

**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: 2019		A1 / LCP 60				
Month	NOx (mg/m3)			CO (mg/m3)		
	Monthly Mean	Max Daily Mean	Part Load Max Daily Mean	Monthly Mean	Max Daily Mean	Part Load Max Daily Mean
January	-	-		-	-	-
February	-	-		-	-	-
March	-	-		-	-	-
April	68.	69.67		4.7	4.8	10.7
May	60.11	77.84		10.4	17.2	52.2
June	61.97	74.63		7.7	12.6	34.4
July	63.84	71.05		7.6	12.8	36.3
August	63.66	72.57		6.7	17.2	27.5
September	66.77	76.82		6.5	13.3	15.3
October						
November						
December						
Monthly ELV / Daily ELV (f)	125.	125.		80.	80.	80.
Annual 95th Percentile (h)	74.30(143)			19.9(143)		
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% 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

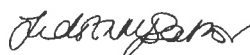
(e) Averages determined at loads in the range MSUL* < Load = 100% ISO base load and above (* For a 3 parameter approach, from the point of Start-Up to the point of Shut-down)

(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:

21st October 2019

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

/ersion/date:

V.3.1 31 Dec 2015

Permit/Variation Number: EPR/JP3632ZH/V002

Year: 2019		A2 / LCP60				
Month	NOx (mg/m3)			CO (mg/m3)		
	Monthly Mean	Max Daily Mean	Part Load Max Daily Mean	Monthly Mean	Max Daily Mean	Part Load Max Daily Mean
January	211.88	224.43		11.6	27.9	
February	209.22	219.43		11.3	17.6	
March	206.89	222.76		13.3	23.8	
April	207.44	215.86		10.5	12.6	
May	201.8	231.13		8.5	11.2	
June	197.68	213.81		8	9	
July	199.79	211.98		8.5	9.8	
August	-	-		-	-	
September	-	-		-	-	
October						
November						
December						
Monthly ELV / Daily ELV (f)	250.	250.		100.	110.	
Annual 95th Percentile (h)	223.33(114)			25.1(114)		
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:

21st October 2019

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: 2019		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	75.73	80.86		0.6	4.1	4.1
February	74.79	78.71		0.3	4.1	9.4
March	74.67	80.75		0.3	3.7	3.7
April	75.31	78.58		0	0	1.3
May	49.15	69.96		5.6	20.1	23.1
June	54.32	73.61		2.6	11.3	35.5
July	69.1	77.34		0	0.3	6.9
August	38.62	51.46		4.8	19.7	24.5
September	64.04	76.46		0.5	4	12.7
October						
November						
December						
Monthly ELV / Daily ELV (f)	125.	125.		80.	80.	80.
Annual 95th Percentile (h)	79.47(248)			10.5(248)		
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% 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

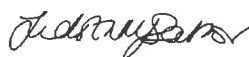
(e) Averages determined at loads in the range MSUL* < Load = 100% ISO base load and above (* For a 3 parameter approach, from the point of Start-Up to the point of Shut-down)

(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:

21st October 2019

No confidence adjustment