

Compliance Assessment Report CAR_NRW0040628

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: Check Monitoring/Sampling, Reason: Incident Response (Incident number 2207064).

On 10/10/2022 - 18/10/2022 between 23:00 and 00:30.

Parts of permit assessed: See report

NRW Lead Officer: Stuart Ross, accompanied by Paul Challender.

Report sent to: David Quick, Plant Manager on 03/11/2022.

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

| Part of permitted activity assessed (criteria) | Assessment result | Permit condition |
|--|-------------------|------------------|
| F2 - Amenity - Noise | C2 Significant | 3.4.1 |
| A1 - Specified by permit | C3 Minor | 2.3 |

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 |
|----------|---------------|-------------------|
| F2 | See Actions | Already completed |
| A1 | See Action | Already completed |

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

This compliance assessment report (CAR) documents noise assessments and investigations conducted between 10/10/22 and 18/10/22. Such assessments and investigations were conducted in response to recent reported noise complaints from 3 different individuals. Noise assessments and investigations are provided in a chronological order.

Monday 10th October 2022

NRW officers Stuart Ross & Paul Challender deployed to the Padeswood and Pen-y-ffordd areas to assess noise from Hanson Cement. At 2300 hrs the officers were on Hazel Drive, Pen-y-ffordd. From this location there is a direct line of site to the cement work's main stack and there appears to be a façade effect associated with the property on the corner of Hazel Drive & Chester Road. The weather was 10°C, a light north westerly breeze with light cloud cover – 2 octets. The soundscape was one of dominant road noise from the A550. A low drone with the occasional impulsive sound from the air cannons was perceptible. The level was low and non-intrusive as it was easily masked by road noise.

The officers proceeded to Chester Road, Pen-y-ffordd property and took recordings with a Class 1 sound level meter. The cement works was audible. The perceptible sounds included a low level rumble, impulsivity from the air cannons and an unknown clattering buzz presumed to be from the vibrator plate. The perceptibility of these sounds varied however, sometimes being completely inaudible even in the absence of other ambient noise. Ambient noise in the area included traffic, lowing cattle, barking dogs and a calling fox. On occasion audible sound from the works was masked by the ambient noise. The level of noise from the works for the most part was perceived to be non-intrusive and non-polluting by the attending officers.

There were, however, brief instances where the cement works noise level seemed to increase in volume and reflect off one or more of the properties of the new Redrow Estate at the top of Chester Road. These intermittent occurrences were deemed to be polluting. The NRW officers liaised with the shift team leader to ascertain what processes were running and to have certain items of plant switched off and on again. The officers were informed that all the mills were off and only the kiln was on. Two DISABs were on site, one was already off at the time of calling and the other was turned off and no alteration to audible sounds occurred. The vibrator plate was turned off and on with no alteration to audible sounds.

Officers left the area and proceeded to Bannel Lane. Observations and recordings took place at two locations, outside a property and at the Y junction of Bannel Lane. On Bannel Lane no road noise was perceptible at this time. Cement works noise was completely dominant and included a low drone, impulsive noise from the air cannons and the clattering sound similar but more dominant and frequent than that heard in Pen-y-ffordd. There was one occasion of unidentified clanging which may have been HGV or rail sidings noise. The clattering buzz sound that was presumed to be the vibrator plate, modulated in and out of audibility. The buzzing noise was more audible at the Y junction. The shift team leader (STL) joined the officers at the junction and called back to site to have the vibrator plate turned on and off again. There was no change in the sound from site. Liaison with site

staff lead us to believe that there was only one vibrator plate at this time. The officers perceived the clattering buzzing sound to be intrusive and polluting on Bannel Lane.

Wednesday 12th October 2022

On the afternoon of Wednesday 12th October the above officers attended Pen-y-ffordd and Padeswood again stopping at locations encircling the cement works and in Pen-y-ffordd at properties of received noise reports. On this occasion road/traffic noise was dominant with the cement works noise barely perceptible in Pen-y-ffordd. On the lanes around Padeswood the work was audible, but it was mainly the impulsive sounds from the air cannons.

Thursday 13th October 2022

On Thursday 13th October the above officers attended the site to try to establish noise sources. Several fans and items of plant were monitored and recorded with a Class 1 sound level meter. Items of plant were turned off and on and ramped up and down. A tone was identified emanating from a screw at the bottom of the kiln bucket elevator, but this was only perceptible in the immediate vicinity of the item of plant.

