Atul Ltd

Project: Expansion of agro-chemicals (Pesticides/Herbicides) and bulk drug and pharmaceuticals manufacturing unit

EC Compliance Report for the period October 2019- March 2020 to EC F. No. J -11011/48/2003-IA II (I) dated 20.02.2004.

<table>
<tr><th>No.</th><th>Condition</th><th>Compliance</th></tr>
<tr><td colspan="3">A. Specific Conditions :</td></tr>
<tr><td>i</td><td>The gaseous emissions (SO_2, NOx, and HCl) and particulate matters from various process units should confirm to the standards prescribed by the concerned authorities from time to time.</td><td>Complied.
The gaseous emissions (SO_2, NOx, and HCl) and particulate matters from various process units confirms to the standards prescribed by GPCB through CCA. Details are given in below Table:
Summary of Process Stack results:
<table>
<tr><th rowspan="2">No.</th><th rowspan="2">Parameter</th><th rowspan="2">Standard values as per CCA</th><th rowspan="2">Unit</th><th colspan="3">Values for the period Oct19- Mar 20</th></tr>
<tr><th>Min.</th><th>Max.</th><th>Avg.</th></tr>
<tr><td>1</td><td>SO_2</td><td>40</td><td>mg/Nm^3</td><td>6.2</td><td>20.4</td><td>13.7</td></tr>
<tr><td>2</td><td>SO_2 (kg/T)</td><td>2</td><td>kg/T</td><td>0.4</td><td>0.8</td><td>0.5</td></tr>
<tr><td>3</td><td>NOx</td><td>25</td><td>mg/Nm^3</td><td>7.2</td><td>14.5</td><td>10.0</td></tr>
<tr><td>4</td><td>HCl</td><td>20</td><td>mg/Nm^3</td><td>2.5</td><td>15.5</td><td>9.6</td></tr>
<tr><td>5</td><td>PM</td><td>150</td><td>mg/Nm^3</td><td>24</td><td>72</td><td>49.4</td></tr>
<tr><td>6</td><td>PM with Pesticide compound</td><td>20</td><td>mg/Nm^3</td><td>6.3</td><td>13.4</td><td>8.5</td></tr>
</table>
Summary of Flue Stack results:
<table>
<tr><th rowspan="2">No.</th><th rowspan="2">Parameter</th><th rowspan="2">Standard values as per CCA</th><th rowspan="2">Unit</th><th colspan="3">Values for the period Oct19- Mar 20</th></tr>
<tr><th>Min.</th><th>Max.</th><th>Avg.</th></tr>
<tr><td>1</td><td>PM</td><td>100</td><td>mg/Nm^3</td><td>52</td><td>88</td><td>68.1</td></tr>
<tr><td>2</td><td>PM (New Boiler)</td><td>50</td><td>mg/Nm^3</td><td>25</td><td>39</td><td>33.6</td></tr>
<tr><td>3</td><td>SO_2</td><td>600</td><td>mg/Nm^3</td><td>102</td><td>136</td><td>115.8</td></tr>
<tr><td>4</td><td>NOx</td><td>600</td><td>mg/Nm^3</td><td>103</td><td>145</td><td>122.4</td></tr>
<tr><td>5</td><td>NOx (NewBoiler)</td><td>300</td><td>mg/Nm^3</td><td>93</td><td>105</td><td>100.5</td></tr>
</table></td></tr>
</table>

<table>
<tr><td></td><td></td><td>Details of stack results for the compliance period is given in Table 1.
(Pl. see pg. no. 18)</td></tr>
<tr><td></td><td>At no time, the emission levels should go beyond the stipulated standards.</td><td>Complied.

Monthly monitoring is being done by GPCB approved, NABL approved agencies. At no time, the emissions exceeded the prescribed limits during report period.

Summary of stack results given in specific condition no. i as above.</td></tr>
<tr><td></td><td>In the event of failure of pollution control system(s) adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.</td><td>Complied.

No such case happened during compliance period.</td></tr>
<tr><td>ii</td><td>Ambient air quality monitoring Station should be set up in down wind direction as well as where max. ground level concentration of SPM anticipated in consultation with the state pollution control board.</td><td>Complied.

10 Ambient air quality monitoring Station have been set up in down wind direction as well as where max. ground level concentration of SPM anticipated in consultation with GPCB. The same had been shown to authority like SPCB, CPCB & MoEF during their visit to our factory.

List of our ambient air monitoring station is given below:
<table>
<tr><th>No.</th><th>Location</th></tr>
<tr><td>1</td><td>66 KVA GEB substation</td></tr>
<tr><td>2</td><td>Opposite Shed D</td></tr>
<tr><td>3</td><td>Near ETP (West Site)</td></tr>
<tr><td>4</td><td>ETP Plat (North site)</td></tr>
<tr><td>5</td><td>Near TSDF</td></tr>
<tr><td>6</td><td>Near Main Guest House</td></tr>
<tr><td>7</td><td>At Wyeth Colony</td></tr>
<tr><td>8</td><td>Gram panchayat hall</td></tr>
<tr><td>9</td><td>Near Main office, North site</td></tr>
<tr><td>10</td><td>Water tank at Haria Road</td></tr>
</table></td></tr>
<tr><td>iii</td><td>Fugitive emission in work zone environment, product, raw material storage areas must be regularly monitored.</td><td>Complied.

Fugitive emissions in the work zone environment and raw material storage area is being regularly monitored by NABL approved third party.</td></tr>
</table>

The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards. Parameter wise summery is given below:

Plant	**Area**	**Parameter**	**Prescribed Limit**	**Values of VOCs in Milligram per NM^3 for the period Oct19- Mar 20**		
				Min.	**Max.**	**Avg.**
2,4 D	Reactor	Phenol	19	11.6	16.6	13.38
	Buffer tank	Chlorine	3	1.6	2.4	1.95
Resorcinol	Benzene storage tank area near vent	Benzene	15	7.9	11.3	9.28
	Near Extraction /scrubber unit	Butyl acetate	-	602	739	671.67
Pharma	At second floor work area	Ammonia	18	10.6	17.4	13.10
	Ammonia recovery area	Ammonia	18	11.6	17.1	15.27
Epoxy - I	At vacuum pump 2nd floor	ECH	10	2.9	6	4.57
	At vessel POS 1208 G.F	ECH	10	5.2	9.2	6.97
Shed H	At second floor work area	Nitrobenzene	5	2.3	4	3.20
Shed J	Buffer Tank	Chlorine	3	1.7	2.6	2.23

Results for the compliance period is given in **Table 2.** (Pl. see pg. no. 22)

The company should install alkali scrubbers for scrubbing of HCl.	**Complied**. Alkali scrubbers for scrubbing of HCl have been installed. In fact we have installed dual scrubbing system i.e. combination of caustic and water scrubber system for scrubbing of HCl in majority of plants like 2,4 D plant, Shed C, Shed F, Shed H etc.

	pH of the scrubber tank should be monitored regularly.	**Complied**. pH of the scrubber tank is monitored regularly and logged. It is a regular operating practice.
	Liquid effluent generated from the scrubber should be sent to effluent treatment plant.	**Complied**. Liquid effluent generated from the scrubber is being sent to ETP along with plant effluent stream.
	All the process equipment/reaction vessels should be connected with central exhaust system.	**Complied**. Central exhaust system has been provided at strategic locations and the critical operations evolving the hazardous gases are routed through multiple stage scrubbing system.
	Further measures should be taken to reduce the losses of solvents.	**Complied**. Reactors are connected to chilled brine condenser system. Breather valves have been provided to all solvent storage tanks.
	Cooling arrangement should be made for all the solvent storage tanks to minimize evaporation losses.	**Complied**. Our Most of solvent storage tanks are underground. All the storage tanks are in close loop which is connected to condenser to minimize evaporation losses.
	The company should monitor VOCs from the incinerator and data submitted regularly to SPCB and Ministry of Environment and forests.	**Complied**. Incinerator stack has been regularly monitored and data submitted regularly to GPCB and MoEF through six monthly EC compliance report. Details of stack results for the compliance period is given in **Table 1.** (Pl. see pg. no. 18)

<table>
<tr>
<td>iv</td>
<td>The effluent generation should not exceed 1191 m3/day (936 m3/d of process effluent and 255 m3/d of domestic effluent).</td>
<td>
Complied.

However, since we have another EC granted in 2019 for expansion, we request to consider latest figures given in same.
According to specific condition of EC F No. J 11011/108/2015-IA-II-(I) dated11.02.2019. Industrial Waste water generation shall not exceed 20,514 m^3/d.
The average wastewater generation for the report period is 8327 m^3/day only. Detail break up is given below:
<table>
<tr><th>Wastewater generation m^3/day</th><th>Oct 19</th><th>Nov 19</th><th>Dec 19</th><th>Jan 20</th><th>Feb 20</th><th>Mar 20</th><th>Total</th></tr>
<tr><td>Month wise</td><td>291813</td><td>257071</td><td>282245</td><td>254951</td><td>225463</td><td>213113</td><td>1524656</td></tr>
<tr><td>Per day</td><td>9413</td><td>8569</td><td>9105</td><td>8224</td><td>7775</td><td>6875</td><td>Avg.
8327</td></tr>
</table>

The maximum values during the compliance period confirms that at no time the wastewater generation went beyond the stipulated standards. Summary is given below:
<table>
<tr><th rowspan="2">Wastewater generation</th><th rowspan="2">Stipulated value</th><th colspan="3">Values for the period Oct19- Mar 20</th></tr>
<tr><th>Min.</th><th>Max.</th><th>Avg.</th></tr>
<tr><td>Wastewater generation m^3/d</td><td>20514</td><td>6875</td><td>9413</td><td>8327</td></tr>
</table>
</td>
</tr>
<tr>
<td></td>
<td>The effluent should be segregated at source of generation.</td>
<td>Complied.

Concentrated effluent is segregated and chemicals are being retrieved through recovery process/distillation.</td>
</tr>
<tr>
<td></td>
<td>The Concentrated effluent stream should be incinerated and non-concentrated effluent after tertiary treatment should be discharged into the CETP.</td>
<td>Complied.

Among the referred expansion project, only one stream from 2, 4 D is concentrated. We have installed distillation plant where the stream is distilled and product so obtained are sold. After recovery of product, lean effluent is sent to ETP where it is treated without any difficulty. Hence no incineration is required.</td>
</tr>
</table>

	The treated effluent should be discharged into estuary zone of river Par through 4.0 km long HDPE pipe line only after it meets the standards stipulated by the Gujarat Pollution Control Board/EPA rules.	**Complied**. The discharged effluent is meeting all state pollution control board limits and values of various parameters of treated effluent is given in **Table 3**. (Pl. see pg. no. 22) Apart from the same, we have carried out EIA study of river Par in 2009 & 2015. The maximum values during the compliance period confirms that at no time the emission went beyond the stipulated standards. Summary is given below:

Sr. No.	**Parameter**	**Norms**	**Values for the period Oct19- Mar 20**		
			Min.	**Max.**	**Avg.**
1	pH	5.5-9.0	6.23	8.19	7.19
2	Temperature	40 deg C	30.1	31.8	31.09
3	Colour (pt. co. scale)in units	---	78	140	92.86
4	Suspended solids	100 mg/l	62	98	79.57
5	Phenolic Compounds	5 mg/l	0.039	0.088	0.05
6	Cyanides	0.2 mg/l	ND	ND	ND
7	Fluorides	2 mg/l	0.62	0.75	0.69
8	Sulphides	2 mg/l	0.9	1.8	1.23
9	Ammonical Nitrogen	50 mg/l	34	48	41.00
10	Total Chromium	2 mg/l	ND	ND	ND
11	Hexavalent Chromium	1 mg/l	ND	ND	ND
12	BOD (3 days at 27°C)	100 mg/l	57	78	64.29
13	COD	250 mg/l	205	240	218.29

<table>
<tr><td></td><td>The domestic waste water should be disposed off through septic tank / soak pit system.</td><td>Complied.

Domestic waste water goes to septic tank and subsequently in to ETP for further treatment.

Detail of Domestic effluent generation is given in below table:
<table>
<tr><th>Domestic Wastewater generation m^3</th><th>Oct 19</th><th>Nov 19</th><th>Dec 19</th><th>Jan 20</th><th>Feb 20</th><th>Mar 20</th><th>Total</th></tr>
<tr><td>Month wise</td><td>12281</td><td>10374</td><td>12189</td><td>9691</td><td>7774</td><td>9266</td><td>61575</td></tr>
<tr><td>Per day</td><td>396</td><td>335</td><td>393</td><td>313</td><td>251</td><td>299</td><td>331
Avg.</td></tr>
</table>

The maximum, minimum and average values are given below:
<table>
<tr><th rowspan="2">Domestic Wastewater generation</th><th colspan="3">Values for the period Oct19-Mar 20</th></tr>
<tr><th>Min.</th><th>Max.</th><th>Avg.</th></tr>
<tr><td>Domestic Wastewater generation m^3/d</td><td>251</td><td>396</td><td>331</td></tr>
</table></td></tr>
<tr><td>v</td><td>The Company should also Set up a separate online fish pond using treated effluent, to ensure that the quality of treated effluent discharged into the par estuary does not have any adverse impact on the aquatic life.</td><td>Complied.

We have set up a separate online fish pond using treated effluent at our ETP.</td></tr>
<tr><td></td><td>The effluent quality at the discharge point must also be monitored periodically by an independent agency authorized by CPCB and report of the independent agency should be submitted to the Ministry's</td><td>Complied.

The effluent quality at the ETP discharge point is regularly being monitored by the Environmental auditors appointed by GPCB.

GPCB also monitor the treated effluent quality at regular intervals. Recent monitoring results of GPCB is attached as Annexure A.

The river water quality at the discharge point is regularly being monitored by GPCB. Agencies like Pollucon Laboratories Pvt. Ltd- MoEF approved agency, Envision Enviro Technologies Pvt. Ltd- NABET accredited have also done the</td></tr>
</table>

	Regional office at Bhopal/CPCB/GPCB	monitoring in 2009 & 2105 respectively. Relevant extracts from latest reports were submitted to Ministry vide our letter Atul/SHE/MoEF/Visit/3 dated 4.4.17.
vi	**As reflected in the EIA/EMP report, the solid waste and ETP sludge should be incinerated and incinerator ash should be disposed off in the landfill facility within the plant premises.**	**Complied**. ETP waste is disposed into our TSDF instead of incineration for which we have taken permission from MoEF vide letter dated 6.5.04 and same is also approved by GPCB through our CCA. We also send our incinerable waste for co-processing as per GPCB approval given through our CCA.
	The ground water quality in and around the unit and the hazardous waste storage site should be regularly monitored and the data recorded to ensure that there is no contamination of the groundwater.	**Complied**. Ground water quality is being checked regularly for in and around the unit and the hazardous waste storage site. Latest Groundwater analysis report was submitted to your good office vide later dated March 11, 2020
vii	**The destructive efficiency of the incinerator should be assessed by an agency like CPCB and a report submitted to the Ministry.**	**Complied**. The destructive efficiency of the incinerator was assessed by M/s. SGS, a reputed agency in field on environmental monitoring. Report already submitted vide our letter Atul/SHE/MoEF/Visit/3 dated 4.4.17.
viii	**The company should comply with the provisions of coastal Regulation Zone Notification of 1991 and Coastal Zone Management Plan of Gujarat.**	**Complied**.
	Further, specific conditions stipulated by the Forest and Environment Department, Government of	**Complied**. Detailed compliance report is already submitted to the Ministry vide our letter our letter Atul/SHE/MoEF/Visit/3 dated 4.4.17.

<table>
<tr><td></td><td>Gujarat vide its letter No. ENV-1097-2942-P dated 27th January, 1998 for laying of pipe line for discharge of treated effluents through the estuary zone of the River Par Zone should be strictly adhered to.</td><td></td></tr>
<tr><td>ix</td><td>Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.</td><td>Complied.

Occupational health surveillance of the workers is being done on regular basis and record maintained as per the factory act which is shown in below table:
<table>
<tr><th>SN</th><th>Employee</th><th>Qty</th><th>Check-up</th></tr>
<tr><td>1</td><td>Staff</td><td rowspan="3">6361</td><td rowspan="3">Pre-Employment</td></tr>
<tr><td>2</td><td>Operators</td></tr>
<tr><td>3</td><td>Workers</td></tr>
</table>
Annual Medical Check-Up: FY April-19 to March-20
<table>
<tr><th>SN</th><th>Employee</th><th>Qty</th><th>Check-up</th></tr>
<tr><td>1</td><td>Staff</td><td rowspan="3">3145</td><td rowspan="3">Annual Checkup</td></tr>
<tr><td>2</td><td>Operators</td></tr>
<tr><td>3</td><td>Workers</td></tr>
</table></td></tr>
<tr><td>x</td><td>The company should develop rainwater harvesting structures to the harvest the run off water from the rooftops and by laying a separate storm water drains system for recharge of ground water and</td><td>Complied.

Company has expanded its harvesting pond capacity to 9000 KL capacity pond to harvest rain water. We are creating facility/ capacity to cater our consumption with rain harvested water with zero river drawls of water during the rainy days. Besides this, there are three check dams and pumping facility to harvest rain water. We are also constructing temporary sand bag dam on top of dam towards the end of monsoon to store additional free flowing rain water in river Par.</td></tr>
</table>

	to reduce the drawl from the river Par.	
xi	**The project authorities may undertake a survey to assess the impact of gaseous emissions/pollutants on the health including respiratory and digestive system of the population within and vicinity of the plant and report submitted to the State Government and to this Ministry within six months.**	**Complied**. The survey was carried out to assess the impact of emission/pollutants on the health including respiratory & digestive systems of population within & vicinity of the plant. So far no major illness have been identified. Report submitted vide our letter ref. Atul/MoEF/Reg/4 dated 16.8.04.
xii	**The Company should developed a green belt in an 25% of the plant area as per the CPCB guidelines.**	**Complied**. Company has developed green belt and dense plantation inside the factory in area more than 33 % of total land. Company is having green belt development plan and planting more than about 50000 plants per year on regular basis.
xiii	**As per the policy decision taken vide this Ministry's circular no. J-21011/8/98- IA II (I) dated 14th May 2002 and 23rd June, 2003, the company shall earmark a separate fund i.e. 1% of the total cost of the project (Rs. 25 Crores) for eco-development measures including community welfare measures in the project area.**	**Complied**. We had submitted the Eco fund earmarked for eco development to GPCB with an intimation to MoEF vide our letter NRK/ECC/GPCB/3 dated 17.05.2004. Action plan related to Eco-fund also made as per process and communicated to authority wide our letter Atul/ECC/GPCB/ECO-fund/2 dated 2.11.2004. Copy of same again submitted to Ministry vide our letter Atul/SHE/MoEF/Visit/3 dated 4.4.17.
	The amount shall be deposited within three months in a separate account to	**Complied**. We had submitted the Eco fund earmarked for eco development to GPCB with an intimation to MoEF vide our letter NRK/ECC/GPCB/3 dated 17.05.2004.

	be maintained by GPCB.	
	The plans in this regard should be submitted to the SPCB as well as to the Ministry within three months of issue of this letter.	**Complied**. Action plan related to Eco-fund also made as per process and communicated to authority vide our letter Atul/ECC/GPCB/ECO-fund/2 dated 2.11.2004.
	After approval of the action plan by GPCB, the amount deposited will be released to the project authorities in two installments based on the progress of implementation.	**Complied**.
B.	**General Conditions**	
i	**The project authorities must strictly adhere to stipulations made by GPCB.**	**Complied**. The company adheres to the compliances and has not exceeded the stipulation. This has been certified by our Environmental auditors, an authorized agency and nominated by GPCB; through Environmental audit every year. Latest compliance report by GPCB appointed Environmental auditor Faculty of Pacific school of Engineering, Dist. Surat for year 18-19 was submitted to your good office vide our letter dated July 09, 2019.
ii	**At no time, the emissions should not go beyond standards.**	**Complied**. Monthly monitoring is being done by NABL approved third party. At no time, the emissions exceeded the prescribed limits during report period. The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards. **Summary of stack results given in specific condition no. i as above.**
	In the event of failure of any pollution control system adopted by the units, the respective unit should be immediately put out of operation and should not be	**Complied**. No such incident happened during compliance period.

<table>
<tr><td></td><td>restarted until the desired efficiency has been achieved.</td><td></td></tr>
<tr><td>iii</td><td>The overall noise level in and around the plant area shall be kept well within the standard by providing noise control measures including acoustic hoods silencers, enclosures etc. on all source of noise generation.</td><td>Complied.

Acoustic hood, silencer and acoustic enclosures and insulation are provided at appropriate high noise area like turbine, DG set, vents etc.</td></tr>
<tr><td></td><td>The ambient noise levels should confirm to the standards prescribed under EPA Rules, 1989, viz. 75 (daytime) and 70bBA(night time)</td><td>Complied.

The ambient noise level is regularly monitored and its data are given in Table 4 and 5. (Pl. see pg. no. 23,24)
The maximum values during the compliance period confirms that at no time the noise emission level went beyond the stipulated standards. Summary is given below:
Noise level monitoring data (Day Time)
<table>
<tr><th>Sr. No.</th><th>Location</th><th>Permissible Limits, dBA</th><th colspan="3">Values for the period Oct19- Mar 20</th></tr>
<tr><td></td><td></td><td>75</td><td>Min.</td><td>Max.</td><td>Avg.</td></tr>
<tr><td>1</td><td>Near Main guest house</td><td>75</td><td>55.7</td><td>61.2</td><td>57.4</td></tr>
<tr><td>2</td><td>Near TSDF</td><td>75</td><td>61.2</td><td>64.2</td><td>62.6</td></tr>
<tr><td>3</td><td>At Wyeth Colony</td><td>75</td><td>49.7</td><td>57.3</td><td>53.6</td></tr>
<tr><td>4</td><td>Gram Panchayat Hall</td><td>75</td><td>60.8</td><td>63.5</td><td>62.7</td></tr>
<tr><td>5</td><td>Near Main Office North site</td><td>75</td><td>59.2</td><td>64.5</td><td>62.18</td></tr>
<tr><td>6</td><td>ETP North site</td><td>75</td><td>63.2</td><td>68.5</td><td>64.4</td></tr>
<tr><td>7</td><td>Opposite shed D</td><td>75</td><td>64.7</td><td>67.3</td><td>66.0</td></tr>
<tr><td>8</td><td>ETP West site</td><td>75</td><td>62.8</td><td>68.5</td><td>64.5</td></tr>
<tr><td>9</td><td>Water tank Haria road</td><td>75</td><td>53.5</td><td>62.6</td><td>57.1</td></tr>
<tr><td>10</td><td>Near 66KVA substation</td><td>75</td><td>62.5</td><td>68.6</td><td>65.0</td></tr>
</table></td></tr>
</table>

Noise level monitoring data (Night Time)

Sr. No.	Location	Permissible Limits, dBA	Values for the period Oct19- Mar 20		
		70	**Min.**	**Max.**	**Avg.**
1	Near Main guest house	70	50.2	52.2	51.2
2	Near TSDF	70	43.7	58.7	55.0
3	At Wyeth Colony	70	43.7	51.1	47.0
4	Gram Panchayat Hall	70	53.4	58.4	56.1
5	Near Main Office North site	70	53.2	57.3	55.5
6	ETP North site	70	53.2	58.6	54.7
7	Opposite shed D	70	54.7	62.7	59.7
8	ETP West site	70	50.3	60.8	57.6
9	Water tank Haria road	70	50.3	55.8	53.1
10	Near 66KVA substation	70	53.8	63.2	57.1

iv | **The project authorities will provide adequate funds to recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forest as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.**

Complied.

EMP measures are implemented by 2010 and many things have already been at place.

Total expenditure for year 19-20 is given in below table:

S.N	Parameter	Capital cost per annum (Rs. In lacs) 2019-20	Recurring Cost For the report period Oct 19 – Mar 20
1	Air Pollution Control	124.17	2444.5
2	Liquid Pollution Control	341.7	
3	Environmental Monitoring and Management	29.3	35

<table>
<tr><td></td><td></td><td>
<table>
<tr><td>4</td><td>Solid waste Disposal</td><td>-</td><td>263.87</td></tr>
<tr><td>5</td><td>Occupational health</td><td>-</td><td>12</td></tr>
<tr><td>6</td><td>Green belt</td><td>-</td><td>5.0</td></tr>
<tr><td colspan="2">Total</td><td>495.17</td><td>2760.37</td></tr>
</table>
</td></tr>
<tr><td rowspan="2">v</td><td>The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management & Handling) Rules, 2003.</td><td>Complied.

The company complies with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. We have valid authorization under our current CCA No. AWH-105110 for handling, storage and disposal of hazardous waste. Stipulation made in CCA by GPCB are being complied. This has been certified by our Environmental auditors, an authorized agency and nominated by GPCB; through Environmental audit every year.
Latest compliance report by GPCB appointed Environmental auditor Faculty of Pacific school of Engineering, Dist. Surat for year 18-19 was submitted to your good office vide our letter dated July 09, 2019</td></tr>
<tr><td>Authorization from the GPCB must be obtained for collections /treatment/ storage/ disposal of hazardous waste.</td><td>Complied.

We have valid authorization under our current CCA No. AWH-105110 for handling, storage and disposal of hazardous waste.</td></tr>
<tr><td rowspan="2">vi</td><td>The stipulated conditions will be monitored by the Regional office of this Ministry at Bhopal/ GPCB.</td><td>Noted.</td></tr>
<tr><td>A six monthly compliance report and the monitored data should be submitted to them regularly.</td><td>Complied.

Six monthly compliance report and the monitored data are being submitted to the Ministry at Bhopal with copy marked to GPCB regularly.</td></tr>
</table>

Vii	**The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at website of the Ministry of Environment and Forest at http://www.envfor.ni.in.**	**Complied**. We informed the public through advertisement and by sending our EC to local Panchayat, Zila parishad, District Industrial Centre for further actions at their end.
	This shall be advertised within seven days from the date of issue of the clearance letter at least in two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Ministry's Regional office at Bhopal.	**Complied**. Advertisement was published as directed and copy of the same was submitted to Ministry.

3.0	**The ministry or any competent authority may stipulate any further condition(s) on receiving reports from the project authorities.** **The above conditions will be monitored by the Regional Office of this Ministry located at Bhopal.**	Noted. Noted.
4.0	**The Ministry may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory.**	Noted.
5.0	**Any other conditions or alternation in the above conditions will have to be implemented by the project authorities in a time bound manner.**	Noted and will be complied.

6.0	**The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 the Air ((Prevention and Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Amendment Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.**	Noted.

Table: 1 Stack results

Details of Process and Flue stack				Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
Sr. No.	Stack Details	Parameters	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
Atul East Site									
1	Phosgene Plant (Old Plant)	Phosgene	0.1 ppm	Not in use	Not in use	Not in use	Not in use	Not in use	Not in use
Caustic Chlorine Plant									
2	Dechlorination Plant	Cl_2	9.0 mg/Nm3	6.2	6.3	7.2	5.8	6.2	6.4
		HCl	20.0 mg/Nm3	8.3	6.8	9.3	6.2	8	6.3
3	Common stack of HCl Sgn unit 1&2	Cl_2	9.0 mg/Nm3	6.7	6.3	5.6	6.2	6.4	5.2
		HCl	20.0 mg/Nm3	9.4	7.6	8.2	7.3	8.4	9.3
FCB Pulst									
4	Foul Gas Scrubber	SO_2	40.0 mg/Nm3	Not in use	Not in use	Not in use	Not in use	Not in use	Not in use
		NOx	25.0 mg/Nm3						
Sulfuric Acid (East Site)									
5	Sulfuric Acid Plant	SO_2	2.0 kg/T	0.4	0.6	0.8	0.6	0.8	0.5
		Acid Mist	50.0 mg/Nm3	14.3	12.4	16.7	13.4	11.7	10.2
6	Chlorosulfonic Acid plant reactor	Cl_2	9.0 mg/Nm3	6.4	5.2	7.3	6.2	6.7	5.3
		HCl	20.0 mg/Nm3	13.0	11.7	14.6	13.7	14.8	12.5
Resorcinol plant									
7	Scrubber vent Resorcinol Plant	SO_2	40.0 mg/Nm3	Not running during visit	Not running during visit	Not running during visit	6.2	8.6	7.3
8	Spray Dryer - Resorcinol Plant	PM	150.0 mg/Nm^3	Not running during visit	Not running during visit	Not running during visit	Not running during visit	32	32
Incinerator									
9	Incinerator	PM	150.0 mg/Nm3	5.2	6.1	6.2	46	38	45
		SO_2	40.0 mg/Nm3	17.8	16.7	16.3	14.2	12.6	16.2
		NOx	25.0 mg/Nm3	8.6	7.2	9.8	9.4	10.8	14.5
NI Plant									
10	Foul Gas Scrubber	SO_2	40.0 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		NOx	25.0 mg/Nm3						
SBD Plant									
11	Spray Dryer	PM	150.0 mg/Nm3	Not in use	Not in use	Not in use	Not in use	Not in use	Not in use
12	Scrubber S-902	Phosgene	0.1 ppm	Not running during visit	Not running during visit	Not running during visit	ND	ND	ND
13	Scrubber S-801/802	HCl	20.0 mg/Nm3	Not running during visit	Not running during visit	Not running during visit	2.5	3.4	3.3
		NOx	25.0 mg/Nm3	Not running during visit	Not running during visit	Not running during visit	11.3	9.2	8.8
2-4-D									
14	Common Scrubber; 2,4D Plant	Cl_2	9.0 mg/Nm3	7.3	6.5	6.8	6.3	6.3	6.6
		HCl	20.0 mg/Nm3	6.5	10.3	7.3	8.4	6.3	6
		Phenol	-	ND	ND	ND	ND	ND	ND
15	Dryer-1	PM with Pesticide component	20.0 mg/Nm3	7.3	6.3	8.6	6.8	7.2	6.9
12	Dryer-2	PM with Pesticide component	20.0 mg/Nm3	9.2	8.2	7.2	9.2	8.6	7.2
16	Dryer-3	PM with Pesticide component	20.0 mg/Nm3	8.3	7.3	10.7	7.5	6.4	6.5
17	Dryer-4	PM with Pesticide component	20.0 mg/Nm3	11.5	13.4	9.6	10.4	11.7	10.2
18	Dryer-5	PM with Pesticide component	20.0 mg/Nm3				8.2	7.6	8.1

