

Compliance Assessment Report CAR_NRW0051727

Permit being assessed: BS6149IQ.

For: Pencoed Rockwool EPR/BS6149IQ, **held by:** Rockwool Ltd

At: Rockwool Ltd , Bridgend , Mid Glamorgan , CF35 6NY.

Type of assessment: Site Inspection,

Reason: Routine.

On: 16/04/2026 between 09:00 and 17:00.

Parts of permit assessed: IR2C, IR3B, IR1A.

NRW Lead Officer: Brigid Armstead.

Report sent to: Joanne Barry, Company Secretary, on 15/06/2026.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR2C - Installations - Operations - Operating techniques	Action only (X)	
IR2C - Installations - Operations - Operating techniques	Action only (X)	
IR2C - Installations - Operations - Operating techniques	Action only (X)	
IR3B - Installations - Emissions and monitoring - Emissions of substances not controlled by emission limits	C3 Minor	3.2.1
IR1A - Installations - Management - General Management	C3 Minor	1.1.1
IR3E - Installations - Emissions and monitoring - Monitoring	C3 Minor	3.5.1
IR1A - Installations - Management - General Management	C3 Minor	1.1.1
IR3E - Installations - Emissions and monitoring - Monitoring	C3 Minor	3.5.1
IR1A - Installations - Management - General Management	C3 Minor	1.1.1
IR3B - Installations - Emissions and	C3 Minor	3.2.1

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
monitoring - Emissions of substances not controlled by emission limits		
IR1A - Installations - Management - General Management	C3 Minor	1.1.1

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

Total non-compliances recorded	Total non-compliance score
8	32

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
IR2C	Provide an update on the proposed butterfly valve installation to the fly ash pot pipework.	31/07/2026
IR2C	Provide a timeframe for remediation and provision of a hardstanding and drainage to the materials storage yard.	31/07/2026
IR2C	Provide an update of the measures taken to reduce risk of groundwater contamination.	31/07/2026
IR3B	The proposed corrective measures are considered appropriate but will require verification during the next site inspection.	Already completed
IR1A	Improvements to the EMS as detailed in Rockwools Schedule 5, part B will require verification during the next site inspection.	31/07/2026
IR3E	The proposed corrective measures are considered appropriate but will require verification during the next site inspection	Already completed
IR1A	The relocation and housing of the dust probe will require verification during the next site inspection.	31/07/2026
IR3E	The proposed corrective measures are considered appropriate but will require verification during the next site inspection.	Already completed
IR1A	Updates to the CEMS alarm screens will require verification during the next site inspection.	31/07/2026
IR3B	The proposed corrective measures are considered appropriate but will require verification during the next site inspection.	Already completed
IR1A	The measured proposed by Rockwool Schedule 5 Part B received by NRW on 23rd April 2026 will require verification during the next site inspection.	31/07/2026

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.

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

Section 1. Site visit

NRW officers BA and AL visited Rockwool Pencoed on 16/04/2026. This site visit included a tour of the Raw Materials Yard, the Fly Ash Silos and the proposed locations for ambient air monitoring equipment installation. The Raw Materials Yard and Fly Ash Silos are discussed below in further detail. The ambient air monitoring equipment and installation has been considered by NRWs Air Quality team and further advice will be provided to Rockwool in due course.

Section 2. CAR Actions

Permit condition	Action summary	Due date	Response received	Action Status
3.1.2	Review ammonia emissions control and abatement options.	31/12/26		In progress
3.5.5	CEMs performance against specified CIs	Ongoing		In progress – carried forward to OMA
PO1	Waste acceptance criteria from the Rockfon recovery		21/4/26	Complete
1.1.1	Binder QC management	31/3/25		Complete
3.1.2	Provide start-up and shut down criteria - CAR_NRW0049847 (2)	31/3/26	31/3/26	Overdue
3.5.1	Technical justification of two high dust events on line 2 cupola CAR_NRW0049847 (3)	31/3/26	31/3/26	Complete
IP22V	Ambient air quality monitoring CAR_NRW0049847 (4)	31/3/26	31/3/26	In progress
2.3.1	Filter slab emission controls CAR_NRW0049847 (5)	31/3/26	31/3/26	Complete
1.1.1	Spinning chamber fire controls	31/3/26	31/3/26	Complete

