

Compliance Assessment Report CAR_NRW0039976

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 30/04/2022.

Parts of permit assessed: See report

NRW Lead Officer: Lara Cubley.

Report sent to: David Quick, Plant Manager on 10/06/2022.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
B1 - Infrastructure - Engineering for prevention and control of emissions	C3 Minor	1.1.1
C2 - General Management - Management system and operating procedures	C3 Minor	1.1.1
E1 - Emissions - Air	Action only (X)	
E1 - Emissions - Air	C3 Minor	3.1.2
C2 - General Management - Management system and operating procedures	C3 Minor	1.1.1

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

Total number of non-compliances recorded	Total non-compliance score
4	16

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
B1	See Action 1	31/07/2022
C2	Additional prestart check to confirm Pfister calibration added.	Already completed
E1	See Action 2	30/06/2022
E1	See Action 3	31/07/2022
C2	See Action 3	31/07/2022

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.

At this time, we are issuing you with a warning for the non-compliance recorded above. Warnings may influence future enforcement response for continued or further non-compliance.

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

January – March 2022 (Q1)

This Compliance Assessment Report (CAR) covers a review of the routine monitoring and reports for the quarterly period January – March 2022 for all permitted emission points.

Emissions to Water (W1)

Emissions to water were compliant with the permitted limits during quarter January - March 2022.

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 SO_x from emission point A8 (Kiln) on the 22nd February and 1st March 2022. Please see '*Notifications*' section below for further detail.

Periodic Emissions

6 monthly periodic reporting not required until Q2 but see Mercury & Hydrogen Fluoride breaches in '*Notifications*' section below.

Other Reports

Alternative raw material / waste derived fuel usage reported in updated format following guidance, thank you.

Notifications

NRW received 7 Part A notifications relating to this period, as required by Condition 4.3 of the Permit.

7/01/22

Part A received 7/01/22 17:10. Part B received 28/04/22. This notification relates to a release of dust from base of kiln brick chute during maintenance operations. On observation of the emission (~100kg), the operation was stopped, inspected, and the lack of roof cover observed. The roof was sealed and inspected prior to putting the chute back into use again at 11:30. The root cause was identified as insufficient supervision from both Hanson & scaffolding management. An additional inspection by the Operator prior to use has been added as a preventative action.

ADVICE & GUIDANCE: The investigation does not document the review of any plans, method statements, risk assessments or training/toolbox talks associated with the operation. It is advisable to conduct such a review in order to determine whether paperwork, assessments, procedures and training where sufficient or could be improved.

14/01/22 (04:05hrs)

Part A received 14/01/22 05:08. Part B received 02/05/22. This notification relates to a leak of cement dust (~20Kg) noted from CM5 transport line (two way valve CT5FV01) at ground level. This leak (hole ~2mm) was detected by a packing bay operative passing the area regularly and reported to the shift manager immediately. CM5 and the associated emission were stopped until a repair was completed. The investigation showed the root cause was maintenance related. Preventative measures instigated by the Operator include adding the individual equipment number to SAP and preventative maintenance task to confirm inspections are carried out and documented appropriately.

NRW considers the root cause to be a breach of Condition 1.1.1 (B1 – Engineering to control emissions = C3) with minor potential impact as the release was reportedly small and stopped swiftly.

ACTION 1: Complete preventative measures identified as part of the investigation report listed below by 31/07/22.

No	Description	By When
1	Regular inspection formalised and added onto SAP as an annual PM GB1P-11002	Annual shutdown
2	Add CT5-FV01 onto SAP to allow for clearer distinguishing between which valve is being referred to in reports and notifications	21.06.2022
3	Ensure that regular inspections of weld in the meantime track any changes.	12 weekly
4	Contact a third party to scan and manufacture an improved double flange joint to be installed at next shutdown	30.06.2022

29/01/22 (12:24 – 12:52hrs)

Part A received 29/01/22 19:20. Part B received 02/05/22. This notification relates to a release from the kiln inlet seal area (~120Kg) shortly following kiln start up and introduction of feed. Efforts to control the dust release by adjusting kiln rotation speed and draught provided marginal

improvements so the kiln was stopped.

NRW considers the root cause to be a breach of Condition 1.1.1 in that the management system failed to identify and minimise the risk of pollution (C2 – Management Systems = C3) with minor potential impact due swift resolution. The release was reportedly small with no dust complaints received over this period).

The root cause of the investigation was the coal Pfisters requiring calibration which caused low fuel inputs leading to a low degree of calcination/kiln instability. Following coal Pfister calibration the kiln was restarted at 15:05 without any further evidence of a dust release. The Operator has added an additional prestart check to confirm Pfister calibration post shutdown.

21/02/22 (14:39 – 18:45hrs)

Part A received 23/03/22 16:06. No Part B received. This notification relates to an exceedance of the periodic Mercury ELV (0.05mg/m³) via emission point A8 (kiln) with a concentration of 0.053mg/m³. However, as the measurement uncertainty was 14% (0.007mg/m³) this is not deemed a breach of the permitted ELV.

Repeat monitoring was scheduled for w/c 25/04/22. Full results/investigations (Part B) are outstanding despite verbal updates.

ACTION 2: The Operator must provide at least an interim Part B investigation in writing to NRW by 30/06/22.

22/02/22

Part A received 22/02/22 18:34. Part B received 29/04/22. This notification relates to a breach of the daily average SO₂ ELV via emission point A8 (kiln) with a concentration of 225mg/m³.

NRW considers this to be a breach of Condition 3.1.2 (E1 – Emissions to Air = CCS3) in that the ELV for SO₂ of 200mg/m³ was breached on the 22/02/22 with minor potential impact on air quality. The kiln was only running for about 7 hours that day.

The investigation showed that elevated sulphur content in the limestone and inability to manage the elevated sulphur content caused this breach. Plant down time was also a contributory factor.

NRW considers the inability to manage the elevated sulphur content in limestone to be a breach of permit Condition 1.1.1 (C2 - Management Systems = C3).

ACTION 3: Complete preventative measures identified as part of the investigation report listed below by 31/07/22.

No	Description	By When
1	Include details of previous day's SO ₂ emissions on quality report, produced each weekday for the morning Production Meeting	Done
2	Introduce action limits on XRF SO ₃ results, agreed with JP & SM, for samples of limestone drill chippings from the Quarry, by means of conditional formatting on the results spreadsheet	29/4/22
3	Extract visible shale from blasts and spread beneath low sulphur material	Done
4	Yellow plant maintenance programme	15/7/22
5	Improve availability of EPC/UK drill rig	Done

24/02/22 (11:15 – 14:10hrs)

Part A received 23/03/22 16:06. Part B received 10/06/22. This notification relates to an exceedance of the periodic Hydrogen Fluoride ELV via emission point A8 (kiln) with a concentration of 6.2mg/m³.

A FTIR analyser was measuring at the same time as this test and recorded very low levels of Hydrogen Fluoride as reviewed by NRW on 29/03/22 and detailed in CAR_NRW0039704. Fluoride salts passing the filter during the sampling were reportedly a potential cause of this high result. Repeat monitoring was undertaken in triplicate on 25/04/22. All three results showed a concentration of <0.022mg/m³.

01/03/22

Part A received 02/03/22 01:56. Part B received 29/04/22. This notification relates to a breach of the daily average SO₂ ELV via emission point A8 (kiln) with a concentration of 212mg/m³.

The investigation found the same as that for the SO₂ breach on the 22/02/22 apart from the fact that plant down time was not a contributory factor on this occasion. Breach of permit non-compliance has been consolidated with that for SO₂ on 22/02/22.

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.