

	EPR Compliance Assessment Report		Report ID: CAR_NRW0033602	
This form will report compliance with your permit as determined by an NRW officer				
Site	Rockwool Pencoed		Permit Ref	BS6149/Q (as amended)
Operator/ Permit holder	Rockwool Ltd			
Date	28 th and 29 th June 2018			
What parts of the permit were assessed	See report			
Assessment	Audit	EPR Activity:	Installation: X	Waste Op: Water Discharge:
Recipient's name/position	Joshua Caulton			
Officer's name	Neil Herbert & Kay Roberts (29 th only)		Date issued	11 th July 2018

Section 1 - Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations. A detailed explanation and any action you may need to take are given in the "Detailed Assessment of Compliance" (section 3). 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			Condition(s) breached
a) Permitted activities	1. Specified by permit	N	
b) Infrastructure	1. Engineering for prevention & control of pollution	N	
	2. Closure & decommissioning	N	
	3. Site drainage engineering (clean & foul)	N	
	4. Containment of stored materials	3	3.2.3
	5. Plant and equipment	N	
c) General management	1. Staff competency/ training	3	1.1.1b
	2. Management system & operating procedures	3	1.1.1a
	3. Materials acceptance	N	
	4. Storage handling, labelling, segregation	3	2.3.1
d) Incident management	1. Site security	N	
	2. Accident, emergency & incident planning	N	
e) Emissions	1. Air	N	
	2. Land & Groundwater	N	
	3. Surface water	N	
	4. Sewer	N	
	5. Waste	N	
f) Amenity	1. Odour	3	3.3.1
	2. Noise	N	
	3. Dust/fibres/particulates	N	
	4. Pests, birds & scavengers	N	
	5. Deposits on road	N	
g) Monitoring and records, maintenance and reporting	1. Monitoring of emissions & environment	A	
	2. Records of activity, site diary, journal & events	N	
	3. Maintenance records	N	
	4. Reporting & notification	N	
h) Resource efficiency	1. Efficient use of raw materials	N	
	2. Energy	N	

KEY: C1, C2, C3, C4 = CCS breach category (* suspended scores are marked with an asterisk),
A = Assessed or assessed in part (no evidence of non-compliance), N = Not assessed, NA = Not Applicable

Number of breaches recorded	5	Total compliance score (see section 5 for scoring scheme)	20
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If the Total No Breaches is greater than zero, then please see Section 3 for details of 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 (e.g. 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 suspended or consolidated scores.
- details of advice given
- any other areas of concern
- all actions requested
- any examples of good practice.
- a reference to photos taken

Meetings and site visits

This was a two-day, pre-arranged series of meetings/visits.

The first visit covered the following: meeting with operations director to discuss compliance and future plant development; meeting with Rockwool's environment team on improving compliance & other topics, followed by short site visit to curing oven and site yard.

The second day was primarily geared towards discussing groundwater monitoring and management at the site. One of NRW's hydrogeologist was in attendance to provide expert technical input. A site familiarisation tour was then provided by the operator for the benefit of NRW's hydrogeologist. A summary of the key issues and observation of the visits/meetings have been set out below. These are not necessarily set out in a chronological fashion.

Groundwater meeting (see also CAR dated 15th June 2018)

Actions agreed:

- operator to undertake a groundwater re-sampling exercise as soon as practicable. In addition to the standard suite the following additional parameters should be included: major ion suite, LNAP suite (including well water level dip)
- operator to revise and submit amended groundwater and soil monitoring schedule (original was outlined as part of the improvement condition 16 submission). This revision will include: monthly water level monitoring; LNAP & major ion suite to be added to the 2-year monitoring schedule.
- undertake a groundwater monitoring point audit of the existing wells (to include lost/damaged) wells. The audit should aim to collate all borehole logs available.
- check whether wells have been silted and whether they can be remediated.
- operator to submit proposals for the installation of a new upgradient groundwater monitoring point.
- operator to submit proposals for the installation of a series of new downgradient groundwater monitoring wells.
- subsurface tanks (process tanks) need to be subject to integrity checks periodically for signs of cracks etc. This should be part of the site's routine infrastructure monitoring¹.

Comments and observation from the site visits

Inappropriate waste storage

Line 1 Waste Bay

We were shown the large stockpile of waste wool (currently outside the L1 waste bay) that has been allowed to accumulate on the site's yard in recent months. The stockpile has been identified as the cause of some recent surface water emission failures and the environment team have developed an action plan to attempt to address this. The operator has diverted the surface water, that flows from this area, back into the process water system and they are looking at reducing their waste stockpiles.