Sr. No.	Stack Details	Parameters	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
CP Plant									
20	MCPA	Cl_2	9 mg/NM^3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		HCl	20 mg/Nm^3						
		SO_2	40 mg/NM^3						
21	Fipronil	SO_2	40 mg/NM^3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		HCl	20 mg/Nm3						
17	Imidacloprid	NH_3	175 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
18	Pyrathroids	SO_2	40 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		HCl	20 mg/Nm3						
19	Stack at Amine Plant	NH_3	175 mg/Nm3	21.5	30.2	20.4	25.5	20.8	15.2
MPBL Plant									
20	Phosgene Scrubbr at MPBL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
21	Central Scrubber at MPBL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
BICO plant									
22	Central scrubber at Nico Plant	Acetonytryle, IPA	—	-	-	-	-	-	-
Ester Plant									
23	Scrubber at Ester plant for Glyphosate	Formaldehyde	10 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
24	Central Scrubber MCPA Plant	HCl	20 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
25	MPP plant scrubber	HCl	20 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		Phosgene	0.1 ppm						
Atul West Site									
26	Shed A03/03/44	Cl_2	9 mg/NM^3	7.8	6.7	5.8	6.7	7.1	6.5
		HCl	20 mg/NM^3	10.3	9.6	8.4	9.2	12.7	10.2
27	Shed B2/12/24 Reaction Vessel	Cl_2	9.0 mg/Nm3	6.7	6.5	5.4	6.5	5.3	4.5
		HCl	20.0 mg/Nm3	8.3	8.8	12.6	9.3	8.6	7.3
28	Shed B18/02/24 Fan	SO_2	40 mg/NM^3	14.2	16.3	Not Running During Visit	16.2	14.7	13.3
		Cl_2	9 mg/NM^3	5.6	4.6		5.2	4.8	4.5
		HCl	20 mg/NM^3	12.4	10.6		9.3	7.3	6.8
29	Shed C5/20/15 Chlorinator	Cl_2	9.0 mg/Nm3	6.4	5.3	7.3	5.2	6.3	7.2
		HCl	20.0 mg/Nm3	10.2	12.3	9.8	11.8	10.7	13.3
30	Shed D Nro Spray dryer No. 45	PM	150.0 mg/Nm3	63	56	46	55	32	40
31	Shed D Nro Spray dryer No.50	PM	150.0 mg/Nm3	58	48	62	48	24	Not Running During Visit
32	Shed E 7/12/49 Spray Dryer	PM	150.0 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
33	Shed F F6/1/15 Reactors Vessel	Cl_2	9.0 mg/Nm3	5.4	6.7	6.3	6.7	5.1	3.2
		HCl	20.0 mg/Nm3	7.3	8.4	8.2	8.4	7.3	6.8
34	Shed G 10/8/1 (receiver)	Cl_2	9.0 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		HCl	20.0 mg/Nm3						
35	Shed H 11/6/17 chlorinator	Cl_2	9.0 mg/Nm3	6.5	6.8	5.8	5.8	3.2	2.5
		HCl	20.0 mg/Nm3	15.2	12.5	12.4	11.4	9.7	7.2
36	Shed K K-13/3/4 Final of Sulfuric acid plant	SO_2	2.0 kg/T	0.8	0.6	0.8	0.5	0.4	0.5
		Acid Mist	50.0 mg/Nm3	17.3	20.5	15.4	10.6	14.3	10.2
37	Shed J15/09/25	HBr	—	ND	ND	ND	ND	ND	Not Running During Visit
		SO_2	40 mg/NM^3	12.8	13.2	16.8	15.2	11.7	

Sr. No	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
38	Shed J12/01/42	SO_2	40 mg/NM^3	13.3	10.3	17.2	10.3	13.5	Not Running During Visit
		Cl_2	9.0 mg/Nm3	6.5	6.7	7.1	6.2	5.8	
		HCl	20.0 mg/Nm3	9.4	8.2	12.5	8.6	7.5	
39	Shed J12/03/36	SO_2	40 mg/NM^3	14.8	14.8	16.7	14.5	12.5	Not Running During Visit
		HCl	20.0 mg/Nm3	9.7	8.4	9.2	8.2	7.2	
40	Shed N Scrubber Fan N20/08/24	Cl_2	9 mg/NM^3	7.2	6.3	8.2	6.7	5.6	7.5
		HCl	20 mg/NM^3	13.6	12.8	15.5	13.2	10.4	12.8
41	Shed N Scrubber Fan N20/02/41	SO_2	40 mg/NM^3	17.3	13.6	20.4	13.9	14.6	10.2
42	Sulfer Black Plant	H_2S	--	ND	ND	ND	ND	ND	ND
		NH_3	175 mg/NM^3	19.7	13.5	22.6	13.5	17.2	16.4
43	Sulfer Dyes plant	H_2S	--	ND	ND	ND	ND	ND	ND
		NH_3	175 mg/NM^3	29.8	27.4	34.2	26.4	12.8	10.2
44	MPP plant	HCl	20 mg/NM^3	12.7	9.7	11.6	10.8	9.8	-
45	Flavors & Fragrances Plant	HCl	20 mg/NM^3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
Atul North Site									
46	N-FDH Plant Catalytic Incinerator	PM	150.0 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		SO_2	40.0 mg/Nm3						
		NOx	25.0 mg/Nm3						
		Formaldehyde	10.0 mg/Nm3						
47	PHSN Plant vessel	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
48	PHSN - II Plant	HCl	20.0 mg/Nm3	12.3	12.3	9.8	11.3	9.8	8.2
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
49	DCDPS Plant	SO_2	--	ND	ND	ND	ND	ND	ND
50	DDS Plant	NH_3	175 Mg/Nm3	55.3	55.3	58.4	52.3	48.3	44.1
51	SPIC II Plant	SO_2	--	ND	ND	ND	ND	ND	ND
52	SPIC I Plant	NH_3	175 mg/Nm3	68.2	68.2	101.2	72.2	68.2	64.3
53	SPIC IV Plant	NH_3	175 mg/NM^3	45.5	45.5	132.6	88.6	73.4	70.3
		SO_2	--	7.3	7.3	4.3	3.6	4.2	3.5
54	Furnace (Phosgene plant-New)	PM	150 mg/NM^3	62	62	72	52	46	42
55	Reactor (Phosgene plant- New)	CO	--	ND	ND	ND	ND	ND	ND
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND

Sr. No.	Stack Details	Parameters	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
East site									
1	FBC boiler E1	PM	100 mg/Nm3	65	53	71	63	76	78
		SO_2	600 mg/Nm3	110	124	112	104	112	115
		NOx	600 mg/Nm3	137	145	126	125	106	103
2	FBC boiler E2	PM	100 mg/Nm3	73	68	68	78	82	88
		SO_2	600 mg/Nm3	126	132	107	113	109	108
		NOx	600 mg/Nm3	140	137	119	117	121	116
3	FBC boiler E3	PM	100 mg/Nm3	78	59	75	65	72	75
		SO_2	600 mg/Nm3	136	128	116	108	113	114
		NOx	600 mg/Nm3	129	132	126	112	126	120
4	Hot Oil Unit (Resourcing Plant)	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	24	24	36	28	22	25
5	DG set 1010 KVA (Standby)	PM	150 mg/Nm^3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
West Site									
6	FBC boiler W1	PM	100 mg/Nm3	53	60	52	70	58	55
		SO_2	600 mg/Nm3	102	112	104	118	119	120
		NOx	600 mg/Nm3	122	124	123	104	113	116
7	Hot Oil Plant sheet-B	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	30	30	40	32	20	21
8	Oil burner Steel B (Stand By)	PM	150.0 mg/Nm3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
9	Boiler (50 TPH 2 Nos) (New boilers(W2,W3	PM	50 mg/Nm3	25	32	34	37	39	35
		SO_2	600 mg/Nm3	127	132	108	116	120	110
		NOx	300 mg/Nm3	93	102	98	102	103	105
		Mercury	0.03 mg/Nm3	ND	ND	ND	ND	ND	ND
10	DG set 1500 KVA (Stand By)	PM	150.0 mg/Nm3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
North Site									
11	Thermic fluid heater of DCO/DAP Plant	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	24	24	32	30	28	26

Table 2 : Fugitive Emission Monitoring details

Plant	Area	Parameter	Prescribed Limit	Results of VOCs in Milligram per NM^3					
				Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20
2,4 D	Reactor	Phenol	19	11.6	12.6	14.8	16.6	12.4	12.3
	Buffer tank	Chlorine	3.0	1.6	2.1	1.9	2.4	1.6	2.1
Resorcinol	Benzene storage tank area near vent	Benzene	15	7.9	10.2	8.4	11.3	9.4	8.5
	Near Extraction/scrubber unit	Butyl acetate	-	649	715	620	705	739	602
Pharma	At second floor work area	Ammonia	18	10.6	14.2	10.8	12.4	17.4	13.2
	Ammonia recovery area	Ammonia	18	14.9	16.8	15.2	17.1	16	11.6
Epoxy - I	At vacuum pump 2nd floor	ECH	10	6	3.4	2.9	3.5	5.9	5.7
	At vessel POS 1208 G.F	ECH	10	5.2	5.6	7.4	9.2	7.8	6.6
Shed H	At second floor work area	Nitrobenzene	5	3.6	3	2.3	3.4	4	2.9
Shed J	Buffer Tank	Chlorine	3	2.1	2.6	2.1	2.5	1.7	2.4

Table 3 : Quality of treated effluent

Sr. No.	Parameter	Results						GPCB Limits
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	
1	pH	8.19	7.95	6.91	7.02	7.45	6.23	5.5 to 9.0
2	Temperature °C	31.4	31.8	30.9	30.4	31.6	30.1	40 °C
3	Colour (pt. co. scale)in units	100	90	80	140	80	78	---

4	Suspended solids, mg/l	92	76	92	98	65	72	100
5	Phenolic Compounds, mg/l	0.088	0.056	0.044	0.056	0.041	0.047	5
6	Cyanides, mg/l	ND	ND	ND	ND	ND	ND	0.2
7	Fluorides, mg/l	0.75	0.7	0.65	0.75	0.68	0.62	2
8	Sulphides, mg/l	1.2	0.9	1.2	1.8	1.2	1.1	2
9	Ammonical Nitrogen, mg/l	48	38	43	46	34	37	50
10	Total Chromium, mg/l	ND	ND	ND	ND	ND	ND	2
11	Hexavelent Chromium, mg/l	ND	ND	ND	ND	ND	ND	1
12	BOD (3 days at 27°C), mg/l	78	65	60	65	59	66	100
13	COD, mg/l	240	220	218	215	208	222	250
Note : ND is Not Detectable.								

Table 4 : Noise level monitoring data (Day Time)

Sr. No.	**Location**	**Noise Level, dBA**						**Permissible Limits, dBA**
		Oct 19	**Nov 19**	**Dec 19**	**Jan 20**	**Feb 20**	**Mar 20**	75
1	Near Main guest house	56.7	59.7	55.7	55.7	55.7	61.2	75
2	Near TSDF	64.2	61.2	62.3	62.3	62.3	63.7	75
3	At Wyeth Colony	57.3	49.7	53.5	53.5	53.5	54.4	75
4	Gram Panchayat Hall	62.4	60.8	63.5	63.5	63.5	62.5	75
5	Near Main Office North site	60.2	59.2	64.5	64.5	64.5	60.2	75
6	ETP North site	64.3	68.5	63.2	63.2	63.2	64.4	75
7	Opposite shed D	64.8	64.7	66.4	66.4	66.4	67.3	75
8	ETP West site	68.5	62.8	63.7	63.7	63.7	65.5	75
9	Water tank Haria road	59.7	62.6	53.5	53.5	53.5	60.2	75
10	Near 66KVA substation	63.3	68.6	65.2	65.2	65.2	62.5	75

Table 5 : Noise level monitoring data (Night Time)

Sr. No.	Location	Noise Level, dBA						Permissible Limits, dBA
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	70
1	Near Main guest house	50.2	52.2	50.6	50.6	51.6	52.2	70
2	Near TSDF	55.7	58.7	54.2	54.2	53.2	54.4	70
3	At Wyeth Colony	44.7	43.7	46.1	46.1	51.1	50.3	70
4	Gram Panchayat Hall	57.3	54.8	58.4	58.4	53.4	54.3	70
5	Near Main Office North site	57.3	54.8	54.2	54.2	56.8	56.2	70
6	ETP North site	58.6	55.3	53.6	53.6	53.2	54.4	70
7	Opposite shed D	60.2	57.3	62.7	60.7	59.2	58.3	70
8	ETP West site	57.8	59.8	60.8	57.8	54.7	55.1	70
9	Water tank Haria road	52.3	55.8	50.3	52.3	54.7	53.2	70
10	Near 66KVA substation	57.2	53.8	63.2	57.2	56.4	55.1	70

Annexure A

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:276560 - Analysis Completion:02/03/2020

Dyes and Dye- Intermediates / LAB Inward : 52218

Gujarat Pollution Control Board, Vapi
C5/124, GIDC Vapi,
Near Hotel Pritam,
Vapi - 396 195
Tele:(0260) 2432089

TEST REPORT

Test Report No. : 52218 **Date: 02/03/2020**

1. Name of the Customer	**: Atul Limited - 23158**
2. Address	**: 5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85, 91, etc.,AT & P.O.ATUL, Dist. Valsad, Pin: ATUL-396020, Taluka : Valsad, District : Valsad, GIDC : Not In Gidc**
3. Nature of Sample	**: REP-Representative/Grab, (Insp Type : COM-On Complaint)**
4. Sample Collected By	**: R.K. Maheta,SO**
5. Quantity of Sample Received	**: 5**
6. Code No. of the Sample	**: 276560**
7. Date & Time of Collection & Inwarding	**: 13/02/2020 , (1710 to 1710) & 14/02/2020**
8. Date of Start & Completion of Analysis	**: 17/02/2020 & 02/03/2020**
9. Sampling Point	**: From Final outlet of Central ETP ~**
10. Flow Details (Remarks)	**: Yes**
11. Mode of Disposal	**: Estuary zone of River Par**
12. Ultimate Receiving Body	**: Estuary zone of river par**
13. Temperature on Collection	**: 29 & pH Range on pH Strip :@ 7-8 on pH strip**
14. Carboys Nos for	**: Barcode & Color & Appearance :Brown**
15. Water Consumption & W.W.G (KLPD)	**: Ind :23726.000 , Dom :938.000 & Ind :21727.000 , Dom :939.000**

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	29
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi.2012	1 – 14 pH value As or	7.03
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	150
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Methoc	10 – 200000 mg/L	4838
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Methoc	2 – 10000 mg/L	94
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	10.24
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	1659
8	Sulphate	mg/l	APHA(22nd edi)4500 SO4 E	2-40mg/l	746
9	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	214
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	0.8
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.5
12	Sulphide	mg/l	APHA (22nd Edi.)4500-s2-F –iodometric Method	1-500.0 mg/l	bdl
13	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05--50000 mg/l	84

Laboratory Remarks : Freeze By:445-lab_445 Dt.: 02/03/2020

J.D.OZA, Lab Head

Field Observation :

Note :

1. * - These parameters are NOT covered under the scope of NABL.
2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
3. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
4. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
8. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA.
9. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

N I C

03/03/2020

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:273804 - Analysis Completion:22/01/2020

Dyes and Dye- Intermediates / LAB Inward : 51880

Gujarat Pollution Control Board, Vapi
C5/124, GIDC Vapi,
Near Hotel Pritam,
Vapi - 396 195
Tele:(0260) 2432089

TEST REPORT

Test Report No. : 51880 **Date: 24/01/2020**

1. Name of the Customer	: Atul Limited - 23158
2. Address	: 5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85, 91, etc.,AT & P.O.ATUL, Dist. Valsad, Pin: ATUL-396020, Taluka : Valsad, District : Valsad, GIDC : Not In Gidc
3. Nature of Sample	: REP-Representative/Grab, (Insp Type : SCN-After SCN Inspection)
4. Sample Collected By	: R.K. Maheta,SO
5. Quantity of Sample Received	: 5
6. Code No. of the Sample	: 273804
7. Date & Time of Collection & Inwarding	: 07/01/2020 , (1105 to 1105) & 08/01/2020
8. Date of Start & Completion of Analysis	: 08/01/2020 & 22/01/2020
9. Sampling Point	: ## Final Outlet of the ETP --
10. Flow Details (Remarks)	: Yes
11. Mode of Disposal	: In to Estuary zone of river par
12. Ultimate Receiving Body	: Estuary zone of river par
13. Temperature on Collection	: 27 & pH Range on pH Strip :@ 7-8 on pH Strip
14. Carboys Nos for	: I & Color & Appearance :Brownish
15. Water Consumption & W.W.G (KLPD)	: Ind :23726.000 , Dom :938.000 & Ind :21727.000 , Dom :939.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	27
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi.2012	1 – 14 pH value As or	7.29
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	150
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Methoc	10 – 200000 mg/L	3830
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Methoc	2 – 10000 mg/L	46
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	4.41
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	1305
8	Sulphate	mg/l	APHA(22nd edi)4500 SO4 E	2-40mg/l	585
9	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	166
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	0.4
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.87
12	Sulphide	mg/l	APHA (22nd Edi.)4500-s2-F –Iodometric Method	1-500.0 mg/l	0.65
13	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	44

Laboratory Remarks : Freeze By:445-lab_445 Dt.: 24/01/2020

J.D.OZA, Lab Head

Field Observation : -

Note :

1. * - These parameters are NOT covered under the scope of NABL.
2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
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5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
8. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA.
9. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

N I C

01/02/2020

Atul Limited

Project: Expansion of Pesticide and Synthetic Organic Chemicals manufacturing unit at post Atul, Dist. Valsad

EC Compliance Report for the period October 2019- March 2020 as per EC F. No. J -11011/85/ 2009-IA II (I) dated 13.05.2009

<table>
<tr><th>No.</th><th>Condition</th><th>Compliance</th></tr>
<tr><td colspan="3">A. Specific Conditions</td></tr>
<tr><td>i</td><td>Industrial Waste water generation shall not exceed 17,283 m^3/d.</td><td>Complied.
Since we have another EC granted in 2019 for expansion, we request to consider latest figures given in same.
According to specific condition of EC F No. J 11011/108/2015-IA-II-(I) dated11.02.2019. Industrial Waste water generation shall not exceed 20,514 m^3/d.

The average wastewater generation for the report period is 8327 m^3/day only which is well within the limit. Detail break up is given in below table:
<table>
<tr><th>Wastewater generation m^3/day</th><th>Oct 19</th><th>Nov 19</th><th>Dec 19</th><th>Jan 20</th><th>Feb 20</th><th>Mar 20</th><th>Total</th></tr>
<tr><td>Month wise</td><td>291813</td><td>257071</td><td>282245</td><td>254951</td><td>225463</td><td>213113</td><td>1524656</td></tr>
<tr><td>Per day</td><td>9413</td><td>8569</td><td>9105</td><td>8224</td><td>7775</td><td>6875</td><td>Avg. 8327</td></tr>
</table>
The maximum values during the compliance period confirms that at no time the wastewater generation went beyond the stipulated value. Summary is given below:
<table>
<tr><th rowspan="2">Wastewater generation</th><th rowspan="2">Stipulated value</th><th colspan="3">Values for the period Oct 19 - Mar 20</th></tr>
<tr><th>Min.</th><th>Max.</th><th>Avg.</th></tr>
<tr><td>Wastewater generation m^3/d</td><td>20514</td><td>6875</td><td>9413</td><td>8327</td></tr>
</table></td></tr>
<tr><td></td><td>23 m^3/d High COD effluent shall be incinerated.

97 m^3/d High TDS effluent shall be evaporated through MEE</td><td>Complied.
Since we have another EC granted in 2019 for expansion, we request to consider latest figures given in same.
According to specific condition No. viii) of EC F No. J 11011/108/2015-IA-II-(I) dated11.02.2019.“Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall Be treated in ETP/RO to meet the prescribed standards.” Accordingly the High TDS/High COD Process water quantity are now 291 m^3/d and 81 m^3/d.</td></tr>
</table>

<table>
<tr><td></td><td></td><td>We have been segregating high COD streams (COD >50000 ppm) and same is being taken for recovery to get economic benefit. Rest lean effluent of COD <2000 ppm is finally sent to ETP for treatment.
All the high COD streams are being diverted to recovery system rather than incineration. Streams containing Ammonia, Methanol, Copper, Solvents, Phenolics, etc. are taken for the recovery of the same and reused. Hence, there is no High COD Waste water stream remaining and therefore no incineration was done during this period.</td></tr>
<tr><td></td><td></td><td>Complied.
The average 138.66 m^3/d high TDS waste water was evaporated in MEE. Detail break up is given in below table:

<table>
<tr><th rowspan="2">Sr No</th><th rowspan="2">Month</th><th colspan="3">Break up of effluent Kl/Day</th></tr>
<tr><th>High TDS/ COD</th><th>Low TDS/COD</th><th>Total Effluent generation</th></tr>
<tr><td>1</td><td>October-19</td><td>153</td><td>9260</td><td>9413</td></tr>
<tr><td>2</td><td>November-19</td><td>140</td><td>8429</td><td>8569</td></tr>
<tr><td>3</td><td>December-19</td><td>112</td><td>8993</td><td>9105</td></tr>
<tr><td>4</td><td>January-20</td><td>143</td><td>8081</td><td>8224</td></tr>
<tr><td>5</td><td>February-20</td><td>149</td><td>7625</td><td>7775</td></tr>
<tr><td>6</td><td>March-20</td><td>135</td><td>6740</td><td>6875</td></tr>
</table>

High TDS effluent generation is variable as per the production.</td></tr>
<tr><td></td><td>Total quantity of 17283 m^3/d shall be treated at company's own effluent treatment plant.</td><td>Complied.
Since we have another EC granted in 2019 for expansion, we request to consider latest figures given in same.
According to specific condition of EC F No. J 11011/108/2015-IA-II-(I) dated 11.02.2019 Industrial Waste water generation shall not exceed 20,514 m^3/d.

The average 8327 m^3/day wastewater was treated in the company's own effluent treatment plant during the reporting period.</td></tr>
<tr><td></td><td>Final Discharge of Treated effluent is being discharge into river par through 4 km line constructed by M/s Atul.</td><td>Complied.

Final discharged effluent meeting all state pollution control board's limit is being discharged into river Par through 4 km line.</td></tr>
</table>

Ammonia bearing effluent shall be subject to ammonia recovery before mixing with normal effluent stream.

Complied.

Ammonia bearing effluent streams generated from 4,4 DDS production is recovered by stripping in series of packed column. The ammonia contained water from the stripper is condensed in condenser and recovered ammonia is being recycled back in production of 4,4 DDS. Details are given in below table:

Recover Ammonia	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	Total
KL	587	465	524	524	491	333	2924

Phenol will be recovered from phenol containing effluent.

Complied.

20 Kgs phenol is recovered from effluent per one MT of 2,4 D production. A distillation column has been installed for phenol recovery. Resin tower are installed to recover phenol. Data is given in below table:

	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	Total
DCP crude distilled	1584.6	1438.3	1492.5	1467.3	1219.8	914.8	8117.3
2,4DCP recovered	1390	1254	1304	1282	1070	802.5	7102.5
2.6DCP recovered	110.8	101.4	104.3	104.8	85.1	63.4	570
OCP/ Residue	83.7	82.8	84.2	80.4	64.6	48.8	444.7

The treated effluent shall confirm the discharge norms.

Complied.

The treated effluent is meeting all the state pollution control board's discharge norms and values of various parameters of treated effluent is given in **Table 1**. (Pl. see pg. no. 31)

The maximum values during the compliance period confirms that at no time the emission went beyond the stipulated standards. Summary is given below:

Sr. No.	Parameter	Norms	Values for the period Oct 19- Mar 20		
			Min.	Max.	Avg.
1	pH	5.5-9.0	6.23	8.19	7.19
2	Temperature	40 deg C	30.1	31.8	31.09
3	Colour (pt. co. scale)in units	---	78	140	92.86
4	Suspended solids	100 mg/l	62	98	79.57
5	Phenolic Compounds	5 mg/l	0.039	0.088	0.05
6	Cyanides	0.2 mg/l	ND	ND	ND
7	Fluorides	2 mg/l	0.62	0.75	0.69
8	Sulphides	2 mg/l	0.9	1.8	1.23

9	Ammonical Nitrogen	50 mg/l	34	48	41.00
10	Total Chromium	2 mg/l	ND	ND	ND
11	Hexavalent Chromium	1 mg/l	ND	ND	ND
12	BOD (3 days at 27°C)	100 mg/l	57	78	64.29
13	COD	250 mg/l	205	240	218.29

The domestic effluent shall be disposed off through septic tank / soak pit.

Complied.

Domestic effluent goes to septic tank / soak pit and finally diverted to ETP. Detail of Domestic effluent generation is given in below table:

Domestic Wastewater generation m^3	**Oct 19**	**Nov 19**	**Dec 19**	**Jan 20**	**Feb 20**	**Mar 20**	**Total**
Month wise	12281	10374	12189	9691	7774	9266	61575
Per day	396	335	393	313	251	299	Avg. 331

The maximum, minimum and average values are given below:

Domestic Wastewater generation	**Values for the period Oct 19- Mar 20**		
	Min.	**Max.**	**Avg.**
Domestic Wastewater generation m^3/d	299	396	331

ii **The process emissions (SO_2, NH_3, Cl_2, and HCl, shall be scrubbed with Scrubbers.**

Complied.

All the SO_2, NH_3, Cl_2, and HCl vents are being routed through adequate and properly designed scrubbing system. Furthermore, most of the process and flue gas stacks have been monitored through online monitoring system and also connected to GPCB and CPCB website.

	The emission shall be dispersed through stack of adequate height as per CPCB standard.	**Complied.** The emission is dispersed through adequate height of stacks as per CPCB standard as given below: For Incinerator: Minimum stack height shall be 30 meters above ground. For Boilers : Stack Height $H=14(Q)^{0.3}$ Details of stack results along with its height data is given in **Table 2**. (Pl. see pg. no. 32) Gaseous emissions from process units are monitored regularly on monthly basis. During the report period no case varies from standard.
	The gaseous emission from the DG sets shall be dispersed through stack of adequate height as per CPCB standards.	**Complied**. The gaseous emission from the DG sets is being dispersed through stack of adequate height as per CPCB standards given below: The minimum height of stack is provided using the following formula (ref. CPCB): $H = h+0.2x\sqrt{KVA}$ H =Total height of stack in meter h =Height of the building in meters where the generator set is installed KVA = Total generator capacity of the set in KVA However, DG sets are being used only during emergency startups.
	Acoustic enclosures shall be provided to the DG set to control the noise pollution.	**Complied**. All DG sets are having inbuilt acoustic enclosures to control the noise pollution and meeting the prescribed norms.
iii	**The company shall upload the status of compliance of stipulated environmental clearance conditions including results of monitored data on its web site.**	**Complied**. The status of compliance of stipulated environmental clearance conditions including results of monitored data is posted on our web site. And it can be viewed at: http://www.atul.co.in/sustainability/pdf/Atul-EC-Compliance-Report.pdf
	Status of compliance of stipulated environmental clearance conditions to be sent to Regional office of MoEF, the respective Zonal office of CPCB and the state pollution control board.	**Complied**. Compliance status report to the stipulated environmental clearance conditions are regularly submitted to the regional office of MoEF, zonal office of CPCB and state pollution control board.

	The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as Stack emissions) or critical sectorial parameters like VOC, indicated for the project shall be monitored and displayed at a convenient location near the main gate of company in the public domain.	**Complied**. The critical pollutants parameters namely; SPM, RSPM, SO_2, NOx are monitored regularly on monthly basis and displayed at board at the company entrance. Details of stack results, ambient air monitoring and VOC measured in fugitive emission is given in **Table 2, 3 and 4** respectively. (Pl. see pg. no. 32,36,37) The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards. Parameter wise summary is given below: **Summary of Process Stack results:**

No.	Parameter	Standard values as per CCA	Unit	Values for the period Oct 19- Mar 20		
				Min.	Max.	Avg.
1	SO_2	40	mg/ Nm^3	6.2	20.4	13.7
2	SO_2 (kg/T)	2	kg/T	0.4	0.8	0.5
3	NOx	25	mg/ Nm^3	7.2	14.5	10.0
4	HCl	20	mg/ Nm^3	2.5	15.5	9.6
5	PM	150	mg/ Nm^3	24	72	49.4
6	PM with Pesticide compound	20	mg/ Nm^3	6.3	13.4	8.5

Summary of Flue Stack results:

No.	Parameter	Standard values as per CCA	Unit	Values for the period Oct 19- Mar 20		
				Min.	Max.	Avg.
1	PM	100	mg/N m^3	52	88	68.1
2	PM (New Boiler)	50	mg/N m^3	25	39	33.6
3	SO_2	600	mg/N m^3	102	136	115.8
4	NOx	600	mg/N m^3	103	145	122.4
5	NOx (NewBoiler)	300	mg/N m^3	93	105	100.5

Summary of Ambient Air Quality results:

Station	Parameter	Limit microgm/ NM^3	Values for the period Oct 19- Mar 20		
			Min.	Max.	Avg.
66 KV	RSPM (PM2.5)	60	19.6	36.8	28.8
	PM10	100	38.4	52.3	44.0
	SO2	80	9.4	11.2	10.3
	NOx	80	13.2	17.5	15.3
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
Opposite Shed D	RSPM (PM2.5)	60	28	38	33
	PM10	100	35	52	40.3
	SO2	80	7.9	9.6	8.7
	NOx	80	8.3	11.2	9.5
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
Near West site ETP	RSPM (PM2.5)	60	24	45	34.3
	PM10	100	39	55	43.6
	SO2	80	7.7	14.7	9.4
	NOx	80	8.4	15.4	10.5
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
Near North ETP	RSPM (PM2.5)	60	27	44	36.6
	PM10	100	40	54	44
	SO2	80	8.3	12.8	10.0
	NOx	80	8.2	14.2	10.8
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
TSDF	RSPM (PM2.5)	60	26	46	37.8
	PM10	100	40	50	44.5
	SO2	80	7.4	10.6	9.0
	NOx	80	7.6	13.6	10.1
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
Main Guest House	RSPM (PM2.5)	60	15	28	21.1
	PM10	100	22	45	37.1
	SO2	80	4.3	8.4	6.1
	NOx	80	5.2	9.4	7.5
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
Wyeth Colony	RSPM (PM2.5)	60	10	20	19.6
	PM10	100	24	44	35.3
	SO2	80	4.1	7.6	6.35
	NOx	80	4.6	8.6	6.9

	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
Gram panchayat hall	RSPM (PM2.5)	60	12	30	24.3
	PM10	100	29	52	42.5
	SO2	80	6.2	8.6	7.4
	NOx	80	5.7	9.4	7.4
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
Main office, North site	RSPM (PM2.5)	60	19	35	26.5
	PM10	100	35	52	43.3
	SO2	80	6.4	9.2	7.5
	NOx	80	7.3	10.6	8.5
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
Haria water tank	RSPM (PM2.5)	60	17.8	37.8	27.5
	PM10	100	24.4	52.2	39.9
	SO2	80	8.8	11.2	9.4
	NOx	80	10.2	15.8	13.4
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND

Summary of VOC results :

Plant	**Area**	**Parameter**	**Prescribed Limit**	**Values of VOCs in Milligram per NM^3 for the period Oct 19- Mar 20**		
				Min.	**Max.**	**Avg.**
2,4 D	Reactor	Phenol	19	11.6	16.6	13.38
	Buffer tank	Chlorine	3	1.6	2.4	1.95
Resorcinol	Benzene storage tank area near vent	Benzene	15	7.9	11.3	9.28
	Near Extraction/ scrubber unit	Butyl acetate	-	602	739	671.67
Pharma	At second floor work area	Ammonia	18	10.6	17.4	13.10
	Ammonia recovery area	Ammonia	18	11.6	17.1	15.27
Epoxy - I	At vacuum pump 2nd floor	ECH	10	2.9	6	4.57

			At vessel POS 1208 G.F	ECH	10	5.2	9.2	6.97
		Shed H	At second floor work area	Nitrobenzene	5	2.3	4	3.20
		Shed J	Buffer Tank	Chlorine	3	1.7	2.6	2.23

iv	**The company shall adopt cleaner production technology to minimize the quantity of fresh water requirement and process effluent generation.**	**Complied**. Company is fully devoted towards protection of environment and has successfully completed many cleaner production projects and will continuously improve further. We have already converted few of our plants as ZLD and are in process of converting many other plants as ZLD. Our Ankleshwar unit is completely ZLD unit. Treated wastewater is being used in lime preparation at ETP, steam condensate is being collected and used in place of raw water, vacuum pump, gland cooling and other water is being collected and reused. Vacuum pumps are removed by installing centrifuge in place of neutch filter and water consumption is reduced. Cooling tower blow down water is used as fire hydrant make up and also used for dust suppression and fly ash quenching instead of fresh water. Water used for washing purpose is reused.