	CAR_NRW0049847 (6)			
3.2.1	Electrical fire controls criteria - CAR_NRW0049847 (7)	31/3/26	31/3/26	Complete
3.4.1	Noise inspection and maintenance arrangements criteria - CAR_NRW0049847 (8)	31/3/26	31/3/26	Complete
3.4.1	Review need for acoustic barrier criteria - CAR_NRW0049847 (9)	31/3/26	31/3/26	Complete
1.1.1	Fly ash pot pressure control/relief - CAR_NRW0049847 (10)	31/3/26	31/3/26	In progress
3.2.1	Materials storage yard remediation CAR_NRW0049847 (11)	31/3/26	31/3/26	In progress
3.2.1	Materials storage yard hard standing - CAR_NRW0049847 (12)	31/3/26	31/3/26	In progress
3.2.1	Process water tank and drainage inspection CAR_NRW0049847 (14)	31/1/26.	31/3/26	In progress
3.1.2	Surface water discharge compliance CAR_NRW0049847	31/3/26	31/3/26	Complete
4.2.2	Surface water monitoring parameters not reported 2025 CAR_NRW0050851	31/3/26	31/3/26	Complete.
3.1.2	Dust probe interference corrective actions - CAR_NRW0050851	31/3/26	31/3/26	Complete
3.5.1	Line 1 emissions monitoring plan- CAR_NRW0050851	30/4/26		Overdue
4.2.2	Reporting management- CAR_NRW0050851	30/4/26		Overdue
3.2.1	A22 Ammonia breach- CAR_NRW0050851	30/4/26		Overdue
4.3.1	Sch 5 management- CAR_NRW0050851	30/4/26		Overdue
1.3.1	Specific water usage efficiency- CAR_NRW0050851	30/6/26		
3.1.2	Ammonia emissions to air root cause- CAR_NRW0050851	30/6/26		

In progress:**2.1. CAR_NRW0049847 (4) Ambient air quality monitoring**

Rockwool proposes installation of two PM2.5/PM10 monitors at 2 onsite locations, one attached to each noise monitor, to support assessment of secondary particulate formation potentially associated with ammonia emissions.

The ambient air monitoring equipment and installation has been considered by NRW's Air Quality team and further advice will be provided to Rockwool in due course.

2.2. CAR_NRW0049847 (10) Fly ash pot pressure control/relief criteria

Every down day the level sensors and high level alarms are cleaned to remove fly ash and improve accuracy of readings. Maintenance Schedule is on SAP.

Rockwool are reviewing options to install butterfly valves on pipework for blowing so it can only start once cleaning has completed, this will prevent the relief valve opening due to blocked filters. The butterfly valve will also close if fly ash capacity hits the High High Level or if the pressure exceeds a pre-determined value.

This will stop the pot blowing in and prevent the relief valve opening but is waiting on CAPEX proposal and approval

Action 1: Provide an update on the proposed butterfly valve installation to the fly ash pot pipework. **Due 31 July 2026**

2.3. CAR_NRW0049847 (11) Materials storage yard remediation

NRW received a Geoenvironmental report from Rockwool on 1st April 2026 and a Remediation plan on 17th April 2026. These reports are currently under review and further feedback will follow in due course.

2.4. CAR_NRW0049847 (12) Materials storage yard hard standing

An amended Emissions management plan was received by NRW on 1st April 2026. A management of change process has been completed to relocate materials and prevent processing within the contaminated areas. Further proposals for impermeable hardstanding and contained drainage are under review, informed by ongoing soil investigation results and discussions with NRW.

Action 2: Provide a timeframe for remediation and provision of a hardstanding and drainage to the materials storage yard. **Due 31 July 2026**

2.6. CAR_NRW0049847(14) Process water tank and drainage inspection

Investigations into potential leakage from process water tanks and associated infrastructure are in progress through Root cause analysis.

Site assessments have been undertaken (January 2026), and quotations for tank integrity testing have been requested.

A radar survey is scheduled for completion in April 2026, with remedial works planned for May 26 to reduce groundwater contamination risk.

A long term inspection and maintenance strategy will be developed following completion of

remedial work on borehole caps as well as annual integrity checks with external company.