However, as this measure has limitations (e.g. limited process water following rainfall; process shutdown, reliance on submersible pump) the operator has been tasked to explore and implement further contingencies, including:

- relocate the wastes to an existing roofed bay with basal containment;
- mobile containers with suitable containment;
- reduce volumes by sending the waste for off-site recovery/disposal;
- use of temporary cover system with temporary containment system;
- amending the process to maximise re-use of waste where possible to reduce the stockpile.

Other more permanent measures will also need to be implemented to ensure wastes are stored in accordance with the permit.

All waste wool must be housed in a covered area with appropriate containment to prevent pollution (e.g. discharges to land, groundwater, surface water and fugitive releases).

¹ See CAR 10th March 2017.
CAR 2 V1.0

Further Observations relating to material containment

We once again noted that housekeeping measures were not being applied to minimise the risk of surface water contamination. Simple measures such as cleaning spillages immediately and providing suitable containers to collect wastes is not being undertaken, despite their simplicity and limited cost. Examples are shown below (all of the areas noted normally drain to the surface water system and could contribute to surface water emission failures).



Photograph showing extensive wool waste (from PSM 56 cutting section) covering the external yard. Arrow denotes drain.



Photograph showing siting of waste receptacle too low beneath discharge point resulting in spillages. Container is also balanced on pallets which could easily topple causing pollution or injury.



Further dusts/wastes covering drain on yard (adjacent to L1 building)

Surface Water Action Plan

The operator has produced an action plan (see attached) to address the recent surface water emission failures and these were discussed in the meeting. Actions 1,2,3,5 and 6 appear sensible although timescales for the completion of some of these actions need to be submitted **Action**. Action 4 deals with the Line 1 Waste Bay and we have provided comment on this in the above section of this report – this requires further work.

Finally we have also instructed the operator that further barriers/controls need to be installed to provide improved surface water compliance. Measures to be considered (but not limited to) include: yard drainage to be diverted from surface water system; new effluent treatment system; installation of real time monitoring of key contaminants (phenol & ammonia) with associated automatic telemetrically controlled discharge point; increase storage capacity for water on site.

Compliance:

The failure to store potentially polluting materials (e.g. waste wool) in covered bays with appropriate containment is considered a breach of condition 2.3.1 of the permit. A ccs score of 3 has presently been attributed to this failure, c4,

Note on Surface Water Compliance: the assessment of the recent surface water emission limit failures will be completed separately once the quarterly return for this quarter has been submitted and assessed.

Fly Ash spillage

Evidence of extensive spillage of fly ash was noted around the fly-ash silos, attached to the Cement Briquetting Plant (CBP). This area drains into an area which is normally connected to the site's surface water system. It is once again unclear how staff had:

- failed to note the presence of the dust
- failed to clean the dust
- failed to implement an investigation into the cause of the spillages.



Action: Operator to arrange appropriate clean up immediately (note: this material may possess potentially hazardous properties and appropriate H&S precautions should be applied). The collected spillage should then be recovered or disposed of appropriately.

Action: Operator is presently undertaking an investigation into the fly ash conveyor system on the silo to identify the cause of the spillages.

Action: staff training has already been identified² by the operator and scheduled, however the team/s responsible for this area should be prioritised for immediate re-training.

Compliance

The failure to implement simple housekeeping measures (i.e. cleaning spillages) is considered a breach of conditions 1.1.1a and 1.1.1 b. ccs scores of 3 have been allocated to these failures, against the c2 and c1 compliance headings.

Storage of potentially polluting liquids

At several locations visited during this visit we regularly noted un-bunded liquid containers storing oils, chemical etc being stored on site. All potentially polluting liquids must be provided with secondary containment³.

Action: all containers to be relocated to appropriately bunded areas.

Action: staff and contractors to be reminded of their duties in terms of appropriate liquid storage.

Compliance:

The failure to provide appropriate containment for a range of containers seen at the site, which contain potentially polluting liquids, is a breach of condition 3.2.3 of your permit and an offence. A ccs score of 3 has been attributed to this breach, against the b4 compliance heading.

Note: We also observed a fuel spillage whilst on site due to a vehicle collision. However, staff/contractors appeared to be dealing with the spillage and containing the leak satisfactorily.