<table>
<tr><td></td><td></td><td>Details of water consumption break up is given below:

Details of water consumption:
<table>
<tr><th colspan="5">Water Consumption Break up m^3</th></tr>
<tr><th rowspan="2">Period</th><th colspan="3">Water consumption in</th><th rowspan="2">Total</th></tr>
<tr><th>Process</th><th>Cooling</th><th>Domestic</th></tr>
<tr><td>Oct-19</td><td>246283</td><td>56258</td><td>15745</td><td>318286</td></tr>
<tr><td>Nov-19</td><td>215962</td><td>50386</td><td>12968</td><td>279316</td></tr>
<tr><td>Dec-19</td><td>236423</td><td>55242</td><td>15236</td><td>306901</td></tr>
<tr><td>Jan-20</td><td>213412</td><td>49368</td><td>12114</td><td>274894</td></tr>
<tr><td>Feb-20</td><td>189063</td><td>46645</td><td>9717</td><td>245425</td></tr>
<tr><td>Mar-20</td><td>178366</td><td>41696</td><td>11582</td><td>231644</td></tr>
</table></td></tr>
<tr><td>v</td><td>The company shall obtain Authorization for Collection; Storage and Disposal of Hazardous waste under the hazardous waste management (Handling and trans boundary movement rule-2008) for management of hazardous waste and prior permission from GPCB shall be obtained for disposal of solid waste in the TSDF.</td><td>Complied.

We have obtained authorization for our own TSDF through GPCB notification no. GPCB/HAZ/GEN-55/9647 dated 13th March 2000 and NOC no. CTE-65621 dated 19/11/2014. Also we have valid authorization under our current CCA No. AWH-67717 for handling, storage and disposal of hazardous waste.
Copy of the same was submitted to Ministry vide our letter Atul/SHE/MoEF/Visit/3 dated 4.4.17.</td></tr>
<tr><td></td><td>The concerned company shall undertake measures for the firefighting facility in case of emergency.</td><td>Compiled.

Company is having two nos. of fire tenders, fully adequate hydrant system and trained staff, emergency response team(ERT) of trained workers, power supply from two source with emergency backup power provision from DG set as well grid and detailed on-site emergency plan. Mock drills are also carried out at regular interval.</td></tr>
</table>

vi	**The project authorities shall strictly comply with the rules and guidelines under manufacturing, storage and import of hazardous chemicals rule 1989 as amended in October, 1994 and January, 2000.**	**Complied**. We are complying with all the requirement of MSIHC rule 1989 as amended in October, 1994 and January, 2000 and having proper storage and handling system, Onsite emergency plan, Licenses, reporting, etc. The company complies with all stipulated norms of act made in CCA by GPCB are being complied. Compliance report by GPCB appointed Environmental auditor Faculty of Pacific school of Engineering, Dist. Surat for year 18-19 was submitted to your good office vide our letter dated July 09, 2019
	All Transportation of Hazardous chemicals shall be as per the MVA, 1989.	**Complied**. Transportation of Hazardous chemicals are being done as per the MVA rule 1989. TREM (Transport Emergency) card and MSDS of chemicals are provided to transporter.
vii	**The company shall undertake waste minimization measures : Metering and control of quantities of active ingredients to minimize waste.**	**Complied**. All the liquid ingredients are being charged through measure vessels and/or flow meters to control on quantity as per the stoichiometry. All the solid ingredients are charged after proper weighment only. All these meters and weighing machines are calibrated and records are maintained.
	Reuse of by products from the process as raw materials or as raw material substitutes in other processes.	**Complied**. Sodium Sulfate, Sodium Thio Sulphate, Brine, MEE salt, Sodium hypochlorite, Copper Hydroxide, spent acid, etc. are few by-products from the process which are being sold for using the same either as raw material or as substitute to raw materials. Also, fly ash and Gypsum are being used as raw material for Brick Manufacturing. Sodium Hypochlorite, Sodium hydro sulfide, etc. are being used as raw material in other processes.
	Use of automated filling to minimize spillage.	**Complied**. Automated filling system for our agro products, polymers, resorcinol, dyes for small and bulk packing is provided to minimize spillage.
	Use of 'close feed' system into batch system.	**Complied**. Chemicals and solvents are handled in close handling system through pipe lines only.
	Venting equipment through vapor recovery system.	**Complied**. All the reactors are equipped with vents/stacks, which are connected to either vapor recovery system consisting of condensers, ejector/vacuum pumps and/or scrubbers. Genosorb technology for solvent vapor recovery is also installed and working perfectly.
	Use of high pressure hoses for equipment	**Complied**. Many equipment like reactors, spray dryers, condenser wherever necessary are being cleaned with high pressure sparger / jet to reduce waste water

	cleaning to reduce wastewater generation.	generation.
viii	**Fugitive emissions in the work zone environment, product, raw material storage area shall be regularly monitored. The emission shall conform to the limits imposed by I.**	**Complied**. Fugitive emissions in the work zone environment and raw material storage area is being regularly monitored by NABL approved third party. Data for the reporting period is given in **Table 4** (Pl. see pg. no.37). Besides this online monitors in work area for parameters like Chlorine, HCl, Phosgene are also installed. The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards. **Summary is given in specific condition iii.**
ix	**The project authority shall provide chilled brine solution in secondary condenser for condensation of the VOCs.**	**Complied**. All the VOCs/solvent recovery systems are attached with chilled brine solution in secondary condenser for condensation of VOCs.
	The project authority shall ensure that solvent recovery shall not be less than 95%	**Complied**. On an average solvent recovery is 96%.
	The VOC monitoring shall be carried in the solvent storage area and data submitted to the Ministry.	**Complied**. We are monitoring VOC as well as other chemicals in work area as per Factories Act and records are being maintained in Form No. 37. VOC monitoring in solvent storage area is being done and data are submitted through EC compliance report. Data for the report period is given in **Table 4.** (Pl. see pg. no.37)
x	**Solvent management shall be as follows:** **Reactor shall be connected to chilled brine condenser system.**	**Complied**. All the reactors handling solvent are connected/attached with chilled brine condenser for solvent recovery.
	Reactor and solvent handling pump shall have mechanical seals	**Complied**. All the reactors and pumps handling solvent are equipped with mechanical seals to prevent leakages.

	to prevent leakages.	
	The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.	**Complied**. The condensers provided are properly designed with respect to HTA and Residence time to achieve more than 95 % recovery. As mentioned above, average 96 % solvent recovery is being achieved.
	Solvents shall be stored in a separate space specified with all safety measures.	**Complied**. Solvents are stored in tank farms in separate tanks with proper earthing, flame arresters, lightening arresters, fencing, Fire hydrant system, Fire extinguishers, flame proof equipment, etc. safety measures.
	Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.	**Complied**. Double earthing is provided and regular checking and testing of the same is being done and recorded.
	Entire plant shall be flame proof.	**Complied**. Plants are equipped with Jumpers, flame proof electrical fittings and proper earthing as per the Hazardous area classification of PESO.
	The solvent storage tanks shall be provided with breather valve to prevent loses.	**Complied**. Breather valves have been provided to all the solvent storage tanks to minimize the loses.
xi	**Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc.**	**Complied**. Hazardous chemicals are being stored in tanks, drums and carboys considering the storage quantity and chemical stored.
	Company shall develop an area of 33% green belt and selection of plant species shall be as per the guideline of CPCB.	**Complied**. Company has developed green belt and dense plantation inside and outside the factory in more than 33 % of total land. Company is having green belt development plan and planting more than about 50000 plants per year on regular basis.

<table>
<tr><td>xii</td><td>The company shall harvest surface as well as rain water from the roof tops of the building and storm water drain to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.</td><td>Complied.

Company has expanded its harvesting pond capacity to 9000 KL capacity pond to harvest rain water

We are creating facility/ capacity to cater our consumption with rain harvested water with zero river drawls of water during the rainy days. Besides this, there are three check dams and pumping facility to harvest rain water.

We also construct temporary sand bag dam on top of dam towards the end of monsoon to store additional free flowing rain water in river Par.
In addition to above, surface runoff water and roof top water is used to recharge bore wells.</td></tr>
<tr><td>xiii</td><td>Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.</td><td>Complied.

Occupational health surveillance of the workers is being done on regular basis and record maintained as per the factory act which is shown in below table:
Pre-Employment Check-up (in –house):FY April-19 to March-20
<table>
<tr><th>SN</th><th>Employee</th><th>Qty</th><th>Check-up</th></tr>
<tr><td>1</td><td>Staff</td><td rowspan="3">6361</td><td rowspan="3">Pre-Employment</td></tr>
<tr><td>2</td><td>Operators</td></tr>
<tr><td>3</td><td>Workers</td></tr>
</table>
Annual Medical Check-Up: FY April-19 to March-20
<table>
<tr><th>SN</th><th>Employee</th><th>Qty</th><th>Check-up</th></tr>
<tr><td>1</td><td>Staff</td><td rowspan="3">3145</td><td rowspan="3">Annual Checkup</td></tr>
<tr><td>2</td><td>Operators</td></tr>
<tr><td>3</td><td>Workers</td></tr>
</table></td></tr>
<tr><td colspan="3">B. General Conditions:</td></tr>
<tr><td>i</td><td>The project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board.</td><td>Complied.

The company adheres to the compliances and has not exceeded the stipulation. This has been certified by our Environmental auditors, an authorized agency and nominated by GPCB; through Environmental audit every year.

Latest compliance report by GPCB appointed Environmental auditor Faculty of Pacific school of Engineering, Dist. Surat for year 18-19 was submitted to your good office vide our letter dated July 09, 2019</td></tr>
<tr><td>ii</td><td>No further expansion or modification in the plant shall be carried out without prior approval of the</td><td>Complied.

Any expansion will be done only after getting EC.</td></tr>
</table>

	Ministry of Environment and Forests. **In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.**	
iii	**At no time, the emissions shall exceed the prescribed limits.**	**Complied**. Monthly monitoring is being done by NABL approved third party. At no time, the emissions exceeded the prescribed limits during report period. **Summary of stack results given in specific condition no. iii.**
	In the event of failure of any pollution control system adopted by the units, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	**Complied**. No such case happened during compliance period. Whenever such incident of failure of pollution control system happened, we will stop the operation and rectify the problem and then only restart.
iv	**The Gaseous emission (NOx, HCl, SO2 and SPM) and Particulate matter along with RSPM levels from various process units shall**	**Complied**. The gaseous emissions (SO_2, NOx, and HCl) and particulate matters from various process units confirms to the standards prescribed by GPCB through CCA. Details of stack results for the compliance period is given in **Table 2**. (Pl. see pg. no. 32)

<table>
<tr><td></td><td>conform to the standards prescribed by the concerned authorities from time to time.</td><td></td></tr>
<tr><td rowspan="2"></td><td>At no time, the emission levels shall go beyond the stipulated standards.</td><td>Complied.

We will ensure that at no time emission will go beyond the standards. The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards.

Summary of stack results given in specific condition no. ii.</td></tr>
<tr><td>In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restricted until the control measures are rectified to achieve the desired efficiency. Stack monitoring for SO_2, NOx and SPM shall be carried.</td><td>Complied.

No such case happened during compliance period. Stack monitoring for SO_2, NOx and SPM has been carried out and details given in Table 2. (Pl. see pg. no. 32) Whenever such incident of failure of pollution control system happened, we will stop the operation and rectify the problem and then only restart.</td></tr>
<tr><td>v</td><td>The Location of ambient air quality monitoring stations shall be decided in consultation with state pollution control Board and it shall be ensured that at least one station is installed in the up wind and downwind direction as well as where maximum ground level concentration are anticipated.</td><td>Complied.

The Location of ambient air quality monitoring stations had been decided in consultation with GPCB so that at least one station is installed in the up wind and downwind direction as well as where maximum ground level concentration are anticipated. The same had been shown to authority like SPCB, CPCB & MoEF during their visit to our factory.

List of our ambient air monitoring station is given below:
<table>
<tr><th>No.</th><th>Location</th></tr>
<tr><td>1</td><td>66 KVA GEB substation</td></tr>
<tr><td>2</td><td>Opposite Shed D</td></tr>
<tr><td>3</td><td>Near ETP (West Site)</td></tr>
<tr><td>4</td><td>ETP Plat (North site)</td></tr>
<tr><td>5</td><td>Near TSDF</td></tr>
<tr><td>6</td><td>Near Main Guest House</td></tr>
<tr><td>7</td><td>At Wyeth Colony</td></tr>
<tr><td>8</td><td>Gram panchayat hall</td></tr>
<tr><td>9</td><td>Near Main office, North site</td></tr>
<tr><td>10</td><td>Water tank at Haria Road</td></tr>
</table>
</td></tr>
</table>

		Details of ambient air quality results is given in **Table 3**. (Pl. see pg. no. 36)
vi	**Dedicated Scrubbers and stacks of appropriate height as per the central pollution control board guideline shall be provided to control the emission from various vents.**	**Complied**. Dedicated Scrubbers with stacks of appropriate height (as per the central pollution control board guideline) have been provided to control the emission from various vents. Details of stack results along with its height data is given in **Table 2**. (Pl. see pg. no. 32)
	The scrubber water shall be sent to ETP for further treatment or sell to actual end users.	**Complied**. The scrubber water is being sent to ETP for further treatment.
vii	**The overall noise level in and around the plant area shall be kept well within the standard by providing noise control measures including acoustic hoods silencers, enclosures etc. on all source of noise generation.**	**Complied**. In built Acoustic enclosure, silencer and insulation are provided on all source of noise generation to keep over all noise level within the stipulated standards like turbine, DG set, etc.
	The ambient noise level shall confirm to the standards prescribed under Environment(Protection) Act-1986 Rules,1989 viz 75 dBA (day time) and 70 dBA (night time)	**Complied**. The ambient noise level confirm to the standard prescribed under EPA. The same is being regularly monitored and its details are given in **Table 5 and 6**. (Pl. see pg. no. 38,39) The maximum values during the compliance period confirms that at no time the noise emission level went beyond the stipulated standards. Summary is given below:

Noise level monitoring data (Day Time)

Sr. No.	Location	Permissible Limits, dBA	Values for the period Oct 19- Mar 20		
		75	**Min.**	**Max.**	**Avg.**
1	Near Main guest house	75	55.7	61.2	57.4
2	Near TSDF	75	61.2	64.2	62.6
3	At Wyeth Colony	75	49.7	57.3	53.6
4	Gram Panchayat Hall	75	60.8	63.5	62.7
5	Near Main Office North site	75	59.2	64.5	62.18
6	ETP North site	75	63.2	68.5	64.4
7	Opposite shed D	75	64.7	67.3	66.0
8	ETP West site	75	62.8	68.5	64.5
9	Water tank Haria road	75	53.5	62.6	57.1
10	Near 66KVA substation	75	62.5	68.6	65.0

Noise level monitoring data (Night Time)

Sr. No.	Location	Permissible Limits, dBA	Values for the period Oct 19- Mar 20		
		70	**Min.**	**Max.**	**Avg.**
1	Near Main guest house	70	50.2	52.2	51.2
2	Near TSDF	70	43.7	58.7	55.0
3	At Wyeth Colony	70	43.7	51.1	47.0
4	Gram Panchayat Hall	70	53.4	58.4	56.1
5	Near Main Office North site	70	53.2	57.3	55.5
6	ETP North site	70	53.2	58.6	54.7
7	Opposite shed D	70	54.7	62.7	59.7
8	ETP West site	70	50.3	60.8	57.6
9	Water tank Haria road	70	50.3	55.8	53.1
10	Near 66KVA substation	70	53.8	63.2	57.1

viii	**Training shall be imparted to all employees on safety and health aspects of chemicals**	**Complied**. Company is imparting training to all new employees as well as regular employees at regular intervals on safety and health aspects of chemicals handling. Safety precautions and hazards are also being communicated through display boards at appropriate places in the plants.

<table>
<tr><td></td><td>handling.</td><td></td></tr>
<tr><td></td><td>Pre-employment and routine periodical medical examination for all employees shall be undertaken on regular basis.</td><td>Complied.

Pre medical checkup and routine medical checkup for the employees is being done on regular basis (Six monthly).
Data are submitted in below table :

Summary of medical checkup given in specific condition no. xiii.</td></tr>
<tr><td>ix</td><td>Usage of PPE’s by employee/ workers shall be ensured.</td><td>Complied.

Company have PPE policy in place and is strictly followed. Company is providing adequate PPEs to all the employees.</td></tr>
<tr><td>x</td><td>The project proponent shall also comply with all the environmental protection measures and safeguards proposed in project report submitted to the ministry.</td><td>Complied.

Company has complied with all the environmental protection measures and safeguards proposed in the report apart from the recommendations made their in.</td></tr>
<tr><td></td><td>All the recommendation made in respect of environmental management and risk mitigation measures relating to the project shall be implemented.</td><td>Since ToR didn’t suggest for EIA or public hearing, no such recommendations mentioned. However, we are committed for healthy work environment and safe work practices.

However, Compliance to the recommendation made in respect of adequacy report for the referred project is given below:
<table>
<tr><th>No.</th><th>Recommendation</th><th>Compliance</th></tr>
<tr><td>1</td><td>Liquid incinerator also to be refurbished.</td><td>Complied. However, We have been segregating high COD streams (COD >50000 ppm) and same is being taken for recovery to get economic benefit. Rest lean effluent of COD <2000 ppm is finally sent to ETP for treatment. Hence no incineration required for high COD wastewater.</td></tr>
<tr><td>2</td><td>Online pH and DO measuring arrangement in aeration tank</td><td>Complied. Online pH and DO monitoring available.</td></tr>
</table>
</td></tr>
</table>

		3	ETP lab should be equipped with auto sampler, auto titrator, COD digester etc.	**Complied.** Our ETP lab has 5 nos. of auto samplers for various stages sample collections. The lab also have COD digesters.
		4	Explore possibility of more efficient mode of aeration	**Complied.** We have replaced our surface aerators with more efficient jet aerators.
		5	Company shall initiate rain water harvesting projects	**Complied.** Company has recently constructed 9000 KL capacity pond to harvest rain water.
		6	Change fuel (CNG) in Incinerator	**Complied.** We use CNG at our incinerator.
		7	Auto pH control system at new Incinerator plant.	**Complied.** Auto pH control system installed and being working at new Incinerator plant.
		(ref: comprehensive study report by Atmiya Institute of Technology, Rajkot 2010)			
xi	**The company will undertake all relevant measures for improving the socio economic condition for the surrounding area, CSR activities will be undertaken by involving local villages and administration:**	**Complied**. Company is doing CSR activities through its Atul Rural Development Fund trust and is specially designed for up gradation of surrounding area and well fare of nearby localities. List of **CSR activities** carried out during **April 19- March 20** is given below table :			

Sr. No	Activity	Implementing agency	Budget (lakhs)	Spent (lakhs)
1	Enhancement of education practices in Kalyani Shala	AFT| Atul Kelavani Mandal	36.80	36.80
2	Support to tribal children in Atul Vidyamandir	AFT| Atul Vidyalaya Trust	6.00	6.00
3	Improvement of teaching methodology in primaryschools Adhyapika Project	AFT| ARDF	48.00	48.00
4	Enhancement of rural education	AFT | ARDF	10.97	10.97
5	Promotion of educational facilities in an	AFT | Shree Vallabh Seva Kendra	3.00	3.00

	ashram shala				
6	Conservation of manuscripts	AFT | L D Bhartiya Sanskruti Vidyamandir	40.00	40.00
7	Contribution towards publication of books On Indian culture| ecology | philosophy	AFT | Prakrit Bharati Academy	5.00	5.00
8	Support to develop a school in a tribal area	AFT	5.00	5.00
9	Conduct science workshops for rural teachers	AFT | Vikram A Sarabhai Community Science Centre	3.00	3.00
10	upport needy children with educational kits	AFT	2.70	2.70
11	Capacity building of teachers through training	AFT	0.94	0.94
12	Introduction of digital education at Sanskrit Mahavidyalay a	AFT |Swadhyay Mandal	4.50	4.50
13	Support children with special needs	AFT| Osmosis Play Centre an Educational Games Library	2.00	2.00
14	Empowerment of women through various vocational training courses	AFT | ARDF	13.48	13.48

		15	Skill training to youth as apprentices	Atul Ltd	179.25	179.25
		16	Skill development of youth through vocational training	AFT | ARDF	36.20	36.20
		17	Capacity building of tribal farmers in bee keeping	AFT | Under The Mango Tree Society	1.40	1.40
		18	Empowerment of tribal families by creating home stay facilities	AFT	85.00	85.00
		19	Create livelihood opportunities among tribal families by providing cows	AFT| BAIF Institute for Sustainable Livelihoods and Development	66.37	66.37
		20	Develop micro entrepreneurs to provide sustainable livelihood	AFT	37.50	37.50
		21	Support tribal farmers by providing seeds	AFT | ARDF	1.14	1.14
		22	Improvement of hygiene through construction of toilets	AFT | ARDF	32.00	32.00
		23	Enhancement of rural health through health camps	AFT | ARDF	9.79	9.79
		24	Up gradation of medical equipment in a hospital	AFT | Gyan Mandal Laxmipura Group Prerit Arogya Mandal	15.00	15.00
		25	Provision of	AFT | Seva	2.40	2.40

			blood units to the needy and deserted patients	Yagna Samiti		
		26	Promotion of sports among rural youth	Atul Ltd	11.00	11.00
		27	Contribution for establishing CT scan facility in a hospital	AFT | ARDF | Kasturba Vaidyakiya Rahat Mandal	10.00	10.00
		28	Promotion of health and fitness through marathon	AFT | ARDF	9.09	9.09
		29	Promotion of sports in rural schools by providing sport kits	AFT	6.15	6.15
		30	Provision of medical assistance to the needy people	AFT | ARDF	2.79	2.79
		31	Upliftment of quality of life of salt pan workers	AFT | ARDF	2.70	2.70
		32	Provision of blood units to thalassemia patients	AFT | Valsad Raktdan Kendra	7.00	7.00
		33	Contribution for advance treatment of cancer patients	AFT | Charutar Arogya Mandal	5.00	5.00
		34	Contribution for community marriage of underprivileged couples	AFT | Shree Chandramauleshwar Mahadevji Sansthapan Trust | Shree Valsad Taluka Patel Samaj Pragati	2.50	2.50

				Mandal		
		35	Support to children with special needs	AFT | Mathru Foundation	1.00	1.00
		36	Provide financial support to critically ill patients	AFT | Kasturba Vaidyakiya Rahat Mandal	31.25	31.25
		37	Support to families of Indian solders	AFT	2.50	2.50
		38	Provision of free farm kits and fertilisers at subsidised rates to farmers	AFT | ARDF	3.00	3.00
		39	Support to disaster relief for COVID-19 pandemic	AFT | ARDF	50.00	50.00
		40	Support to families of special children	AFT	19.44	19.44
		41	Provision of infrastructure support for institution building	AFT | World Renewal Spiritual Trust	1.50	1.50
		42	Renovation of anganwadi infrastructure (model anganwadi project)	AFT | ARDF	51.00	51.00
		43	Provision of infrastructure support to a crematorium	AFT | Atul Parnadi Muktidham Trust	5.00	5.00
		44	Provision of infrastructure support to school	AFT	4.00	4.00
		45	Support to small development activities in	AFT | ARDF	0.48	0.48

			nearby villages			
		46	Afforestation	Atul Ltd | ARDF	5.00	5.00
		47	Establishment of solid waste management system in Atul village	AFT| ARDF	30.00	30.00
		48	Conservation of coastal area through cleanliness drive	AFT	1.00	1.00
		49	Plantation of medicinal plants at Kalyani Shala	AFT	5.51	5.51
		Total			914.35	914.35

The summary of expense occurred in CSR activities for last year is listed below:

Budget for Financial year 19-20 (Rs. in lakhs)	**Actual Expense during year 19-20 (Rs. in lakhs)**
914.35	914.35

xii	**The company shall undertake eco developmental measures including community welfare measures in the project area for the overall improvement of the environment.**	**Complied** as mentioned in xi above.
xiii	**A Separate environmental management cell equipped with full flagged laboratory facility shall be set up to carry out the environmental management and monitoring function.**	**Complied**. Company is having separate Environmental Management Cell equipped with full-fledged laboratory facility to carry out the environment management and monitoring functions. Apart from this, one Environment Research Lab is also established for research work for the study of various aspects related to environment and its remedial measures. Organogram of Environment Health & Safety was already submitted vide our letter Atul/SHE/EC Compliance/06 dated 12.7.17. Company has developed a separate laboratory equipped with equipment such as pH meter, TDS meter, COD meter, Glass ware, gas chromatography system, and oven, muffle furnace, etc. to carry out testing of routine parameters. However sampling and testing is carried out by GPCB approved and company appointed consultant also. Currently the parameters measured in-house are pH, COD, TDS, MLVSS, and MLSS.

<table>
<tr><td></td><td></td><td></td></tr>
<tr><td>xiv</td><td>The project authorities shall earmark adequate funds to implement the conditions stipulated by the Ministry of Environment and Forest as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.</td><td>Complied.

EMP measures are implemented by 2010 and many things have already been at place.
Non recurring cost: Rs. 5.0 Cr
Recurring cost: A separate budget is being allocated every year to comply with all the legal requirement stipulated by SPCB, CPCB & MoEF apart from upkeep of pollution control systems and facilities. Total expenditure for the report period is given in below table.
<table>
<tr><th>S. N</th><th>Parameter</th><th>Capital cost per annum (Rs. In lacs) 2019-20</th><th>Recurring Cost For the report period Oct 19 – Mar 20</th></tr>
<tr><td>1</td><td>Air Pollution Control</td><td>124.17</td><td rowspan="2">2444.5</td></tr>
<tr><td>2</td><td>Liquid Pollution Control</td><td>341.7</td></tr>
<tr><td>3</td><td>Environmental Monitoring and Management</td><td>29.3</td><td>35</td></tr>
<tr><td>4</td><td>Solid waste Disposal</td><td>-</td><td>263.87</td></tr>
<tr><td>5</td><td>Occupational health</td><td>-</td><td>12</td></tr>
<tr><td>6</td><td>Green belt</td><td>-</td><td>5.0</td></tr>
<tr><td colspan="2">Total</td><td>495.17</td><td>2760.37</td></tr>
</table></td></tr>
<tr><td>xv</td><td>A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila parishad/Municip al Corporation. Urban local body and the local NGO, if any, from who</td><td>Complied.
Latest submission to the Panchayat, Zila parishad, District Industrial Centre was distributed on 11.11.2016. Copy of the same was submitted to Ministry vide our letter Atul/SHE/MoEF/Visit/3 dated 4.4.17.</td></tr>
</table>

	suggestions/representation, if any, were received while processing the proposal.	
	The clearance letter shall also be put on the web site of the company by the proponent.	**Complied**. Available at company's website at http://www.atul.co.in/sustainability/pdf/Atul-Environmental-Clearance-for-expansion-2009.pdf
xvi	**The implementation of the project vis-à-vis environmental action plan shall be monitored by Ministry's Regional office at Bhopal / SPCB / CPCB.**	**Complied**. SPCB and MoEF is monitoring through their regular visits.
xvii	**The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at website of the Ministry of Environment and Forest at http://www.envfor.ni.in.**	**Complied**. We informed the public through advertisement and by sending our EC to local Panchayat, Zila parishad, District Industrial Centre for further actions at their end.

	This shall be advertised within seven days from the date of issue of the clearance letter at least in two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Ministry's Regional office at Bhopal.	**Complied**. Advertisement was published as directed and copy of the same was submitted to Ministry vide our letter dated 14.11.2009.
xviii	**The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closures and final approval of the project by the concerned authorities and the date of start of the project.**	**Complied**. Start date : May 2009 Completion date : May 2010 Final approval : We have obtained NOC and CCA from GPCB. Company has funded the project internally and hence not submitted the financial closure details.
8	**The Ministry may revoke or suspend the clearance if implementation of any of the above**	Noted.

	conditions is not satisfactory.	
9	**The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.**	Noted and will be complied.
10	**Any appeal against this Environment clearance shall lie with the national appellate authority, if preferred, within a period of 30 days as prescribed under section 11 of National Environment Appellate Authority Act, 1997.**	Noted.
11	**The above conditions will be enforced, inter-alia under the provisions of the**	Noted.

	Water (Prevention and Control of Pollution) Act, 1974 the Air ((Prevention and Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundry movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	

Table 1 : Quality of treated effluent

Sr. No.	Parameter	Results						GPCB Limits
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	
1	pH	8.19	7.95	6.91	7.02	7.45	6.23	5.5 to 9.0
2	Temperature °C	31.4	31.8	30.9	30.4	31.6	30.1	40 oC
3	Colour (pt. co. scale)in units	100	90	80	140	80	78	---
4	Suspended solids, mg/l	92	76	92	98	65	72	100
5	Phenolic Compounds, mg/l	0.088	0.056	0.044	0.056	0.041	0.047	5
6	Cyanides, mg/l	ND	ND	ND	ND	ND	ND	0.2
7	Fluorides, mg/l	0.75	0.7	0.65	0.75	0.68	0.62	2
8	Sulphides, mg/l	1.2	0.9	1.2	1.8	1.2	1.1	2
9	Ammonical Nitrogen, mg/l	48	38	43	46	34	37	50
10	Total Chromium, mg/l	ND	ND	ND	ND	ND	ND	2
11	Hexavelent Chromium, mg/l	ND	ND	ND	ND	ND	ND	1
12	BOD (3 days at 27°C), mg/l	78	65	60	65	59	66	100
13	COD, mg/l	240	220	218	215	208	222	250
Note : ND is Not Detectable.								

