

**IED RTA 1**

V.3.1 Dec 2015

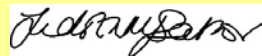
**Releases of IED Pollutants to Air****Operational Summary for the year****Q3 2018****Operator:** Dow Silicones UK Ltd**Site Location:** Barry Cogeneration Plant**Original permit number:** **EPR/JP3632ZH** **LCP:** **60.**

Note: beginning 1 January 2016, a return is required for each LCP within 28 days of the end of each quarter

Emissions	SO2	NOx	Dust
	(tonnes)	(tonnes)	(tonnes)
January	0.01	10.09	
February	0.01	8.62	
March	0.01	6.16	
<b>Total for Quarter 1</b>	<b>0.03</b>	<b>24.87</b>	
April	0.01	6.45	
May	0.01	7.31	
June	0.01	7.13	
<b>Total for Quarter 2</b>	<b>0.03</b>	<b>20.89</b>	
July	0.01	5.67	
August	0.01	5.79	
September	0.01	5.55	
<b>Total for Quarter 3</b>	<b>0.03</b>	<b>17.01</b>	
October	0	-	
November	0	-	
December	0	-	
<b>Total for Quarter 4</b>	<b>0.</b>	<b>0.</b>	
<b>Annual Total</b>	<b>0.09</b>	<b>62.77</b>	

I confirm that this data is not knowingly reported with any omissions, errors or misrepresentation. All measurement equipment used to generate the data has been appropriately calibrated and maintained regularly; this includes calibration against traceable international measurement standards where available. The data is supported by appropriate record keeping. IT is designed, documented, tested, implemented, controlled and maintained to ensure reliable, accurate and timely processing of data; data handling and calculations have been appropriate; data has been checked for false and unusual measurements. The annual report of emissions for the above participating large combustion plant has been verified in accordance with the requirements of the Transitional National Plan Regulations.

Name of the operator staff responsible for the quality of data supplied to the Register in accordance with the principles above.



Judith Sartor, Environmental Specialist

Date 24th Oct 2018

**RELEASES TO AIR  
 QUARTERLY RETURN  
 MONTHLY MEAN, MAXIMUM DAILY MEAN AND ANNUAL PERCENTILE CONCENTRATIONS  
 OPERATING MODE:**

**Operator:** Dow Silicones UK Ltd **Form:** IED CON 2 (Gas Turbines)  
**Location:** Barry Cogeneration Plant **Version/date:** V.3.1 31 Dec 2015  
**Permit/Variation Number:** EPR/JP3632ZH/V002

Year: 2018	A1 / LCP 60					
	NOx (mg/m3)			CO (mg/m3)		
Month	Monthly Mean	Max Daily Mean	Part Load Max Daily Mean	Monthly Mean	Max Daily Mean	Part Load Max Daily Mean
January	61.06	64.74		2.7	9.2	15.9
February	63.58	65.84		5.4	12.1	43.8
March	52.77	63.76		11.4	55.1	126.3
April	58.16	65.77		7.6	21.3	42.6
May	58.	63.54		6.4	12.8	25.3
June	59.01	65.59		6.4	21.2	31.6
July	57.89	60.66		4.1	8.1	24.8
August	61.39	69.95		4.	12.1	37.3
September	70.77	83.15		4.	12.3	12.3
October	-	-		-	-	-
November	-	-		-	-	-
December	-	-		-	-	-
Monthly ELV / Daily ELV (f)	125.	125.		80.	80.	80.
Annual 95th Percentile (h)	70.50(254)			16.7(254)		
Annual Percentile ELV (g)	125.			80.		

**NOTES:**

- (a) All data based on validated hourly average concentrations, excluding start-up and shut-down and periods of malfunction or breakdown of abatement equipment, at 15% O<sub>2</sub>, dry, 273.15K, 101.325 kPa
- (b) Annual percentiles are submitted with the final return (Quarter 4)
- (c) Extend report to cover the required number of LCP on each site and repeat report for each separately regulated Operating Mode as required, e.g., Combined Cycle, Open Cycle, Supplementary firing, Auxiliary firing
- (d) Averages determined at loads in the range 70% < Load ≤ 100% ISO base load and above
- (e) Averages determined at loads in the range MSUL\* < Load = 100% ISO base load and above (\* For a 3 parameter approach, from the point of Start-Up to the point of Shut-down)
- (f) Leave the Daily ELV blank if this is applied as a 95th percentile ELV within the Permit
- (g) For each pollutant, report the Annual 95th percentile ELV for hourly averages in the first column and, if applicable, the Annual 95th percentile ELV for daily means in the second column
- (h) For each pollutant, report the Annual 95th percentile of hourly averages in the first column and, if applicable, the Annual 95th percentile of daily means in the second column

Signed on behalf of the Operator by:



Judith Sartor, Environmental Specialist

Date of return:

24th Oct 2018

No confidence adjustment

**RELEASES TO AIR  
 QUARTERLY RETURN  
 MONTHLY MEAN, MAXIMUM DAILY MEAN AND ANNUAL PERCENTILE CONCENTRATIONS  
 OPERATING MODE:**