Fugitive releases

During the visit we walked along the site's northern and western perimeter and a very strong offensive process odour was noted along the site boundary. This was traced back to the CBP building, where the shutter door to the process hall had been left open. Note: this may have also been a contributory factor in the recent dust/odour complaint made against the factory (WIRS 1803643).

Action: doors to processing plant to be kept closed to prevent fugitive releases.

Compliance:

We consider this is a breach of condition 3.3.1 of your permit and an offence. A ccs score of 3 has been attributed to this breach, against the f1 compliance heading.

A very strong ammonia type smell was also noted around the binder plant/process water tanks, although it seemed to be localised to this area. **Action:** The source of this odour will need to be investigated.

We also noted dust being generated as briquettes from the CBP were being dropped into the silo that collects them for conveying to the charging plant. The operator should explore means of reducing this fugitive release.

Leaks from transmission pipework

A process water transmission pipe was found to be leaking. It appears that a temporary repair had been attempted, but the pipe was still leaking. Fortunately, the leak appeared to be contained within the site's containment area serving the diesel refuelling point, however all leaks should be properly repaired. The pipework was connected using screw fastened couplers however other pipework was connected by more robust fusion couplers. In future the operator should use the more robust couplers wherever possible.

Action: undertake permanent repair to the leaking process transmission pipe near the diesel refuelling area.

Leak at base of L3 curing oven cooling zone - emission chimney

A liquid emission (which was later identified as binder) had occurred at the base of the chimney. The liquid did not pose an immediate risk of pollution, although spill procedures should have been implemented. The presence of entrained liquid binder at this location (i.e. after the site's abatement stage) may be indicative of problems with the site's extraction and abatement system and needs investigation. **Action**

² See action plan – surface water exceedances

³ or other appropriate measures.

Impregnating Oil Leak

Evidence of a leak of impregnating oil was noted within the containment bund in the tank farm. JC intimated that this had already been identified and the maintenance department were in the process of addressing the problem.

Other matters

L3 Curing Oven

The operator provided an update on the proposed works to resolve the current issue with the curing oven emissions. We were also taken to see the L3 oven. As part of the August shutdown a deep clean of the oven has been scheduled which will be immediately followed by a non-destructive magnetisation inspection. On completion of the inspection the operator will need to submit to NRW the inspection findings within two weeks of the results (unless otherwise agreed with NRW). The operator will also need to submit a report detailing the repairs necessary and the timescales for their earliest undertaking. In the event the inspection is not successful the operator will need to communicate this to NRW immediately on receipt of the findings. We can then start discussions with the operator on the next steps. The compliance assessment of the curing oven releases will be assessed separately on receipt of the 6 monthly results (due at the end of July).

Action: submit to NRW the inspection findings within two weeks of the results (unless otherwise agreed with NRW). The operator to submit a report detailing the repairs necessary and the timescales for their earliest undertaking. In the event the inspection is not successful the operator will need to communicate this to NRW immediately on receipt of the findings

Action Plan for A19 CEMS issue

A copy of an action plan was provided and was briefly discussed in the meeting. This will be considered further when the quarterly submission is received (end of July) and assessed by NRW.

Binder Plant Decommissioning

The binder plant decommissioning remains ongoing.

L1 Cupola

We discussed the re-commissioning of the Line 1 cupola which has been mothballed for over ten years. Issues to now address prior to commissioning, include:

- review and submit revised SO₂ air dispersion model to include L1 emission points;
- submit a commissioning plan for the L1 cupola (see further details attached);
- install MCERTS standard CEMS;
- In light of the recent waste storage issues noted above, adequate facilities must be in place before L1 enters operation. This means that there must be space for the expected increased volumes so that potentially polluting raw materials and waste wool⁴ can be stored appropriately⁵.
- Confirm adequate process water storage capacity available and consider implication if any of surface water management provisions;
- replace level sensors within cupola - we were informed this has already been completed.

Ammonia releases - update

We briefly discussed our review into the ammonia emission profile from the facility and this work remains ongoing. However, Rockwool have been asked, as part of their continual improvement assessments, to look into whether there is scope to reduce ammonia emissions from the site.

Retaining Wall

We did note during our visit that several timber cribs, that provide the support for your retaining wall appear rotten or missing at some locations. Whilst the H&S implications of a slope failure are obvious there may also be environmental implications and we do recommend that this is investigated by appropriately qualified personnel to ensure the integrity of the structure. **Action**

Enforcement

We will consider the appropriate enforcement and/or protective response separately.