Table: 2

Details of Process and Flue stack				Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
Atul East Site									
1	Phosgene Plant (Old Plant)	Phosgene	0.1 ppm	Not in use	Not in use	Not in use	Not in use	Not in use	Not in use
Caustic Chlorine Plant									
2	Dechlorination Plant	Cl_2	9.0 mg/Nm3	6.2	5.3	7.2	6.8	4.2	4.4
		HCl	20.0 mg/Nm3	8.3	6.8	9.3	6.3	8	6.5
3	Common stack of HCl Sign unit 1&2	Cl_2	9.0 mg/Nm3	6.7	4.3	5.6	5.3	6.4	5.2
		HCl	20.0 mg/Nm3	9.4	7.6	8.9	7.3	8.4	9.3
PCB Palnt									
4	Foul Gas Scrubber	SO_2	40.0 mg/Nm3	Not in use	Not in use	Not in use	Not in use	Not in use	Not in use
		NOx	25.0 mg/Nm3						
Sulfuric Acid (East Site)									
5	Sulfuric Acid Plant	SO_2	2.0 kg/T	0.4	0.6	0.8	0.8	0.4	0.5
		Acid Mist	50.0 mg/Nm3	14.3	12.4	16.7	13.4	11.7	10.2
6	Chlorosulfonic Acid plant reactor	Cl_2	9.0 mg/Nm3	6.8	5.3	7.3	6.2	5.7	5.3
		HCl	20.0 mg/Nm3	12.5	11.7	14.6	13.7	14.8	12.5
Resorcinol plant									
7	Scrubber vent Resorcinol Plant	SO_2	40.0 mg/Nm3	Not running during visit	Not running during visit	Not running during visit	6.3	8.6	7.3
8	Spray Dryer -Resorcinol Plant	PM	150.0 mg/Nm^3	Not running during visit	Not running during visit	Not running during visit	Not running during visit	32	32
Incinerator									
9	Incinerator	PM	150.0 mg/Nm3	32	31	42	46	38	43
		SO_2	40.0 mg/Nm3	17.8	16.7	16.2	14.2	12.1	10.2
		NOx	25.0 mg/Nm3	8.6	7.2	9.8	9.8	10.8	14.5
NI Plant									
10	Foul Gas Scrubber	SO_2	40.0 mg/Nm3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
		NOx	25.0 mg/Nm3						
NRD Plant :									
11	Spray Dryer	PM	150.0 mg/Nm3	Not in use	Not in use	Not in use	Not in use	Not in use	Not in use
12	Scrubber S-902	Phosgene	0.1 ppm	Not running during visit	Not running during visit	Not running during visit	ND	ND	ND
13	Scrubber S-801/902	HCl	20.0 mg/Nm3	Not running during visit	Not running during visit	Not running during visit	2.5	3.4	3.5
		NOx	25.0 mg/Nm3	Not running during visit	Not running during visit	Not running during visit	11.3	9.2	8.8
2-4-D I									
14	Common Scrubber: 2,4D Plant	Cl_2	9.0 mg/Nm3	7.5	6.5	5.6	6.2	4.2	4.6
		HCl	20.0 mg/Nm3	6.5	10.3	7.5	8.4	6.3	6
		Phenol	–	ND	ND	ND	ND	ND	ND
15	Dryer-1	PM with Pesticide component	20.0 mg/Nm3	7.5	6.3	8.6	6.8	7.2	6.5
12	Dryer-2	PM with Pesticide component	20.0 mg/Nm3	9.2	8.2	7.2	9.2	8.6	7.2
16	Dryer-3	PM with Pesticide component	20.0 mg/Nm3	8.5	7.5	10.7	7.5	6.9	6.5
17	Dryer-4	PM with Pesticide component	20.0 mg/Nm3	11.3	13.4	9.5	10.4	11.7	10.2
18	Dryer-5	PM with Pesticide component	20.0 mg/Nm4				6.2	7.6	8.1

Sr. No.	Stack Details	Parameters	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
CP Plant									
20	MCPA	Cl_2	9 mg/NM^3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		HCl	20 mg/NM^3						
		SO_2	40 mg/NM^3						
21	Fipronil	SO_2	40 mg/NM^3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		HCl	20 mg/Nm3						
17	Imidacloprid	NH_3	175 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
18	Pyrethroids	SO_2	40 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		HCl	20 mg/Nm3						
19	Stack at Amine Plant	NH_3	175 mg/Nm3	21.6	26.2	20.4	25.1	20.8	19.2
MPSL Plant									
20	Phosgene Scrubbr at MPSL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
21	Central Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
NICO plant									
22	Central scrubber at Nico Plant	Acetonytryle, IPA	—	-	-	-	-	-	-
Ester Plant									
23	Scrubber at Ester plant for Glyphosate	Formaldehyde	10 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
24	Central Scrubber MCPA Plant	HCl	20 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
25	MPP plant scrubber	HCl	20 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		Phosgene	0.1 ppm						
Atul West Site									
26	Shed A05/03/44	Cl_2	9 mg/NM^3	7.8	6.7	5.8	6.7	7.1	6.5
		HCl	20 mg/NM^3	10.3	9.6	8.4	9.2	12.7	10.2
27	Shed B2/12/24 Reaction Vessel	Cl_2	9.0 mg/Nm3	6.7	6.5	5.4	6.5	5.3	4.5
		HCl	20.0 mg/Nm3	8.3	8.8	12.6	9.3	8.6	7.3
28	Shed B18/02/24 Fan	SO_2	40 mg/NM^3	14.2	16.3	Not Running During Visit	16.2	14.7	13.3
		Cl_2	9 mg/NM^3	5.6	4.6		5.2	4.8	4.5
		HCl	20 mg/NM^3	12.4	10.6		9.3	7.3	6.8
29	Shed C5/20/15 Chlorinator	Cl_2	9.0 mg/Nm3	6.4	5.2	7.3	5.2	6.3	7.2
		HCl	20.0 mg/Nm3	10.2	12.3	9.8	11.8	10.7	13.3
30	Shed D Nico Spray dryer No. 45	PM	150.0 mg/Nm3	63	56	46	55	52	40
31	Shed D Nico Spray dryer No.50	PM	150.0 mg/Nm3	58	48	62	48	24	Not Running During Visit
32	Shed E 7/12/49 Spray Dryer	PM	150.0 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
33	Shed F F6/1/15 Reactors Vessel	Cl_2	9.0 mg/Nm3	5.4	6.7	6.3	6.7	5.1	3.2
		HCl	20.0 mg/Nm3	7.3	8.4	8.2	8.4	7.3	6.8
34	Shed G 10/8/1 (residue)	Cl_2	9.0 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		HCl	20.0 mg/Nm3						
35	Shed H 11/6/17 chlorinator	Cl_2	9.0 mg/Nm3	6.3	6.8	5.8	5.8	3.2	2.5
		HCl	20.0 mg/Nm3	15.2	13.5	13.4	11.4	9.7	7.2
36	Shed K K-13/3/4 Final of Sulfuric acid plant	SO_2	2.0 kg/T	0.8	0.6	0.8	0.5	0.4	0.5
		Acid Mist	50.0 mg/Nm3	17.3	20.5	15.4	10.6	14.3	10.2
37	Shed J19/09/25	HFe	—	ND	ND	ND	ND	ND	Not Running During Visit
		SO_2	40 mg/NM^3	12.8	13.2	16.8	13.2	11.7	

Sr. No	Stack Details	Parameters	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
38	Shed J12/01/42	SO_2	40 mg/NM^3	15.2	10.3	17.2	10.3	13.5	Not Running During Visit
		Cl_2	9.0 mg/Nm3	6.3	6.7	7.1	6.2	5.8	
		HCl	20.0 mg/Nm3	9.4	8.2	12.3	8.6	7.3	
39	Shed J12/03/36	SO_2	40 mg/NM^3	14.8	14.8	16.7	14.5	12.9	Not Running During Visit
		HCl	20.0 mg/Nm3	8.7	8.4	9.2	8.2	7.3	
40	Shed N Scrubber Fan SQ0/08/24	Cl_2	9 mg/NM^3	7.2	6.3	6.2	6.7	5.6	7.3
		HCl	20 mg/NM^3	13.6	12.8	15.5	12.2	10.4	12.8
41	Shed N Scrubber Fan SQ0/02/41	SO_2	40 mg/NM^3	17.3	13.6	20.4	13.9	14.6	10.2
42	Sulfer Black Plant	H_2S	–	ND	ND	ND	ND	ND	ND
		NH_3	175 mg/NM^3	13.7	13.3	22.6	13.9	17.2	16.4
43	Sulfer Dyes plant	H_2S	–	ND	ND	ND	ND	ND	ND
		NH_3	175 mg/NM^3	29.6	27.4	34.2	20.4	12.8	10.2
44	MPP plant	HCl	20 mg/NM^3	12.7	9.7	11.6	10.8	9.8	-
45	Flavors & Fragrances Plant	HCl	20 mg/NM^3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
Atul North Site									
46	N-FDH Plant Catalytic Incinerator	PM	150.0 mg/Nm3	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit	Not Running During Visit
		SO_2	40.0 mg/Nm3						
		NOx	25.0 mg/Nm3						
		Formaldehyde	10.0 mg/Nm3						
47	PHN Plant vessel	Phosgene	0.1 ppm	ND	ND	ND	NO	ND	ND
48	PHN - II Plant	HCl	20.0 mg/Nm3	12.3	12.3	9.8	11.3	9.8	8.2
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
49	DCDPS Plant	SO_2	—	ND	ND	ND	NO	ND	ND
50	DDS Plant	NH_3	175 Mg/Nm3	55.3	55.3	98.4	52.3	48.3	44.1
51	BPIC II Plant	SO_2	—	ND	ND	ND	NO	ND	ND
52	BPIC I Plant	NH_3	175 mg/Nm3	68.3	68.2	101.3	73.2	68.2	64.3
53	BPIC IV Plant	NH_3	175 mg/NM^3	45.5	45.5	132.6	88.6	73.4	70.3
		SO_2	—	7.3	7.3	4.3	3.6	4.2	3.5
54	Furnace (Phosgene plant-New)	PM	150 mg/NM^3	62	62	72	52	46	42
55	Reactor (Phosgene plant- New)	CO	–	ND	ND	ND	ND	ND	ND
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND

Sr. No.	Stack Details	Parameters	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
East site									
1	FBC boiler E1	PM	100 mg/Nm3	65	53	71	63	76	78
		SO_2	600 mg/Nm3	110	124	112	104	112	115
		NOx	600 mg/Nm3	137	145	126	125	106	103
2	FBC boiler E2	PM	100 mg/Nm3	73	66	68	78	82	88
		SO_2	600 mg/Nm3	126	132	107	112	109	108
		NOx	600 mg/Nm3	140	137	119	117	121	116
3	FBC boiler E3	PM	100 mg/Nm3	78	59	75	65	72	75
		SO_2	600 mg/Nm3	136	138	116	109	113	114
		NOx	600 mg/Nm3	129	132	126	112	126	120
4	Hot Oil Unit (Reserved Plant)	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	24	24	36	28	22	25
5	DG set 1010 KVA (Standby)	PM	150 mg/Nm^3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
West Site									
6	FBC boiler W1	PM	100 mg/Nm3	53	60	52	70	58	55
		SO_2	600 mg/Nm3	102	112	104	118	110	120
		NOx	600 mg/Nm3	123	124	123	104	113	116
7	Hot Oil Plant shed-B	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	30	30	40	32	20	21
8	Oil burner Shed B (Stand By)	PM	150.0 mg/Nm3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
9	Boiler (50 TPH 2 Nos) (New boilers) W2,W3	PM	50 mg/Nm3	25	32	34	37	39	33
		SO_2	600 mg/Nm3	127	132	108	116	120	110
		NOx	300 mg/Nm3	93	102	98	102	103	105
		Mercury	0.03 mg/Nm3	ND	ND	ND	ND	ND	ND
10	DG set 1500 KVA (Stand By)	PM	150.0 mg/Nm3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
North Site									
11	Thermic fluid heater of DCO/DAP Plant	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	24	24	32	30	28	26

Table 3 : Ambient Air Monitoring details

Station	Parameter	Limit micro gm/N M^3	**Oct 19**	**Nov 19**	**Dec 19**	**Jan 20**	**Feb 20**	**Mar 20**
66 KV	PM 2.5	60	21.3	19.6	32.2	29.6	33.7	36.8
	PM10	100	43.5	38.4	45.3	40.4	44.2	52.3
	SO2	80	9.8	10.4	9.4	10.4	11.2	10.8
	NOx	80	16.4	17.5	16.2	13.5	13.2	15.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Opposite Shed D	PM 2.5	60	21.3	28	32	38	32	36
	PM10	100	43.5	35	39	35	39	42
	SO2	80	9.8	7.9	9.6	8.4	9.6	8.2
	NOx	80	16.4	8.3	9.3	9.2	9.3	10.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Near West site ETP	PM 2.5	60	24	24	27	45	36	38
	PM10	100	39	39	42	39	42	45
	SO2	80	8.7	8.7	8.4	14.7	8.4	8.7
	NOx	80	9.4	9.4	8.4	15.4	8.4	11.4
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Near North ETP	PM 2.5	60	27	27	29	40	40	44
	PM10	100	40	40	44	40	42	44
	SO2	80	8.3	8.3	9.6	12.8	9.6	10.8
	NOx	80	8.6	8.6	8.2	14.2	8.2	12.8
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
TSDF	PM 2.5	60	26	26	28	42	43	46
	PM10	100	46	46	46	42	40	43
	SO2	80	7.4	7.4	8.2	10.6	8.2	9.8
	NOx	80	8.1	8.1	7.6	11.5	7.6	13.6
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Main Guest House	PM 2.5	60	15	15	15	28	19	24
	PM10	100	25	25	22	45	42	44
	SO2	80	4.5	4.5	4.3	8.4	7.8	6.3
	NOx	80	5.2	5.2	6.2	9.4	8.2	7.8
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Wyeth Colony	PM 2.5	60	10	10	17	25	20	22
	PM10	100	26	26	24	42	39	37
	SO2	80	4.1	4.1	5.4	7.2	6.7	7.6

	NOx	80	4.6	4.6	5.3	8.2	7.4	8.6
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Gram panchayat hall	PM 2.5	60	12	12	22	30	28	29
	PM10	100	29	29	32	49	48	45
	SO2	80	6.2	6.2	6.3	8.6	7.8	8.2
	NOx	80	5.7	5.7	7.2	9.4	8.2	7.3
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Main office, North site	PM 2.5	60	19	19	24	35	30	26
	PM10	100	35	35	38	52	48	49
	SO2	80	7.2	7.2	6.8	9.2	8.4	7.3
	NOx	80	7.3	7.3	8.1	10.6	9.6	8.3
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Haria water tank	PM 2.5	60	18.3	18.3	17.8	28.2	37.8	30.8
	PM10	100	24.4	24.4	32.7	42.2	42.7	45.2
	SO2	80	9.5	9.5	8.8	11.2	8.8	8.8
	NOx	80	15.8	15.8	14.5	14.3	11.5	10.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND

Table 4 : Fugitive Emission Monitoring details

Plant	**Area**	**Parameter**	**Prescribed Limit**	**Results of VOCs in Milligram per NM^3**					
				Oct 19	**Nov 19**	**Dec 19**	**Jan 20**	**Feb 20**	**Mar 20**
2,4 D	Reactor	Phenol	19	11.6	12.6	14.8	16.6	12.4	12.3
	Buffer tank	Chlorine	3.0	1.6	2.1	1.9	2.4	1.6	2.1
Resorcinol	Benzene storage tank area near vent	Benzene	15	7.9	10.2	8.4	11.3	9.4	8.5
	Near Extraction/scrubber unit	Butyl acetate	-	649	715	620	705	739	602
Pharma	At second floor work area	Ammonia	18	10.6	14.2	10.8	12.4	17.4	13.2
	Ammonia recovery area	Ammonia	18	14.9	16.8	15.2	17.1	16	11.6
Epoxy - I	At vacuum pump 2nd floor	ECH	10	6	3.4	2.9	3.5	5.9	5.7
	At vessel POS 1208 G.F	ECH	10	5.2	5.6	7.4	9.2	7.8	6.6
Shed H	At second floor work area	Nitrobenzene	5	3.6	3	2.3	3.4	4	2.9
Shed J	Buffer Tank	Chlorine	3	2.1	2.6	2.1	2.5	1.7	2.4

Table 5 : Noise level monitoring data (Day Time)

Sr. No.	Location	Noise Level, dBA						Permissible Limits, dBA
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	75
1	Near Main guest house	56.7	59.7	55.7	55.7	55.7	61.2	75
2	Near TSDF	64.2	61.2	62.3	62.3	62.3	63.7	75
3	At Wyeth Colony	57.3	49.7	53.5	53.5	53.5	54.4	75
4	Gram Panchayat Hall	62.4	60.8	63.5	63.5	63.5	62.5	75
5	Near Main Office North site	60.2	59.2	64.5	64.5	64.5	60.2	75
6	ETP North site	64.3	68.5	63.2	63.2	63.2	64.4	75
7	Opposite shed D	64.8	64.7	66.4	66.4	66.4	67.3	75
8	ETP West site	68.5	62.8	63.7	63.7	63.7	65.5	75
9	Water tank Haria road	59.7	62.6	53.5	53.5	53.5	60.2	75
10	Near 66KVA substation	63.3	68.6	65.2	65.2	65.2	62.5	75

Table 6 : Noise level monitoring data (Night Time)

Sr. No.	Location	Noise Level, dBA						Permissible Limits, dBA
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	70
1	Near Main guest house	50.2	52.2	50.6	50.6	51.6	52.2	70
2	Near TSDF	55.7	58.7	54.2	54.2	53.2	54.4	70
3	At Wyeth Colony	44.7	43.7	46.1	46.1	51.1	50.3	70
4	Gram Panchayat Hall	57.3	54.8	58.4	58.4	53.4	54.3	70
5	Near Main Office North site	57.3	54.8	54.2	54.2	56.8	56.2	70
6	ETP North site	58.6	55.3	53.6	53.6	53.2	54.4	70
7	Opposite shed D	60.2	57.3	62.7	60.7	59.2	58.3	70
8	ETP West site	57.8	59.8	60.8	57.8	54.7	55.1	70
9	Water tank Haria road	52.3	55.8	50.3	52.3	54.7	53.2	70
10	Near 66KVA substation	57.2	53.8	63.2	57.2	56.4	55.1	70

Atul Limited

Project: CRZ clearance for proposed 4.0 km long treated effluent discharge pipe line in Par estuary, Dist. Valsad.

CRZ Compliance for the period October 2019- March 2020 as per CRZ Clearance No. ENV-1097-2942-P, dated 17.01.1998.

<table>
<tr><th>No.</th><th>Condition</th><th>Compliance</th></tr>
<tr><td>1</td><td>The Company shall strictly adhere to all the provisions of CRZ notification of 1991 and subsequent amendments.</td><td>Complied.

Details are given below in the table:

<table>
<tr><th>No.</th><th>Clause under CRZ notification</th><th>Compliance</th></tr>
<tr><td>1</td><td>Imposes the given restrictions in setting up and expansion of industries, operations or processes in CRZ.</td><td>Noted</td></tr>
<tr><td>2</td><td>List of prohibited activities within CRZ.</td><td>Noted</td></tr>
<tr><td>3</td><td>Guideline for regulation of permissible activities.</td><td>Noted</td></tr>
<tr><td>4</td><td>Procedure for monitoring and enforcement.</td><td>Applicable to Ministry</td></tr>
<tr><td>Ann 1</td><td>Classification of costal regular zone.</td><td>Noted</td></tr>
<tr><td>Ann 2</td><td>Guidelines for development of beach/ resort/ hotels.</td><td>NA</td></tr>
<tr><td>Ann 3</td><td>List of petroleum products permitted in storage in CRZ except CRZ-1.</td><td>NA</td></tr>
</table>
</td></tr>
<tr><td>2</td><td>The company shall strictly adhere to the conditions stipulated by the Gujarat Pollution Control Board in their Consent order.</td><td>Complied.

The company complies with all stipulated norms under various acts. Stipulation made in CCA by GPCB are being complied and the same is certified by the external agency, i.e. our Environmental auditors appointed by GPCB. Latest audit report for year 18-19 was submitted vide our letter dated July 09, 2019.</td></tr>
<tr><td>3</td><td>The company shall discharge the treated effluent meeting the norms prescribed by G.P.C.B.</td><td>Complied.

The discharged effluent is meeting all pollution board limits and values of various parameters of treated effluent is given in Table 1. (Pl. see pg. no. 4)

The maximum values during the compliance period confirms that at no time the emission went beyond the stipulated standards.

Summary is given below:</td></tr>
</table>

Sr. No.	Parameter	Norms	Values for the period Oct 19- Mar 20		
			Min.	Max.	Avg.
1	pH	5.5-9.0	6.23	8.19	7.19
2	Temperature	40 deg C	30.1	31.8	31.09
3	Colour (pt. co. scale)in units	---	78	140	92.86
4	Suspended solids	100 mg/l	62	98	79.57
5	Phenolic Compounds	5 mg/l	0.039	0.088	0.05
6	Cyanides	0.2 mg/l	ND	ND	ND
7	Fluorides	2 mg/l	0.62	0.75	0.69
8	Sulphides	2 mg/l	0.9	1.8	1.23
9	Ammonical Nitrogen	50 mg/l	34	48	41.00
10	Total Chromium	2 mg/l	ND	ND	ND
11	Hexavalent Chromium	1 mg/l	ND	ND	ND
12	BOD (3 days at 27oC)	100 mg/l	57	78	64.29
13	COD	250 mg/l	205	240	218.29

The effluent quality at the ETP discharge point is regularly being monitored by the Environmental auditors appointed by GPCB. Latest audit report for the year 18-19 was submitted vide our letter dated July 23, 2019. The same was submitted to CPCB also as directed.
GPCB also monitor the treated effluent quality at intervals. Recent result by GPCB is attached as Annexure 1.

The river water quality at the discharge point is regularly being monitored by GPCB. Agencies like NIO, Pollucon Laboratories Pvt. Ltd- MoEF approved agency, Envision Enviro Technologies Pvt. Ltd –NABET accredited have also done the monitoring during the years. Relevant extracts from latest reports were submitted to Ministry vide our letter Atul/SHE/MoEF/Visit/3 dated 4/4/17.

The company shall keep records of the quality of effluents being discharge during the tides as per the recommendations of N.I.O.	Complied. We are keeping the records of quality effluents being discharged during the tides in soft copy as per the recommendations of N.I.O.

4	The company shall submit the quarterly progress report of compliance of conditions.	Complied. We have submitted progress reports to the Forest and Environment Department of Gujarat during the pipe line installation work. Couple of reports were already submitted to Ministry vide our letter Atul/SHE/MoEF/Visit/3 dated 4/4/17.
5	The company shall bear all the cost of the agency to be appointed by the Government for overseeing/monitoring the project activities during construction/operational phases.	Noted and will be complied as and when it will come.
6	The company shall comply with all the recommendations, additional conditions and environmental safeguards prescribed in the report of NIO dated March, 1997.	Complied. Compliance to NIO recommendations are being followed. Copy of compliance report submitted to Forest and Environment Department of Gujarat was already submitted to Ministry vide our letter Atul/SHE/MoEF/Visit/3 dated 4/4/17.
6	The company shall submit an Environmental Audit Report every year.	Complied. Latest environmental audit report for year 18-19 was submitted vide our letter dated July 23, 2019.
7	The company shall obtain the necessary permissions from different Government department/agencies under different laws/Acts.	Complied. We have received GPCB approval for operating 4Km line vide its consent letter no. 16399 dated 22.12.98. Copy already submitted to Ministry vide our letter Atul/SHE/MoEF/Visit/3 dated 4/4/17.
8	Any additional conditions which may imposed from time to time.	Noted and will be complied.

Table 1: Quality of treated effluent

Sr. No.	Parameter	Results						GPCB Limits
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	
1	pH	8.19	7.95	6.91	7.02	7.45	6.23	5.5 to 9.0
2	Temperature °C	31.4	31.8	30.9	30.4	31.6	30.1	40 °C
3	Colour (pt. co. scale)in units	100	90	80	140	80	78	---
4	Suspended solids, mg/l	92	76	92	98	65	72	100
5	Phenolic Compounds, mg/l	0.088	0.056	0.044	0.056	0.041	0.047	5
6	Cyanides, mg/l	ND	ND	ND	ND	ND	ND	0.2
7	Fluorides, mg/l	0.75	0.7	0.65	0.75	0.68	0.62	2
8	Sulphides, mg/l	1.2	0.9	1.2	1.8	1.2	1.1	2
9	Ammonical Nitrogen, mg/l	48	38	43	46	34	37	50
10	Total Chromium, mg/l	ND	ND	ND	ND	ND	ND	2
11	Hexavelent Chromium, mg/l	ND	ND	ND	ND	ND	ND	1
12	BOD (3 days at 27°C), mg/l	78	65	60	65	59	66	100
13	COD, mg/l	240	220	218	215	208	222	250
Note : ND is Not Detectable.								

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:276560 - Analysis Completion:02/03/2020

Dyes and Dye- Intermediates / LAB Inward : 52218

Gujarat Pollution Control Board, Vapi
C5/124, GIDC Vapi,
Near Hotel Pritam,
Vapi - 396 195
Tele:(0260) 2432089

TEST REPORT

Test Report No. : 52218 Date: 02/03/2020

1. Name of the Customer : Atul Limited - 23158
2. Address : 5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85, 91, etc.,AT & P.O.ATUL, Dist. Valsad, Pin: ATUL-396020, Taluka : Valsad, District : Valsad, GIDC : Not In Gidc
3. Nature of Sample : REP-Representative/Grab, (Insp Type : COM-On Complaint)
4. Sample Collected By : R.K. Mabeta,SO
5. Quantity of Sample Received : 5
6. Code No. of the Sample : 276560
7. Date & Time of Collection & Inwarding : 13/02/2020 , (1710 to 1710) & 14/02/2020
8. Date of Start & Completion of Analysis : 17/02/2020 & 02/03/2020
9. Sampling Point : From Final outlet of Central ETP –
10. Flow Details (Remarks) : Yes
11. Mode of Disposal : Estuary zone of River Par
12. Ultimate Receiving Body : Estuary zone of river par
13. Temperature on Collection : 29 & pH Range on pH Strip :@ 7-8 on pH strip
14. Carboys Nos for : Barcode & Color & Appearance :Brown
15. Water Consumption & W.W.G (KLPD) : Ind :23726.000 , Dom :938.000 & Ind :21727.000 , Dom :939.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	29
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi.2012	1 – 14 pH value As or	7.03
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	150
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Methoc	10 – 200000 mg/L	4838
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Methoc	2 – 10000 mg/L	94
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l	10.24
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	1669
8	Sulphate	mg/l	APHA(22nd edi)4500 SO4 E	2-40mg/l	746
9	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	214
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	0.8
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.5
12	Sulphide	mg/l	APHA (22nd Edi.)4500-s2-F –iodometric Method	1-500.0 mg/l	bdl
13	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	84

Laboratory Remarks : Freeze By:445-lab_445 Dt.: 02/03/2020

J.D.OZA, Lab Head

Field Observation :

Note :

1. * - These parameters are NOT covered under the scope of NABL.
2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
3. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
4. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
8. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA.
9. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

N I G

03/03/2020

ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

Sample ID:273804 - Analysis Completion:22/01/2020

Dyes and Dye- Intermediates / LAB Inward : 51880

Gujarat Pollution Control Board, Vapi
C5/124, GIDC Vapi,
Near Hotel Pritam,
Vapi - 396 195
Tele:(0260) 2432089

TEST REPORT

Test Report No. : 51880 Date: 24/01/2020

1. Name of the Customer	: Atul Limited - 23158
2. Address	: 5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85, 91, etc.,AT & P.O.ATUL, Dist. Valsad, Pin: ATUL-396020, Taluka : Valsad, District : Valsad, GIDC : Not In Gidc
3. Nature of Sample	: REP-Representative/Grab, (Insp Type : SCN-After SCN Inspection)
4. Sample Collected By	: R.K. Maheta,SO
5. Quantity of Sample Received	: 5
6. Code No. of the Sample	: 273804
7. Date & Time of Collection & Inwarding	: 07/01/2020 , (1105 to 1105) & 08/01/2020
8. Date of Start & Completion of Analysis	: 08/01/2020 & 22/01/2020
9. Sampling Point	: ## Final Outlet of the ETP ~ -
10. Flow Details (Remarks)	: Yes
11. Mode of Disposal	: In to Estuary zone of river par
12. Ultimate Receiving Body	: Estuary zone of river par
13. Temperature on Collection	: 27 & pH Range on pH Strip :@ 7-8 on pH Strip
14. Carboys Nos for	: 1 & Color & Appearance :Brownish
15. Water Consumption & W.W.G (KLPD)	: Ind :23726.000 , Dom :938.000 & Ind :21727.000 , Dom :939.000

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	27
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi.2012	1 – 14 pH value As or	7.29
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	150
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Methoc	10 – 200000 mg/L	3830
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Methoc	2 – 10000 mg/L	46
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/L	4.41
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	1305
8	Sulphate	mg/l	APHA(22nd edi)4500 SO4 E	2-40mg/l	585
9	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	156
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	0.4
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.87
12	Sulphide	mg/l	APHA (22nd Edi.)4500-s2-F –iodometric Method	1-500.0 mg/l	0.65
13	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05–50000 mg/l	44

Laboratory Remarks : Freeze By:445-lab_445 Dt.: 24/01/2020

J.D.OZA, Lab Head

Field Observation : -

Note :

1. * - These parameters are NOT covered under the scope of NABL.
2. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
3. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
4. This report is not to be reproduced wholly or in part or used in any advertising media without the permission of the Board in writing.
5. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
6. Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
7. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
8. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA.
9. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

N I C

01/02/2020

Atul Limited

Project: Setting up an addition captive power plant of 22 MW at post Atul, Dist. Valsad

EC Compliance Report for the period October 2019 - March 2020 as per

EC No. SEIAA/GUJ/EC/1(d)/340/2016

<table>
<tr><th>No.</th><th>Condition</th><th>Compliance Status</th></tr>
<tr><td colspan="3">Specific Conditions :</td></tr>
<tr><td>1.</td><td>Unit shall comply the emission standards mentioned in the Notification by MOEF&CC vide S.O. 3305(E) dated 07/12/2015.</td><td>Complied.
We ensured that at no time the emission level will go beyond the stipulated standards and or prescribed limits. In such cases / Occurrences we will intimate to board & authority time to time. In event of failure of APCM, the unit shall not restarted until the control measures are rectified to achieve efficiency.

Stack details are as follow:
Flue gas stack analysis is monitored at regular interval (Monthly) for ensuring the compliance. The testing Lab appointed for Flue gas analysis is being done by GPCB approved (schedule-II) M/s. Pollucon Laboratories Pvt.Ltd, surat NABL approved TC-5945, issue date-28/05/2019 and validity till 27/05/2021.

The maximum value (SPM, SO2 & NOx) during the compliance period confirms that at no time the emission level went beyond the stipulated standards. Parameter wise summary is given below:
Flue gas stack results from (Oct-19 to mar-20) is attached as
Annexure I
Flue gas Stack results of last six month period (October-2019 to March-2020):
<table>
<tr><th rowspan="2">Parameter</th><th rowspan="2">Standard values as per CCA</th><th rowspan="2">Unit</th><th colspan="3">Values for the period October 19- March 20</th></tr>
<tr><th>Min</th><th>Max</th><th>Avg</th></tr>
<tr><td>PM</td><td>100</td><td>mg/Nm^3</td><td>52</td><td>88</td><td>68.1</td></tr>
<tr><td>PM (New Boiler)</td><td>50</td><td>mg/Nm^3</td><td>25</td><td>39</td><td>33.6</td></tr>
<tr><td>SO_2</td><td>600</td><td>mg/Nm^3</td><td>102</td><td>136</td><td>115.8</td></tr>
<tr><td>NOx</td><td>600</td><td>mg/Nm^3</td><td>103</td><td>145</td><td>122.4</td></tr>
<tr><td>NOx (NewBoiler)</td><td>300</td><td>mg/Nm^3</td><td>93</td><td>105</td><td>100.5</td></tr>
</table>
</td></tr>
</table>

		  **D.G.SET STACK** **(D.G.SET)** The Ambient Air Quality is being monitored at regular interval for ensuring the compliance. The testing lab appointed is M/s. Royal Environment Auditing & Consultancy Service, Surat NABL Approved **TC – 5948**, issue date-**1/06/2019** and valid till **31/05/2021.** **Ambient Air quality analysis report shows that maximum concentration of PM2.5 is found 46 mg/Nm3 at TSDF site and minimum concentration is found 10 mg/Nm3 at Wyeth Colony during last six month monitoring period (October-2019 to March-2020).** These result are below permissible emission standards mentioned in the Notification by MOEF&CC vide S.O. 3305(E) dated 07/12/2015 during last six month monitoring period (October-2019 to March-2020). **Ambient Air quality analysis report shows that maximum concentration of PM10 is found 54 mg/Nm3 at Nr.North site of ETP and minimum concentration is found 22 mg/Nm3 at Main Guest house during last six month monitoring period (October-2019 to March-2020).** These results are below permissible emission standards mentioned in the Notification by MOEF&CC vide S.O. 3305(E) dated 07/12/2015 during last six month monitoring period (October-2019 to March-2020). **Ambient Air quality analysis report shows that maximum concentration of SO_2 is found 14.7 mg/Nm3 at Near West site ETP and minimum concentration is found 4.1 mg/Nm3 at Wyeth**

colony site during last six month monitoring period (October-2019 to March-2020). These results are below permissible emission standards mentioned in the Notification by MOEF&CC vide S.O. 3305(E) dated 07/12/2015 during last six month monitoring (October-2019 to March-2020).

