

PERMIT NUMBER BR9685IX

DOW SILICONES UK LTD

SCHEDULE 5 INCIDENT NOTIFICATION

To:	Process Industry Inspector
FAO: Mr Geraint Thomas	Natural Resources Wales Rivers House St Mellons Business Park Fortran Road St Mellons Cardiff CF3 0EY
Phone	03000 65 3000
Email	icc@cyfoethnaturioleymru.gov.uk
From:	Chris Chadwick
Name Of Operator	Dow Silicones UK Ltd
Location of Process:	Cardiff Road, Barry, Vale of Glamorgan
FAX No:	
Telephone No:	+44 1446 723678
Email	Chris.chadwick@dow.com
Date Information Provided:	11 th February 2022

Part A

Permit Number	EPR/BR9685IX
Name of Operator	Dow Silicones UK Ltd
Location of Facility	Barry, South Glamorgan, Wales
Time and Date of Detection	7/2/2022

a) Notification requirements for any activity that gives rise to an incident or accident which significantly affects or may significantly affect the environment	
To be notified immediately	
Date and time of event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substance(s) potentially released	
Best estimate of quantities or rate of release	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident	

b) Notification requirements for the breach of a permit condition	
To be notified immediately	
Emission point reference source	W1 Authorised discharge point to River Cadoxton
Parameter(s)	pH
Limit	pH 6-9
Measured value and uncertainty	pH 10.5-12.1 based on dual analysers. High pH material, from storm sewer into final effluent flume, estimated to be approx. 10m3.
Date and time of monitoring	pH>9 at the following times 13.41-14.16 & 16.06-16.12 on February 2 nd 2022 14.13-14.20 & 15.05-15.25 on February 7 th 2022
Measures taken, or intended to be taken, to stop the emission	When waste-water treatment (WWT) was shut-down 7 th Feb (14.13-14.20 & 15.05-15.25), the final effluent flow stopped being sent to river. Soon after the pH on the two final effluent pH probes increased to between 10.5 and 11.9, for the periods indicated. When the flow from the plant was reinstated at 14.20 and 15.25 respectively, the pH returned to normal (pH7.5-7.7). It was observed by the operator, that after the WWT plant flow had stopped and the final effluent flume had emptied, an additional flow

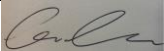
	<p>was seen, approx. 2 minutes after the sewer had emptied, from the storm water line from w952, which also connects into the final effluent flume, at a rate of <10m³/hr. This storm water line is not currently used and has not been used for several years. w952 storm sump goes directly to WWT, to verify this W952 storm sump was tested by the operator and was pH6 and the Vetter bag isolation at the storm sump was checked for its integrity, this was fine.</p> <p>The source of the high pH material is a residual amount of lime-based material in the W952 storm water line, from a small lime spill within the w1205 area. Most of the spilt lime was contained and collected but a small amount did enter the storm sewer through a manhole in the road close to w1205.</p> <p>The investigation is ongoing, which has identified that there was also a pH breach, as shown above on Feb 2nd and that the initial spill causing the issue, occurred Jan 29th. During the Jan 29th incident the pH reached but did not exceed pH9.</p> <p>It is now believed that most of the lime that entered the storm sewer, has now been discharged, as subsequent WWT plant trips, which result in W952 storm sewer draining, have not resulted in the pH of the final effluent exceeding pH9.</p> <p>Impact to the river will have been minimal due to the river currently being at a relatively high level and flow being around the mean of 0.225m³/s or approximately equal to Q31 or Q32.</p>
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Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

c) In the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment:	
To be notified immediately	
Description of where the effect on the environment was detected	
Substance(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B- to be submitted as soon as practicable

Any more information on the matters for notification under Part A	
Measure taken, or intended to be taken, to prevent a recurrence of the incident	
Measure 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.	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name	Chris Chadwick
Post	Barry Site Environmental Manager
Signature	
Date	11 th February 2022