

Compliance Assessment Report

Report ID:
CAR_NRW0031684

This form will report compliance with your permit as determined by an NRW officer

Site	Padeswood Cement Works EPR/BL1096IB	Permit Ref	BL1096IB			
Operator/Permit holder	Castle Cement Limited					
Regime	Installations					
Date of assessment	09/05/2017	Time in	13:00	Out	15:30	
Assessment type	Site Inspection					
Parts of the permit assessed	Various					
Lead officer's name	Ross, Stuart					
Accompanied by						
Recipient's name/position	Robert Keough/ Quality & Environment Manager	Date issued	01/06/2017			

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
A1 - Specified by permit	C3	3.1.1
	A	
C2 - General Management - Management system and operating procedures	C3	1.1
C4 - General Management - Storage, handling labelling and Segregation	C3	3.2.3

KEY: See Section 5 for breach categories, suspended scores will be indicated as such.

A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,

O = Ongoing non-compliance, not scored.

Number of breaches recorded	3	Total compliance score (see section 5 for scoring scheme)	12
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If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

Dust release 23/03/17

A local resident reported a fugitive dust emission from Castle Cement and an odour of 'burned cement'. The reporter later said that the fugitive emission from the site was visibly suspended in the air surrounding the works on adjacent fields towards Toll Bar Cottage.

NRW officers investigated the complaint and did not substantiate any ongoing dust emission but did witness a slight, intermittent combustion odour possibly from the kiln plume. The initial incident investigation by Castle Cement did not identify a dust issues on site.

Working with the complainant Castle Cement identified the area/location of the dust emission that was later found to be a defective expansion joint on the raw mill circuit. The kiln system was then shut down pending a repair and other planned maintenance.

A dust sample was collected from the complainant's vehicle(s) and sample results confirmed the presence of limestone, feldspar, silica and clinker dust. This is highly likely to have originated from the cement works and the Environment Manager reported that the sample result is consistent with a dust release from the expansion joint.

The expansion joint in question is on a duct that is normally under negative pressure and an emission would only be noticeable if the system experienced positive pressure.

The expansion joint is difficult to access and scaffolding was erected to allow a repair to be completed. Other similar joints were also to be inspected during the shutdown. During a site visit 30/03/17 NRW viewed the expansion joint and it could be seen that there was a tear in the fabric. The Environment Manager reported that the tear was initially quite small but has since been opened up as part of the investigation/remedial works.

It was also observed that the duct work, stairways and the general area surrounding the expansion joint were covered in a significant quantity of dust which was later cleaned up by Castle Cement.

Further information received from Castle Cement 03/05/17 reported that;

'The kiln was stopped following the failure of the expansion joint and scaffolding was organised to enable replacement of the joint. Inspections of other expansion joints of the same age were carried out by the onsite maintenance team and two further expansions joints which had early signs of wear with the potential to fail in the future were identified. These expansion joints also received smaller patch repairs.'

A survey of the various expansion joints on site has been organised by an internal contractor for the middle of May. This will aim to identify and categorise the age and likelihood of failure of the joints on site so that a, repair and replacement strategy of the joints can be carried out on a continuous basis.

An analysis of the incident found that the failure of the joint was due to a combination of reasons. The first being the difficulty in inspection of the expansion joints from a distance when they are at great height.

The inspection being carried out by the contractor should give us an indication of the condition of the current joints and their potential life span. This information will then be used to create a repair and replacement plan at suitable timeframes for each of the joints.

The second cause was due the large changes in pressure that the expansion joint was subject to due to frequent trips on the raw mill, due to an at the time unknown electrical fault. The issue has now been resolved; this will result in fewer trips on the raw mill, and should reduce the wear on the expansion joint'.

NRW considers that insufficient preventative maintenance and inspection provision was in place to prevent and minimise the risk of expansion joint failure and the potential emission of dust/fumes to the environment. This is in breach of permit condition 1.1 (General Management) and attracts a non-compliance score of 3.

1. **ACTION** –Provide NRW with the findings of the expansion joint condition survey (planned May 2017), the repair and replacement strategy and the preventive maintenance programme to be put in place to prevent and where that is not possible, to minimise the risk of future expansion joint failures. Please do so by 30/06/17.

2. **ACTION** – Complete a review of the measures in place to ensure the early detection of fugitive dust emissions from plant and

equipment (e.g. plant surveillance, shift managers 'tour') and implement a programme of improvements as required.

3. **ACTION** - Complete a review of the measures in place to ensure high standards of housekeeping are maintained to both minimise the risk of fugitive dust emissions to the environment and to aid the detection of abnormal plant operations (e.g. unexpected accumulations of dust). Implement a programme of improvements as required.

Progress in meeting actions 2 and 3 above will be monitored by NRW during future site inspections.