Action 3: Provide an update of the measures taken to reduce risk of groundwater contamination. **Due 31 July 2026**

Section 2. Incidents and Complaints:

	Date	Release point	Pollutant	Cause/action required	Notification	Permit non compliance
3.1	6/1/26	A17 Emergency chimney	Combustion gas	Pressure switch fault due to water ingress/ Part B required	Odour complaint rec and Sch 5 part A rec 8/1/26	3.2.1 cat 3 & 1.1.1 cat 3
3.2	16-17/1/26	A2	N/A	Moisture in dust probe/ Part B required	Sch 5 part A submitted	3.5.1 cat 3 Suspended & 1.1.1 cat 3
3.3	18/2/26	A19	N/A	Power failure/ Part B required	Sch 5 part A rec 24 Feb.	3.5.1 cat 3 & 1.1.1 cat 3
3.4	5/3/26	Silo 11	Flyash	Level indicator failure/ Part B required	Sch 5 part A rec 6/3/26	3.1.1 cat 3 and 1.1.1 Cat 3

3.1. A17 Emergency chimney emissions 6 January 2026

NRW received a complaint regarding of a strong sulphurous odour and taste outside a Pencoed property on 6th January 2026 at 20:52. This complaint was forwarded on to Rockwool for investigation.

Rockwool submitted a schedule 5 Part A notification on 8th January 2026 advising that at 8pm on 6th January, line 2 experienced a fault with the pressure switch due to a water ingress into the panel. This led to the emergency chimney (A17) opening as it should to relieve the pressure, resulting in a release to atmosphere for approximately 6 mins. The system operated as designed, safely relieving pressure and preventing damage to the combustion chamber and associated plant.

Rockwool submitted a Schedule 5 part B informing NRW of the following actions to be taken in order to prevent a recurrence of the incident:

- Introduce pre- and post-shutdown inspections of the combustion system to identify potential issues at an early stage to be prevented
- Consult the OEM to review manufacturer recommendations for maintenance and

component replacement within the combustion system.

The release of emissions to air from A17 is in breach of permit condition 3.2.1. Due to the short duration (6 minutes) of the emissions, **this breach has been assigned a category 3 (minor) non compliance with permit condition 3.2.1.**

This incident was considered preventable due to inadequate preventative maintenance.

The root cause analysis found that the breach was due to water ingress which could have been prevented with proper preventative maintenance. A lack of preventative maintenance **is a breach of permit condition 1.1.1 and has been assigned a category 3 (minor) non compliance.**

Action 4: Improvements to the EMS as detailed in Rockwools Schedule 5, part B will require verification during the next site inspection.

3.2. A2 dust probe failure 16/17 January 2026

A line 2 dust emission monitoring fault was reported for emission point A2 on the 16th/17th January 2026. A **Schedule 5** part A notification was received on 19th Jan 2026 advising of A2 dust spikes on 16/17 January 2026 due to moisture in the dust probe.

A Dust CEM faulty transmitter reading is not an ELV exceedance, but unreliable emissions data reporting has been assigned **a category 3 non compliance with permit condition 3.5.1. This score is suspended as this non compliance was scored for Q4 2025 and a corrective action plan has been received.** Improvements to the monitoring provisions and maintenance regime will be assessed at the next Operator Monitoring Assessment (OMA).

A root cause investigation determined that the transmitters location contributed to the fault. Rockwool have therefore determined a corrective action of relocating and housing the dust probe to better protect the equipment from extreme winter weather, preventing recurrence. The proposed corrective measures are considered appropriate but will require verification during the next site inspection.

This incident was considered preventable due to inadequate preventative maintenance.

A category 3 non compliance with permit condition 1.1.1 has been assigned as the root cause investigation has disclosed that a lack of preventative maintenance resulted in an equipment failure.

Action 5. The relocation and housing of the dust probe will require verification during the next site inspection.

3.3. A19 CEMS Power failure on 18th February 2026

NRW received notification that on Wednesday 18th Feb, Line 3 CEMS duty unit experienced a loss of power supply. No alarm was received in the control room, and the issue was not immediately identified. The fault was detected after approximately 3 hours

when a flatline was observed in the emissions data. During this period, the CEMS was not recording valid emissions data. Initial investigation indicates that the duty CEMS unit lost electrical power. Additionally, the control room alarm associated with CEMS power failure did not activate, resulting in delayed detection.

