


BIRLA CARBON INDIA PVT. LTD

UNIT-PATALGANGA

Summary of Environment Performance

Monitoring	Location	Month		Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20
		Parameter	MPCB Limit						
	Boiler Stack, MOC : RCC, Height: 108M, Dimeter at TOP : 6.3M	TPM	150 mg/Nm3	29.2	33.24	35.1	37.29	38.2	40.35
		SO2	5760 Kg/Day	3.33	67.76	68.48	57.02	7.62	8
		Nox		135.68	111.16	115.09	86.13	83.6	33.95
		CO		14.85	14.31	14.24	17	63.74	54.34
		HCs		BDL	BDL	BDL	BDL	BDL	BDL
		HC (Non Methane)		BDL	BDL	BDL	BDL	BDL	BDL
	Dryer Stack, MOC : MS, Height: 77M, Dimeter at TOP : 2.3 M	TPM	150 mg/Nm3	32.12	29.14	30.31	32.78	32.31	43.88
		SO2	1260 Kg/Day	15.88	17.56	17.72	19.18	18.39	19.14
		Nox		52.26	43.23	44.63	51.34	49.49	52.53
		CO		14.1	13.52	13.48	12.44	29.04	19.6
		HCs		BDL	BDL	BDL	BDL	BDL	BDL
		HC (Non Methane)		BDL	BDL	BDL	BDL	BDL	BDL
	D.G. Stack, MOC : MS, Height: 43M, Dimeter at TOP : 0.254 M	TPM	150 mg/Nm3	48.79	54.66	56.19	53.45	52.94	65.07
		SO2	216 Kg/Day	2.28	46.5	47.1	54.39	53.58	62.42
		Nox		59.97	55.16	56.7	49.32	47.29	50.84
		CO		9.45	9.36	9.2	16.06	19.13	21.82
		HCs		BDL	BDL	BDL	BDL	BDL	BDL
		HC (Non Methane)		BDL	BDL	BDL	BDL	BDL	BDL
		TPM	150	13.13	13.66	14.53	18.64	17.52	18.94

Stack Monitoring	PGF No.01	SO2		BDL	BDL	BDL	BDL	BDL	BDL
		Nox		BDL	BDL	BDL	BDL	BDL	BDL
		CO		2.15	2.11	1.9	1.71	2.12	1.87
		HCs		BDL	BDL	BDL	BDL	BDL	BDL
	PGF No.02	TPM	150	11.07	12.1	13.68	16.58	14.35	15.18
		SO2		BDL	BDL	BDL	BDL	BDL	BDL
		Nox		BDL	BDL	BDL	BDL	BDL	BDL
		CO		2.42	2.33	2.1	1.72	2.63	1.68
		HCs		BDL	BDL	BDL	BDL	BDL	BDL
	Gas Flare System	TPM		73.72	68.55	68.26	65.37	64.27	71.81
		SO2		4.55	7.19	7.21	6.83	6.04	9.18
		Nox		15.75	16.42	17.83	17.4	16.55	15.37
		CO		1.68	1.62	1.6	4.33	3.11	2.8
		HCs		BDL	BDL	BDL	BDL	BDL	BDL
	Packing Exhaust Blower	TPM		64.08	62.16	63.6	55.63	53.44	57.26
		SO2		11.96	11.98	11.89	13.66	12.87	17.18
		Nox		21.61	17.97	18.53	18.07	17.73	18.75
		CO		5.42	5.24	5.1	4.38	2.91	1.72
		HCs		BDL	BDL	BDL	BDL	BDL	BDL
	Fire Hydrant Diesel Pump	TPM		49.11	52.3	54.26	53.63	52	57.45
		SO2		5.99	5.9	5.85	6.31	5.52	4.72
		Nox		10.89	12.07	12.49	12.33	12.67	6.92
		CO		4.44	4.33	4.2	3.54	4.11	1.86
		HCs		BDL	BDL	BDL	BDL	BDL	BDL
	DG Set River Side	TPM			50.81	49.33	47.6	45.01	63.31
		SO2			5.96	5.99	7.36	6.57	8.65
		Nox			14.46	15.58	19.25	18.92	24.66
		CO			7.29	7.01	9.27	13.09	18.27
HCs				BDL	BDL	BDL	BDL	BDL	
		RSPM PM 2.5	60	17.47	22.46	23.29	33.5	35.54	32.68
		RSPM PM 10	100	40.34	43.66	44.08	54.74	58.82	53.1
		SO2	80	5.54	10.15	10.27	11.95	14.57	13.53

