

Compliance Assessment Report CAR_NRW0038827

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 2106705).

On 02/08/2021 between 10:43 and 12:55.

Parts of permit assessed: See report

NRW Lead Officer: Lara Cubley.

Report sent to: David Quick, Plant Manager on 14/10/2021.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
E1 - Emissions - Air	C3 Minor	3.1.2
C1 - General Management - Staff competency/training	C2 Significant	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
2	35

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
E1	ACTION 1 & 2	05/11/2021
C1	ACTION 1 & 2	05/11/2021

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.

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

Introduction

Natural Resources Wales (NRW) received several complaints from a residential area of Pen-y-Ffordd known as 'The Groves Estate' between 20/07/21 and 24/07/21 relating to dust thought to have come from the Castle Cement Padeswood site. The Operator attended some of the complainants addresses to sample dust deposited on cars in order to help determine the source of the dust. Analysis and results of the dust samples typically take 2 - 3 weeks to come back.

The Operator's initial investigations reported potential issues with the clinker store stock inspections. NRW believed the clinker stock inspections were unlikely to cause such an off-site impact. The Operator's investigations did not find any further potential issues but reported they had received about 20 complaints of dust. NRW decided to do an unannounced site inspection to investigate the possible cause of the dust complaints.

Inspection

The site was inspected by NRW on the 02/08/21. During the site inspection visible dust emissions were noted from a vent at elevation on the side of a building in the old Mill 4 area behind BF41. This vent was confirmed to originate from the transfer point where clinker, gypsum & limestone are fed to the common belt to Cement Mill 5 (CM5_BF10 confirmed as emission point P46 from permit application). The Operations Manager ordered the emission to be ceased immediately.

NRW considers this to constitute a breach of permit condition 3.1.2 (E1 Emissions - Air CCS3) in that visible dust was noted (>10mg/m3 emission limit). From the spread of complaints and samples analysed it appeared that the impact was over a whole estate known as 'The Groves Estate' which has in the order of 200 homes. Complaints were mostly of dust on cars but also window sills/windows and garden furniture. There was a minor effect on property from the visible cementitious dust fallout which it is understood has been removed by car detailers under the instruction of Castle Cement. The dust was quite difficult to remove and there were concerns regarding damage to paintwork, but none reported to date. It is unlikely that the release of material would lead to significant exceedance of air quality standards, rather a short term, local effect on air quality.

During the site inspection the kiln and associated equipment had just entered a shut down period. A Disab was in operation cleaning the cooler building. The following shortcomings were noted with respect to dust management:

- Rear crane bay roller door left open with visible dust drifting out.
- GCT dust room below – door left open but closed during inspection.
- Underground access to conveyors (behind clinker dome) door ajar – closed during inspection but auto closure not working effectively.

NRW considers this a breach of Condition 1.1.1 in that the operator failed to follow his own management system, dust management plan PG10 (C1 Staff Competency & Training CCS3 consolidated with CCS2 score below).

The road around back of SRF building is not paved and was dirty from spillage of black material. We understand that this route is being temporarily used whilst access via by-pass area is not possible. Other main roadways on the site were appropriately clean during the inspection.

ADVICE & GUIDANCE: Ensure spillages are cleaned up and that highly trafficked areas are hardstanding.

Incident Investigation Findings

As requested, the Operator provided a report detailing the investigation into this incident on 12/08/21. The main findings of the investigation were as follows:

- Commencing 14th July Castle Cement received in excess of 80 dust complaints from 'The Groves Estate' Pen-y- Ffordd.
- Analysis of samples taken from vehicles showed clinker dust, mostly hydrated and some fresh.
- CM5_BF10 filter, (put back into service 13th July), was confirmed as the source of the dust fallout due to the timeline and as evidenced by NRW's inspection.
- Clinker store stock inspections made via a door at the top of the store to prevent overfilling were identified as another possible source but ruled out as they didn't start until 21st July.
- On stopping the emission BF10 filter was inspected and two holed bags were identified and replaced on 02/08/21.
- The Operator failed to adequately monitor this filter. Visual checks on the emissions from Shift Manager routes/patrols did not identify and report the issue and initiate corrective action in line with the Operator's own procedures and management systems.

NRW considers this a breach of Condition 1.1.1 in that the operator failed to follow his own management system, in particular dust management plan PG10 and maintenance management (C1 Staff Competency & Training CCS2) with the potential for a significant risk to the environment.

Maintenance

The Operator states the following with regard to maintenance history of BF10 filter:

- A number of filter bags were replaced on the 21/08/20.
- A detailed inspection by specialist contractor was undertaken on 04/02/21 and no evidence of bag failure was identified.
- Since specialist contractor inspection installation of a vibrator on discharge chute of filter hopper and resolution of high fan vibration completed.
- 3 bags were replaced prior to starting filter on 13/07/21.

Notification

The Operator provided a Part A Notification on 16/08/21. The investigation report is considered sufficient to satisfy the permit requirements of a Part B (Permit Condition 4.3)

Actions

The Operator has proposed a number of actions in the investigation report received 12/08/21 to prevent reoccurrence as follows:

1. Install burst bag monitor in ducting of BF10 by 05/11/2021
2. Redirect the ducting of BF10 so it vents within the building by 05/11/2021

3. Filter inspection routine of BF10 and other similar filters to be carried out by Process Operatives which will include a check of the cleaning cycle, hopper, vent and transport from filter by 31/08/2021
4. Move clinker store door and seal up existing by 31/08/2021
5. Review other filters with similar set up to BF10 (i.e. in building but vented to outside) to determine whether the additional environmental control measures stated for BF10 are required by 05/11/2021
6. Review of filter planned preventative maintenance schedule to ensure all filters are maintained at adequate frequencies defined by risk by 05/11/2021.

ACTION 1: The Operator is to complete the 6 actions listed above to the timescales stated.

ACTION 2: The current methods employed to prevent overfilling of the clinker dome are not considered appropriate. The Operator is to review such methods and provide a summary of proposed actions by 05/11/21.

There are a number of other actions within CAR_NRW0038746 to be completed related to management and in particular staff competency/training which will contribute to the prevention of recurrence of such an incident and must be completed.

We would like to bring to the attention the Operator's Attention ACTION 16 is CAR form CAR_NRW0038746:

'The Operator shall review the scope and frequency of work orders for the planned maintenance of bag filters. This should be based on risk by reviewing data such as past performance, hours ran, and manufacturers recommendations with a view to fault free operation. A summary of this review shall be provided to NRW in writing by 19/11/21.'

Permit Condition 2.3.1(a) - Table S1.2 requires operation in accordance with Information received in support of NRW Cement Sector Permit Review response to Regulation 60 (1) notice received 29/07/15. This states, *'In addition to these observations there is an annual performance check carried out by specialist contractors. The performance test includes a visual check of emissions, measurement of air flow, static pressures and pressure drop across the filter. The performance test also covers the operation of reverse jet/pulse jet, compressed air systems including pressure before and after pulse, pulse duration, operation of solenoid valves, diaphragm valves and checks on the condition of the structure and casing.'*

ADVICE & GUIDANCE: The Operator must ensure work orders cover these performance tests.

NRW will consider its enforcement response in relation to these matters

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.