

Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	EPR/BS6149IQ
Name of operator	Rockwool Limited
Location of Facility	Wern Tarw, Pencoed, Bridgend, CF35 6NY
Time and date of the detection	6th August 2020
Rockwool Ref Number	05/20

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution																				
To be notified within 24 hours of detection																				
Date and time of the event	June 2018 to October 2020																			
Reference or description of the location of the event	Data discrepancies of CEMS equipment measuring SO ₂ , NO _x and CO on Line 1, 2 and 3 CODEL monitoring systems.																			
Description of where any release into the environment took place	A1, A2 & A19																			
Substance(s) potentially released	SO ₂ , NO _x & CO																			
Best estimate of the quantity or rate of release of substances	Re-calculated data (June 2018 - October 2020) <table><tr><td></td><td>Line 1</td><td>Line 2</td><td>Line 3</td></tr><tr><td>CO</td><td>No exceedances</td><td>No exceedances</td><td>No exceedances</td></tr><tr><td>NO_x</td><td>No exceedances</td><td>No exceedances (Two days showing as in exceedance due to open circuit instrument fault - not actual exceedance)</td><td>No exceedances (27 days showing as in exceedance between Aug 19 - Feb 20 due to instrument fault)</td></tr><tr><td>SO₂</td><td>No exceedances</td><td>No exceedances</td><td>Exceedances on 33 days*</td></tr></table> * Further analysis of these 33 days has been carried out and the results are shown in part b) below.					Line 1	Line 2	Line 3	CO	No exceedances	No exceedances	No exceedances	NO _x	No exceedances	No exceedances (Two days showing as in exceedance due to open circuit instrument fault - not actual exceedance)	No exceedances (27 days showing as in exceedance between Aug 19 - Feb 20 due to instrument fault)	SO ₂	No exceedances	No exceedances	Exceedances on 33 days*
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SO ₂	No exceedances	No exceedances	Exceedances on 33 days*																	
Measures taken, or intended to be taken, to stop any emission	Full investigation of the measurement and calculation process undertaken (complex time-consuming process). Re-calculation of emissions values using best available historical data. Once the calculation method was confirmed - external verification of CEMS undertaken. Line 2 NO_x - CODEL CEMS unit reset after production stop. Line 3 NO_x - No exceedances noted during the time due to measurement units error. Historical re-calculation of emissions data showed elevated readings - these returned to normal when CODEL optics were changed during a regular service. No process issues seen during this time - hence instrument fault determined to be the root cause (not emissions exceedance). Line 3 SO₂ - Close monitoring of the process and reducing output where needed and/or stopping the line.																			