End of Section 2

⁴ or any other potentially polluting materials

⁵ Example: waste wool must be housed in a covered area with appropriate containment to prevent pollution (e.g. discharges to land, groundwater, surface water and fugitive releases).

	EPR Compliance Assessment Report	Report ID: CAR_NRW0033602	
This form will report non-compliance with your permit as determined by an NRW officer			
Site	Rockwool Ltd	Permit	BS6149/Q (as amended)
Operator/ Permit	Rockwool Pencoed	Date	28th and 29th June 2018

Section 3- Enforcement Response		Only one of the boxes below should be ticked
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.		
Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed.		
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.		
We will now consider what enforcement action is appropriate and notify you, referencing this form.		x

Section 4- Action(s)			
Where a non - compliance has been detected and an enforcement response has been selected above, this section summarises the steps you need to take to return to compliance and also provides timescales for this to be done.			
Criteria Ref.	CCS Category	Action Required/Advised	Due Date
See Section 1 above			
c1, c2	C3	All spillages of waste and any other potentially polluting materials to be cleaned up immediately. Inspection of entire yard should now be completed. The areas where we found the spilt waste should now have been cleaned, including fly ash deposit.	Should be completed for spillages noted during visit. Any subsequent spillages should be cleaned up immediately
		Undertake urgent staff retraining to ensure appropriate spillage procedures are implemented on site. Priority to be given to staff working on the yard.	Within one month of the issue of this report
		Investigation into the cause/s of the fly ash spillage.	Within one month of the issue of this report
		Appropriate mitigation to then be implemented to prevent further fly ash spillages	
		Review of the infrastructure and suitability of containers used to transfer and store materials within the site (i.e. suitability of silo bins, skirting etc) to ensure they reduce risk of dust releases and provide adequate containment.	Within one month of the issue of this report
C4	C3	Implement interim contingency measures (see section 2 for further details) to prevent further surface water (and/or risk of groundwater) permit exceedances	date will be dependent of the contingencies adopted however operator must ensure no further permit exceedances
f1	C3	Ensure appropriate measures (e.g. doors kept closed) to reduce fugitive releases (e.g. odour and noise) are always implemented.	immediate
b4	C3	All potentially polluting liquids must be provided with appropriate containment in accordance with the permit.	This action should now be completed.
Other actions and recommendations			
Groundwater Actions		operator to undertake a groundwater re-sampling exercise as soon as practicable. In addition to the standard suite the following additional parameters should be included: major ion suite, LNAP suite (including well water level dip)	Within one month of the issue of this report
		operator to revise and submit amended groundwater and soil monitoring schedule. This revision will include: monthly water level monitoring; LNAP & major ion suite to be added to the 2-year monitoring schedule.	Within one month of the issue of this report
		undertake a groundwater monitoring point audit of the existing wells (to include lost/damaged) wells. The audit should aim to collate all borehole logs available.	Within two months of the issue of this report

	check whether wells have been silted and whether they can be remediated.	Within two months of the issue of this report
	operator to submit proposals for the installation of a new upgradient groundwater monitoring point.	Within three months of the issue of this report
	operator to submit proposals for the installation of a series of new downgradient groundwater monitoring wells.	Within three months of the issue of this report
	Subsurface tanks (process tanks) need to be subject to integrity checks periodically for signs of cracks etc. This should be part of the site's routine infrastructure monitoring.	The report for the 2017/2018 inspection should now be available. Ongoing thereafter
Surface Water action plan	Update plan to reflect meeting discussion (see section 2) and present timetable for completion of measures.	31 st July 2018 – (date next monitoring submission due)
Pipework	undertake permanent repair to the leaking process water transmission pipe attached to the tank farm bund.	Within three months of the issue of this report
Impregnating Oil Leak (bund)	Identify and repair leak from impregnating oil tank	Within three months of the issue of this report
Commissioning plan	Ensure commissioning plan has been prepared for L1 cupola and associated infrastructure.	Prior to L1 cupola commissioning
L3 Cooling zone	Provide investigation findings into cause of binder entrainment in the cooling zone emission chimney	Within one month of the issue of this report

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 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 which 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 Natural Resources Wales (NRW) to fulfill its regulatory and monitoring functions and to maintain the relevant public register(s). 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 (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 and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Information Regulations request.

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

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 twenty 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 the officer's line managers. 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) 601 0987**.