Details of our assessment

October - December 2021 and Annual Reporting for 2021

This Compliance Assessment Report (CAR) covers a review of the routine monitoring and reports for the quarterly period October – December 2021 for all permitted emission points. It also reviews the annual reporting requirements for 2021.

Emissions to Water (W1)

Emissions to water were compliant with the permitted limits during quarter October - December 2021.

Emissions to Air

Continuous Monitoring (A3, A4, A5, A8, A9, A15)

All continuous emissions monitoring was provided as required by the permit and shown to be within the permitted limits during this quarterly period apart from NO_x from emission point A8 (Kiln) on the 27th and 28th November 2021. Please see '*Notifications*' section below for further detail.

Periodic Monitoring

Emissions Point A8 (Kiln 4) - July - December (monitoring 07/09/21 - 09/09/21). All determinands reported as required by the Permit and compliant with Emission Limit Values (ELVs).

Emission Point A5 (Cement Mill 5) - July - December (monitoring 28/10/21). Reported Particulate emissions concentration of 0.99mg/m³ is compliant with the Permit.

Other Reports

Alternative raw material / waste derived fuel usage reported.

ACTION 1: The Operator should review these reports further to guidance provided on the 26/01/22 and ensure future submissions are in accordance with guidance by 30/04/22.

Kiln by-pass dust 6 monthly analysis results provided as required by the permit.

Notifications

NRW received 6 Part A notifications relating to this period, as required by Condition 4.3 of the Permit.

9/11/21

Part A received 10/11/21 15:29. Part B received 04/02/22. This notification relates to a release of calcined raw meal (~100kg) from the kiln inlet seal area at 20:05. The kiln was stopped for further investigation. On investigation it was identified that the dust room was full. The dust chute and room were reportedly cleared and the area cleaned by vacuumation prior to re-starting the kiln at 06:00hrs on 11/11/21. An isolation gate was fitted to the dust chute during the January 2022 shutdown. This should enable inspection and emptying of the dust room during the kiln operation.

NRW considers this to be a breach of Condition 3.1.1 (E1 = CCS3, Unauthorised Emission) with minor potential impact due to a reportedly small release and swift resolution. There were a number of dust complaints 4-5 days following this reported release.

ACTION 2: The Operator should ensure an inspection and monitoring regime is implemented for the dust room and chute to ensure it is not overwhelmed and early detection of any problems. Provide NRW an outline of this inspection and monitoring regime in writing by 30/04/22.

15/11/21 (12:33 - 12:59hrs)

Part A received 15/11/21 15:31. Part B received 04/02/22. This notification relates to a particulate/fume release (~80kg) from the kiln inlet seal. Action was reportedly taken to stop the release by way of increasing ID fan speed until the situation was stable. The site was reportedly planning a controlled kiln stop for internal investigation.

15/11/21 (17:45 - 21:40hrs)

Part A received 15/11/21 22:07 and corrected 19/11/21. Part B received 04/02/22. This notification relates to a particulate/fume release (~100 - 120kg) from the kiln inlet seal. As per earlier release that day, action was taken by way of increasing ID fan speed but the action didn't achieve an improvement. The kiln went into a shutdown on the 18/11/21.

Investigations revealed that the heat resistant scoops at the kiln inlet were worn. These scoops were replaced and the kiln restarted 27/11/21 with no reported further issues. This is reportedly the first time these scoops have been replaced since the kiln commenced operation in 2005. Given the potential impact the operator has now committed to inspect these scoops when the pre-cast inlet blocks are replaced on an approximate 2 yearly interval.

A number of complaints from local residents regarding dust fall out onto vehicles were received over this period. Analysis of dust samples from complainants vehicles revealed that clinker dust was present along with part-reacted raw meal and other non-cementitious mineral materials suggestive of raw meal. Some of these non-cementitious mineral materials could be present in the environment as general dust. The part-reacted raw meal is likely to come from the kiln inlet seal emissions.

NRW considers this to be a breach of Condition 3.1.1 (E1 = CCS3, Unauthorised Emission to

air) with minor potential environmental impact.