**Ambient Air
Quality
Monitoring**

Tank Farm Area	Nox	80	8.64	16.35	15.98	15.83	9.03	15.45
	O3	180	7.31	11.14	10.46	16.01	14.16	15.11
	Pb	1	BDL	BDL	BDL	BDL	BDL	BDL
	CO	4	BDL	0.5	1	0.5	1.89	1.8
	NH3	400	9.43	5.32	5.86	6.91	7.99	4.92
	C6H6	5	BDL	BDL	BDL	BDL	BDL	BDL
	BaP	1	BDL	BDL	BDL	BDL	BDL	BDL
	As	6	BDL	BDL	BDL	BDL	BDL	BDL
	Ni	20	BDL	BDL	BDL	BDL	BDL	BDL
Switch Yard	RSPM PM 2.5	60	19.96	20.38	21.62	35.54	33.91	28.59
	RSPM PM 10	100	39.92	40.75	43.66	59.64	55.56	49.02
	SO2	80	6.43	13.38	14.09	15.25	16.68	14.46
	Nox	80	12.98	12.32	12.83	14.89	10.33	18.57
	O3	180	6.97	12.86	11.66	18.05	14.88	15.64
	Pb	1	0.02	0.02	BDL	BDL	BDL	BDL
	CO	4	0.5	0.5	0.5	0.5	0.92	1.1
	NH3	400	11.71	8.48	9.52	9.96	7.9	6.93
	C6H6	5	BDL	BDL	BDL	BDL	BDL	BDL
	BaP	1	BDL	BDL	BDL	BDL	BDL	BDL
	As	6	BDL	BDL	BDL	BDL	BDL	BDL
Ni	20	0.01	0.01	BDL	BDL	BDL	BDL	
Material Gate	RSPM PM 2.5	60	21.21	22.87	23.7	39.62	36.76	38.4
	RSPM PM 10	100	37.01	45.33	47.82	63.32	67.4	58.82
	SO2	80	5.77	9.34	10.77	12.52	15.91	15.01
	Nox	80	9.55	14.79	15.64	17.94	11.14	18.03
	O3	180	8.16	10.52	11.37	23.11	15.43	15.43
	Pb	1	BDL	BDL	BDL	BDL	BDL	BDL
	CO	4	0.5	0.5	0.5	1	1.98	0.98
	NH3	400	5.88	4.24	5.29	9.12	8.23	7.03
	C6H6	5	BDL	BDL	BDL	BDL	BDL	BDL
	BaP	1	BDL	BDL	BDL	BDL	BDL	BDL
	As	6	0.02	0.02	BDL	BDL	BDL	BDL
Ni	20	0.01	0.01	BDL	BDL	BDL	BDL	
	RSPM PM 2.5	60	20.38	25.37	24.95	37.81	34.72	36.76

	Near Dandwadi	RSPM PM 10	100	38.67	44.49	45.74	58.01	62.09	61.27	
		SO2	80	6.02	11.18	11.9	14.11	12.16	12	
		Nox	80	13.42	14.45	14.85	13.79	11.02	17.92	
		O3	180	14.28	13.19	12.87	19.3	15.85	15.49	
		Pb	1	0.01	0.01	BDL	BDL	BDL	BDL	
		CO	4	0.5	1	0.5	0.5	1.34	1.35	
		NH3	400	10.58	6.38	7.08	8.65	6.58	5.92	
		C6H6	5	BDL	BDL	BDL	BDL	BDL	BDL	
		BaP	1	BDL	BDL	BDL	BDL	BDL	BDL	
		As	6	0.02	BDL	BDL	BDL	BDL	BDL	
		Ni	20	BDL	0.01	BDL	BDL	BDL	BDL	
Ambient Noise Level Monitoring	Near Switch Yard	Day	75	59.61	59.8	59.93	59.6	58.88	59.41	
		Night	70	53.87	53.34	53.15	53.25	54.37	52.43	
	Near Tank Farm Area	Day	75	60.37	60.48	59	59.92	58.98	60.97	
		Night	70	54.32	52.45	54.22	53.15	53.25	52.34	
	Near Material Gate	Day	75	59.95	60.92	60.93	57.44	56.44	53.51	
		Night	70	53.41	54.73	55.01	63.48	53.86	50.48	
	Near Dandwadi	Day	75	60.34	60.14	59.6	59	60.05	59.48	
		Night	70	53.02	52.51	53.25	54.22	52.48	51.88	
	Near DG Set	Day (Inside)		102.3	100.3	100.1	100.7	101.2	101.5	
		Day (Outside)		75.2	73.2	73.3	73.7	73.9	74.5	
Rivar DG	Day (Inside)		100.9	101.6	100.9	101.4	100.7	101.5		
	Day (Outside)		73.5	74.9	74.6	74.8	73.7	73.9		
	Settling Pond Outlet	pH	5.5 -9.0	6.75	6.79	6.73	6.7	6.95	6.5	
		TSS	100	12	14	18	20	30	35	
		TDS	2100	104	102	110	112	140	170	
		COD	250	34.5	39.21	42.35	43.92	138.46	184.61	
		BOD (3 day)	100	14	15	19	17	58.8	66.5	
		O & G	10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
			pH	6.5-8.5	6.15	6.21	6.18	6.15	6.95	6.95
			Temp.	30 °C	23	23	24	24.7	28.4	30
			TSS	100	12	14	22	24	32	30
			TDS	2100	100	102	112	116	118	136

**Water
Sample**

**ETP Composite Water (ETP
Outlet)**

COD	250	14.11	16	15.68	18.82	26.54	46.15
BOD (3 day)	100	5	6	6	6.8	10	17.03
O & G	10	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorieds	600	66.96	65.33	66.16	64.98	87.97	97.97
Sulphates	1000	16.5	16	16.5	18	30	35
Phosphate	5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Free Available Chlorine	0.5	0.89	1.33	0.84	0.89	<0.1	<0.1
Zinc	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron	1	0.304	0.318	0.304	0.318	<0.1	<0.1
Copper	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
pH		6.55	6.61	6.58	6.5	6.98	7.05
TSS	Not to exceed 50	22	24	30	31	31	40
TDS		176	178	186	188	192	196
COD	Not to exceed 100	38.4	35.2	34.5	36.92	40	46.15
BOD (3 day)	Not to exceed 30	14	13	14	12	22.8	18.66
O & G		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

**TREATED SEWAGE
(STP Outlet)**