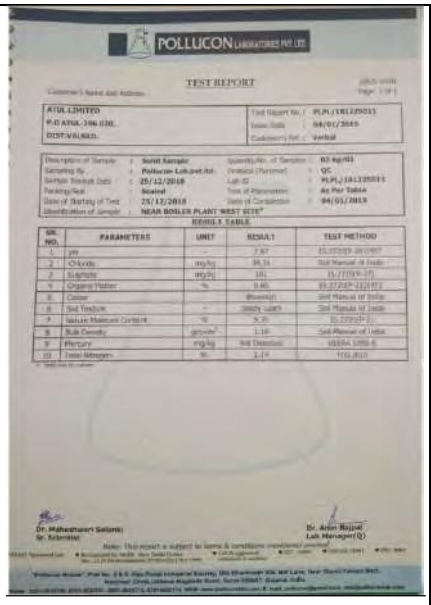
Ambient Air quality analysis report shows that maximum concentration of NOx is found 17.5 mg/Nm3 at 66 KV and minimum concentration is found 4.6 mg/Nm3 at Wyeth Colony during last six month monitoring period (October-2019 to March-2020). These results are below permissible emission standards mentioned in the Notification by MOEF&CC vide S.O. 3305(E) dated 07/12/2015 during last six month monitoring period (October-2019 to March-2020). Is Attached as **Annexure II**

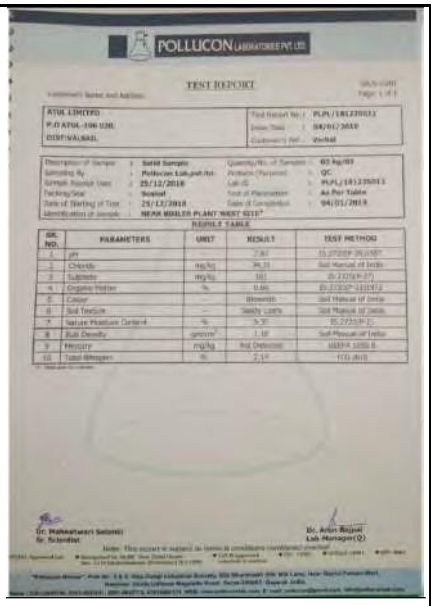
Ambient air monitoring Reports:

Station	**Parameter**	**Limit microgram/ NM^3**	**Values for the period Oct 19- Mar 20**		
			Min.	**Max.**	**Avg.**
66 KV	RSPM (PM2.5)	60	19.6	36.8	28.8
	PM10	100	38.4	52.3	44.0
	SO2	80	9.4	11.2	10.3
	NOx	80	13.2	17.5	15.3
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND

			Opposite Shed D	RSPM (PM2.5)	60	28	38	33	
				PM10	100	35	52	40.3	
				SO2	80	7.9	9.6	8.7	
				NOx	80	8.3	11.2	9.5	
				Ammonia	850	ND	ND	ND	
				HCl	200	ND	ND	ND	
			Near West site ETP	RSPM (PM2.5)	60	24	45	34.3	
				PM10	100	39	55	43.6	
				SO2	80	7.7	14.7	9.4	
				NOx	80	8.4	15.4	10.5	
				Ammonia	850	ND	ND	ND	
				HCl	200	ND	ND	ND	
			Near North ETP	RSPM (PM2.5)	60	27	44	36.6	
				PM10	100	40	54	44	
				SO2	80	8.3	12.8	10.0	
				NOx	80	8.2	14.2	10.8	
				Ammonia	850	ND	ND	ND	
				HCl	200	ND	ND	ND	
			TSDF	RSPM (PM2.5)	60	26	46	37.8	
				PM10	100	40	50	44.5	
				SO2	80	7.4	10.6	9.0	
				NOx	80	7.6	13.6	10.1	
				Ammonia	850	ND	ND	ND	
				HCl	200	ND	ND	ND	

			Main Guest House	RSPM (PM2.5)	60	15	28	21.1	
				PM10	100	22	45	37.1	
				SO2	80	4.3	8.4	6.1	
				NOx	80	5.2	9.4	7.5	
				Ammonia	850	ND	ND	ND	
				HCl	200	ND	ND	ND	
			Wyeth Colony	RSPM (PM2.5)	60	10	20	19.6	
				PM10	100	24	44	35.3	
				SO2	80	4.1	7.6	6.35	
				NOx	80	4.6	8.6	6.9	
				Ammonia	850	ND	ND	ND	
				HCl	200	ND	ND	ND	
			Gram panchayat hall	RSPM (PM2.5)	60	12	30	24.3	
				PM10	100	29	52	42.5	
				SO2	80	6.2	8.6	7.4	
				NOx	80	5.7	9.4	7.4	
				Ammonia	850	ND	ND	ND	
				HCl	200	ND	ND	ND	
			Main office, North site	RSPM (PM2.5)	60	19	35	26.5	
				PM10	100	35	52	43.3	
				SO2	80	6.4	9.2	7.5	
				NOx	80	7.3	10.6	8.5	
				Ammonia	850	ND	ND	ND	
				HCl	200	ND	ND	ND	
			Haria water tank	RSPM (PM2.5)	60	24.4	52.2	39.9	
				PM10	100	8.8	11.2	9.4	
				SO2	80	10.2	15.8	13.4	
				NOx	80	24.4	52.2	39.9	
				Ammonia	850	ND	ND	ND	
				HCl	200	ND	ND	ND	

2.	All measures shall be taken to prevent soil and ground water contamination.	**Complied.** To monitor the soil and ground water Quantity, online flow meter is installed at the inlet and outlet line of ETP. We are not extracting ground water as a source of water. We are using River (Par) as a source of fresh water. We have adequate control measured for any leakages from the plant. We have developed RCC pipeline for collecting our effluent. We have maintained and regularly check ground and soil quality once in year through M/s. Pollucon Laboratories Pvt.Ltd. NABL approved **TC-5945**, issue date- **28/05/2019** and validity till **27/05/2021.** We are regularly monitor (once in year) through reputed institute (**M/s**. **Pollucon Laboratories Pvt.Ltd, surat**) to access the impacts on soil and ground water quality. As per details study report shows that there is no soil and ground water contamination found. No ground water is tapped for meeting the project requirements. Neutralization pit has been put in service for waste water generated from D.M. Plant. RO plant is commissioned to recycle the cooling tower make up water. Entire quantity of waste water is being utilized in ash quenching and coal storage yard to attend coal smoldering. **Hence, our CPP unit is achieved ZLD.** We are ensuring that solid waste is stored in identified solid hazardous waste storage area, provided with covered shed, impervious flooring and leachate collection facility to prevent soil contamination. Detailed study report on Groundwater and soil quality in and around Atul was done during the year 2018-19 by reputed and NABL approved agency M/s. Pollucon Laboratories Pvt. Ltd, Surat. NABL approved **TC-5945**, issue date- **28/05/2019** and validity till **27/05/2021.**  POLLUCON LABORATORIES PVT. LTD. TEST REPORT  POLLUCON LABORATORIES PVT. LTD. TEST REPORT

3.	The project proponent shall submit the detailed study report to Gujarat Pollution Control Board (GPCB) at least once in a year, through the reputed institute or university to assess the impacts on soil and ground water quality, if any due to application of waste water generation from the CPP and shall adopt the additional mitigation measures as may be suggested through such studies.	**Complied.** **We are regularly submitting (once in year) the detailed study report to GPCB & MoEF&CC, through reputed institute (NABL accredited Laboratory M/s. Pollucon Laboratory Pvt. Ltd.) to assess the impacts on soil and ground water quality was submitted to your good office vide letter dated 19.12.2019** No ground water is tapped for meeting the project requirements. We are using river water as a source of fresh water. However Neutralization pit has been put in service for waste water generated from D.M. Plant. RO plant is commissioned to recycle the cooling tower make up water. Entire quantity of waste water is being utilized in ash quenching and coal storage yard to attend coal smoldering. **Hence, our CPP unit is achieved ZLD.** We are ensured that solid waste is stored in identified solid hazardous waste storage area, provided with covered shed, impervious flooring and leachate collection facility to prevent soil contamination. Detailed study report on Groundwater and soil quality in and around Atul was done during the year 18-19 by reputed and NABL approved agency M/s. **Pollucon Laboratories Pvt. Ltd, Surat.**
		 POLLUCON LABORATORIES PVT. LTD. TEST REPORT ATUL LIMITED P.O ATUL-396 020, DIST:VALSAD. RESULT TABLE SR. NO. / PARAMETERS / UNIT / RESULT / TEST METHOD Dr. Maheshwari Solanki Sr. Scientist Dr. Arun Bajpai Lab Manager(Q)
		 POLLUCON LABORATORIES PVT. LTD. TEST REPORT RESULT TABLE SR. NO. / PARAMETERS / UNIT / RESULT / ACCEPTANCE LIMIT AS PER IS 10500:2012 / PERMISSIBLE LIMIT AS PER IS 10500:2012 / TEST METHOD Dr. Maheshwari Solanki Dr. Arun Bajpai Lab Manager(Q)

<table>
<tr><td></td><td></td><td></td></tr>
<tr><td>4.</td><td>A.2:WATER:</td><td></td></tr>
<tr><td></td><td>The fresh water requirement for the proposed expansion shall not exceed 2095 KL/day and it shall be met through the existing water supply system from River par.</td><td>Complied.
The average water consumption for the last six month compliance period (October- 2019 to March -2020) is 1210 KL/day only which is well within the permissible limit of 2095 KL/Day. Detail break up is given in below table:

<table>
<tr><th>Sr. No</th><th>Month</th><th>Qty. F/W (KL/Month)</th><th>Avg. Qty. F/W (KL/Day)</th></tr>
<tr><td>1</td><td>Oct-19</td><td>33986</td><td>1359</td></tr>
<tr><td>2</td><td>Nov-19</td><td>31560</td><td>1018</td></tr>
<tr><td>3</td><td>Dec-19</td><td>39580</td><td>1319</td></tr>
<tr><td>4</td><td>Jan-20</td><td>38696</td><td>1248</td></tr>
<tr><td>5</td><td>Feb-20</td><td>36598</td><td>1181</td></tr>
<tr><td>6</td><td>Mar-20</td><td>32986</td><td>1137</td></tr>
</table>

The maximum value during the compliance period confirms that at no time the wastewater generation went beyond the stipulated value. Fresh water requirement is met through the existing water supply system from river par. water permission from concerned authority for additional water requirement was submitted to your good office vide letter dated 11.02.2019
.</td></tr>
</table>

5	Metering of water shall be done and its records shall be maintained. No ground water shall be tapped in any case for meeting the project requirements.	**Complied.** Magnetic water flow meter is attached at inlet line of ETP and reuse line (outlet) at RO permeate line. Its records are regularly maintained. We are not using ground water tapped in any case for meeting the project requirements. Because our source of water is river (Par) water with permission letter of water for industrial purpose from Par River.   **Water meter @ Inlet line** **Water Meter @ Reuse line**
6.	The industrial effluent generation from the proposed expansion shall not exceed 270 KL/day and entire quantity of effluent shall be utilized for ash quenching, dust suppression, fire hydrant make up, Gardening plants floorcleaning.	**Complied**. Waste water generation in not exceeding then prescribed limit of 270 KL/Day during last six compliance month. The average wastewater generation for the report period (last six month –October 2019 to March 2020) is **169.16 KL/day.** Only which is well within the prescribed limit of 270 KL/Day and entire waste water quantity is utilized / reused after giving neutralization & RO treatment. Entire quantity of waste water is being utilized in ash quenching, coal storage yard to attend coal smoldering, dust suppression, fire hydrant make up, Gardening plants floor cleaning and no waste water discharge to ETP. Detail break up is given in below table:

Sr. No	Month	Waste water Generation (KL/Month)	Avg. Waste water Generation/ Reused Qty (KL/Day)
1	Oct-19	4874	195
2	Nov-19	4689	151
3	Dec-19	5098	170
4	Jan-20	5290	171
5	Feb-20	4956	160
6	Mar-20	4875	168

<table>
<tr><td></td><td></td><td></td></tr>
<tr><td>7.</td><td>There shall be no discharge of industrial effluent from the proposed project in any case.</td><td>Complied.
Industrial Waste water generation is not exceeding then prescribed limit of 270 KL/Day during last six compliance months (October 2019 to March 2020). Neutralization pit has been put in service for waste water generated from D.M. Plant. Entire Avg. Quantity of 169.7 KL/Day waste water is being utilized in ash quenching and coal storage yard to attend coal smoldering, dust suppression, fire hydrant make up, Gardening plants floor cleaning. Please refer table of Avg. waste water generation (KLD) in point no.6.
Hence, Our CPP unit is achieved ZLD. No Discharge of industrial effluent from the proposed project in any case.</td></tr>
<tr><td>8.</td><td>Domestic waste water generation shall not exceed 1 KL/day Which shall be disposed of into soak system.</td><td>Complied.
Domestic water generation in not exceeding then prescribed limit of EC during last six compliance months (October -2019 to March-2020). The minimum domestic waste water generation is 0.75 KL/Day in August month. The Maximum domestic waste water generation is 0.98 KL/Day in September month. The average wastewater generation for the report period (last six month –October 2019 to March 2020) is 0.59 KL/day only which is well within the limit. Domestic waste water disposed through soak pit / septic tank system.
<table>
<tr><th>SN</th><th>Month</th><th>Waste water Generation (KL/Day)</th></tr>
<tr><td>1</td><td>Oct-19</td><td>0.67</td></tr>
<tr><td>2</td><td>Nov-19</td><td>0.50</td></tr>
<tr><td>3</td><td>Dec-19</td><td>0.65</td></tr>
<tr><td>4</td><td>Jan-20</td><td>0.62</td></tr>
<tr><td>5</td><td>Feb-20</td><td>0.59</td></tr>
<tr><td>6</td><td>Mar-20</td><td>0.56</td></tr>
</table></td></tr>
<tr><td>9.</td><td>The unit shall provide metering facility at the inlets and outlets of the collection cum reuse system of waste water and</td><td>Complied.
Magnetic Flow Meter is provided at the inlet of the collection tank and reuse system of waste water and records are being maintained.
Photograph of water meter shown below:</td></tr>
</table>

	maintain records of thesame.	  **Water meter @ Inlet line** **Water meter @ Reuse line** **Month wise water consumption, waste water generation on the basis of I/L and O/L flow meter readings are shown below table:**

SN	Month	Water consumption (Inlet) (KL/Month)	Wastewater Generation (Outlet) (KL/Month)
1	Oct-19	33986	4874
2	Nov-19	31560	4689
3	Dec-19	39580	5098
4	Jan-20	38696	5290
5	Feb-20	36598	4956
6	Mar-20	32986	4875

We are reusing 100% treated water in ash quenching , coal storage yard to attend coal smoldering, dust suppression, fire hydrant make up, Gardening plants & floor cleaning. **Hence, we are achieving ZLD. No waste water discharge to ETP from our Captive power plant.**

10.	Proper logbooks of waste water reuse system showing quantity and quality of effluent reused shall be maintained and furnished the GPCB from time to time.	**Complied.** We are properly maintaining logbook of water consumption, waste water generation & reuse data showing quantity and quality of effluent by means of Magnetic flow meter for quantity and TOC meter for quality of Reused effluent. Furnished these data communicate regularly to GPCB from time to time. **Month wise water consumption, waste water generation and reuse data are shown below Table:**

SN	Month	Water consumption (KL/Month)	Waste water Generation (KL/Month)	Reuse (KL/Month)	Reuse (KL/Day)
1	Oct-19	33986	4874	4874	195
2	Nov-19	31560	4689	4689	151
3	Dec-19	39580	5098	5098	170
4	Jan-20	38696	5290	5290	171
5	Feb-20	36598	4956	4956	160
6	Mar-20	32986	4875	4875	168

11.	Rain water harvesting of rooftop rain water shall be undertaken as proposed in the EIA report of the project and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water through percolation wells. Before recharging the rain water, pre-treatment must be done to remove suspended matter.	**Complied**. Rooftop rain water from Coal sheds and New TG building is collected in well- constructed pond and used as make up water for cooling tower. We have already two numbers of check dams in natural storm water drains to collect and harvest rain water in monsoon season after giving necessary pre- treatment to remove suspended matter as we have pumped these rain water to clarifloculator units to remove suspended matter. We are creating facility/ capacity to cater our consumption with rain harvested water with zero river drawls of water during the rainy days. Besides this, there are three check dams and pumping facility to harvest rain water. We also construct temporary sand bag dam on top of dam towards the end of monsoon to store additional free flowing rain water in river Par. In addition to above, surface runoff water and roof top water is used to recharge bore wells. Total No. of Pond: 2 Nos. Capacity of Pond: (1 Nos. x 10000 KL) & (1 Nos. x 2000 KL) Company has harvest 9.63 lac KL rain water during 2019. **Photograph of rain water harvesting structure (Pond) as shown below:** **Water Harvesting Project at Colony**   **Water Harvesting Project Near Coconut circle**

<table>
<tr><td></td><td>A.3AIR:</td><td></td></tr>
<tr><td>12.</td><td>Existing two coal fired steam boilers shall be replaced with two AFBC Boilers having capacity 50 TPH each.</td><td>Complied.

In the existing unit, two numbers of Stoker Fired Boilers (SFB) are provided with Scrubbers for dust collection. As, it is old technology and not feasible to provide ESP with these boilers, the SFBs are replaced with higher efficiency boilers with adequate APC facility (4 field ESP).</td></tr>
<tr><td>13.</td><td>Fuel (Indian coal/and or Imported coal and or Lignite) to the tune of 16725 MT/M shall be used for proposed boilers.</td><td>Complied.

The average fuel consumption for the report period (last six month –October 2019 to March 2020) is 15209.17 MT/M only which is well within the limit. Detail break up is given in below table:

<table>
<tr><th>Sr. No</th><th>Month</th><th>Avg. Fuel consumption (MT/Month</th></tr>
<tr><td>1</td><td>Oct-19</td><td>13269</td></tr>
<tr><td>2</td><td>Nov-19</td><td>15743</td></tr>
<tr><td>3</td><td>Dec-19</td><td>15318</td></tr>
<tr><td>4</td><td>Jan-20</td><td>16224</td></tr>
<tr><td>5</td><td>Feb-20</td><td>16760</td></tr>
<tr><td>6</td><td>Mar-20</td><td>13941</td></tr>
</table>

The maximum values during the compliance period confirm that at no time the fuel consumption went beyond the stipulated value.</td></tr>
<tr><td>14.</td><td>Sulfur and ash content of the fuel to be used shall be analyzed and its record shall be maintained.</td><td>Complied.
We are using Indian Coal or Imported coal and lignite in different proposition as per availability. We are regularly monitored (monthly) and analyzed the proximate & ultimate analysis of coal / Lignite which show % Ash content, GCV, Sulphur content and heavy metal present in coal /lignite</td></tr>
<tr><td>15</td><td>A Long term study of radio activity and heavy metal contents in coal/ lignite to be used shall be carried out through a reputed institute and results thereof analyzed regularly and reported along with monitoring reports.

Thereafter mechanism for an in-built continuous monitoring</td><td>Complied.
The heavy metal contents in coal/ lignite used has been carried out by reputed institute M/s. Pollucon Laboratory Pvt. Ltd. (NABL Accredited).</td></tr>
</table>

<table>
<tr><td></td><td>for radio activity and heavy metals in coal/lignite and Fly ash (Including bottom ash) shall be put in place.</td><td></td></tr>
<tr><td>6.</td><td>Height of flue gas stacks attached to boilers shall be minimum 74.58 meters.</td><td>Complied. Height of the stack is 106 meters. The emission is dispersed through adequate height of stacks as per CPCB standard as given below:
<table>
<tr><th>Stack No.</th><th>Stack attached to</th><th>Stack height In Meter</th><th>APCM</th><th>Parameter</th><th>Permissible limit</th></tr>
<tr><td>1.</td><td>Boiler (50 TPH x 2Nos.)</td><td>106</td><td>ESP with 4 field</td><td>PM
SO_2
NOx
Mercury (Hg)</td><td>50 mg/NM^3
600 mg/NM^3
300 mg/NM^3
0.03 mg/NM^3</td></tr>
</table>
For Boilers : Stack Height $H=14(Q)^{0.3}$
Height of the stack is 106 meters, which is actually higher than norms.</td></tr>
<tr><td>17.</td><td>A flue gas stack of 74.58m height shall be provided with online monitoring system to proposed steam Boiler.</td><td>Complied.
Height of the stack is 106 meters attached to Boiler (50 TPH x 2 Nos.). We have installed Online monitoring system to steam boiler for SPM, SOx and NOx is already been made and connected to CPCB server.</td></tr>
<tr><td></td><td>Mercury gas emission from stacks shall also be monitored on periodic basis.</td><td>
<table>
<tr><th>Stack No.</th><th>Stack attached to</th><th>Stack height In Meter</th><th>APCM</th><th>Parameter</th><th>Permissible limit</th></tr>
<tr><td>1.</td><td>Boiler (50 TPH x 2 Nos.)</td><td>106</td><td>ESP with 4 field</td><td>PM
SO_2
NOx
Mercury (Hg)</td><td>50 mg/NM^3
600 mg/NM^3
300 mg/NM^3
0.03 mg/NM^3</td></tr>
</table>
Mercury emission is also monitored on monthly basis by GPCB approved M/s. Royal Environment Auditing & Consultancy Service, Rajkot, an NABL approved agency.
For Mercury stack emission data please refer specific condition No.1.</td></tr>
</table>

<table>
<tr><td></td><td></td><td>No Mercury is Detected in Flue gas stack as well as in Ambient air in last six month monitoring results.</td></tr>
<tr><td>18.</td><td>High efficiency Electro static precipitators (ESP) with efficiency not less than 99.9% shall be installed for control of flue gas emission from the proposed Boilers.</td><td>Complied.
We have installed high efficiency electro static precipitator (4 field) with 99.9% efficiency to control of flue gas emission within the permissible limit from the proposed boilers. Last six month (October-2019 to March-2020) monitoring reports shows that Avg. SPM emission is identify 39 mg/Nm^3 which is below permissible limit of 50 mg/Nm^3 Photograph of ESP as shown below:
 
ESP</td></tr>
<tr><td></td><td>The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms.</td><td>Complied.
GPCB Permissible limit for PM is 50 mg/NM3. Particulate matter emission did not exceed the GPCB norms during report period (October 2019 to March 2019) Which shows that ESP is working efficiently (99.9%).
Stack PM emission data from October-2019 to March-2020 is mention below table:
<table>
<tr><th rowspan="2">No.</th><th rowspan="2">Stack Attached to</th><th rowspan="2">Parameter</th><th rowspan="2">Standard values as per CCA</th><th rowspan="2">Unit</th><th colspan="3">Values for the period October19 to March20</th></tr>
<tr><th>Min.</th><th>Max.</th><th>Avg.</th></tr>
<tr><td>1</td><td rowspan="4">Boiler (50 TPH x 2 Nos.)</td><td>SPM</td><td>50.0</td><td>mg/Nm3</td><td>25</td><td>39</td><td>33.66</td></tr>
<tr><td>2</td><td>SO_2</td><td>600</td><td>mg/Nm3</td><td>108</td><td>132</td><td>118.3</td></tr>
<tr><td>3</td><td>NOx</td><td>300</td><td>mg/Nm3</td><td>93</td><td>105</td><td>100</td></tr>
<tr><td>4</td><td>Mercury</td><td>0.03</td><td>mg/Nm3</td><td>ND</td><td>ND</td><td>ND</td></tr>
</table></td></tr>
</table>

<table>
<tr>
<td></td>
<td>The control system shall be designed and integrated in plant DCS in such a way that amended from ESP exceeds the specified standard prescribed in the Environment (protection) Rules 1986 as amended from time to time, utilization of boiler capacity shall so that flue gas emission from the stack meets with the specified standards or boiler shall shut down totally.</td>
<td>Complied.

We have designed and integrated in Plant DCS in such a way that in event of ESP in working not efficiently or something found fault or operation issue due to which flue gas emission go beyond the specified standard prescribed in the Environment (protection) Rules 1986 as amended from time to time than in such cases / occurrence we will intimate to board & authority to stop the operation plant or decrease the load of power plant. We will not restart or increase the load until the control measures are rectified to achieve the 100 percent efficiency.

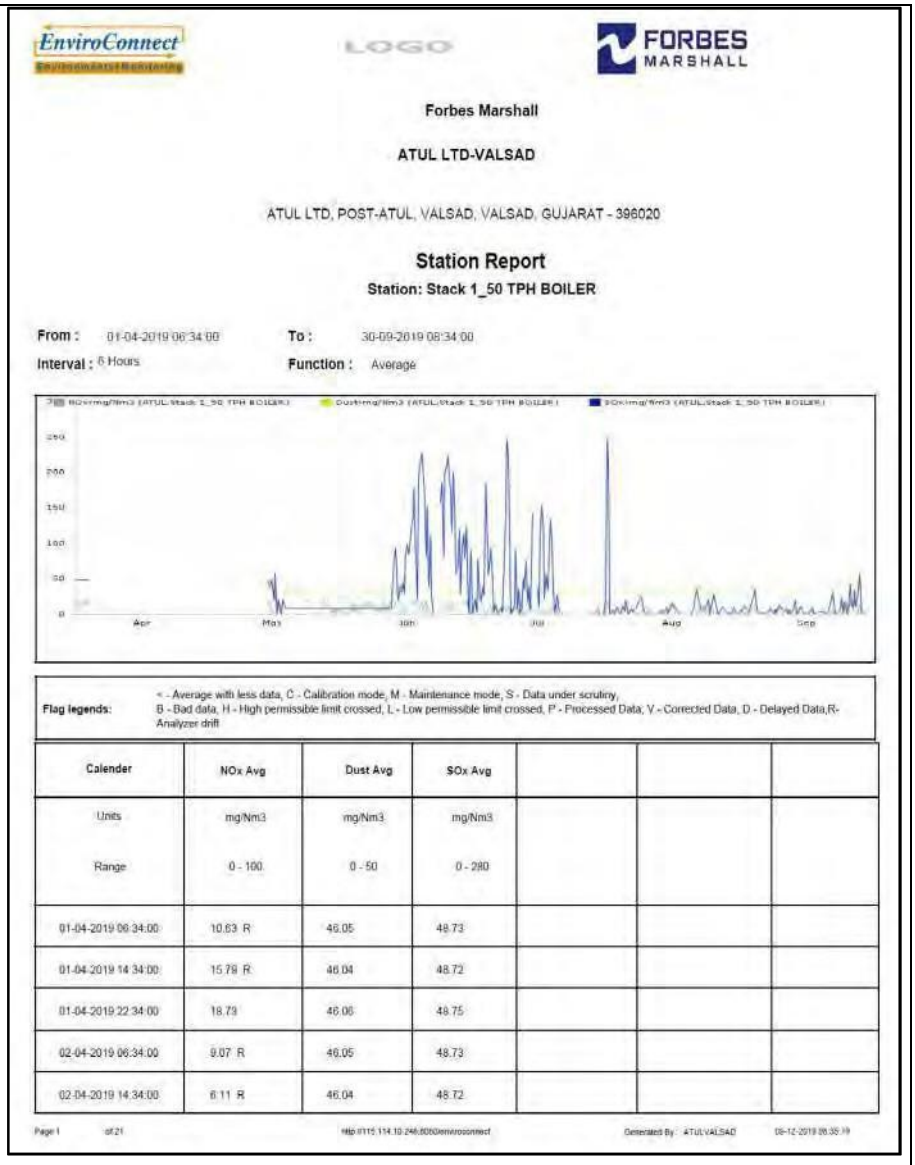
Flue gas stack analysis is monitored at regular interval (Monthly) for ensuring the compliance. The testing Lab appointed for Flue gas analysis is being done by GPCB approved (schedule-II) M/s. Pollucon Laboratories Pvt.Ltd, surat NABL approved TC-5945, issue date-28/05/2019 and validity till 27/05/2021.
Flue gas emission from the stack meets with the specified standards prescribed in the Environment (protection) Rules1986 as amended from time to time for the report period (October 2019 to March 2020)

Stack results of last six month period October-2019 to March-2020:
<table>
<tr><th rowspan="2">No.</th><th rowspan="2">Parameter</th><th rowspan="2">Standard values as per CCA</th><th rowspan="2">Unit</th><th colspan="3">Values for the period Oct 19- Mar 20</th></tr>
<tr><th>Min.</th><th>Max.</th><th>Avg.</th></tr>
<tr><td>1</td><td>PM</td><td>100</td><td>mg/Nm3</td><td>52</td><td>88</td><td>68.1</td></tr>
<tr><td>2</td><td>PM (New Boiler)</td><td>50</td><td>mg/Nm3</td><td>25</td><td>39</td><td>33.6</td></tr>
<tr><td>3</td><td>SO2</td><td>600</td><td>mg/Nm3</td><td>102</td><td>136</td><td>115.8</td></tr>
<tr><td>4</td><td>NOx</td><td>600</td><td>mg/Nm3</td><td>103</td><td>145</td><td>122.4</td></tr>
<tr><td>5</td><td>NOx (NewBoiler)</td><td>300</td><td>mg/Nm3</td><td>93</td><td>105</td><td>100.5</td></tr>
</table>
</td>
</tr>
<tr>
<td>19.</td>
<td>Third party monitoring of the functioning of ESP along with efficiency shall be carried out once in a year through a reputed institute / organization.</td>
<td>Complied.

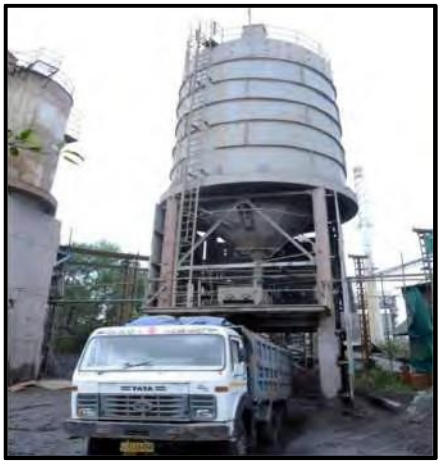
We have regularly monitoring the functioning of ESP along with efficiency by third party once in year through a reputed institute. The monitoring has been carried out and reports of ESP efficacy found satisfactory (i.e. 99.9% efficiency).
We have attached herewith ESP efficiency report through reputed Institute GPCB approved (schedule-II) M/s. Pollucon Laboratories Pvt.Ltd, surat NABL approved TC-5945, issue date-28/05/2019</td>
</tr>
</table>

		and validity till **27/05/2021.**
20.	Lime stone injection technology shall be adopted to control SO2 and it shall be ensured that SO2 levels in the ambient air do not exceed the prescribed standards.	**Complied**. We have adopt lime stone injection technology to control SO2 emission in atmosphere as standard prescribed in the Environment (protection) Rules 1986 as amended from time to time and interconnected with the online emission monitoring system. **Ambient Air quality analysis report shows that maximum concentration of SO_2 is found 14.7 mg/Nm3 at Near West site ETP and minimum concentration is found 4.1 mg/Nm3 at Wyeth colony site during last six month monitoring period (October 2019 to March 2019).** These results are below permissible emission standards mentioned in the Notification by MOEF&CC vide S.O. 3305(E) dated 07/12/2015 during last six month monitoring period **(October 2019 to March 2019)**
21.	The company shall prepare schedule and carry out regular preventive maintenance of mechanical and electrical parts of ESPS and assign responsibility of preventive maintenance to the senior officer of the company.	**Complied**. Our company is ISO 14001 certified company and regular preventive maintenance of all the critical equipment is a part of our system. We have standard preventive maintenance schedule / activities (monthly, By monthly, yearly) of mechanical and electrical parts or equipment's of ESPS. We have recorded the percentage completion of preventive maintenance assigned work as per schedule. These scheduled has been prepared and reviewed / approved by senior officer of the company
22.	Diesel to the tune of 300 Lit/hr shall be used as a fuel in stand –by D. G. Set (1500 KVA)	**Complied**. We have D.G. set of 1010 & 1500 KVA on standby only. Both D.G sets are not started in last six month compliance period (October-19 to March-2020). So that the diesel consumption for the report period is zero.
23.	The flue gas emission from DG set shall be dispersed through adequate stack height as per CPCB standards. At no time the emissions levels shall go beyond the stipulated standards.	**Complied**. Adequate stack height of 11 mt of DG set (1500 KVA) and 10 mt of D.G. set (1010 KVA) as per CPCB standards. Both D.G sets are not started in last six month compliance period (October-19 to March-2020).