Condition 1.1.1 requires the Operator to manage and operate the activities in accordance with a management system that identifies and minimises risks of pollution. The Operator's Environmental Management System failed to recognise the potential impact of failure to inspect and maintain the kiln inlet scoops on the environment. The Operator continued to operate the activities despite potential for pollution following the 2 notifications on the 15/11/21 until kiln shut down on the 18/11/21.

NRW considers this to be a breach of Condition 1.1.1 (B5 = CCS2, Plant) in that the Operator failed to maintain these scoops with potential for a minor environmental impact.

ACTION 3: Plan to undertake a review to identify any plant, and equipment which could lead to a pollution incident that is not currently part of a planned preventative inspection/maintenance regime. Provide a summary of the plan to NRW in writing by 30/04/22, to include resources, methodology, and timescale.

ACTION 4: Undertake the above review in accordance with the plan and provide NRW with a list of any plant and equipment which could lead to a pollution incident that is not currently part of a planned preventative inspection/maintenance regime in writing. Timescale to be agreed following action 3.

ACTION 5: For each such identified piece of plant or equipment identified in action 4 above provide suggested action and implementation date in writing to NRW. Timescale to be agreed following action 3 & 4.

27/11/21

Part B received 01/02/22. This notification relates to a release of ~50Kg particulates from the clinker dome caused by damaged flashing following storm Arwen. The kiln was stopped immediately to prevent further release. The damage was repaired and further checks of the structure integrity conducted prior to re-starting the kiln.

27/11/21 (05:08 - 12:05hrs) & 28/11/21 (15:08 - 00:00hrs)

Part Bs received 01/02/21. These two notifications relate to a breach of the daily average NO_x ELV via emission point A8 (kiln) with a concentration of 908.51mg/m³ and 682.72mg/m³ respectively. For the breach on the 27/11/21 investigations show that a card had failed on the NO_x abatement communications device. This was reportedly caused by a power outage. A spare was available and the card replaced. As a precaution all other electrical components for this unit have been ordered as spares.

NRW considers this to be a breach of Condition 3.1.2 (E1 = CCS3) in that the ELV for NO_x of 450mg/m³ was breached on the 27/11/21 with minor potential impact on air quality.

For the breach on the 28/11/21, investigations identified a contactor fault on the SNCR pump at 21:11hrs following start-up. This was repaired at 23:15hrs. This was reportedly related to earlier power outage. If a 24 hour rolling average is applied the NO_x concentration of 428mg/m³ would not have exceeded the 450mg/m³ ELV.

Part Bs

The Permit requires Part B of notifications to be submitted as soon as practicable. The level of information should be sufficient with respect to root cause and measures taken to prevent pollution. The Operator has taken between 2 to 3 months to provide Part Bs for this period. This has improved but needs to improve further to prevent non-compliance.

NRW considers this to be a breach of Condition 4.3.2 - G4 Reporting & Notifications CCS3.

ACTION 6: This Action is the same as that required by CAR form NRW0039000 Action 14 for Q3 monitoring returns - The Operator should review procedures to ensure the correct detail is provided to the timescales required by the relevant permit conditions. The review shall cover the sufficiency of resources to ensure compliance with these permit conditions. A report documenting the review together with findings and any suggested improvements should be submitted to NRW in writing by 28/02/22.

Annual Reporting

Annual report for 2021 (Condition 4.2.2) received as required and complete with annual performance parameters.

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

Important information

Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

Assessment results and non-compliance categories (used in section 1):

Assessment result	Description
Assessed (A)	Assessed or assessed in part, no evidence of non-compliance found
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description	Score
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property	60
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property	31
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property	4
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property	0.1

How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator

Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

What are suspended scores?

In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

Full list of Industry and Waste action criteria (used in section 1 and 2):

A: Permitted activities

- A1 Specified by permit

B: Infrastructure

- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

C: General management

- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

D: Incident management

- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

E: Emissions

- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

F: Amenity

- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

G: Monitoring and records, maintenance and reporting

- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

H: Resources efficiency

- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

Enforcement response

Any permit condition non-compliance is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

Data protection notice

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. 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 our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

Disclosure of information – this report will be available to view on-line

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within 20 working days to let you know if we agree to your request.

What do I do if I disagree with the report or have a complaint?

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 – 18:00), or email enquiries@naturalresourceswales.gov.uk for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at ask@ombudsman.wales

Welsh Language Standards

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.