A failure to monitor emissions for three hours is a breach the emissions monitoring requirements of the permit and so has been assigned **a category 3 non compliance with permit condition 3.5.1.**

The root cause of the CEMS unit power failure was identified as the internal analyser power supply. A new power supply was ordered for the analyser and until this was installed ROCKWOOL utilised the standby CEMS unit to ensure constant accurate readings. If power failure occurs the alarm on the WINCC has been updated to "Check CEMS Unit", at this point operators know to check the CEMS panel. Two monitors in the Control Room have been changed to POP screens showing live SO₂, NO_x, CO and particulates readings.

The proposed corrective measures are considered appropriate but will require verification during the next site inspection.

A category 3 non compliance with permit condition 1.1.1 has been assigned as the root cause investigation has disclosed that a lack of preventative maintenance resulted in an equipment failure.

Action 6. Updates to the CEMS alarm screens will require verification during the next site inspection.

3.4. Silo 11 Flyash release on 5th March 2026

NRW received notification that whilst blowing fly ash into Silo 11, the silo level indication failed resulting in fly ash venting from the top of the silo for approximately 24 minutes until the release was noticed and the operation stopped.

Fly ash on the filter went straight to the environment. The immediate area was cleaned by road sweeper.

The release of emissions to air from the fly ash silo filter is in breach of permit condition 3.2.1. **This breach has been assigned a category 3 (minor) non compliance with permit condition 3.2.1.**

A root cause analysis determined the silo was empty not full. The filter cleaning cycle was not initiated causing an increase in pressure and the fly ash release observed.

Rockwool submitted a Shedule 5 part B notification on 23rd April 2026 advising that the following measures have been taken to prevent a recurrence of the incident:

- Skill matrix of personnel who carry out task to have gap-analysis conducted. Training to ensure everyone is aware of the importance of initiating the filter cleaning cycle.
- The level sensor is checked every down day.

- The level sensor is to be re-located to an area with less fly ash exposure and a HHL sensor is to be installed.
- Reviewing options to install butterfly valves on pipework for blowing so it can only start once cleaning has completed. The butterfly valve will also close if fly ash capacity hits the High High Level or if the pressure exceeds a pre-determined value.

The proposed corrective measures are considered appropriate but will require verification during the next site inspection.

This incident was considered preventable due to inadequate preventative maintenance.

A category 3 non compliance with permit condition 1.1.1 has been assigned as the root cause investigation has disclosed that a lack of preventative maintenance resulted in an equipment failure.

Action 7. The measures proposed by Rockwool Schedule 5 Part B received by NRW on 23rd April 2026 will require verification during the next site inspection

Section 4. Assessment of 2026 Q1 monitoring reports:

Line 1: 0 operating hours in Q1.

Line 2: Dust CEMS breach 17/18 Jan as per Schedule 5 received by NRW and assessed above.

Line 3: 1 discarded day, no non compliances.

W1: No emissions monitored in Q1.

END

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 required for the permit condition assessed to avoid non-compliance. No non-compliance scored at this time
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(1) – Emissions to water
- IR3A(2) – Emissions to air
- IR3A(3) – Emissions to 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.

Disputing the Content of this Compliance Assessment Report Form

If you disagree with the content of this Compliance Assessment Report form, you should submit your concerns, in writing, to the regulating officer who issued it within **15 working days** of its issue. This will be treated as a **Stage 1 review**.

If you are not satisfied with the outcome of the stage 1 review, you may request a **Stage 2 appeal**. This request must be submitted **within 21 working days** of receiving the response from the stage 1 review.

Further details on our review and appeal process are available at: [Natural Resources Wales / Appeal a regulatory decision from Natural Resources Wales](#)

Concerns Not Related to the Content of this Compliance Assessment Report Form

If your concerns do not relate to the content of the Compliance Assessment Report form, you should first attempt to resolve the issue with the regulating officer or their line manager.

If the issue remains unresolved, please contact our **Customer Contact Team**:

- **Telephone:** 0300 065 3000 (Monday to Friday, 09:00–17:00)
- **Email:** enquiries@naturalresourceswales.gov.uk

They will provide details on how to escalate your concerns through our **Complaints and Commendations procedure**.

If you are dissatisfied with our response, you may contact the **Public Services Ombudsman for Wales**:

- **Telephone:** 0300 790 0203
- **Email:** 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.