

# ENVIRONMENT MONITORING REPORT



## GAIL (India) Limited, Pata Petrochemical Complex Auraiya, Uttar Pradesh (U.P.)



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Prepared by  
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(MoEF&CC Recognized, NABL Accredited Laboratory)



**December 2023**



Monitoring of Environmental Parameters at GAIL (India) Limited, PATA, UP



TABLE-3a: Ambient Air Quality Monitoring Results -AAQ- : Inside the Complex- PC-2 AAQMS-02

Date of Sampling	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	NH <sub>3</sub> (µg/m <sup>3</sup> )	O <sub>3</sub> (µg/m <sup>3</sup> )	Lead (µg/m <sup>3</sup> )	Benzene (µg/m <sup>3</sup> )	Benzo (a) Pyrene (ng/m <sup>3</sup> )	Arsenic (As), (ng/m <sup>3</sup> )	Nickel (Ni), (ng/m <sup>3</sup> )
04.12.2023	69.8	36.9	12.1	17.2	0.41	10.5	2.4	<0.1	2.2	<0.5	<1.0	<5.0
07.12.2023	69.7	37.2	10.6	14.6	0.45	13.6	2.6	<0.1	2.2	<0.5	<1.0	<5.0
11.12.2023	62.6	34.3	12.3	16.7	0.41	13.8	2.7	<0.1	2.3	<0.5	<1.0	<5.0
14.12.2023	67.8	31.7	10.8	20.1	0.42	12.4	2.4	<0.1	2.3	<0.5	<1.0	<5.0
18.12.2023	66.9	35.3	9.2	17.6	0.55	12.3	2.5	<0.1	2.5	<0.5	<1.0	<5.0
20.12.2023	66.5	36.3	18.0	18.4	0.49	12.2	2.1	<0.1	2.5	<0.5	<1.0	<5.0
22.12.2023	72.9	34.3	14.2	15.2	0.51	13.4	2.3	<0.1	2.5	<0.5	<1.0	<5.0
26.12.2023	70.6	31.8	16.3	18.7	0.47	12.4	2.5	<0.1	2.9	<0.5	<1.0	<5.0
28.12.2023	69.4	30.7	11.4	18.8	0.40	11.3	2.7	<0.1	2.2	<0.5	<1.0	<5.0
<b>Min</b>	<b>62.6</b>	<b>30.7</b>	<b>9.2</b>	<b>14.6</b>	<b>0.40</b>	<b>10.5</b>	<b>2.1</b>	<b>&lt;0.1</b>	<b>2.2</b>	<b>&lt;0.5</b>	<b>&lt;1.0</b>	<b>&lt;5.0</b>
<b>Max</b>	<b>72.9</b>	<b>37.2</b>	<b>18.0</b>	<b>20.1</b>	<b>0.55</b>	<b>13.8</b>	<b>2.7</b>	<b>&lt;0.1</b>	<b>2.9</b>	<b>&lt;0.5</b>	<b>&lt;1.0</b>	<b>&lt;5.0</b>
<b>Mean</b>	<b>68.5</b>	<b>34.3</b>	<b>12.8</b>	<b>17.5</b>	<b>0.46</b>	<b>12.4</b>	<b>2.5</b>	<b>&lt;0.1</b>	<b>2.4</b>	<b>&lt;0.5</b>	<b>&lt;1.0</b>	<b>&lt;5.0</b>
<b>98%ile</b>	<b>72.5</b>	<b>37.2</b>	<b>17.7</b>	<b>19.9</b>	<b>0.54</b>	<b>13.7</b>	<b>2.7</b>	<b>&lt;0.1</b>	<b>2.8</b>	<b>&lt;0.5</b>	<b>&lt;1.0</b>	<b>&lt;5.0</b>
<b>NAAQ Standards</b>	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>2</b>	<b>400</b>	<b>100</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>20</b>

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10/10/2024

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Monitoring of Environmental Parameters at GAIL (India) Limited, PATA, UP



Source Emission Monitoring: Table 6.1 a

S. No	Name of the Stack	Date Of Sampling	Velocity m/sec	Flue Gas Discharge Quantity Nm <sup>3</sup> /hr	Stack gas temperature °C	Particulate Matter (mg/Nm <sup>3</sup> )	Sulphur Dioxide (mg/Nm <sup>3</sup> )	Oxides of Nitrogen (mg/Nm <sup>3</sup> )	Carbon Monoxide (mg/Nm <sup>3</sup> )	Oxygen (%)
1	LLDPE-1 -Dowtherm A	20.12.2023	17.34	36504.51	256	5.49	18.6	54.7	17.5	7.2
2	LLDPE-1 -Dowtherm B	20.12.2023	16.84	35852.23	250	5.18	20.5	50.8	19.1	6.9
3	GCU-1- FF-101	15.12.2023	13.60	64103.80	129	3.46	16.7	33.2	22.5	7.1
4	GCU-1- FF-102	15.12.2023	13.60	63628.96	132	3.55	21.8	29.3	21.3	6.5
5	GCU-1- FF-103	15.12.2023	14.18	66671.79	130	3.59	21.6	31.3	18.2	5.9
6	GCU-1- FF-104	15.12.2023	15.02	69529.36	134	5.25	26.9	29.3	20.3	6.2
7	GCU-1- FF-105	15.12.2023	13.85	65444.98	128	6.13	26.3	31.3	22.4	7.2
8	GCU-1- FF-106	15.12.2023	14.59	68429.74	131	3.98	16.7	33.2	21.6	7.6
9	GCU-2- FF-110	13.12.2023	14.99	165251.49	131	2.16	20.5	43.0	22.8	6.3
10	GCU-2- FF-120	13.12.2023	15.24	166822.83	134	3.67	18.0	33.2	21.4	6.5
11	GCU-2- FF-130	13.12.2023	14.48	160477.60	129	3.11	19.9	29.3	20.2	6.9
12	Power Plant-1- UB-1	Shutdown	-	-	-	-	-	-	-	-
13	Power Plant-1- UB-2	09.12.2023	14.00	263956.84	129	3.32	21.8	43.0	21.3	7.5
14	Power Plant-1- UB-3	Shutdown	-	-	-	-	-	-	-	-
15	Power Plant-2- UB-1	05.12.2023	14.38	270448.62	130	3.28	21.8	44.9	20.8	6.5
16	Power Plant-2- UB-2	05.12.2023	14.61	276854.05	127	3.36	23.1	46.9	16.9	7.2
17	HRSG- 1	05.12.2023	14.85	469705.08	153	4.36	21.8	78.2	17.8	7.8
18	HRSG- 2	05.12.2023	15.63	499062.49	149	3.44	16.7	50.8	16.3	6.2
<b>Standards</b>										<b>--</b>
						<b>10/5</b>	<b>50</b>	<b>350/250</b>	<b>150/100</b>	<b>--</b>

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