ADVICE & GUIDANCE: The operator should investigate the source of this noise and associated maintenance requirements.

A very low frequency was detected by two fans in the cooler building, which was audible immediately outside the building. The main source appeared to be the nose ring fan. A second vibrator plate was identified several meters directly above the known vibrator plate on top of a silo associated with the new by-pass system. This vibrator plate appeared to be facing Pen-y-ffordd and was outputting a high dB and vibrated the structure to which it was affixed. The operator did not know that this item of plant existed. The operator was advised that this may be the source we heard on Monday. The operator was advised to look at putting in measures to control noise from this item of plant and that we intended to return to the area one evening to assess associated noise impacts.

Friday 14th October 2022

The Operator isolated this second vibrator plate on top of the by-pass silo at 4pm. Since this isolation a resident on Chester Road has stated that the noise issue has been resolved from their perspective.

Sunday 16th October 2022

On the evening of Sunday 16th September, the above officers deployed in the evening to the same locations. There was an easterly blustery wind carrying sound away from the

Chester Road and Bannel Lane locations. The dominant sound at this time was comprised of road/traffic noise, wind, rustling leaves and rain. The cement works was inaudible. Conditions were inappropriate for taking noise measurements.

Monday 17th October 2022

On the night of Monday 17th September the officers again attended the Penyfordd and Padeswood locations. There was a light west south westerly breeze and a cloudless sky. On Bannel Lane the cement works could be heard with impulsivity from the air cannons and a low droning sound. The clattering buzz assumed to be the vibrator plate could not be heard. The officers took recordings in a property's garden. The ambient noise included traffic, aircraft, lowing cattle, occasional water running to drains from the residential property.

We spoke to the STL, he advised that the kiln had gone down that evening and that the bottom vibrator plate was on, but the top vibrator plate had been isolated. The officers asked for the top vibrator plate to be turned on. This was done in different combinations of the top and bottom vibrator plates being operational. Only the top vibrator plate could be heard at the location. The top vibrator plate was positively identified as the clattering buzz sound. The STL was requested to isolate this item of plant again. The officers considered the noise from the top vibrator plate to be intrusive and causing a pollution in the Bannel Lane area.

The officers attended the Pen-y-ffordd locations in the vicinity of the property of a reporter of noise and made recordings outside. The area was subject to a droning sound from the cement works which appeared to modulate in amplitude with occasional impulsive noise from the air cannons. The area was subject to road/traffic noise including several motorcycles, lowing cattle, a fox calling and minor rattling from the Redrow estate flags. During one recording taken the noise from the cement works ceased abruptly at 0012 hrs and did not return. The officers spoke to the STL to try and ascertain which item of plant had been shut down or which item connected to the SCADA system had altered its mode of operation. The STL was unable to identify any change that he believed would precipitate the drop off in perceived sound levels in Pen-y-ffordd, however, it was confirmed that the kiln system went into a shutdown.

NRW is of the opinion that the Operator has breached Permit Condition 3.4.1 because an authorised NRW officer has perceived noise at levels likely to cause pollution outside the site from the top by-pass vibration plate without taking appropriate measures (F2 - Noise CC2). No control measures were in place to prevent or reduce the noise impact from the vibrator plates. NRW Guidance states, 'Where the non-compliance continues for more than one week you should categorise it as C2 Significant to reflect the increased impact that ongoing amenity non-compliance has on nearby residents'. This noise has had a significant effect on human senses. It has been occurring frequently throughout the night since the commissioning of the by-pass system over 4 months ago. Although the volume is not so much an issue the characteristics of this noise make it more intrusive than the normal climate.

ACTION 1: Cease use of the top vibrator plate with immediate effect. Completed 4pm 14/10/22.

NRW is of the opinion that the Operator has breached Permit Condition 2.3 (A1 - Specified by Permit - C3). The by-pass variation application did not include vibration plates within the cement kiln dust transport system. As such no BAT assessment was made and noise pollution has occurred.

ADVICE & GUIDANCE: It is also advisable that the Operator ceases use of the bottom vibration plate. Should the operator wish to commence use of either the top or bottom vibrator plate of the by-pass system, an application for a variation to the permit must be made. This variation should include:

(a) A BAT assessment following the hierarchy of control i.e., is the vibration plate technique BAT in the first place or are their other options for prevention of blockages, location, isolation, and finally acoustic enclosure.

(b) A noise impact assessment.

See CAR_NRW0040628 regarding change management issues.

Noise complaint investigations are ongoing relating to a drone.

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.