

Compliance Assessment Report CAR_NRW0038936

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: Site Inspection, Reason: Incident Response (Incident number 2107975).

On 23/09/2021 between 12:10 and 14:20.

Parts of permit assessed: SEE NOTES

NRW Lead Officer: Lara Cubley, accompanied by Emma Pierce.

Report sent to: Plant Manager, Plant Manager on 29/11/2021.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
G2 - Monitoring and Records, Maintenance and Reporting - Records of activity, site diary/journal/events	C4 No impact	1.1.2

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

Total number of non-compliances recorded	Total non-compliance score
1	0.1

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
G2	Shift Manager walk logs are a record of site inspection and need to be completed and recorded consistently.	26/11/2021

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.

At this time, we do not intend to take any further action.

This statement does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue.

4. Details of our assessment

Natural Resources Wales (NRW) conducted an unannounced inspection of the Padeswood

Cement Works site and visited local areas as a result of dust complaints between 20/09/21 and 23/09/21.

Off-Site

Prior to attending site between approximately 11:15 and 12:00 a walk around of 'The Groves Estate' Penyffordd was conducted to assess dust.

Parked cars in the area were observed for dust. Some were clean (free of dust), some did have a visible layer of dust on the bonnet and roof, others were somewhere in between. Based on observations at the time there was nothing to suggest a major dust release from the installation, but a contribution could not be ruled out.

One reporter's vehicle on Silver Birch Way was reportedly newly cleaned and this was obvious from observations. A sparse amount of dust was noted on the car with some finer specs and then what appeared to be some slightly larger spots which could be where many finer specs of dust had gathered together. They appeared almost white or pale grey against the dark paintwork. Other cars were observed on Lilac Way and we spoke to a reporter here. The car was covered in a lot more dust but it was understood that this had not been cleaned for some time. There appeared to be a mixture of dust types including a coarse dark grey granular dust which was also observed on some cars in Alder Close.

The results of the analysis received was for Poppyfield Drive, Oak Drive and Pine Way.

For the Poppyfield Drive result most of the tape was blank making analysis difficult. As a result 50 individual particles were analysed at random. 34% was cementitious with only 3 of the 5 particles confirmed as clinker from the site or intermediates from the kiln. 24% limestone, 18% Iron rich material, 10% silica, 8% feldspar and a few particles of fly ash. Many of these materials are used on the site in cement manufacture but are also common in the environment.

The Oak drive sample proved easier to analyse as there was more dust on the tapes. Approximately 39% was cementitious material but not necessarily identified as coming from the site. It was extensively hydrated and carbonated indicating it had been in the environment for some time, as it was from the Poppyfield Drive sample. Approximately 20% was organic in nature and therefore unlikely to be related to cement production. The rest of the dust was identified as silica, feldspar and iron rich particles. Again despite being used on site these materials are also common in the environment and did not conclusively indicate they came from site.

The Pine Way sample analysis showed that based on visual assessments of the SEM images, it was estimated that the clinker fraction was very approximately two-thirds of the total dust. In conclusion, very approximately two-thirds of this dust by volume was clinker dust, and therefore related to cement production. Other mineral material, principally limestone and silica, may have been related to cement production or may have been general dust. The small proportion of organic material was unrelated to cement production.

The Operator reported no dust issues over this period. NRW will continue to respond to and investigate any dust complaints.

On-Site

NRW attended the site unannounced between 12:10 - 14:20 and an inspection was undertaken accompanied by the Shift Manager and the Environment & Quality Manager. It was confirmed that the Kiln and associated plant was running. This included Cement Mills 3 & 5 but not the coal mill and Cement Mill 1 had just stopped running as we arrived on site.

During the site inspection no visible dust emissions were noted and roads appeared clean and wetting of the main road was observed. There was some dust noted as being whipped up from deposits in the area at the roller door entrance to Cement Mill 3.

