

PERMIT NUMBER BR9685IX
DOW CORNING LTD

SCHEDULE 5 PART A INCIDENT NOTIFICATION

This information MUST be FAXED to Natural Resources Wales at the below FAX no. within 24 hr. of an incident occurring.

Revision Date: 06 June 2006

To:	Process Industry Inspector
FAO: Mr Tony Leakey	Natural Resources Wales Rivers House St Mellons Business Park Fortran Road St Mellons Cardiff CF3 0EY
FAX No:	029 20362095
From: Name Of Operator Location of Process:	Judith Sartor Dow Corning Limited Cardiff Road, Barry, Vale of Glamorgan
FAX No:	01446-749634
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Date Information Provided:	05/04/2017

Part A

Permit Number	EPR/BR9685IX
Name of Operator	Dow Corning Ltd
Location of Facility	Barry, South Glamorgan, Wales
Time and Date of Detection	04/04/17

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	
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 limit	
Emission point reference source	A41
Parameter(s)	Dioxans and Furans
Limit	0.1 ng/Nm3

Measured value and uncertainty	0.14 ng/Nm³ (Uncertainty +/- 0.015 ng/Nm³)
Date and time of monitoring	07/03/2017 10:30 14:30
Measures taken, or intended to be taken, to stop the emission	Another sample is being arranged asap. This is the first breach of this limit since this unit was commissioned in 1997. Plant engineers are investigating to see what the cause of this could be. The residence time did not drop below 2.3 seconds during the sampling period.

c) Notification requirements for the detection of any significant adverse environmental effect, to be notified within 24 hours.	
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	A root cause investigation was completed and full details will be provided for NRW. This contains detailed technical information and is considered confidential. <u>Summary</u> The internal soot removal equipment (soot blower) failed on 23rd December 2016 and had not been put back on line due to unavailability of spares. The soot blower was run as soon as the failed sample result was received. Butanes in feed stream were increased due to recent configuration change, which may have increased the potential for carbon build up with the soot blower off line (carbon can act as a catalyst to create dioxins) The unit was shutdown for a full clean in May. The ERU burner was found to be fouled, but this did not reduce residence time below required value. Having operated the soot blower, the fire tube was found to be relatively clean. Two sets of testing carried out after operation of the soot blower and before the cleanout show that the operation of the soot blower is key to minimise the dioxins emitted from the unit. One further sample has been taken and analysed since the clean – which also shows very low levels of dioxins.
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	W949 Dioxin Results (ng/M3) <table><caption>W949 Dioxin Results (ng/M3)</caption><thead><tr><th>Date</th><th>W949 Dioxin Result (ng/M3)</th><th>Limit (ng/M3)</th></tr></thead><tbody><tr><td>2010</td><td>0.01</td><td>0.10</td></tr><tr><td>2011</td><td>0.04</td><td>0.10</td></tr><tr><td>2012</td><td>0.01</td><td>0.10</td></tr><tr><td>2013</td><td>0.04</td><td>0.10</td></tr><tr><td>2014</td><td>0.02</td><td>0.10</td></tr><tr><td>2015</td><td>0.02</td><td>0.10</td></tr><tr><td>2016</td><td>0.02</td><td>0.10</td></tr><tr><td>Mar-17</td><td>0.14</td><td>0.10</td></tr><tr><td>Apr-17</td><td>0.02</td><td>0.10</td></tr><tr><td>May-17</td><td>0.01</td><td>0.10</td></tr><tr><td>End May...</td><td>0.01</td><td>0.10</td></tr></tbody></table>	Date	W949 Dioxin Result (ng/M3)	Limit (ng/M3)	2010	0.01	0.10	2011	0.04	0.10	2012	0.01	0.10	2013	0.04	0.10	2014	0.02	0.10	2015	0.02	0.10	2016	0.02	0.10	Mar-17	0.14	0.10	Apr-17	0.02	0.10	May-17	0.01	0.10	End May...	0.01	0.10
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Measure taken, or intended to be taken, to prevent a recurrence of the incident	The following actions were identified: 1. Update the ERU operating procedure regarding operation of the soot blower 2. Purchase a complete spare soot blower 3. Specify the soot blower as an Environmentally critical piece of equipment																																				
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.	Above actions should prevent reoccurrence.																																				
The dates of any unauthorised emissions from the facility in the preceding 24 months.	Previous Schedule 5 notifications: 7 Dec 2016 – W810 HCl 22 Jun 2016 – W931 Methanol																																				

Name	Judith Sartor
Post	Environmental Specialist
Signature	
Date	05/07/2017