	Acoustic enclosure be provided to DG set to mitigate the noise pollution.	**Complied**. We have provided Acoustic enclosure to both DG sets to mitigate the noise pollution in day time and night time.
24.	Online monitoring system shall be installed to monitor the SOx, NOx and SPM in the flue gas stack.	**Complied**. Online monitoring system for SPM, SOx and NOx is already been made and connected to CPCB server. **Photograph of main gate digital display board for ambient air quality.**
		

		
	An arrangement shall also be done for reflecting the online monitoring result on the company's server, which can be assessable by the constructed.	**Complied**. We have arrangement of reflecting the online monitoring result on the company's server, which can be assessable by the constructed.

<table>
<tr>
<td>25.</td>
<td>Adequate storage facility for the fly ash in terms of closed silos shall be provided at site. No pond shall be constructed.</td>
<td>Complied.
We have not constructed ash pond for the CPP unit. We have closed three silo of 200 MT and Two silo of 300 MT capacity of each, total 1200 MT capacity, which is well enough for our average generation of last six compliance report (Oct-19 to Mar-20) approx. 250 TPD. We dispatch the fly ash daily from these silos so we have not prepare ash pond.

Photograph of Closed silos for Fly ash / Bottom ash storage
Fly ash / bottom ash generation data for period (October-2019 to March–2020) as shown below table:

<table>
<tr><th>Fly Ash</th><th>Unit</th><th>Oct 19</th><th>Nov 19</th><th>Dec 19</th><th>Jan 20</th><th>Feb 20</th><th>Mar 20</th></tr>
<tr><td>Generation</td><td>MT</td><td>4765</td><td>4848</td><td>4712</td><td>5170</td><td>5188</td><td>4985</td></tr>
<tr><td>Disposal</td><td>MT</td><td>4765</td><td>4848</td><td>4712</td><td>5170</td><td>5188</td><td>4985</td></tr>
</table>
</td>
</tr>
<tr>
<td>26.</td>
<td>Handling of the fly ash shall be through a closed pneumatic system.</td>
<td>Complied.
We are handling of fly ash through a closed pneumatic system which is shown below:</td>
</tr>
</table>

<table>
<tr><td></td><td></td><td> 

Dense phase pneumatic ash handling system</td></tr>
<tr><td>27.</td><td>Ash shall be handled only in dry state.</td><td>Complied.
We are handling ash only in dry state. Sold to cement and brick manufacturer.</td></tr>
<tr><td>28.</td><td>The unit shall strictly comply with the fly ash Notification under the EPA and it shall ensure that there is 100% utilization of fly ash to be generated from the unit.</td><td>Complied.
We are strictly complying fly ash notification under EPA and we are doing 100 % utilization of fly ash to be generated from the unit during last six month compliance period.
Fly ash / bottom ash generation data for period (October-2019 to March–2020) as shown below table

<table>
<tr><th>Fly Ash</th><th>Unit</th><th>Oct 19</th><th>Nov 19</th><th>Dec 19</th><th>Jan 20</th><th>Feb 20</th><th>Mar 20</th></tr>
<tr><td>Generation</td><td>MT</td><td>4765</td><td>4848</td><td>4712</td><td>5170</td><td>5188</td><td>4985</td></tr>
<tr><td>Disposal</td><td>MT</td><td>4765</td><td>4848</td><td>4712</td><td>5170</td><td>5188</td><td>4985</td></tr>
</table></td></tr>
</table>

29	The fugitive emission in the work zone environment shall be monitored. The emission shall confirm to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health) Following Indicative guidelines shall be also be followed to reduce the fugitive emission.	**Complied**. We are regularly (once in month) monitoring fugitive emission in work zone environment to confirm the standard prescribed by the concerned authorities from time to time. And indicative guidelines are strictly followed to reduce the fugitive emission. Measures adopted to control fugitive emission: • All process pumps shall be provided trays to collect probable leakage. • More weight age on selection of MoC of piping shall be given to avoid leakage/spillage. • Overflow system with return line to day tank/storage tank from batch tank will be provided to prevent hazardous material overflow.

		. • De-dusting system is provided at coal storage area, closed silo system is available to collect fly ash. Covered conveyer belt system is available for transfer of coal. water sprinkle system is available to control dust fugitive emission. • Proper system is provided for decontamination and effective cleaning of drums. • All transfer points are fully enclosed. • All roads are RCC & paved on which movement of raw materials or products are take place. • Maintenance of air pollution control equipments are to be done regularly. • All the workers are working with proper PPE's. i.e boiler shuit, dust mask, safety goggles, face shield, safety shoes etc. • Adequate Green belt is developed around the plant to arrest the fugitive emissions.
	All handing & transport of coal & Lignite shall be exercised through covered coal conveyors only.	**Complied**. All handing & transport of coal & Lignite is done through covered coal conveyors only. 
	Enclosure shall be provided at coal/Ligniteloadinganduploading operations.	**Noted and Complied**. Enclosure is provided at coal / Lignite loading and uploading operations.
	Water shall be sprinkled on coal / Lignite stock piles periodically to retain some moisture in top layer and also while compacting to reduce the fugitive emission.	**Complied**. We are regularly sprinkled water on coal / Lignite stock piles to retain some moisture in top layer and also while compacting to reduce the fugitive emission.

		 **Shed for coal storage**
	All transfer points shall be fully enclosed.	**Noted and Complied**. We have on road coal conveying system through covered coal trucks and in plant coal transferring system through closed conveying system. All transfer points are fullyenclosed.flyashintermsofclosedsilosshallbeprovidedatsite.Handling of the fly ash shall be through a closed pneumatic system.
	Adequate dust suppression / extraction system at crusher house as well as for the coal/ Lignite stock yard and other vulnerable areas shall be provided to abate dust nuisance.	**Complied**. We have provided Adequate dust extraction system (Dust collector) at crusher house is provided While dust suppression system (water sprinkler system) the coal/ Lignite unloading areas to abate dust nuisance.
	Accumulated coal dust / fly ash on the ground and surfaces shall be removed / swept regularly and water the area after sweeping.	**Complied**. We have adopt practice for Coal dust / Fly ash is being cleaned regular basis as per schedule that we have set. We are also ensuring that Coal dust and fine particles are being loaded to coal handling plant after spraying water on it.

	Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.	**Complied**. Paver blocks have been provided in the ESP and some internal area of power plant. Concrete Road have been built in the surrounding area of Power Plant to reduce fugitive emissions during vehicle movement.  **Concrete road at Captive Power Plant**
	Air borne dust shall be controlled with water sprinkles at suitable locations in	**Complied**. Waste water of neutralization pit is being used for dust suppression in Coal plant
	the plant.Coal / Lignite shall be transported through covered trucks only whereas fly ash shall be transported through closed trucks only.	and Fly ash handling units. Covered trucks / closed bulkers are being utilized for handling coal and fly ash.   **Closed truck** **water sprinkler system**
	A green belt shall be developed all around the plant boundary and also the roads to mitigate fugitive & transport dust emission.	**Complied**. Proper plantation is done all around the plant boundar and also the roads to mitigate fugitive & transport dust emission. Total Plot area: 1126078.27 sq.mt Green belt area: 409030.00 sq.mt (approx. 36% of total plot area) Layout plan with green belt is as shown below:

<table>
<tr><td></td><td></td><td>  </td></tr>
<tr><td>30.</td><td>Regular Monitoring of ground level concentration of PM2.5, PM10, NOx, SO2 and Hg shall in the impact zone and its records shall be maintained.</td><td>Complied.

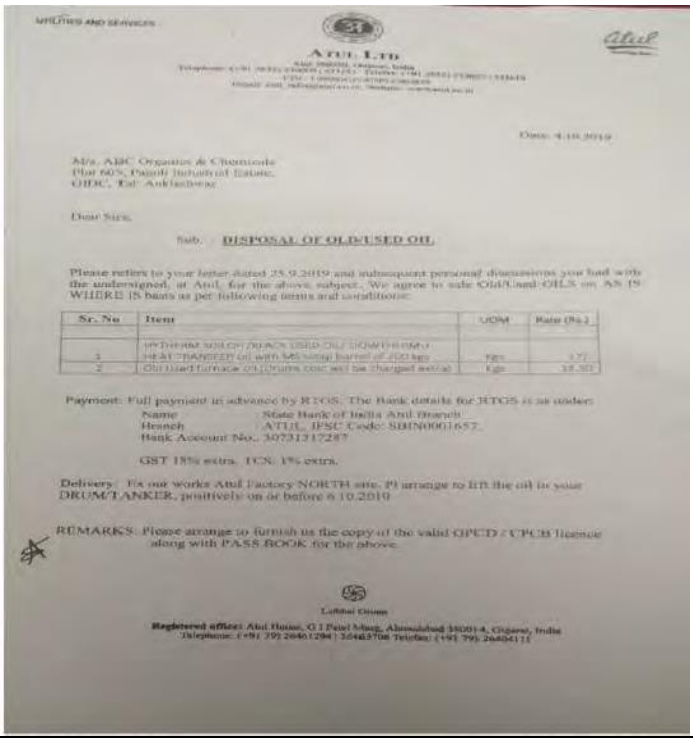
We are regularly monitoring ground level concentration of PM2.5, PM10, NOx, SO2 in ambient air of impact zone and its records are maintained as per schedule.</td></tr>
<tr><td></td><td>Ambient air quality levels shall not exceed the standards stipulated by GPCB.</td><td>Complied.
The Location of ambient air quality monitoring stations had been decided in consultation with GPCB so that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentration are anticipated. This also covers the impact, if any, of the project plant. The same had been shown to authority like SPCB, CPCB &MoEF during their visit to ourfactory.

The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards. Parameter wise summary is given below:

Summary of Ambient Air Quality results:
<table>
<tr><th rowspan="2">Station</th><th rowspan="2">Parameter</th><th rowspan="2">Limit micro gm/NM3</th><th colspan="3">Values for the period Oct 19- Mar 20</th></tr>
<tr><th>Min.</th><th>Max.</th><th>Avg.</th></tr>
</table></td></tr>
</table>

		66 KV (Up wind)	RSPM (PM2.5)	60	19.6	36.8	28.8	
			PM10	100	38.4	52.3	44.0	
			SO2	80	9.4	11.2	10.3	
			NOx	80	13.2	17.5	15.3	
			Ammonia	850	ND	ND	ND	
			HCl	200	ND	ND	ND	
		Opposite Shed D (Up wind)	RSPM (PM2.5)	60	28	38	33	
			PM10	100	35	52	40.3	
			SO2	80	7.9	9.6	8.7	
			NOx	80	8.3	11.2	9.5	
			Ammonia	850	ND	ND	ND	
			HCl	200	ND	ND	ND	
		Near West site ETP (Up Wind)	RSPM (PM2.5)	60	24	45	34.3	
			PM10	100	39	55	43.6	
			SO2	80	7.7	14.7	9.4	
			NOx	80	8.4	15.4	10.5	
			Ammonia	850	ND	ND	ND	
			HCl	200	ND	ND	ND	
		Near North ETP (Up wind)	RSPM (PM2.5)	60	27	44	36.6	
			PM10	100	40	54	44	
			SO2	80	8.3	12.8	10.0	
			NOx	80	8.2	14.2	10.8	
			Ammonia	850	ND	ND	ND	
			HCl	200	ND	ND	ND	
		TSDF (Down wind)	RSPM (PM2.5)	60	26	46	37.8	
			PM10	100	40	50	44.5	
			SO2	80	7.4	10.6	9.0	
			NOx	80	7.6	13.6	10.1	
			Ammonia	850	ND	ND	ND	
			HCl	200	ND	ND	ND	
		Main Guest	RSPM (PM2.5)	60	15	28	21.1	
		House (Down wind)	PM10	100	22	45	37.1	
			SO2	80	4.3	8.4	6.1	
			NOx	80	5.2	9.4	7.5	
			Ammonia	850	ND	ND	ND	
			HCl	200	ND	ND	ND	
		Wyeth Colony	RSPM (PM2.5)	60	10	20	19.6	

		(Down wind)	PM10	100	24	44	35.3
			SO2	80	4.1	7.6	6.35
			NOx	80	4.6	8.6	6.9
			Ammonia	850	ND	ND	ND
			HCl	200	ND	ND	ND
		Gram panchayat hall (Cross wind)	RSPM (PM2.5)	60	12	30	24.3
			PM10	100	29	52	42.5
			SO2	80	6.2	8.6	7.4
			NOx	80	5.7	9.4	7.4
			Ammonia	850	ND	ND	ND
			HCl	200	ND	ND	ND
		Main office, North site (Cross wind)	RSPM (PM2.5)	60	19	35	26.5
			PM10	100	35	52	43.3
			SO2	80	6.4	9.2	7.5
			NOx	80	7.3	10.6	8.5
			Ammonia	850	ND	ND	ND
			HCl	200	ND	ND	ND
		Haria water tank (Cross wind)	RSPM (PM2.5)	60	17.8	37.8	27.5
			PM10	100	24.4	52.2	39.9
			SO2	80	8.8	11.2	9.4
			NOx	80	10.2	15.8	13.4
			Ammonia	850	ND	ND	ND
			HCl	200	ND	ND	ND
	If at any stage these levels are found to exceed the prescribed limits necessary additional control measures shall be taken be decided in consultation with the GPCB.	**Complied**. No such case found till date. Still if these type of situation is come than We have designed and integrated in Plant DCS in such a way that in event of ESP in working not efficiently or something found fault or operation issue due to which flue gas emission go beyond the specified standard prescribed in the Environment (protection) Rules 1986 as amended from time to time than in such cases / occurrence we will intimate to board & authority to stop the operation plant or decrease the load of power plant. We will not restart or increase the load until the control measures are rectified to achieve the 100 percent efficiency.					
	A.4 SOLID/ HAZARDOUS WASTE :						

31.	The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance from time to time.	**Not Applicable** **There is no Hazardous waste generation in Captive Power Plant.**
	Authorization from the GPCB shall be obtained for collection / treatment/storage disposal of hazardous waste.	**Complied**. We have CCA Amendment No. AWH – 82241 dated. 20/09/2016. No hazardous waste is generated. This EC condition is not applicable to us.
32.	Hazardous waste sludge shall be packed stored in separate designated hazardous waste storage facility with impervious bottom and leachate collection facility, before its disposal.	**Not Applicable.** There is no Haz. waste generation in this project.
33.	The used oil shall be sold to only to the registered recyclers / refiners.	**Complied**. Used oil is being sold to GPCB authorized vendor namely ABC Organics & Chemicals. 

ATUL LTD

Date: 4.10.2019

M/s. ABC Organics & Chemicals
Plot 603, Panoli Industrial Estate,
GIDC, Tal: Ankleshwar

Dear Sirs,

Sub.: DISPOSAL OF OLD/USED OIL

Please refer to your letter dated 25.9.2019 and subsequent personal discussions you had with the undersigned, at Atul, for the above subject. We agree to sale Old/Used OILS on AS IS WHERE IS basis as per following terms and conditions:

Sr. No	Item	UOM	Rate (Rs.)
1	HEAT TRANSFER oil with MS metal barrel of 200 kgs	Kgs	3.77
2	Old Used furnace oil (Drums cost will be charged extra)	Kgs	18.50

Payment: Full payment in advance by RTGS. The Bank details for RTGS is as under:
Name : State Bank of India Atul Branch
Branch : ATUL, IFSC Code: SBIN0001657.
Bank Account No.: 30731317287

GST 18% extra. TCS: 1% extra.

Delivery: Ex our works Atul Factory NORTH site. Pl arrange to lift the oil in your DRUM/TANKER, positively on or before 6.10.2019

REMARKS: Please arrange to furnish us the copy of the valid GPCD / CPCB license along with PASS BOOK for the above.

Lalbhai Group

Registered office: Atul House, G I Patel Marg, Ahmedabad 380014, Gujarat, India
Telephone: (+91 79) 26461294 | 30465708 Telefax: (+91 79) 26404115

<table>
<tr><td>34.</td><td>The discarded containers / barrels
/bags/ liners shall be sold only to the registered recycler.</td><td>Complied.
No bags / liners are being utilized for Power Plant.</td></tr>
<tr><td rowspan="2">35.</td><td>For storage of fly ash closed silos of adequate capacity shall be provided.</td><td>Complied.
We are not constructed ash pond to the CPP unit. We have closed three silo of 200 MT and Two silo of 300 MT capacity of each, total 1200 MT capacity, which is well enough for our average generation of approx. 250 TPD. We dispatch the fly ash daily from these silo so we have not prepare ash pound.

<table><tr><th>Fly Ash</th><th>Unit</th><th>Oct 19</th><th>Nov 19</th><th>Dec 19</th><th>Jan 20</th><th>Feb20</th><th>Mar 20</th></tr><tr><td>Generation</td><td>MT</td><td>4765</td><td>4848</td><td>4712</td><td>5170</td><td>5188</td><td>4985</td></tr><tr><td>Disposal</td><td>MT</td><td>4765</td><td>4848</td><td>4712</td><td>5170</td><td>5188</td><td>4985</td></tr></table></td></tr>
<tr><td>No ash pond shall be construed in the project.</td><td>Complied.
No ash pond is construed in the project.</td></tr>
<tr><td>36.</td><td>The fly ash shall be supplied to the manufacturers of fly ash based products such as cement, concrete blocks, bricks, panels, etc.</td><td>Complied. Fly ash is being given to Cement and Bricks manufacturers and also being used for our own Bricks Manufacturing unit.</td></tr>
</table>

<table>
<tr><td></td><td>The unit shall strictly comply with the Fly Ash Notification under EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from theunit.</td><td>Complied.
We are strictly complying fly ash notification under EPA and we are ensuring that that is 100 % utilization of fly ash to be generated from the unit.

Fly ash / bottom ash generation data for period (October-2019 to March-2020) as shown below table:
<table><tr><th>Fly Ash</th><th>Unit</th><th>Oct 19</th><th>Nov 19</th><th>Dec 19</th><th>Jan 20</th><th>Feb 20</th><th>Mar 20</th></tr><tr><td>Generation</td><td>MT</td><td>4765</td><td>4848</td><td>4712</td><td>5170</td><td>5188</td><td>4985</td></tr><tr><td>Disposal</td><td>MT</td><td>4765</td><td>4848</td><td>4712</td><td>5170</td><td>5188</td><td>4985</td></tr></table>
We have done Agreement between Ambuja cement Ltd. And Atul Ltd. For supply of dry ash from Atul Limited, Atul, Valsad, Gujarat.</td></tr>
<tr><td>37.</td><td>All possible efforts shall be made for co-processing of the Hazardous waste prior to disposal into TSDF/CHWIF.</td><td>Not Applicable.
Since there is no Hazardous waste generated in this unit.</td></tr>
<tr><td></td><td>A.5 SAFETY:</td><td></td></tr>
<tr><td>38.</td><td>The project management shall strictly comply with the provisions made in the Factories Act, 1948 as well as manufacturer, storage and Impact of Hazardous chemicals Rules 1989</td><td>Complied.
We are complying all the rules and regulation led by MSIHC,1989.We are complying
with Hazardous and Other Wastes (Managements and transboundary Movement) Rules,2016 towards ETP Sludge, Used Oil & Empty Drums-Handling, and Storage</td></tr>
<tr><td></td><td>as amended in 2000 for handling of hazardous chemicals.</td><td>& Disposal to authorized Facility/TSDF. We have obtained valid authorization from GPCB towards handling of above mention waste vide CC&A Amendment No. AWH
– 82241dated.20/09/2016.Since there is no hazardous waste generated in Captive Power Plant.</td></tr>
<tr><td>39.</td><td>Necessary precautions like continuous monitoring of hot spot (ignite lignite) using temperature detection systems water sprinklers, avoiding stacking of lignite near stream pipeline etc shall be made for storing lignite to prevent fire</td><td>Complied.
Lignite is usually used on the same day of its receiving at site as far as possible. Lignite is not being stored for not more than 3-4 Days. However, Water spray and fire hydrant system is available for the fuel storage sheds.</td></tr>
</table>

	hazard.	
40.	All the risk mitigation measures, general & specific recommendations mentioned in risk Assessments Report shall be implemented.	**Complied**. We will implement All the risk mitigation measures, general & specific recommendations mentioned in risk assessments report.
41.	A well designed fire hydrants system shall be installed as per the prevailing standards.	**Complied.** A well designed Fire hydrant system is adequate and as per standards. **Fire hydrant Network details:** Single Hydrant point: 192Nos. Double hydrant point: 07 Nos. Fixed monitor: 11Nos. Hose boxes: 30 Nos. Central hose station: 10 Nos. Hose pipe: 15 mts. 250 Nos. Branch pipes (jet type): 50 Nos. Foam making branch pipe: 03 Nos. Foam compound: 200 litre Foam generator with high expansion foam: 2 Nos.
42.	Personal protective Equipment shall be provided to worker and its usage shall be ensured and supervised.	**Complied**. PPEs like nose masks, safety goggles, chemical resistive aprons, fire proof apron, Hand gloves, safety helmet, welding goggles, ear mugs, safety shoes etc are providedtotheworkersandutilizationofthePPEsisfollowedstrictlyinPowerPlant.

PHOTOGRAPHS OF ONSITE MOCK DRILL




ATUL
Stores/Accounts/Indentor

ATUL LIMITED
INFRA PC OU
STORES REQUISITION SLIP

13-DEC-19 15:10:08
Page 1 of 1
STR/FM/05/00

Req. Number	: 15192745	Date	: 24-JUL-19
Org Code	: 813	Chargable CC	: 51P01
Org Name	: Infra Engineering (PC	Chargeable CC Name	: STEAM PLANT
Withdrawing CC.	: 01F43		
Withdrwaing cc name	: Mechanical Power House Ca		
Purpose	: safety goggle		

Sr. No.	Item Code	Description	UOM	Item Default Locator	Qty Require
1	2902904104	HONEYWELL SAFETY GOGGLE (ANTI-FOG), MODEL- A700	NO		20

NISHITH_GANDHI

RAISED BY | AUTHORISED BY | ISSUED BY

43.	First Aid Box and required antidotes for the chemical used in the unit shall be readily available in adequate quantity at all the times.	**Complied.** First aid box are kept in each plant and at strategic locations whereas antidotes are kept in the medical Centre.    

<table>
<tr>
<td>44.</td>
<td>Occupational health surveillance of the workers shall be done its records shall be maintained. Pre - employment and periodical medical examination for all the worker shall be undertaken as per the Factories Act &rules.</td>
<td>
Complied.
Being done on regular basis as per the Factories Act & rules.
Occupational health surveillance of the workers is carried out on a regular basis as per section-41 C of the factories act and ruke-68T of Gujarat Factories Rules and records are maintained.
Regular Medical Checkup of all employees are done by in- house Dr. Vishal Mehta (M.B.B.S), Dr. Suman Patel (M.D. Physician) & Dr. Sandip Bhandare (M.B.B.S, AFIH) in following manner;
The following medical checkup has been completed;
Pre-Employment Check-Up (In-house): FY April-19 to March-20
<table>
<tr><th>SN</th><th>Employee</th><th>Qty</th><th>Check-Up</th></tr>
<tr><td>1</td><td>Staff</td><td rowspan="3">6361</td><td rowspan="3">Pre-Employment</td></tr>
<tr><td>2</td><td>Operators</td></tr>
<tr><td>3</td><td>Workers</td></tr>
</table>
Annual Medical Check-Up: FY April-19 to March-20
<table>
<tr><th>SN</th><th>Employee</th><th>Qty</th><th>Check-Up</th></tr>
<tr><td>1</td><td>Staff</td><td rowspan="3">3145</td><td rowspan="3">Annual Checkup</td></tr>
<tr><td>2</td><td>Operators</td></tr>
<tr><td>3</td><td>Workers</td></tr>
</table>
Various types of tests being performed are as below
A.Preemployment Checkup:
Vision, Colour blindness, CBC, Urine, Height, Weight, B/P, Pulse , Habit, Personal History , Family History, Identification Mark
</td>
</tr>
</table>

B. Annual Checkup:
Physical checkup, Vision, Blood, Urine, PFT, ECG

Our occupational health centre & Pathology Lab is equipped with necessary facilities under supervision of factory medical officer with trained three EHS persons.

Medical Facilities:

- First Aid boxes in all plants
- Central Ambulance Room in the middle of the factory
- Two Ambulance Vans. Out of which one is equipped with ICU facilities.
- Medical Center
- Three full time AFIH certified doctors.
- Equipped with 3Beds
- Full equipped Pathological lab with advanced diagnostic equipment
- ECG Equipment
- Cardiac monitor
- Defibrillator
- Finger pulse Oxy meter
- Pulmonary Function Test Apparatus
- 02Administration
- Antidotes with routine Important and ital life saving Drugs
- Tie-up with Kasturba Hospital, Valsad, and Pardi Hospital, Pardi, respectively 7 kms and 3 kms. away from Atul

		we also have tie up with external two hospitals (Pardi Hospital and Kasturba Hospital). We have medical checkup schedule once in quarter for Insecticide plant's employees Other necessary items including First-aid medicines, antidotes and equipment as prescribed in the schedule the under Rule-68 U (b) of the Gujarat factories rules are also been provided..  Atul Ltd Department of Health Laboratory Report Haematology  Atul Ltd Department of Health Laboratory Report Biochemistry Remark: All employ found medically fit to work, no contiguous diseases were observed.
45.	Flameproof fittings shall be provided at the proposed power plant.	**Complied**. Flame proof fittings are provided.

46.	Adequate firefighting facilities shall be provided at the proposed power plant.	**Complied.** Firefighting facilities are adequate. The risk to people after a fire has started shall largely depends on the adequacy and maintenance of means to escape, the alarm system, training of the workforce in fire routine and evacuation procedures at Atul Ltd. management has proposed to employ well-resourced and adequate fire fighting network. Details regarding the firefighting capacity of the unit are given below: ❑ Four full fledged fire hydrant system in the company ❑ Water Storage Capacity - 50 million Liters ❑ Total hydrant post/ monitors –780 ❑ Total length of hydrant line – 15km ❑ Fire Fighting Equipment ❑ DCP 1350 ❑ CO_2 776 ❑ Foam : 05Trolly ❑ Fire Tenders ❑ One fire tender having 1800 Lit water capacity ❑ Second multipurpose fire tenders having 5000 Lit water & 500 Foam ❑ Third Multipurpose tender having facility of DCP-500 Kg, Foam – 500 lit and Water – 4500Lit. ❑ SCBA sets – 35nos. ❑ Emergency alarm system – 532 nos. points spread across the company ❑ Fire station manned round the clock with Siren and Annunciation System. ❑ Regular Testing on every Monday ❑ Smoke detectors in the office and labs ❑ Auto water deluging system at critical reactors ❑ Auto water sprinkler system at tank farms Onsite mock drill and fire fighting Training:

47.	Proper ventilation shall be provide in the work area.	**Complied.** Proper ventilation provided in work area.
48.	All transporting routes within the factory premise shall have paved roads to minimize splashes and spillages.	**Complied**. The roads inside factory are either of cement concrete or Bitumen concrete.  
49.	The project management shall prepare a details Disaster management plan (DMP) for the project as the guidelines from Directors of Industrial safety and Health.	**Complied.** Detailed disaster management plan is already prepared. Please find attached herewith detail disaster management plan was submitted to your goog office vide letter dated **19.12.2019** for the project as the guidelines from Directors of Industrial safety and health. 
	A.6 NOISE:	

On-Site Emergency Plan of M/s Atul Ltd., Atul, Dist: Valsad

PREFACE

Our First Emergency Plan was prepared in 1990 and then after it has been regularly updated as & when required based on learning from various Mock drills and on account of expansion in the facility. Updating of the On site emergency plan was done to incorporate various elements of risks, hazards and consequences that are relevant to our Plants which were taken either from published data or derived from our own experience. Mock drills were conducted to test the plan and improve our emergency preparedness. Also, we had reviewed the potential hazards and assessment earlier done. The results of these exercises, identification and assessment of all credible scenarios, survey of various Rules, Regulations and standards were taken as basis for modifying the On Site Emergency Plan, classification of Emergencies as well as keeping in view the requirements of implementation of ISO 14001:2015 and OHSAS 18001:2015.

As emergencies arise suddenly the necessity to remain always alert and ready with supporting facilities to face them is of paramount importance. This document can't be said to be the complete as it only sets the broad guidelines. It is only by periodically conducting regular table top exercise and mock drills our preparedness will improve which will help us to minimize the consequences of emergencies as and when they arise.

All the key personnel are requested to study the document and become familiar with the contents and disseminate information to those working with them.

Shri. B. N. Mohanan
Whole-Time Director

50.	To minimize the noise pollution the following noise control measures shall be implemented.	**Complied.** We are regularly implemented noise control measures to minimize the noise pollution.
	Selection of any new plant equipment shall be made with specifications of low levels.	**Complied.** All steam vents have attached with Silencers. Low noise level is considered as one of the prime specifications while selecting new machines in Power plant. For Example, Replacement of reciprocating type noisy air compressors by low noise emitting screw air compressors.
	Manufacturer / supplier of major noise generating machines / equipment like air compressor. Feeder pumps, turbine generators, etc shall be instructed to make required design modifications wherever possible regulatory norms with respect to noise generation for individual units.	**Complied.** We are always acknowledge or take care when purchasing of major noise generating machines / equipment like air compressor, feeder pumps, turbine generators, etc, strictly instructed or emphasized to supplier to give less noise generating equipment's as much as possible to regulatory norms with respect to noise generation for individual units.
	Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.	**Complied.** We have routine and preventive maintenance schedule of machinery / equipment's and vehicles to be undertaken to reduce the noise impact.
	Noise suppression measures such as enclosures, buffers and / or protective measures shall be provided.	**Complied**. Acoustic enclosures are provided on DG sets. Silencers have been provided on main steam vent valves of Boilers.
	Employees shall be provided with ear protection measures like earplugs or earmuffs.	**Complied.** We have provided ear protection measures like earplugs or ear muffs to all employees on regular basis.
	Proper oiling lubrication and preventive maintenance shall be carried out of the machineries and equipment to reduce noise generation.	**Complied.** Proper oiling lubrication and preventive maintenance is carried out of the machineries and equipment to reduce noise generation.
	Construction	**Noted &Complied.**

	equipment generating minimum noise vibration shall be chosen.	We are always use minimum noise vibration generation construction equipment.
	Ear plugs and / muffs shall be made compulsory for the construction workers working near the noise generating activities / machines / equipment.	**Complied.** **OurcompanyhaswelllaiddownOHSpolicytouseProperPPE'sbyall employeesin** **plant area.** Ear plugs and / muffs are compulsory for the construction workers working near the noise generating activities / machines / equipment.
	Vehicles and construction equipment With internal combustionengines without proper silencer shall not be	**Noted &Complied.** We are permitted those vehicles and construction equipment with internal combustion engines with proper silencer and spark arrestor.
	allowed to operate.	
	Construction equipment meeting the norms specified by EP Act, 1986 shall only be used.	**Noted &Complied.** We are only using construction equipment meeting the norms specified by EP Act, 1986.
	Noise control equipment and baffling shall be employed ongenerators especially when they are operated near the residential and sensitive areas.	**Noted &Complied.** We are taken care of Noise control equipment and baffling will be employed on generators especially when they are operated near the residential and sensitive areas.
	Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment	Noted &Complied. We are using mufflers on all motorized equipment to reduce noise levels.
51.	The overall noise level in and around the plant area shall be kept well within the prescribed standard by providing noise control measures including acoustic insulation, hoods, silencers, enclosures, vibration, dampers etc. on all sources of noise generation.	**Complied.** The overall noise level in and around the plant area to be kept well within the prescribed standard by providing noise control measures including acoustic insulation, hoods, silencers, enclosures, vibration, dampers etc.on all sources of noise generation provided.

