

Compliance Assessment Report CAR_NRW0043327

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: Report/Data Review,

Reason: Routine.

On: 29/12/2023.

Parts of permit assessed: monitoring returns.

NRW Lead Officer: Rebecca Harwood.

Report sent to: David Quick, Plant Manager, on 23/02/2024.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3A - Emissions and monitoring - Emissions to water, air or land	Action only (X)	
IR3E - Emissions and monitoring - Monitoring	Assessed (A)	
IR4B - Information - Reporting	Assessed (A)	
IR4C - Information - Notification	Assessed (A)	
IR3B - Emissions and monitoring - Emissions of substances not controlled by emission limits	C3 Minor	3.2

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

Total non-compliances recorded	Total non-compliance score
1	4

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
IR3A	see text below	05/04/2024
IR3B	operator has completed corrective actions as part of their	Already

Criteria	Action needed	Complete by
	investigation	completed

Compliance 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

Review of emissions monitoring Q4 2023 (October - December 2023)

Emissions monitoring data covering the period 1st October to 31st December 2023 was received on the 19th January 2024 in accordance with permit condition 4.2.3.

1. Emissions to Water

No exceedances have been identified within the monitoring return for emission point W1.

2. Emissions to Air

Continuous Monitoring (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 period.

The Operator submitted a Schedule 5 notification on 8th November 2023 for a daily particulates exceedance recorded at emission point A8 (Kiln 4) during start up. It was identified that chamber 2 was causing the elevated dust readings, this chamber was isolated and work was subsequently completed on the damper.

The definition of start up in Schedule 6 - Interpretation is "*start-up*" means (a) the process of bringing the kiln into normal operation. Start-up commences when raw meal is introduced into the kiln and may continue until the kiln feed rate reaches 120 tonnes per hour and the kiln is stable. On commencing kiln operation the first continuous monitoring daily average can be calculated from the 24 hour period starting from the time that kiln startup completed. Subsequent daily averages will be based on a 24 hour period commencing at midnight following the kiln startup. Or (b) as otherwise agreed in writing with Natural Resources Wales.

The kiln feed rate was at 120tph at midday, at this point the results from the CEMS start to be displayed, however, the Operator has stated that it takes a further 60-90 minutes for the kiln to become stable. If the CEMS results for the period 12:00 - 13:00 are removed from the data set then the rolling 24 hour average becomes compliant. Therefore NRW accept that there was not an exceedance of particulates above the ELV on this occasion.

Action 1: The Operator should submit their procedure for determining when the plant has exited start up (as per definition above) and when stable combustion (normal operations) has been achieved.

Action 2: Confirm to NRW that any works identified during the December 2023 inspection were completed during the January 2024 outage.

Periodic monitoring (A15, A8)

Particulate monitoring was undertaken at Cement Mill 5 (emission point A15) on 5 October 2023. The results were compliant with the ELVs within the permit.

Six monthly monitoring at the Kiln 4 main stack (emission point A8) was undertaken on 2-3 October 2023. There were no exceedances of the ELVs stated within the permit.

The Kiln by-pass dust 6 monthly analysis was also submitted.

3. ARM and WDF Reporting

The alternative raw material / waste derived fuel usage forms for October - December 2023 have been updated. No issues have been identified.

4. Summary of Schedule 5 Notifications Received

In addition to the notification received for the dust exceedance during start up (discussed above), a notification was received relating to an unauthorised release of dust from Cement Mill 3 on 16th December 2023. Approximately 30-50kg dust was released as a result of the mill fan tripping. The Operator has confirmed that *Stack emissions were stable at 2mg/Nm³ prior to stopping and the fluxo inlet valve failed due to brass sealing ring detachment*. The investigation summary states: *"The failure that occurred prevented the compressed air supply stopping which created a constant flow of compressed air into the fluxo and the only way this could vent was through the fluxo cement inlet valve, into the pre hopper and into the building. Isolating the compressed air and re-attaching the brass sealing ring resolved the issue."* The brass ring had been inspected as part of the preventative maintenance plan on 1st December 2023 and no issues had been identified.

A category 3 score, under subheading IR3B Emissions of substances not controlled by emission limits, has been applied against permit condition 3.2 for the above release.

There was a previous issue with the brass ring detaching in August 2021. NRW will review the actions from this previous event and the fluxo design as part of a future compliance visit. Further actions may arise following this.

5. Noise monitoring

As part of the submitted Noise Management Plan, the Operator had committed to undertaken quarterly noise monitoring. As a result of an increased number of outages / stoppages scheduling the noise surveys for when the plant was fully operational was difficult; therefore monitoring was only undertaken three times during the year in March, July and December 2023.

A further background noise assessment was completed during August 2023 when the site was in a partial shutdown.

6. Annual Report

A report on the performance of the activities as required by permit condition 4.2.2. was received by Natural resources Wales on the 19th January 2024. No issues have been identified.

Performance parameters were reported to Natural Resources Wales in accordance with permit condition 4.2.2. No issues were identified.

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.

If your assessment result in Section 1 is suspended, what does this mean?

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 compliance criteria (used in section 1 and 2):

1. Management

- IR1A – General management
- IR1B – Finance (only applicable to Landfill)
- IR1C – Energy efficiency
- IR1D - Efficient use of raw materials
- IR1E - Avoidance, recovery and disposal of wastes produced by the activities
- IR1F - Multiple operator installations

2. Operations

- IR2A – Permitted activities
- IR2B – The site
- IR2C – Operating techniques
- IR2D – Technical requirements
- IR2E – Improvement programme
- IR2F – Pre-operational conditions
- IR2G – Landfill engineering (only applicable to Landfill)
- IR2H – Waste acceptance (only applicable to Landfill)
- IR2I – Leachate levels (only applicable to Landfill)
- IR2J – Closure and aftercare (only applicable to Landfill)
- IR2K – Landfill gas management (only applicable to Landfill)

3. Emission and Monitoring

- IR3A – Emissions to water, air or land
- IR3B – Emissions of substances not controlled by emission limits
- IR3C – Odour
- IR3D – Noise and vibration
- IR3E – Monitoring
- IR3F – Pests
- IR3G – Air quality management plans
- IR3H – Monitoring for the purposes of the Industrial Emissions Directive (this heading includes Large Combustion Plants)
- IR3I – Fire

4. Information

- IR4A – Records
- IR4B – Reporting
- IR4C – Notification

Enforcement response

Any non-compliance with a permit condition 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 twenty 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 to 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.