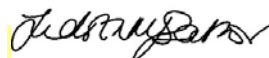
**Operator:** Dow Silicones UK Ltd **Form:** IED CON 2 (Gas Turbines)  
**Location:** Barry Cogeneration Plant **Version/date:** V.3.1 31 Dec 2015  
**Permit/Variation Number:** EPR/JP3632ZH/V002

Year: 2018	A2 / LCP60					
	NOx (mg/m3)			CO (mg/m3)		
Month	Monthly Mean	Max Daily Mean	Part Load Max Daily Mean	Monthly Mean	Max Daily Mean	Part Load Max Daily Mean
January	186.72	196.96		7	25.6	
February	193.71	202.79		3.9	13.1	
March	189.4	197.49		5.1	10.3	
April	185.29	192.4		2.5	6.6	
May	187.69	194.5		3.4	4.3	
June	196.37	214.87		3.6	7.3	
July	184.36	186.72		2.7	5.2	
August	-	-		-	-	
September	191.92	199.51		149.4	238.9	
October	-	-		-	-	
November	-	-		-	-	
December	-	-		-	-	
Monthly ELV / Daily ELV (f)	250.	250.		100.	110.	
Annual 95th Percentile (h)	202.07(34)			117.0(34)		
Annual Percentile ELV (g)	250.			200.		

**NOTES:**

- (a) All data based on validated hourly average concentrations, excluding start-up and shut-down and periods of malfunction or breakdown of abatement equipment, at 15% O2, dry, 273.15K, 101.325 kPa
- (b) Annual percentiles are submitted with the final return (Quarter 4)
- (c) Extend report to cover the required number of LCP on each site and repeat report for each separately regulated Operating Mode as required, e.g., Combined Cycle, Open Cycle, Supplementary firing, Auxiliary firing
- (d) Averages determined at loads in the range 70% < Load ≤ 100% ISO base load and above
- (e) Averages determined at loads in the range MSUL\* < Load = 100% ISO base load and above (\* For a 3 parameter approach, from the point of Start-Up to the point of Shut-down)
- (f) Leave the Daily ELV blank if this is applied as a 95th percentile ELV within the Permit
- (g) For each pollutant, report the Annual 95th percentile ELV for hourly averages in the first column and, if applicable, the Annual 95th percentile ELV for daily means in the second column
- (h) For each pollutant, report the Annual 95th percentile of hourly averages in the first column and, if applicable, the Annual 95th percentile of daily means in the second column

Signed on behalf of the Operator by:



Judith Sartor, Environmental Specialist

Date of return:

24th Oct 2018

No confidence adjustment

**RELEASES TO AIR  
 QUARTERLY RETURN  
 MONTHLY MEAN, MAXIMUM DAILY MEAN AND ANNUAL PERCENTILE CONCENTRATIONS  
 OPERATING MODE:**

**Operator:** Dow Silicones UK Ltd **Form:** IED CON 2 (Gas Turbines)  
**Location:** Barry Cogeneration Plant **Version/date:** V.3.1 31 Dec 2015  
**Permit/Variation Number:** EPR/JP3632ZH/V002

Year: 2018	A3 / LCP60					
	NOx (mg/m3)			CO (mg/m3)		
Month	Monthly Mean	Max Daily Mean	Part Load Max Daily Mean	Monthly Mean	Max Daily Mean	Part Load Max Daily Mean
January	59.92	86.17		2	15	33.1
February	60.04	77.33		3.5	8.8	9.7
March	63.5	80.74		3.8	10.7	18.8
April	59.62	62.48		3.5	13.3	19.4
May	60.02	66.19		3	8.2	24.4
June	54.67	58.31		3	12.4	23
July	53.65	57.36		2.3	4.8	20.2
August	63.4	76.9		2.1	8.8	26.3
September	60.25	61.06		2.7	5.3	19.5
October	-	-		-	-	-
November	-	-		-	-	-
December	-	-		-	-	-
Monthly ELV / Daily ELV (f)	125.	125.		80.	80.	80.
Annual 95th Percentile (h)						
Annual Percentile ELV (g)	125.			80.		

**NOTES:**

- (a) All data based on validated hourly average concentrations, excluding start-up and shut-down and periods of malfunction or breakdown of abatement equipment, at 15% O<sub>2</sub>, dry, 273.15K, 101.325 kPa
- (b) Annual percentiles are submitted with the final return (Quarter 4)
- (c) Extend report to cover the required number of LCP on each site and repeat report for each separately regulated Operating Mode as required, e.g., Combined Cycle, Open Cycle, Supplementary firing, Auxiliary firing
- (d) Averages determined at loads in the range 70% < Load ≤ 100% ISO base load and above
- (e) Averages determined at loads in the range MSUL\* < Load = 100% ISO base load and above (\* For a 3 parameter approach, from the point of Start-Up to the point of Shut-down)
- (f) Leave the Daily ELV blank if this is applied as a 95th percentile ELV within the Permit
- (g) For each pollutant, report the Annual 95th percentile ELV for hourly averages in the first column and, if applicable, the Annual 95th percentile ELV for daily means in the second column
- (h) For each pollutant, report the Annual 95th percentile of hourly averages in the first column and, if applicable, the Annual 95th percentile of daily means in the second column

Signed on behalf of the Operator by:



Judith Sartor, Environmental Specialist

Date of return:

24th Oct 2018

No confidence adjustment