

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

Site	Queensferry Mineral Fibre Works	Permit Ref	BR9383ID		
Operator/Permit holder	Knauf Insulation Ltd				
Regime	Installations				
Date of assessment	31/12/2018	Time in	N/A	Out	N/A
Assessment type	Report/Data Review				
Parts of the permit assessed	Emissions monitoring Q4 and annual reporting, Part A/B notifications and WIRS reports				
Lead officer's name	McGregor-Andrew, Sian				
Accompanied by					
Recipient's name/position	Graham Jones/ Process and Energy Manager	Date issued	05/04/2019		

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
E1 - Emissions - Air	C3	3.1.2 (emission point C)
	C3	3.1.2 (emission point A)

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	2	Total compliance score (see section 5 for scoring scheme)	8
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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

Emissions monitoring for Q4 - October to December 2018

The Q4 emissions monitoring for quarterly monitoring of emission point A, C, G and Y and annual report was received on 25/01/2018 in compliance with condition 4.2.3. Monitoring was undertaken in compliance with condition 3.3.1.

Emission point A:

Max daily average value for CO in November was 145.2mg/m³ (ELV 80mg/m³). EP_EX214 part A notes that the gas demand in the cupola dropped and on 3rd and 4th November the CO emissions exceeded the ELV. The annual report highlights that there was unusually high CO from the cupola affecting the temperature control in the burner and that the burner temperature set point was increased to resolve this. The CO max daily average emissions do not match the figure in the Q4 emissions report and no Part B was submitted for EP_EX214.

Breach of condition 3.1.2, CCS 3 score under criteria E1 - emissions to air

All other parameters were within permitted emission limits

Action: Please submit a Part B for EP_EX214, including the date of the highest CO emission given in the Q4 report and detailing the root cause analysis undertaken and any preventative measures **by 05/05/2019**.

Emission point C:

ELV for particulate matter of 50mg/m³ was exceeded in 2 out of 3 monitoring runs on 18/10/2018. results of 60.7mg/m³ and 62.8mg/m³ were reported. EP_EX217 Part A notification indicated that a re-test would be undertaken. The annual report indicates that the cause was linked to a water leak from the beak trough was entering the hot waste pit underneath. The violent creation of steam as the water hits the hot waste is likely to have created airborne particulate matter that would then be drawn through the extraction system and to emission point C. Although the ceilcote scrubber abatement system was operating satisfactorily the increased particulate input resulted in increased particulate emission. No Part B received.

Breach of condition 3.1.2, CCS 3 score under criteria E1 - emissions to air

All other parameters were within permitted emission limits

Action: Please submit a Part B for EP_EX217, including the root cause analysis undertaken, results of (any retest and steps taken to prevent a recurrence **by 05/05/2019**).

Emission point F:

Annual monitoring was undertaken on 17/10/18, EP_EX218 Part A was raised for an exceedance of the ammonia limit for one of the three runs undertaken. The average of the three runs is 9.5mg/m³, which is within the average limit and not considered to be a breach of the ELV, but is relatively close to it.

Emission point G:

ELV for ammonia of 10mg/m³ was exceeded in 2 out of 3 monitoring runs on 16/10/2018. Results of 15.8mg/m³ and 11.7mg/m³ were reported. the third run result was >0.03mg/m³. EP_EX219 Part A notification stated that a re-test

would be undertaken. The annual report notes that ammonia emission measurements are quite variable over relatively short periods during testing and further analysis is required to try to identify the cause of this variability. No Part B was received for EP_EX219. It is noted that the average of the three run results is below the ELV for the first time in 2018, potentially due to improvements to the impact jet system and effect of the reduction in ammonia usage in binders. This is a positive improvement and sustained effort with maintenance of the abatement equipment for this emission point is required to ensure the emission is brought into compliance.

All other parameters were within permitted emission limits

Action: Please provide Part B notification for EP_EX219 with details of any re-testing and plans for further investigation into variability of ammonia results **by 05/05/2019**.

Emission point Y:

all emissions were within permitted limits and continue to be at such low levels that it has been agreed to move to annual monitoring of this emission point.

Emissions to water:

monitoring was undertaken in compliance with condition 3.3.1.