ACTION: As discussed during the visit it would be beneficial to carry out a programme of cleaning in this area. Please confirm when this has been completed.

A disab unit was on site for vacuum cleaning. All doors were shut apart from one small pedestrian entrance to the clinker reject silo building. No dust was coming from this pedestrian door and it was closed by the Environment & Quality Manager.

It was noted that the exhaust vent from BF10 (previous incident of 02/08/21) had been blanked off.

Shift Managers walk logs not available since 14/09/21 to present. This is a record of site inspection and should be available.

NRW considers this to constitute a breach of permit condition 1.1.2 in that records demonstrating compliance with condition 1.1.1 shall be maintained. (CCS4 - G2, Records of activity, site diary/journal/events)

ACTION: Please investigate and report back

Response on the 2nd November advised that the shift manager's had been doing extra patrols following the number of dust complaints the site had received and some of the documents had not been completed due to this. All shift managers have been reminded to complete this inspection document.

Paper packer fan noise seems excessively loud and had an air leak.

ACTION: Please investigate and report back

Response on the 2nd November advised that a noise assessment is planned for 10th/11th November and the paper packer fan noise will be included in this assessment. The air leak was identified as a receiver continuously venting. Parts were ordered immediately and the issue was resolved on Thursday 28th October.

CEMS

A selection of CEMS data was reviewed with the following points made/discussed:

CM5 - not operational over weekend (17/09/21 07:00 - 20/09/21 15:00) belt issue - could this have caused a release? Area looked clean apart from the spillage noted under the access gantry. Roller door to CM5 not completely closed due to a spillage.

ACTION: Please report back regarding the nature of these spills and subsequent clean up.

Response on the 2nd November advised that CM5 belt is unlikely to have caused a release, as it is contained and the material under the gantry was coarse. The material is a mixture of limestone, gypsum and clinker and none of the dust analysis reports have shown the presence of gypsum which reinforces that this is unlikely to be the source of the dust complaints.

The small spillage by CM5 roller shutter door has been cleaned up and the door closes to the floor. The source of the spillage was failure of the drag chain which is part of the feed

system to the mill. Due to drag chain not removing material, material had built up on the upper floor which then a small amount cascaded down to the ground floor and built up against the door. When the roller door was opened a small amount of material was able to move under the door and prevent the door from closing fully. The drag chain, DC10, has a design issue and this is under review for a more reliable solution.

CM5 - temporary compressor in use due to blower failure

E&Q Manager has confirmed this is still in place and is planned to be changed out during Mill 5 planned shutdown in December. Inspection of the screw pump is required before reinstating the original blower.

CM1&2 - These are running for relatively short periods (especially CM1) which must be inefficient. Reports of gypsum blockages. It was agreed that IC7 noise action required completion and submission along with a BAT review prior to bringing these Mills back into operation. These are both outstanding.

ACTION: Please confirm the status/plan for CM1&2 and complete actions without delay.

Response on the 2nd November advised that the plan is to improve reliability of the mills and keep them in service.

With regards to IC7, the noise consultants tasked with action have confirmed the report will be complete by Friday (5th Nov). A noise BAT review will be discussed with INVC when on site on the 10th/11th November.

CM1&2 - CEMS particulate data for period reviewed was compliant with permitted limits. However, the monitor required QAL2 to demonstrate valid calibration. This should be completed without delay if Mills are to run regularly.

Response on the 2nd November advised that measurements were attempted on the 13th and 14th October but was unsuccessful. This will be booked in again at the earliest opportunity.

CM2 - There appeared to be an error with the feed rate monitoring/data logging from 03/09/21 to 19/09/21.

Response on the 2nd November advised it was most likely the feeder calibration. Although the rate was not accurately monitored the consequence of this impacts the quality of the product and not the environment.

Kiln A8 and cooler A9 recent CEMS emissions monitoring was reviewed for particulate - all looked compliant.

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.