Description of the failure or accident.	We have concluded that our declared CO, NO _x and SO ₂ measurements since June 2018 have been calculated using a wrong unit of measure. This has resulted in the declared readings being lower than our actual results.
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(b) Notification requirements for the breach of a limit																																																																																																									
To be notified within 24 hours of detection unless otherwise specified below																																																																																																									
Emission point reference/ source	A19																																																																																																								
Parameter(s)	SO ₂																																																																																																								
Limit	2,200 mg/Nm ³																																																																																																								
Measured value and uncertainty	<table><tr><th>Date</th><th>SO₂ Daily Average (mg/Nm³)</th><th>Root Cause Analysis</th></tr><tr><td>25/07/2018</td><td>2,328</td><td>Natural Variation</td></tr><tr><td>26/07/2018</td><td>2,276</td><td>Natural Variation</td></tr><tr><td>27/07/2018</td><td>2,388</td><td>Natural Variation</td></tr><tr><td>05/09/2018</td><td>2,260</td><td>Natural Variation</td></tr><tr><td>06/09/2018</td><td>2,204</td><td>Natural Variation</td></tr><tr><td>07/09/2018</td><td>2,281</td><td>Natural Variation</td></tr><tr><td>20/09/2018</td><td>2,232</td><td>Natural Variation</td></tr><tr><td>27/09/2018</td><td>2,282</td><td>Natural Variation</td></tr><tr><td>29/09/2018</td><td>2,202</td><td>Natural Variation</td></tr><tr><td>05/10/2018</td><td>2,213</td><td>Zero cal. probe issue</td></tr><tr><td>06/10/2018</td><td>2,218</td><td>Zero cal. probe issue</td></tr><tr><td>26/10/2018</td><td>2,202</td><td>Zero cal. probe issue</td></tr><tr><td>09/05/2019</td><td>2,235</td><td>Start-up (timing)</td></tr><tr><td>28/05/2019</td><td>3,076</td><td>Zero cal. probe issue</td></tr><tr><td>03/06/2019</td><td>2,504</td><td>Start-up (timing)</td></tr><tr><td>05/06/2019</td><td>3,130</td><td>Natural Variation</td></tr><tr><td>07/06/2019</td><td>3,835</td><td>Start-up (timing)</td></tr><tr><td>08/06/2019</td><td>2,468</td><td>Natural Variation</td></tr><tr><td>27/11/2019</td><td>2,243</td><td>Natural Variation</td></tr><tr><td>06/01/2020</td><td>2,548</td><td>Natural Variation</td></tr><tr><td>14/01/2020</td><td>2,595</td><td>Natural Variation</td></tr><tr><td>10/02/2020</td><td>2,481</td><td>Natural Variation</td></tr><tr><td>27/06/2020</td><td>2,245</td><td>Natural Variation</td></tr><tr><td>05/07/2020</td><td>2,281</td><td>High blast slag trial</td></tr><tr><td>06/07/2020</td><td>2,591</td><td>High blast slag trial</td></tr><tr><td>09/07/2020</td><td>2,288</td><td>High blast slag trial</td></tr><tr><td>10/07/2020</td><td>2,632</td><td>High blast slag trial</td></tr><tr><td>11/07/2020</td><td>2,469</td><td>High blast slag trial</td></tr><tr><td>12/07/2020</td><td>2,492</td><td>High blast slag trial</td></tr><tr><td>13/07/2020</td><td>2,353</td><td>High blast slag trial</td></tr><tr><td>05/08/2020</td><td>2,287</td><td>Natural Variation</td></tr><tr><td>06/08/2020</td><td>2,315</td><td>Natural Variation</td></tr><tr><td>09/09/2020</td><td>2,224</td><td>Natural Variation</td></tr></table>			Date	SO ₂ Daily Average (mg/Nm ³)	Root Cause Analysis	25/07/2018	2,328	Natural Variation	26/07/2018	2,276	Natural Variation	27/07/2018	2,388	Natural Variation	05/09/2018	2,260	Natural Variation	06/09/2018	2,204	Natural Variation	07/09/2018	2,281	Natural Variation	20/09/2018	2,232	Natural Variation	27/09/2018	2,282	Natural Variation	29/09/2018	2,202	Natural Variation	05/10/2018	2,213	Zero cal. probe issue	06/10/2018	2,218	Zero cal. probe issue	26/10/2018	2,202	Zero cal. probe issue	09/05/2019	2,235	Start-up (timing)	28/05/2019	3,076	Zero cal. probe issue	03/06/2019	2,504	Start-up (timing)	05/06/2019	3,130	Natural Variation	07/06/2019	3,835	Start-up (timing)	08/06/2019	2,468	Natural Variation	27/11/2019	2,243	Natural Variation	06/01/2020	2,548	Natural Variation	14/01/2020	2,595	Natural Variation	10/02/2020	2,481	Natural Variation	27/06/2020	2,245	Natural Variation	05/07/2020	2,281	High blast slag trial	06/07/2020	2,591	High blast slag trial	09/07/2020	2,288	High blast slag trial	10/07/2020	2,632	High blast slag trial	11/07/2020	2,469	High blast slag trial	12/07/2020	2,492	High blast slag trial	13/07/2020	2,353	High blast slag trial	05/08/2020	2,287	Natural Variation	06/08/2020	2,315	Natural Variation	09/09/2020	2,224	Natural Variation
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Date and time of monitoring	Investigation and re-calculation conducted between August to October 2020.																																																																																																								
Measures taken, or intended to be taken, to stop the emission	Close monitoring of the process and reducing output where needed and/or stopping the line.																																																																																																								

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	No indication of environmental effect.
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B - to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	• Close monitoring of the process and reducing output where needed and/or stopping the line. • Evaluating abatement technology which can be utilised, with a plan to invest in the appropriate solution with a projected go-live date of June 2021. (this will be confirmed as soon as we receive the final design for the system, which is expected in the next couple of weeks) • Monitoring of background SO₂. • Increased frequency of SRM comparison to CEMS. • Investigate compressed air improvements (to reduce potential optics issues)
The dates of any unauthorised emissions from the facility in the preceding 24 months.	2016 <u>Half hourly exceedance (previous permit)</u> • 11/01/2016 – A19 (1 half hourly CO exceedance) • 20/01/2016 – A19 (2 half hourly CO exceedances) • 04/02/2016 – A19 (1 half hourly CO exceedance) • 04/03/2016 – A19 (1 half hourly CO exceedance) <u>Daily average exceedance (current permit)</u> • 08/03/2016 – A2 (SO₂) • 09/06/2016 – A2 (SO₂ & NO_x) • 10/06/2016 – A2 (SO₂, NO_x & CO) • 11/06/2016 – A2 (SO₂ & NO_x) • 12/06/2016 – A2 (SO₂, NO_x & CO) • 13/06/2016 – A2 (SO₂) • 14/06/2016 – A2 (SO₂) • 15/06/2016 – A2 (SO₂, NO_x & CO) • 16/06/2016 – A2 (SO₂, NO_x & CO) • 17/06/2016 – A19 (SO₂) • 21/06/2016 – A2 (SO₂) • 22/06/2016 – A2 (SO₂) • 23/06/2016 – A2 (SO₂ & NO_x) 2017 • 01/09/2017 – A19 CEMS breakdown
Name*	██████████
Post	Safety, Health and Environmental Manager
Date	23/10/2020

* authorised to sign on behalf of Rockwool Limited