Performance indicators:

The annual report included an interpretive review of the results of monitoring assessments and the performance parameters required by condition 4.2.2 and schedule 4

WIRS reports:

1807259 - report of smoke and dusty odours affecting a commercial property throughout the day. Attended by an NRW officer who substantiated an off-site impact which was observed to be a plume grounding from the shorter stack of emission point G. The main stack emissions were not causing any impact, however there was little to no rise or dispersion of the emission from point G, making it very unpleasant to stand at the reporter's property. No other potential sources were identified in the vicinity. The officer visited site to discuss the impact of the emissions, no abnormal operating conditions were noted on site for the duration of the report. Off-site checks carried out the following day by the operator did not identify an ongoing issue.

1807339 - Report of fumes affecting the air quality around Sandycroft school. Attended by an NRW officer who substantiated an intermittent but distinctive mild odour on the school yard and the area along Leaches Lane. The headmaster reported that it had been much worse earlier in the day. Wind direction was blowing from Knauf towards the school and on driving around the local area no other odour sources were noted. The operator did not report any abnormal operating conditions during the period of the complaint. As highlighted previously it is important that off-site odour reports are investigated at the location of the report as stated in the OMP, not only within the site boundary, due to the difficulty in establishing the nature and intensity of odours related to plume grounding. As stated in the annual report an increased stack height may positively impact on dispersion of the plume, however this does not negate the need to investigate options to address amenity issues, even where operating conditions are normal.

1900838 - report of continuous noise which was investigated and traced to a noisy roller on a batching system conveyor which was removed pending replacement.

1900260 - report of a screeching noise. An investigation found a stone jammed in another part of the conveyor system, which was removed to resolve the problem. This may also have been the cause of the previous report, however at the time the report was sent to site the batching system was not running. Both reports were investigated promptly and resolved.

Part A/B notifications

EP_EX214,217,218,219 relate to emissions monitoring, see details and actions above - part As not yet received.

EP_EX215 - loss of CEMS data during Opsi unit re-instatement and for 30 minutes following repair. Plant operation was otherwise stable. Loss of data only during maintenance. No Part B received.

EP_EX216 - abnormally high CO readings from emission point A over a 46 minute period. Daily average was just

below the daily average ELV, part A raised as a precaution to avoid a late notification of an exceedance at month end data verification stage. Enviro Technology assisting with investigating these results No Part B received.

EP_EX 220 - Temperature probe failure causing low SO2 corrected readings between 27/12/18 and 08/01/19. Probe replaced and spare now held on site. Operator is considering the use of low-level internal triggers to prompt investigations. Uncorrected data was within normal ranges. impact on data only. Part B received.

EP_EX221 - loss of CEMS data during routine maintenance. Part B received.

EP_EX222 - moisture build-up in O2 probe caused false readings. Probe was repaired. Uncorrected data indicated normal emissions readings. Part B received.

EP_EX223 - initially reported as an O2 probe failure, however investigations showed that the motherboard had failed in the oxygen analyser. Impact on data only, uncorrected data indicates normal emissions readings. Part B received.

Action: Provide missing Part B notification details **by 05/05/2019**

Actions from last CAR:

1. Emission limit for particulate matter at emission point A updated on reporting forms - complete
2. Review of procedures for determining compliance with daily averages for CEMS was carried out. All levels above 80% of the ELV will be reported as Part As and subject to verification to avoid late notification of potential exceedances.
3. Enetex fan performance can now be monitored via the OsiPi data system to detect changes quickly - operator-driven improvement - complete
4. Report on achieving compliance for emission point G received, improvements to the maintenance and water flow to the impact jet abatement system have been completed and reductions in ammonia content of binders (where appropriate) are being trialled - complete.
5. Root cause analysis for CEMS failures did not identify a specific cause. A review of maintenance and spares management has been undertaken. - complete
6. OMP has been updated with tap-out emissions, revised version received - complete
7. Review of emissions from cupola syphon have been undertaken by observing the operation on three occasions. The cupola build for start-ups no longer includes wood and paper which has reduced the smoke generated in the cupola. A foil syphon seal continues to be used and the scrubber fans continue to be operated at >95% to extract fumes via the drum to the ceilcote scrubbers. This will be further discussed in relation to the scope of the planned stack replacement programme - ongoing.
9. Set-point logic changes to burner control were made on 29/08/18 to address the cause of a smoke emission from the oxidiser stack during an oven fire. - complete.

EPR Compliance Assessment Report

**Report ID:
CAR_NRW0034694**

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Site	Queensferry Mineral Fibre Works	Permit Ref	BR9383ID
Operator/Permit holder	Knauf Insulation Ltd	Date	31/12/2018

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.

We will now consider what enforcement action is appropriate and notify you, referencing this form.

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			
E1	C3	see text on CAR form	15/03/2019
E1	C3	see text on CAR form	15/03/2019

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.