Site Sewage Pumping Station

On 30/03/17 NRW witnessed a discharge of sewage/surface water from the site pumping station. The pumping station receives sewage from the site facilities, and 13 residential properties on Padeswood Drive in addition to surface water from the main site access road.

Adjacent to the pumping station, what appeared to be relatively dilute sewage was surcharging from a manhole chamber and running over ground into a ditch that runs along the western edge of the CKD landfill. This is a small tributary of Black Brook - the impact was likely to be minor.

Whilst there is a trade effluent consent to allow the discharge of effluent from the pumping station to public sewer, there is no authorisation in place to permit the direct discharge of effluent from the pumping station to the environment. This incident is in breach of permit condition 3.1.1 (unauthorised discharge), CCS3.

It was established that the pumps within the pumping station were not operating (tripped) and the alarm system failed to activate to alert site personnel to a high level within the wet well. Shortly after this issue was identified site personnel restarted the pumps and the discharge ceased.

Part A and B notifications were submitted to NRW.

Castle Cement reported that the pump maintenance contractor identified that the PLC system had not been correctly installed, which led to over working and excessive wear on one of the pumps, which would have been a contributing factor to its failure.

In response to the incident Castle Cement reported that both audible and visible alarms were fitted to alert the site in times of the pumps tripping or through high level in the sump. In addition both pumps received a thorough service including the replacement of parts to ensure their continuing function. The logic circuit error was fixed to ensure that the pumps receive equal wear during operation.

On 09/05/17 a meeting was held with NRW, Welsh Water and Castle Cement to discuss the site pumping station permitting arrangements (trade effluent consent) and issues relating to the diversion of surface water from the pumping station to the authorised surface water discharge points. Welsh Water have reservations regarding the surface water entering the pumping station and It was agreed that the objective is now to prevent the pumping station being overwhelmed with storm water to reduce the risk of an unauthorised discharge to the environment.

1. **ACTION** – Castle Cement to investigate options for diverting clean uncontaminated surface water from site roads / roofs and similar areas to the authorised discharge points (preferably W1). It is important that any misconnections from foul drainage are ruled out from any diverted surface water drainage legs. Please provide NRW with your proposals by 30/06/17

Pollution Prevention - Containment of Liquids

During the inspection it was noted that two full IBCs containing cement grinding aid were stored on unmade ground outside the stores building. It was reported by the Environment Manager that the IBCs had been identified for removal. The storage of IBCs in this manner is in breach of permit condition 3.2.3 and has potential for minor environmental impact. CCS3.

1. **ACTION** – Provide grinding aid IBCs with secondary containment or take other appropriate measure to prevent and minimise to risk of leakage and spillage - please do so by 02/06/17. Ensure all potentially polluting liquids are stored in compliance with permit condition 3.2.3.

Outside the main stores building a roofed area with concrete hard standing is used for the storage of oils/ lubricants and other product used in the process. The concrete floor and general area did not show any signs of historic leaks and spills. However, surface water drains are located just outside this building and it appears possible that any significant spills could enter the drainage system.

Some of the liquids stored in this area did not have any form of secondary containment (mainly smaller containers on shelving) including a small number of 45 gallon drums placed directly on the floor. It is noted that drip trays are placed under the 45 gallon drum racking system but due to their size and position the drip trays may not guarantee full containment.

It is therefore recommended that a review of secondary containment for this area is carried out to ensure adequate spill protection, covering reception of goods, handling and storage.

A possible option includes the installation of a kerb to create a 'kerbed area' capable of containing 110% capacity of the largest container or 25% of the total inventory (whichever volume is larger). This would also create a set down area for drum and IBC deliveries.

You may wish to refer to 'Pollution Prevention Guideline PPG26' that is easily obtainable online. This guidance has technically

been withdrawn from use but it does provide some practical advice that you may wish to consider.

Raw Mill Reject chute

On 30/05/17 it was confirmed that work has started to repair panels on the building adjacent to the raw mill reject chute and chute lagging is estimated to be complete within the next 14 days. Mill performance has been improved by minimising false trips. Feedback from an affected local resident received 31/05/17 was that noise levels have reduced over recent months.

Improvement Condition 2

Please provide a response to my letter of 21/03/17 by 30/06/17. It is important that this improvement condition is completed (agreement reached) to ensure emissions monitoring is completed in accordance with the permit.

EPR Compliance Assessment Report

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Section 3 – Enforcement Response

You must take immediate action to rectify any non-compliance and prevent repetition.

Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			
A1	C3	Refer Details Section	30/06/2017
C2	C3	Refer Details Section	30/06/2017
C4	C3	Refer Details Section	02/06/2017

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/services relating to environmental matters
- Consulting with the public, public bodies and other organisations (eg. 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 its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.