	The ambient noise levels shall confirm to the standards prescribed under the Environment (protection) Act and Rules. Workplace noise levels for workers shall be as per the factories Act and Rules.	**Complied.** The ambient and workplace noise level confirms to the standard prescribed under EPA. The same is being regularly monitored. The maximum values during the compliance period confirms that at no time the noise emission level went beyond the stipulated standards. Summary is given below: Noise monitoring data (October 19 to March 20) is attached as **Annexure III**

Noise level monitoring data (Day Time)

Sr. No.	Location	Permissible Limits, dBA	Values for the period Oct 19-Mar 20		
		75	**Min.**	**Max.**	**Avg.**
1	Near Main guest house	75	55.7	61.2	57.4
2	Near TSDF	75	61.2	64.2	62.6
3	At Wyeth Colony	75	49.7	57.3	53.6
4	Gram Panchayat Hall	75	60.8	63.5	62.7
5	Near Main Office North site	75	59.2	64.5	62.18
6	ETP North site	75	63.2	68.5	64.4
7	Opposite shed D	75	64.7	67.3	66.0
8	ETP West site	75	62.8	68.5	64.5
9	Water tank Haria road	75	53.5	62.6	57.1
10	Near 66KVA substation	75	62.5	68.6	65.0

Noise level monitoring data (Night Time)

Sr. No.	Location	Permissible Limits, dBA	Values for the period Oct 19-Mar 20		
		70	**Min.**	**Max.**	**Avg.**
1	Near Main guest house	70	50.2	52.2	51.2
2	Near TSDF	70	43.7	58.7	55.0

		3	At Wyeth Colony	70	43.7	51.1	47.0
		4	Gram Panchayat Hall	70	53.4	58.4	56.1
		5	Near Main Office North site	70	53.2	57.3	55.5
		6	ETP North site	70	53.2	58.6	54.7
		7	Opposite shed D	70	54.7	62.7	59.7
		8	ETP West site	70	50.3	60.8	57.6
		9	Water tank Haria road	70	50.2	52.2	51.2
		10	Near 66KVA substation	70	43.7	58.7	55.0
	A.7 GREEN BELT AND OTHER PLANTATION.						

52.	The unit shall develop green belt in at least 68000 sq.m area within the premises. Green belt shall comprises of rows of varying height tall native trees with thick foliage in the periphery of the factory premises.	**Complied.** Green belt is developed and we planted more than 50000 plants every year. Green belt is comprised of at least minimum 3 to 4 raw plantation with minimum height of native trees is 5 to 6 mtr with thick foliage in the periphery of the factory premises. Proper plantation is done all around the plant boundary and also the roads to mitigate fugitive & transport dust emission. Total Plot area: 1126078.27 sq.mt Total Green belt area: 409030.00 sq.mt (approx. 36% of total plot area) Green belt area for Captive power plant: 17920.0 sq.mt Layout plan with green belt is as shown below:    

<table>
<tr><td>53.</td><td>The unit shall also take up adequate plantation at suitable open Land on road sides and other open areas in nearby villages or schools in consultation with the Gram panchayat / GPCB and submit an action plan for the same for next three years to the GPCB.</td><td>Complied. We plant more than 50000 plants every year on road sides and other open areas in nearby villages or
<table>
<tr><th>Sr. No.</th><th>Year</th><th>No. of plants planted</th></tr>
<tr><td>1.</td><td>2010-11</td><td>59,200</td></tr>
<tr><td>2.</td><td>2011-12</td><td>68,700</td></tr>
<tr><td>3.</td><td>2012-13</td><td>63,300</td></tr>
<tr><td>4.</td><td>2013-14</td><td>75,600</td></tr>
<tr><td>5.</td><td>2014-15</td><td>81,500</td></tr>
<tr><td>6.</td><td>2015-16</td><td>72,900</td></tr>
<tr><td colspan="2">Total</td><td>4,21,200</td></tr>
</table>
schools in consultation with the Gram panchayat.</td></tr>
<tr><td></td><td>B.OTHER CONDITIONS:</td><td></td></tr>
<tr><td>54.</td><td>In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.</td><td>Complied.
No such case during the repot period. However, if such case happens we ensure to close down the unit.</td></tr>
<tr><td>55.</td><td>All the recommendation , mitigation measures ,environments protection measures and safeguard proposed in the EIA report of the project prepared by M/s ; Eco chem Sales &Service ,surat& submitted vide letter no NIL dated 03/11/2015 and commitments made during presentation before SEAC, proposed in the EIA report shall be strictly adhered to in letter and spirit.</td><td>Complied.
Compliance to all environmental protection measures and safeguards proposed in the project report submitted to ministry is complied as below:-
<table>
<tr><th>S. No</th><th>Potential Impact</th><th>Action to be followed</th><th>Parameters for monitoring</th><th>Frequency of monitoring</th><th>Status of Compliance</th></tr>
<tr><td>1.</td><td>Air emission</td><td>Adequate stack height APCM- Multi Cyclone& Scrubber is provided as APCM

AAQ</td><td>SPM, RSPM, SO2 and NOx, Vehicle logs to be maintained.</td><td>Monthly through NABL Approved external agency</td><td>Stack and APCM Details are provided in EC Compliance Point No.2 of specific</td></tr>
</table></td></tr>
</table>

				within			Conditions Quality of gaseous emission and AAQ is as per Annexure I &II
				the project premises and nearby habitations to be monitored. All vehicles to be PUC certificate.			
		2.	Noise	Noise generating from operation of boiler, cooling towers & plant & M/c area to be	Spot noise level recording.	Monthly through external agency NABL Approved.	Carried out at the periphery of whole plant premises as Annexure III

				monitored			
		3.	Waste water discharge	Compliance to the wastewater discharge standards complete effluent treatment Plant-Primary+ Secondary & MEE, ZLD is achieved.	pH,TSS, TDS,COD,BOD, oil & Grease	Monthly through external agency NABLApproved.	Discharge effluent is analyzed on daily basis.
		4.	Solid/ Haz Waste	Check compliance of HWM rules.	Quantity and quality monitoring	Periodically	Details are provided in EC Compliance Point No.10 of specific Conditions.
		5.	Non routine events and accident al release.	Plant drawn, considering likely emergencies and steps required to prevent/limit consequences	Mock drills and records of the same.	Periodic during process activities.	Every year 4 nos. mock drills carried out in the premise on rotational basis covering all plants.

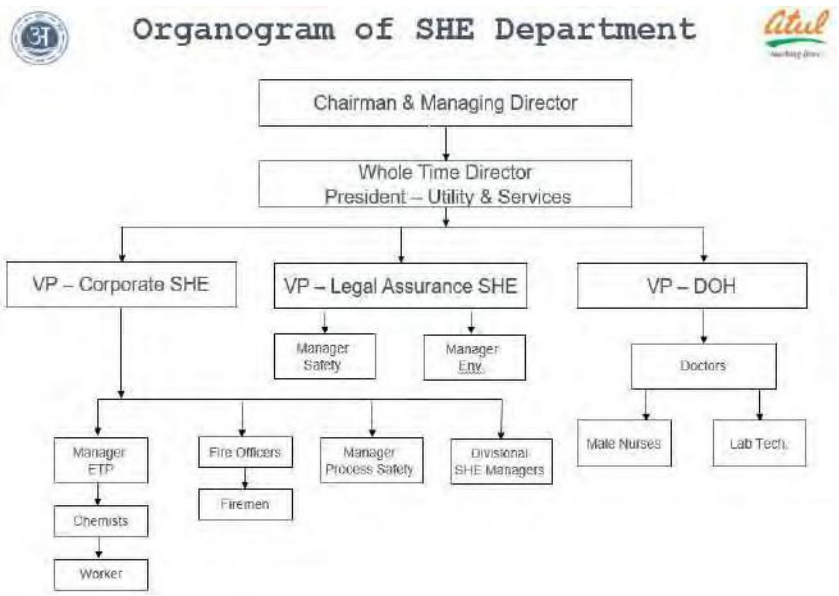
		6.	Green Belts	Vegetation green belt development	More than 50000 no. of plants & species .	Once a year	Green belt area is about 33% landarea. Total area: 1126078.27 sq.mt Green belt area: 409030.00 sq.mt

56.	All the recommendation of CREP guidelines as may be applicable from time to time shall be following vigorously.	**Complied**. CREP guidelines is being followed. Company is following strictly recommendations mentioned in CREP guidelines as follows:-

Activity code No.	Action point (Brief)	Compliance Status as on today	Remarks
1	Implementation of Environmental Standards	Complied	APCM are already in place and maintained. We ensured that at no time the emission level will go beyond the stipulated standards and or prescribed limits by MOEF&CC vide S.O. 3305(E) dated 07/12/2015.
2	Particulate matter emission reduction	Complied	We have installed high efficiency electro static precipitator (4 field) with 99.9% efficiency to control of flue gas emission (particulate matter emission) within the permissible limit from the proposed boilers. Last six month (October-19 to March-2020) monitoring reports shows that Avg. SPM emission is identify 39 mg/Nm3 which is below permissible limit of 50 mg/Nm3.
3	New / expansion power projects to be accorded Environment Clearance	Complied	EC awarded for setting up an additional power plant of 22 MW, Dated20/05/2016 EC No. SEIAA/GUJ/EC/1(d)/340/2016
4	Development of SO2 & NOx emission standards.	NA	Action by CPCB
	Development standards for of	NA	Action by CPCB

				guide mercury lines / & other		
				Review of stack height requirement	NA	Action by CPCB
			5	Install / activate meters / continuous monitoring systems with calibration system.	Complied	All the stacks are equipped with online opacity meter for continuous monitoring and also kept in CC TV camera surveillance. Also Online results are displayed on company main gate.
				Use of beneficiated coal	As soon as it is viable option with respect to its limited availability and proximity of source, will be used.	Currently not available.
			6	Use of abandoned coal mines for Ash disposal	NA	Not Applicable

				Provide dry ash to the users	Complied. Ongoing process	Being given to local brick manufacturers and Cement industries. We have done Agreement between Ambuja cement Ltd. And Atul Ltd. For supply of dry ash from Atul Limited, Atul, Valsad, Gujarat. Dated.21.09.2019.
				Provide dry ash free of cost	Complied	-
				Adhere to schedule by State Dept.	NA	Action by State Dept.
				Environment Clearance Existing plants shall adopt any of systems mentioned in 13(1)	Complied	-
				Fly ash Mission shall prepare guideline	NA	Action by GOI
				New plants shall promote adoption of clean coal & clean power	NA	-
			7	CC&A status	Complied	consent no. **AWH no. 105110** valid up to **30/9/2025**.
			8	Compliance with respect to norms prescribed in CC&A for last one year	Complied	Being checked & verified by Regional Office of GPCB time to time.
			9	Overall compliance with respect to charter (Yes/No)	Yes	Fully complied with all the condition stipulated in EC as well as CC&A.

57.	A separate environment management cell with qualified staff shall be set up for implementation of stipulated environmental safeguards.	**Complied**. Implementation of stipulated environmental safeguards were ensured by the Company's SHE department. 
58.	The project authorities must strictly adhere to stipulations made by the Gujarat Pollution Control Board (GPCB), state government and statutory authority.	**Noted &Complied** We are strictly adhere to stipulations made by the Gujarat Pollution Control Board (GPCB), state government and statutory authority.
59.	No further expansion or modification in the plant likely to cause environmental impacts shall be carried out without obtaining prior	**Complied**. No further expansion or modification in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.

	Environment Clearance from the concerned authority.				
	The above conditions will be enforced, inter-alla under the provisions of water (prevention &Control or pollution) Act, 1974, Air (prevention & Control of pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous & other wastes (Management and Trans boundary Movements) Rules 2016 and the public liability insurance Act, 1991 along with their amendments and rules.	**Noted.**			
			1	CTE	No.77793 dated: 17/05/2016
			2.	CC&A Amendment	No.AWH-82241 dated: 08/11/2016
			3.	Public Liability Insurance	Policy No. 12040036193300000002 Validity: 01/04/19 to 31/03/20 Sum assured: 15.0 Cr
			4.	Factory License	No. 11192 dated: 31/12/2021
			5.	License under Petroleum act,1934 1. Furnace oil 2. Ethanol 3. Kerosene 4. Benzene 5. Methanol	License No. P/HQ/GJ/15/136(P 9747) P/HQ/GH/15/92(97 04) P/HQ/GJ/15/2348(P 167317) P/HQ/GJ/15/138(P 9749) P/HQ/GJ/15/1473(P11115)
			6.	PRESSURE VESSEL/GAS CYLINDER STORAGES 1. Cylinder storage room for Oxygen, Nitrogen, Acytelene. 2. Cylinder storagefor chlorine	G/WC/GJ/06/826 (G13953) G/WC/GJ/06/811 (G13932)
			7.	License under Arms and	No:12 / 90

				Explosive Act 1959 1. Sodium chlorate/Potassium 2. Sulphur yard (storageof sulphur)	No: 8 / 90
			8.	License under Prohibition and Excise Act	
				1. Special DenaturedSpirit 2. Methyl Alcohol	21/89/90 DS-V 45/89/90 MA-1

61. The project proponent shall comply all the conditions mentioned in ' The Companies**(Corporate Social Responsibility Policy)** Rules, 2014 and its amendments from time to time in a letter and spirit.

Complied.

CSR projects (April 2019 to March 2020)

S.N	Description	Location	Final Implementing Agency	Budget from Apr 19 to Mar 20	Expenditure
1	Enhancement of education practices in Kalyani Shala	Atul, Valsad (Gujarat)	AFT | Atul Kelavani Mandal	36.80	36.80
2	Support to tribal children in Atul Vidyamandir	Pardi, Valsad (Gujarat)	AFT | Atul Vidyalaya Trust	6.00	6.00
3	Improvement of teaching methodology in primary schools	91 villages, Valsad (Gujarat)	AFT | ARDF	48.00	48.00

				Adhyapika Project				
			4	Enhancement of rural education	20 villages, Valsad (Gujarat)	AFT | ARDF	10.97	10.97
			5	Promotion of educational facilities in an ashram shala	Pardi, Valsad (Gujarat	AFT | Shree Vallabh Seva Kendra	3.00	3.00
			6	Conservation of manuscripts	Ahmedabad (Gujarat)	AFT | L D Bhartiya Sanskruti Vidya mandir	40.00	40.00
			7	Contribution towards publication of books on Indian culture | ecology | philosophy	Jaipur (Rajasthan)	AFT | Prakrit Bharati Academy	5.00	5.00
			8	Support to develop a school in a tribal area	Chondha, Navsari (Gujarat)	AFT	5.00	5.00
			9	Conduct science workshops for rural teachers	Sabarkantha (Gujarat)	AFT | Vikram A Sarabhai Community Science	3.00	3.00

						Centre		
			10	Support needy children with educational kits	Valsad (Gujarat)	AFT	2.70	2.70
			11	Capacity building of teachers through training	Atul, Valsad (Gujarat)	AFT	0.94	0.94
			12	Introduction of digital education at Sanskrit Mahavidyalaya	Pardi, Valsad (Gujarat)	AFT | Swadhyay Mandal	4.50	4.50
			13	Support children with special needs	Bharuch (Gujarat)	AFT | Osmosis Play Centre and Educational Games Library	2.00	2.00
			14	Empowerment of women through various vocational training courses	Atul, Valsad (Gujarat)	AFT | ARDF	13.48	13.48
			15	Skill training to youth as apprentices	Atul, Valsad (Gujarat)	Atul Ltd	179.25	179.25

			16	Skill development of youth through vocational training	Valsad (Gujarat)	AFT | ARDF	36.20	36.20
			17	Capacity building of tribal farmers in bee keeping	15 villages, Valsad (Gujarat)	AFT | Under The Mango Tree Society	1.40	1.40
			18	Empowerment of tribal families by creating home stay facilities	six villages, Narmada (Gujarat)	AFT	85.00	85.00
			19	Create livelihood opportunities among tribal families by providing cows	28 villages, Valsad (Gujarat)	AFT| BAIF Institute for Sustainable Livelihoods and Development	66.37	66.37
			20	Develop micro entrepreneurs to provide sustainable livelihood	Ozarpada, Valsad (Gujarat)	AFT	37.50	37.50
			21	Support tribal farmers by providing seeds	three villages, Valsad (Gujarat)	AFT | ARDF	1.14	1.14

			22	Improvement of hygiene through construction of toilets	15 villages, Valsad (Gujarat)	AFT | ARDF	32.00	32.00
			23	Enhancement of rural health through health camps	35 villages, Valsad (Gujarat)	AFT | ARDF	9.79	9.79
			24	Upgradation of medical equipment in a hospital	Laxmipura, Sabarkantha (Gujarat)	AFT | Gyan Mandal Laxmipura Group Prerit Arogya Mandal	15.00	15.00
			25	Provision of blood units to the needy and deserted patients	Bharuch (Gujarat)	AFT | Seva Yagna Samiti	2.40	2.40
			26	Promotion of sports among rural youth	Atul, Valsad (Gujarat)	Atul Ltd	11.00	11.00
			27	Contribution for establishing CT scan facility in a hospital	Valsad (Gujarat)	AFT | ARDF | Kasturba Vaidyakiya Rahat Mandal	10.00	10.00

			28	Promotion of health and fitness through marathon	Atul, Valsad (Gujarat)	AFT | ARDF	9.09	9.09
			29	Promotion of sports in rural schools by providing sport kits	Valsad (Gujarat)	AFT	6.15	6.15
			30	Provision of medical assistance to the needy people	Atul, Valsad (Gujarat)	AFT | ARDF	2.79	2.79
			31	Upliftment of quality of life of salt pan workers	Kharagh oda, Surendr ana gar (Gujarat)	AFT | ARDF	2.70	2.70
			32	Provision of blood units to thalassemia patients	Valsad (Gujarat)	AFT | Valsad Raktda n Kendr a	7.00	7.00
			33	Contribution for advance treatment of cancer patients	Karams ad, Anand (Gujarat)	AFT | Charut ar Arogya Mandal	5.00	5.00
			34	Contributio n for community marriage of underprivile ged couples	Valsad (Gujarat)	AFT | Shree Chandr amaule s hwar Mahad evji Sansth apan	2.50	2.50

						Trust | Shree Valsad Taluka Patel Samaj Pragati Mandal		
			35	Support to children with special needs	Bangalore (Karnataka)	AFT | Mathru Foundation	1.00	1.00
			36	Provide financial support to critically ill patients	Valsad (Gujarat)	AFT | Kasturba Vaidyakiya Rahat Mandal	31.25	31.25
			37	Support to families of Indian solders	Pulwama (Jammu and Kashmir)	AFT	2.50	2.50
			38	Provision of free farm kits and fertilisers at subsidised rates to farmers	Haria, Valsad (Gujarat)	AFT | ARDF	3.00	3.00
			39	Support to disaster relief for COVID-19 pandemic	Valsad (Gujarat)	AFT | ARDF	50.00	50.00
			40	Support to families of special children	Valsad (Gujarat)	AFT	19.44	19.44

			41	Provision of infrastructure support for institution building	Chanvai, Valsad (Gujarat)	AFT | World Renewal Spiritual Trust	1.50	1.50
			42	Renovation of anganwadi infrastructree (model anganwadi project)	seven villages, Valsad (Gujarat)	AFT | ARDF	51.00	51.00
			43	Provision of infrastructure support to a crematorium	Atul, Valsad (Gujarat)	AFT | Atul Parnadi Muktidham Trust	5.00	5.00
			44	Provision of infrastructue support to school	Surwadi, Bharuch (Gujarat)	AFT	4.00	4.00
			45	Support to small developme nt activities in nearby villages	Atul, Valsad (Gujarat)	AFT | ARDF	0.48	0.48
			46	Afforestatin	Atul, Valsad (Gujarat)	Atul Ltd | ARDF	5.00	5.00
			47	Establishm ent nt of solid waste managemet system in Atul	Atul, Valsad (Gujarat)	AFT| ARDF	30.00	30.00

				village				
			48	Conservation of coastal area through cleanliness drive	Daman (Daman and Diu)	AFT	1.00	1.00
			49	Plantation of medicinal plants at Kalyani Shala	Atul, Valsad (Gujarat)	AFT	5.51	5.51
			Total				**914.35**	**914.35**
62.	The project proponent shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk .Assessments study repot as well as proposed by project proponent.	**Complied**. All the recommendations suggested in the EMP report and Risk assessments study repot as well as proposed by us have been implemented.						

		Adequate fund embarked for EMP, Fy. 2019-2020: **S.N.** | **Parameter** | **Capital Cost per annum (Rs. in lacs) 2019-20** | **Recurring Cost per annum (Rs. in lacs) 2019-20** 1 | Air Pollution Control | 124.17 | 2444.5 2 | Liquid Pollution Control | 341.7 3 | Environmental Monitoring and Management | 29.3 | 35 4 | Solid waste Disposal | - | 263.87 5 | Occupational health | - | 12 6 | Green belt | - | 5.0 **Total** | **495.17** | **2760.37**
64.	The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and May also be seen at website of SEIAA / SEAC/ GPCB.	**Complied.** **We have informed the public that the project has been accorded environmental clearancebytheSEIAAandthatthecopiesoftheclearanceletterareavailablewith the GPCB and also be seen at website of SEIAA/SEAC/GPCB.**  Infrastructure ATUL LTD Ref : Atul/Assurance/EC Date : February 16, 2019 To, Sarpanch Shri Atul Village, Atul Subject : Environmental Clearance (EC) Ref. : F. No. J-11011/108/2015-IA-II(I) dated 11.02.2019 Respected Madam, We hereby inform you that Atul Ltd located at Atul 396 020, Gujarat has been accorded environmental clearance vide F.no. J-11011/108/2015-IA-II(I) dated February 11, 2019 by the Ministry of Environment, Forest and Climate Change, Government of India for the proposed project of expansion of chemicals manufacturing unit. Ft find attached herewith The hard copy of the same in accordance to the condition stipulated in the referred EC for your references and record. Kindly acknowledge the receipt of the same. Thanking you. Yours truly, For Atul Ltd (H. M. Desai) (General Manager- Assurance EHS) Received copy 16/2/19  ATUL LTD Ref. : Atul/Assurance/EC 2019/Adv Through Reg. AD Post Date : February 22, 2019 To, Regional Officer, Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No. 3, E-5, Ravi Shankar Nagar, Bhopal 462016, Madhya Pradesh. Subject : Advertisement for receiving EC Reference : EC F no. J-11011/108/2015-IA-II(I) dated February 11, 2019 Respected Sir, We have been accorded environmental clearance vide F no. J-11011/108/2015-IA-II(I) dated February 11, 2019 by the Ministry of Environment, Forest and Climate Change, Government of India for the proposed project of expansion of chemicals manufacturing unit. As per the condition no. xvi of referred EC, we have published the advertisement of finalising EC in leading newspapers of region; 2 non- in vernacular language and one in English. All three advertise were published on 17th February 2019. Copy of same is attached herewith. Trust the same is in order. Submitted for your record please. Thanking you, Yours truly, For Atul Ltd. H. M. Desai (General Manager- Assurance EHS)

	This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarat	**Complied.** We have given advertisement dated 29.05.2016 in local newspapers that are widely circulated in the region, one of which is given in the Gujarati language and the other in English.
	A copy each of the same shall be forwarded to the concerned Regional office of the Ministry.	**Complied.** A copy each of the same forwarded to the concerned Regional office of the ministry.
65.	The project proponent shall also comply with additional conditions that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.	**Complied.** No additional conditions so far imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.

<table>
<tr>
<td>66.</td>
<td>It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and condition in hard and soft copies to the regulatory authority concerned on 1st June and 1st December of each calendar year.</td>
<td>Complied.
We regularly submit the half-yearly compliance report.
The implementation of the project along with environmental actions plans are monitored by the authority time to time. We have already submitted the 6 monthly compliance reports to the authority for all six monthly periods between 2016 to 2019 & same is being updated on website.
<table>
<tr><th>SN</th><th>EC Compliance Report Period</th><th>Submission Date</th></tr>
<tr><td>1</td><td>June-16 to November-16</td><td>27/01/2017</td></tr>
<tr><td>2</td><td>Dec-16 to May-17</td><td>17/07/2017</td></tr>
<tr><td>3</td><td>May-17 to October-18</td><td>30/11/2017</td></tr>
<tr><td>4</td><td>Nov-17 to April-18</td><td>30/07/2018</td></tr>
<tr><td>5</td><td>May -18 to October-18</td><td>31/12/2018</td></tr>
<tr><td>6</td><td>Nov -18 to April -19</td><td>23/07/2019</td></tr>
<tr><td>7</td><td>April – 19 to September</td><td>19/12/2019</td></tr>
</table>
</td>
</tr>
<tr>
<td>67.</td>
<td>Concealing factual data or submission of false / fabricated data and failure to comply with any of conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.</td>
<td>Noted.</td>
</tr>
</table>

68.	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	**Complied.**
69.	The SEIAA may revoke or suspend the clearance. If implementation of any of the above conditions is not found satisfactory.	**Noted.**
70.	The company in a time bound manner shall implement these conditions. The SEIAA reserves the stipulate additional conditions, if the same is found Necessary.	**Noted.**
71.	The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	**Complied.** We have communicated with the regional officer of MoEF&CC towards the status of work and financial closure time to time. We have also submitted six monthly EC Compliance report periodically in which said information were updated time to time. **Consent to Establish obtained from GPCB vide letter no. GPCB/CCA-VSD-313(12)/ID:23158/306616 Dated: 17/05/2016.**

72.	This environmental clearance is valid for seven years from the date of issue.	**Noted**.
73.	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 day as prescribed under section 16 of the National Green Tribunal Act, 2010.	**Noted**

Annexure I

Flue gas stack result

Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
East site									
1	FBC boiler E1	PM	100 mg/Nm3	65	53	71	63	76	78
		SO_2	600 mg/Nm3	110	124	112	104	112	115
		NOx	600 mg/Nm3	137	145	126	125	106	103
2	FBC boiler E2	PM	100 mg/Nm3	73	68	68	78	82	88
		SO_2	600 mg/Nm3	126	132	107	112	109	108
		NOx	600 mg/Nm3	140	137	119	117	121	116
3	FBC boiler E3	PM	100 mg/Nm3	78	59	75	65	72	75
		SO_2	600 mg/Nm3	136	128	116	108	113	114
		NOx	600 mg/Nm3	129	132	126	112	126	120
4	Hot Oil Unit (Resorcinol Plant)	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	24	24	36	28	22	25
5	DG set 1010 KVA (Standby)	PM	150 mg/Nm^3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
West Site									
6	FBC boiler W1	PM	100 mg/Nm3	53	60	52	70	58	55
		SO_2	600 mg/Nm3	102	112	104	118	119	120
		NOx	600 mg/Nm3	122	124	123	104	113	116
7	Hot Oil Plant shed-B	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	30	30	40	32	20	21
8	Oil burner Shed B (Stand By)	PM	150.0 mg/Nm3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
9	Boiler (50 TPH 2 Nos) (New boilers) W2,W3	PM	50 mg/Nm3	25	32	34	37	39	35
		SO_2	600 mg/Nm3	127	132	108	116	120	110
		NOx	300 mg/Nm3	93	102	98	102	103	105
		Mercury	0.03 mg/Nm3	ND	ND	ND	ND	ND	ND
10	DG set 1500 KVA (Stand By)	PM	150.0 mg/Nm3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
North Site									
11	Thermic fluid heater of DCO/DAP Plant	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	24	24	32	30	28	26

Annexure II

Ambient Air Monitoring details

Station	Parameter	Limit micro gm/NM3	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20
66 KV	PM 2.5	60	21.3	19.6	32.2	29.6	33.7	36.8
	PM10	100	43.5	38.4	45.3	40.4	44.2	52.3
	SO2	80	9.8	10.4	9.4	10.4	11.2	10.8
	NOx	80	16.4	17.5	16.2	13.5	13.2	15.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Opposite Shed D	PM 2.5	60	21.3	28	32	38	32	36
	PM10	100	43.5	35	39	35	39	42
	SO2	80	9.8	7.9	9.6	8.4	9.6	8.2
	NOx	80	16.4	8.3	9.3	9.2	9.3	10.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Near West site ETP	PM 2.5	60	24	24	27	45	36	38
	PM10	100	39	39	42	39	42	45
	SO2	80	8.7	8.7	8.4	14.7	8.4	8.7
	NOx	80	9.4	9.4	8.4	15.4	8.4	11.4
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Near North ETP	PM 2.5	60	27	27	29	40	40	44
	PM10	100	40	40	44	40	42	44
	SO2	80	8.3	8.3	9.6	12.8	9.6	10.8
	NOx	80	8.6	8.6	8.2	14.2	8.2	12.8
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
TSDF	PM 2.5	60	26	26	28	42	43	46
	PM10	100	46	46	46	42	40	43
	SO2	80	7.4	7.4	8.2	10.6	8.2	9.8
	NOx	80	8.1	8.1	7.6	11.5	7.6	13.6
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Main Guest House	PM 2.5	60	15	15	15	28	19	24
	PM10	100	25	25	22	45	42	44
	SO2	80	4.5	4.5	4.3	8.4	7.8	6.3

	NOx	80	5.2	5.2	6.2	9.4	8.2	7.8
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Wyeth Colony	PM 2.5	60	10	10	17	25	20	22
	PM10	100	26	26	24	42	39	37
	SO2	80	4.1	4.1	5.4	7.2	6.7	7.6
	NOx	80	4.6	4.6	5.3	8.2	7.4	8.6
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Gram panchayat hall	PM 2.5	60	12	12	22	30	28	29
	PM10	100	29	29	32	49	48	45
	SO2	80	6.2	6.2	6.3	8.6	7.8	8.2
	NOx	80	5.7	5.7	7.2	9.4	8.2	7.3
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Main office, North site	PM 2.5	60	19	19	24	35	30	26
	PM10	100	35	35	38	52	48	49
	SO2	80	7.2	7.2	6.8	9.2	8.4	7.3
	NOx	80	7.3	7.3	8.1	10.6	9.6	8.3
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Haria water tank	PM 2.5	60	18.3	18.3	17.8	28.2	37.8	30.8
	PM10	100	24.4	24.4	32.7	42.2	42.7	45.2
	SO2	80	9.5	9.5	8.8	11.2	8.8	8.8
	NOx	80	15.8	15.8	14.5	14.3	11.5	10.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND

Annexure III

Noise level monitoring data (Day Time)

Sr. No	Location	Noise Level, dBA						Permissible Limits, dBA
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	75
1	Near Main guest house	56.7	59.7	55.7	55.7	55.7	61.2	75
2	Near TSDF	64.2	61.2	62.3	62.3	62.3	63.7	75
3	At Wyeth Colony	57.3	49.7	53.5	53.5	53.5	54.4	75
4	Gram Panchayat Hall	62.4	60.8	63.5	63.5	63.5	62.5	75
5	Near Main Office North site	60.2	59.2	64.5	64.5	64.5	60.2	75
6	ETP North site	64.3	68.5	63.2	63.2	63.2	64.4	75
7	Opposite shed D	64.8	64.7	66.4	66.4	66.4	67.3	75
8	ETP West site	68.5	62.8	63.7	63.7	63.7	65.5	75
9	Water tank Haria road	59.7	62.6	53.5	53.5	53.5	60.2	75
10	Near 66KVA substation	63.3	68.6	65.2	65.2	65.2	62.5	75

Noise level monitoring data (Night Time)

Sr. No	Location	Noise Level, dBA						Permissible Limits, dBA
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	70
1	Near Main guest house	50.2	52.2	50.6	50.6	51.6	52.2	70
2	Near TSDF	55.7	58.7	54.2	54.2	53.2	54.4	70
3	At Wyeth Colony	44.7	43.7	46.1	46.1	51.1	50.3	70
4	Gram Panchayat Hall	57.3	54.8	58.4	58.4	53.4	54.3	70
5	Near Main Office North site	57.3	54.8	54.2	54.2	56.8	56.2	70
6	ETP North site	58.6	55.3	53.6	53.6	53.2	54.4	70
7	Opposite shed D	60.2	57.3	62.7	60.7	59.2	58.3	70
8	ETP West site	57.8	59.8	60.8	57.8	54.7	55.1	70
9	Water tank Haria road	52.3	55.8	50.3	52.3	54.7	53.2	70
10	Near 66KVA substation	57.2	53.8	63.2	57.2	56.4	55.1	70

COMPLIANCE OF ENVIRONMENTAL CLEARANCE

NO.:F. No. J-11011/108/2015-IA-II (I) , Dated: 11/02/2019

Period – OCTOBER 2019 TO MARCH 2020

Expansion of Chemicals Manufacturing Unit By Atul Ltd, Valsad, Tehsil & Dist-Valsad,

CONDITION	COMPLIANCE STATUS
A SPECIFIC CONDITIONS:	
i Consent to Establish/ Operate for the project shall be obtain from the State Pollution Control Board as required under the Air (prevention and control of pollution) Act, 1981 and the Water (prevention and control of pollution)Act, 1974.	Complied. We have obtained CTE after receiving ToR. CTE was granted by GPCB Vide No. GPCB/CCA- VSD- 313(12)/ID: 23158/363958 on 25.7.2016 (CTE no. 80394) Valid Till-17/7/2023. We had applied for amendment in existing CTO after receiving EC. CTO amendment has been granted by GPCB Vide Letter No. GPCB/CCA-VSD-313(16)/ID: 23158/513897, Dated 17.7.2019 (CTO amendment No. AH 102080), Valid Till-03.11.2019. Renewal for the same has been granted till 30.9.2025 Copy of CTE and CTO was submitted to Ministry vide our letter Atul/SHE/MoEF dated 19.12.2019  GUJARAT POLLUTION CONTROL BOARD PARYAVARAN BHAVAN Sector-10-A, Gandhinagar-382 010 Phone : (079) 23226295 Fax : (079) 23232156 Website : www.gpcb.gov.in BY R/PAD "Consent to Establish" (ROC) CTE-80394 TO, M/S. ATUL LIMITED, PLOT NO.5,6,29,30,31,34,35,37,38,80,81,84,85,91 AT & P.O.ATUL, PIN-396227, DIST: VALSAD. Sub: Consent to Establish (amendment) under Section 25 of Water Act, 1974 and Section 21 of Air Act 1981 Ref: Your application inward no. 104410 dated 27/04/2016 environmental consultant. Sir, Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants Consent to Establish (amendment) for expansion of production quantity in an existing industrial plant/activities (details) at Plot No.5,6,29,30,31,34,35,37,38,80,81,84,85,91, At & P.O.-Atul, Pin-396020 Dist: Valsad for manufacturing of the following products: Sr. No. / Product / Existing Capacity (TPM) / Proposed Capacity (TPM) / Total Capacity (TPM) 1 Dyes 1,330.80 583.33 1,914.13 2 Chloro – Alkali Industry 3,430.00 4,100.00 7,500.00 3 Pesticide Technical 2,644.07 261.64 2,905.71 4 Bulk Drugs & Pharmaceuticals 350.60 0.00 350.60 5 Resin 2,990.90 441.67 3,432.57 6 Other Chemicals 20,551.60 681.00 21,202.60 7 Flavors & Fragrances 0.00 733.32 733.32 Total 31,237.96 6,770.95 38,008.91 8 Phosgene 2844 MT/Year 2156 MT/Year 5000 MT/Year The Validity period of the order will be seven years from date of issue, i.e. upto 17/07/2023. SUBJECT TO THE FOLLOWING CONDITIONS :- • This unit shall not install plant and machinery and shall not start any activities without obtaining Environment Clearance from the MOEF/CC, New Delhi, Government of India. Clean Gujarat Green Gujarat ISO - 9001 - 2008 & ISO - 14001 - 2004 Certified Organisation  GUJARAT POLLUTION CONTROL BOARD PARYAVARAN BHAVAN Sector-10-A, Gandhinagar 382 010 Phone : (079) 23222425 (079) 23232152 Fax : (079) 23232156 Website : www.gpcb.gov.in R.P.A.D. NO: GPCB/CCA-VSD-313(16) /ID: 23158/ 513897 Date: 17/07/2019 TO, M/S. ATUL LIMITED, PLOT NO.5,6,29,30,33,34,35,37,38,80,81,84,85,91 AT & P.O ATUL-396020, TAL: VALSAD, DIST: VALSAD. SUB: Amendment (AH- 102080) to Consolidated Consent & Authorization (CC & A) under various Environmental Acts/ Rules. REF: 1) Your Application inward No.155104 dated: 26/04/2019. 2) CTE issued vide this office letter dated: 25/07/2016. Sir, The Gujarat Pollution Control Board had granted Consolidated Consents & Authorization Order No. AWH- 87717dated 04/11/2014, Which is valid up to 03/11/2019. This order was served vide letter No. GPCB/CCA-VSD-313/ID-23158/306516 dated: 10/03/2015 is further amended with respect of following conditions. Sr. No. / Product / Existing Capacity (TPM) / Proposed Capacity (TPM) / Total Capacity (TPM) 1 Dyes 1,330.80 583.33 1,914.13 2 Chloro – Alkali Industry 3,430.00 4,100.00 7,500.00 3 Pesticide Technical 2,644.07 261.64 2,905.71 4 Bulk Drugs & Pharmaceuticals 350.60 0.00 350.60 5 Resin 2,990.90 441.67 3,432.57 6 Other Chemicals 20,551.60 681.00 21,202.60 7 Flavors & Fragrances 0.00 733.32 733.32 Total 31,237.96 6,770.95 38,008.91 8 Phosgene 2844 MT/Year 2156 MT/Year 5000 MT/Year SPECIFIC CONDITIONS:- (i) The unit shall manufacture the Phosgene gas in fully automated plant having multi levels of safety provisions. (ii) Unit will utilize the Phosgene gas immediately after its generation for their captive purpose only. (iii) Unit shall submit production data of Phosgene every month to this office. (iv) Unit shall use pipeline in case of emergency like breakdown, preventive maintenance only when old pipeline is under maintenance and unit shall get prior permission from Regional Office, Vapi before use of new pipeline. (v) Unit shall comply undertaking dated: 08/07/2016 given to the board. M/s. Atul Limited (PCB ID-23158) Page 1 of 5 Clean Gujarat Green Gujarat ISO-9001-2008 & ISO-14001 - 2004 Certified Organisation

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<td>ii
The treated effluent of 3335 cum/day shall be recycled/reused to meet the requirement of different industrial operations, and the remaining treated effluent of 20514 cum/day shall be discharge to estuary of Par River through the existing pipeline.</td>
<td>Complied.
The treated effluent recycled in system is Avg.306 KL/Day during the reported period from October 2019 to March 2020 which is well below the stipulated norms.
<table>
<tr><th>Sr No</th><th>Month</th><th>Total Recycle</th><th>Avg KL/Day</th></tr>
<tr><td>1</td><td>October-19</td><td>9891</td><td>319</td></tr>
<tr><td>2</td><td>November-19</td><td>9827</td><td>328</td></tr>
<tr><td>3</td><td>December-19</td><td>8654</td><td>279</td></tr>
<tr><td>4</td><td>January-20</td><td>9941</td><td>321</td></tr>
<tr><td>5</td><td>February-20</td><td>8776</td><td>303</td></tr>
<tr><td>6</td><td>March-20</td><td>8870</td><td>286</td></tr>
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Remaining about **Avg 8327 KL/Day** treated effluent has been discharged to estuary of Par river through the existing pipeline after achieving norms stipulated, which well within below limit as prescribed in stipulated condition.

Sr No	Month	Effluent Discharged to Estuary of Par River	KL/Day
1	October-19	291813	9413
2	November-19	257071	8569
3	December-19	282245	9105
4	January-20	254951	8224
5	February-20	225463	7775
6	March-20	213113	9874

The Waste Water analysis at ETP outlet is monitored at regular interval for ensuring the compliance. The testing lab appointed is **M/s. Pollucon Laboratories Pvt Ltd**, Surat **NABL Approved TC – 5945**, issue date-**28/05/2019** and valid till **27/05/2021.**
The analysis reports were within the permissible limits. A detail of analysis report of Monitoring report is attached in **Annexure-I**

Monitoring details of final effluent discharged are as follows:

S.NO	PARAMETER	UNIT	LIMIT	Values for the period Oct 19- Mar 20		
				Min	Max	Avg
1	pH		5.5-9.0	6.23	8.19	7.19
2	Temperature	°C	40	30.1	31.8	31.09
3	Colour	Co-pt	---	78	140	92.86
4	Suspended solids	mg/L	100	62	98	79.57
5	Phenolic Compounds	mg/L	5	0.039	0.088	0.05
6	Cyanides	mg/L	0.2	ND	ND	ND
7	Fluorides	mg/L	2	0.62	0.75	0.69
8	Sulphides	mg/L	2	0.9	1.8	1.23
9	Ammonical Nitrogen	mg/L	50	34	48	41.00
10	Total Chromium	mg/L	2	ND	ND	ND
11	Hexavalent Chromium	mg/L	1	ND	ND	ND
12	BOD (3 days at 27°C)	mg/L	100	57	78	64.29
13	COD	mg/L	250	205	240	218.29

iii Necessary authorization required under the Hazardous and other Wastes Management Rule, 2016 shall be obtain and the Provisions contained in the Rules shall bestrictly adhered to.	**Complied.** We have obtained necessary authorization for Hazardous and other waste by obtaining Amendment in Existing CTO after receiving EC. CTO amendment has been granted by GPCB Vide Letter No. **GPCB/CCA-VSD-313(16)/ID: 23158/513897**, Dated **17.7.2019** (CTO amendment No. **AH 102080**), Valid Till-**03/11/2019**. Renewals for the same has been received vide CCA (**AWH-105110** valid till **30.9.2025**). We have our own TSDF, Incinerator facility for safely management and disposal of hazardous waste generated in their premises. The following are amended for Hazardous and other waste as follows.-

Hazardous Waste Disposal & Management

Name of waste	Waste Authorization as per CCA (In Kgs.)	Waste (Kgs/Month)						
		Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Disposal
Iron Sludge	80000	6000	11420	7340	16060	19495	6200	Own TSDF
Iron Residue	62500	6660	24970	49670	27910	10320	10200	Own TSDF
Brine Sludge	242500	17710	22040	0	32860	61270	30260	Own TSDF
ETP/ Gypsum Sludge	4973667	723120	711860	727310	717520	666476	581161	Own TSDF
Salt from MEE	1678710	37180	42730	59080	93870	138600	75300	Own TSDF
Hyflo	15750	7100	14880	15700	14760	15700	12500	Own Incineraor.
Waste / Salt Lime Dust	5000	3200	4800	4800	3200	5000	4900	Own TSDF
Total		**800970**	**832700**	**886390**	**909780**	**916861**	**81100**	
Epoxy Resin	130000	75310	153550	163080	140660	63740	57260	Co-Pro
Spent	40000	14180	37230	31670	40010	42180	44300	Co-Pro

	Carbon								

iv National Emission Standards for organic chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) Dated 21 July, 2010 and Amended from time to time Shall be followed.

Noted & Complied.

We have been following the Standards for National Emission Standards since beginning. The Location of ambient air quality monitoring stations had been decided in consultation with GPCB so that at least one station is installed in the up wind and downwind direction as well as where maximum ground level concentration are anticipated. This also covers the impact, if any, of the project plant. The same had been shown to authority like SPCB, CPCB &MoEF during their visit to our factory. In total we had selected 10 Locations, and monitored successfully. Results are attached herewith.

The Ambient Air Quality is being monitored at regular interval for ensuring the compliance. The testing lab appointed is **M/s. Royal Environment Auditing & Consultancy Service,** Surat **NABL** Approved **TC – 5948, issue date-01/06/2019** and **valid till 31/05/2021.**

The analysis reports were within the permissible limits. A detail of analysis report of Monitoring report is attached in **Annexure-II**

The maximum values during the compliance period confirm that at no time the emission level went beyond the stipulated standards. Parameter wise summary is given below:

Ambient Air Monitoring Report as per National Emission Standards:-

Station	Parameter	Limit microgram/NM^3	Values for the period Oct 19- Mar 20		
			Min.	Max.	Avg.
66 KV GEB	RSPM (PM2.5)	60	19.6	36.8	28.8
	PM10	100	38.4	52.3	44.0
	SO2	80	9.4	11.2	10.3
	NOx	80	13.2	17.5	15.3
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
Opposite Shed D	RSPM (PM2.5)	60	28	38	33
	PM10	100	35	52	40.3
	SO2	80	7.9	9.6	8.7
	NOx	80	8.3	11.2	9.5
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
Near West site ETP	RSPM (PM2.5)	60	24	45	34.3
	PM10	100	39	55	43.6
	SO2	80	7.7	14.7	9.4
	NOx	80	8.4	15.4	10.5
	Ammonia	850	ND	ND	ND
	HCl	200	ND	ND	ND
	RSPM (PM2.5)	60	27	44	36.6

Near North ETP	PM10	100	40	54	44	
	SO2	80	8.3	12.8	10.0	
	NOx	80	8.2	14.2	10.8	
	Ammonia	850	ND	ND	ND	
	HCl	200	ND	ND	ND	
TSDF	RSPM (PM2.5)	60	26	46	37.8	
	PM10	100	40	50	44.5	
	SO2	80	7.4	10.6	9.0	
	NOx	80	7.6	13.6	10.1	
	Ammonia	850	ND	ND	ND	
	HCl	200	ND	ND	ND	
Main Guest House	RSPM (PM2.5)	60	15	28	21.1	
	PM10	100	22	45	37.1	
	SO2	80	4.3	8.4	6.1	
	NOx	80	5.2	9.4	7.5	
	Ammonia	850	ND	ND	ND	
	HCl	200	ND	ND	ND	
Wyeth Colony	RSPM (PM2.5)	60	10	20	19.6	
	PM10	100	24	44	35.3	
	SO2	80	4.1	7.6	6.35	
	NOx	80	4.6	8.6	6.9	
	Ammonia	850	ND	ND	ND	
	HCl	200	ND	ND	ND	
Gram panchayat hall	RSPM (PM2.5)	60	12	30	24.3	
	PM10	100	29	52	42.5	
	SO2	80	6.2	8.6	7.4	
	NOx	80	5.7	9.4	7.4	
	Ammonia	850	ND	ND	ND	
	HCl	200	ND	ND	ND	
Main office, North site	RSPM (PM2.5)	60	19	35	26.5	
	PM10	100	35	52	43.3	
	SO2	80	6.4	9.2	7.5	
	NOx	80	7.3	10.6	8.5	
	Ammonia	850	ND	ND	ND	
	HCl	200	ND	ND	ND	
Haria water tank	RSPM (PM2.5)	60	17.8	37.8	27.5	
	PM10	100	24.4	52.2	39.9	
	SO2	80	8.8	11.2	9.4	
	NOx	80	10.2	15.8	13.4	
	Ammonia	850	ND	ND	ND	
	HCl	200	ND	ND	ND	

V To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/ or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB Guidelines.	**Complied.** For controlling source & Fugitive emissions in the work zone environment and raw material storage area is being regularly monitored by NABL approved third party. Further also numbers of gas detectors are provided in work area for close monitoring. M/s. Atul Ltd has installed various APCM, special hood, suction pipe for gases emission, Alkaline scrubber and has stack height as per stipulated condition & CPCB guidelines. Elephant trunk with flexible hoods are also provided at potential leak points, sampling points, man holes, charging points and connected with scrubbers. M/s Atul Ltd. is also monitoring VOC as well as other chemicals in work area as per Factories Act and records are being maintained in Form No. 37. Solvents are stored in tank farms in separate tanks with proper earthing, flame arresters, lightening arresters, fencing, Fire hydrant system, Fire extinguishers, flame proof equipment, etc. safety measures. Dedicated Scrubbers with stacks of appropriate height (as per the central pollution control board guideline) have been provided to control the emission from various vents. Central exhaust system has been provided at strategic locations and the critical operations evolving the hazardous gases are routed through multiple stages scrubbing system. The maximum values during the compliance period confirm that at no time the emission level went beyond the stipulated standards. Parameter wise summary is given below, detailed analysis report are attached as **Annexure-III** The Flue & Process Stack is being monitored at regular interval for ensuring the compliance. The testing lab appointed is **M/s. Royal Environment Auditing & Consultancy Service**, Surat **NABL** Approved **TC – 5948**, issue date-**01/06/2019** and valid till **31/05/2021.** 1. Flue Gas Stacks & Its Emission Control Measures:-

SN	Stack Details	Capacity/ Stack Htm	Parameter	Permissible Limits	APCD	Fuel
1	FBC boiler E1	34/56	PM	100 mg/Nm3	Electro static precipitator	Coal/ Lignite
			SO_2	600 mg/Nm3		
			NOx	600 mg/Nm3		
2	FBC boiler E2	34/56	PM	100 mg/Nm3	Electro static precipitator	Coal/ Lignite
			SO_2	600 mg/Nm3		
			NOx	600 mg/Nm3		
3	FBC boiler E3	50/80	PM	100 mg/Nm3	Electro static precipitator	Coal/ Lignite
			SO_2	600 mg/Nm3		
			NOx	600 mg/Nm3		
4	FBC boiler W1	45/70	PM	100 mg/Nm3	Electro static precipitator	Coal/ Lignite
			SO_2	600 mg/Nm3		
			NOx	600 mg/Nm3		
5	Boiler (50 TPH2 Nos) (New boilers)W2,W3	50/106	PM	50 mg/Nm3	Electro static precipitator	Coal/ Lignite
			SO_2	600 mg/Nm3		
			NOx	300 mg/Nm3		

6	Hot Oil Unit (Resorcinol Plant)	32.5	PM	150 mg/Nm3	-	CNG	
			SO_2	100 ppm			
			NOx	50 ppm			
7	Hot Oil Plant shed-B	H: 19	PM	150 mg/Nm3	-	CNG	
			SO_2	100 ppm			
			NOx	50 ppm			
8	Hot Oil Plant shed-B (Stand By)	H: 17	PM	150 mg/Nm3	-	CNG	
			SO_2	100 ppm			
			NOx	50 ppm			
9	Thermic fluid heater of DCO/DAP Plant	H: 12	PM	150 mg/Nm3	-	CNG	
			SO_2	100 ppm			
			NOx	50 ppm			
10	DG set 1010 KVA(Standby)	H: 10	PM	150 mg/Nm3	-	Diesel	
			SO_2	100 ppm			
			NOx	50 ppm			
11	DG set 1500 KVA (Stand By)	H: 11	PM	150 mg/Nm3	-	Diesel	
			SO_2	100 ppm			
			NOx	50 pm			

2. Process Gas Stacks & Its Emission Control Measures:-

Sr. No.	Stack Details	Stack Ht m	Parameter	Permissible Limits	APCD
Atul East Side					
1	New Phosgene plant-Furnace	15	PM	150 mg/Nm3	Alkali & Water Scrubber
2	New Phosgene plant -Reactor	15	CO	--	Alkali & Water Scrubber
			phosgene	0.1 ppm	
Caustic Chlorine Plant					
3	Dechlorination Plant(Hypo unit)	35	Cl_2	9mg/Nm3	Alkali Scrubber
			HCl	20mg/Nm3	
4	Common Stack of HCl Sigri unit 1& 2	25	Cl_2	9mg/Nm3	Alkali Scrubber
			HCl	20mg/Nm3	
Sulfuric Acid (East Side)					
5	Sulfuric Acid plant	30	SO_2	2.0 kg/T	Water Scrubber With DCDA System
			Acid Mist	50mg/Nm3	
6	Chloro Sulfonic Acidplant reactor	11	Cl_2	9mg/Nm3	Caustic And Water Scrubber
			HCl	20mg/Nm3	
FCB plant					
7	Foul Gas Scrubber	26.5	SO_2	40mg/Nm3	Caustic scrubber
			NOx	25mg/Nm3	
Incinerator					
8	Incinerator		PM	150mg/Nm3	Alkali& water scrubber

		40	SO2	40mg/Nm3	
			NOx	25mg/Nm3	
NI Plant					
9	Foul Gas Scrubber	26.5	SO2	40mg/Nm3	Caustic scrubber
			NOx	25mg/Nm3	
NBD Plant					
10	Spray Dryer	21	PM	150mg/Nm3	water scrubber
			NOx	25mg/Nm3	
11	Scrubber S-902	25	Phosgene	0.1 ppm	Caustic scrubber
12	Scrubber S-801/802	25	HCl	20mg/Nm3	Caustic scrubber
			NOx	25mg/Nm3	
2-4-D & related Products					
13	Common Scrubber; 2,4D Plant	5	Cl2	9mg/Nm3	Caustic scrubber
			HCl	20mg/Nm3	
			Phenol	--	
14	Dryer-1	26.5	PM with Pesticide compound	20mg/Nm3	Bag Filter, Water Scrubber
15	Dryer-2				Cyclone, Bag Filter, Caustic scrubber
16	Dryer-3				
17	Dryer-4				
18	Dryer-5				
MPSL Plant					
19	Phosgene Scrubber at MPSL	7	Phosgene	0.1 ppm	Caustic scrubber
20	Central Scrubber at MPSL	7	Phosgene	0.1 ppm	Caustic scrubber
NICO Plant					
21	Central scrubber at Nico Plant	12	Acetonitrile	---	water scrubber
Resorcinol Plant					
22	Spray dryer	20	PM	150mg/NM3	water scrubber
23	Scrubber vent	15	SO2	40mg/NM3	Caustic scrubber
24	Scrubber at Ester plant for Glyphosate	12	Formaldehyde	10mg/Nm3	water scrubber
Other					
25	MCPA	19	CL2	9 mg/NM3	Alkali& Water Scrubber
			HCl	20mg/NM3	
			SO2	40mg/NM3	
26	Fipronil	19	SO2	40mg/NM3	Alkali& Water Scrubber
			HCl	20mg/Nm3	
27	Imidacloprid	20	NH3	175mg/Nm3	Water & Acid Scrubber
28	Pyrathroids	19	SO2	40mg/Nm3	Alkali & Water Scrubber

				HCl	20mg/Nm3	
	29	Stack at Amine Plant	5	NH3	175Mg/Nm3	Caustic Scrubber
	30	Central Scrubber MCPA Plant	19	HCl	20mg/Nm3	Caustic Scrubber
	31	MPP plant scrubber	21	HCl	20mg/Nm3	Water & Alkali Scrubber
				Phosgene	0.1 ppm	

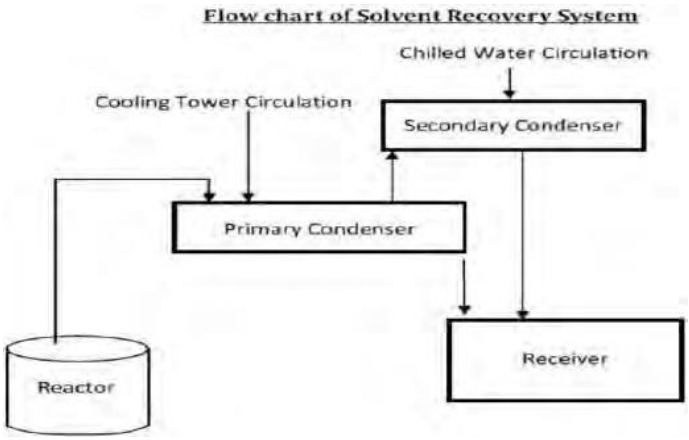
	32	Flavors & Fragrances Plant	21	HCl	20mg/NM3	Water Scrubber Followed By Caustic Scrubber
	33	Sulphur Black Plant	19	H2S	--	Alkali & Water Scrubber
				NH3	175 mg/NM3	
	34	Sulphur Dyes plant	19	H2S	--	Alkali& Water Scrubber
				NH3	175mg/NM3	
				Atul West Site		
	35	Shed A05/03/44	19	Cl2	9 mg/NM3	Caustic Scrubber
				HCl	20 mg/NM3	
	36	Shed B2/12/24 Reaction Vessel	19	Cl2	9 mg/NM3	Caustic Scrubber
				HCl	20 mg/NM3	
	37	Shed B18/02/24 Fan	19	SO2	40 mg/NM3	Caustic Scrubber
				Cl2	9.0mg/Nm3	
				HCl	20 mg/Nm3	
	38	Shed C5/20/15 Chlorinator	19	Cl2	9 mg/NM3	Alkali& Water Scrubber
				HCl	20 mg/NM3	
	39	Shed D Niro Spray dryerNo.45	19	PM	150mg/NM3	Water Scrubber
	40	Shed D Niro Spray dryer No. 50	19	PM	150mg/NM3	Water Scrubber
	41	Shed E 7/12/49 Spray Dryer	19	PM	150mg/NM3	Water Scrubber
	42	Shed F 6/1/15 Reaction Vessel	19	Cl2	9 mg/NM3	Alkali& Water Scrubber
				HCl	20 mg/NM3	
	43	Shed G 10/8/1 (receiver)	19	Cl2	9 mg/NM3	Alkali& Water Scrubber
				HCl	20 mg/NM3	
	44	Shed H11/6/17 Chlorinator	19	Cl2	9 mg/NM3	Alkali& Water Scrubber
				HCl	20 mg/NM3	
	45	Shed K K-13/3/4 Final of Sulfuric acid plant	19	SO2	2 kg/T	Alkali& Water Scrubber
				Acid Mist	50 mg/NM3	
	46	Shed	19	HBr	--	Alkali& Water Scrubber

		J15/09/25		SO2	40 mg/NM3	
	47	Shed J12/01/42	19	SO2	40mg/NM3	Alkali & Water Scrubber
				CI 2	9.0mg/Nm3	
				HCI	20 mg/Nm3	
	48	Shed J12/03/36	19	SO2	40 mg/NM3	Caustic Scrubber
	49	Shed N Scrubber Fan N20/08/24	19	CI2	9 mg/NM3	Caustic Scrubber
				HCI	20mg/Nm3	
	50	Shed-N	19	SO2	40mg/NM3	Alkali& Water Scrubber
	51	N-FDH Plant Catalytic Incinerator	31.5	PM	150mg/Nm3	Bag Filter
				SO2	40mg/Nm3	
				NOx	25mg/Nm3	
				Formaldehyde	10mg/Nm3	
	52	PHIN Plant	15.5	Phosgene	0.1 ppm	Water Scrubber Followed By Two Stage Caustic Scrubber With Ammonia/Steam Injection At stack
	53	DDS (Pharma Plant)	20	NH3	175mg/Nm3	Water Followed By Acid Scrubber
	54	SPIC II Plant (DCDPS)	30	SO3	---	Alkali & Water Scrubber
	55	SPIC I Plant	30	NH3	175mg/Nm3	Water Scrubber Followed By Two Stage Caustic Scrubber With Ammonia/Steam Injection At Stack
	56	SPIC IV Plant	2	NH3	175mg/Nm3	Alkali & Water Scrubber
			2	SO3	---	
	57	PHIN II Plant	21	HCI	20mg/Nm3	Water Scrubber Followed By Two Stage Caustic Scrubber With Ammonia/Steam injection At Stack
				phosgene	0.1 ppm	

vi) Solvent management shall be carried out as follows. a) Reactor shall be connectedto chilled brine condenser system.	**Complied.** Condensers with chilling systems are provided at point of Solvent recovery to minimized vapor loss as shown below:-   **a) Condensers at Solvent Recovery** **b)Solvent Recovery**
b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.	**Complied.** M/s. Atul Limited has provided seals at all Reactors and pump's in order to prevent leakage as shown below:-   **a) Seal at Stirrer** **b) Pump Seal**

c) The condensers shall be provided with sufficient HTA and residence time so as to achieve More than 95% recovery.	**Complied.** Spent solvents are recovered as far as possible as per details given below and all venting equipment are provided with condenser system & scrubber provided with Sufficient Heat Transfer Area (HTA) which helps to achieved more than 95% recovery. The detailed report are as below:-

S.N.	Solvent used	Qty. in MT			
		Qty. Used	Qty. Recover	Qty. Loss	% Recovery
1	Toluene	2577	2562	14.50	99.4
2	Xylene	46135	43825	2310	95.3
3	Butyl Acetate	41238	40454	784	98.1
4	EDC	57850	55536	2314	96.2



- VOC Trap Condenser -02: Chilled water at -15 ^{0}C is be used to trap any traces of Solvent which is slipped from Secondary condenser

MEASURES:

To prevent losses of these solvents in atmosphere, following infrastructure shall be used:

Leak Free Pumps for transfer of solvents.

MSW Gaskets in solvent pipelines to prevent leakage from flanges.

- Minimum number of flanges, joints and valves in pipelines.
- To eliminate chances of leakages from glands of pumps, mechanical seal will be provided at all solvent pumps.
- All the rotating equipment like pumps will be installed with Mechanical Seals to arrest any sort of emissions.

d) Solvents shall be stored in a separate space specified with all safety measures.

Complied.

We have made separate provision for solvent storage & is installed as per PESO regulation wherever applicable with all details of Storage area, operating temperature and pressure, types of possible hazards and control measures.

Details For Solvent Storage is as follows:-

SN	Name of Hazardous substance	Quantity		Place of its Storage	State & Operating Pressure & Temp	Type of hazard	Control measures provided
		Max. Qty can be stored	Qty Stored				
1	Methanol (Group 5 - 2)	470 MT	350 MT	Methanol Storage Tank Farm	Liquid at RT atmos. pressure	Fire	Flame arrester, earthing dyke wall to over ground Tank fire water
2	Phenol	180+ 60MT	120+ 40 MT	PH-II Anisole tank farm	Temp-Ambient	Toxic spill	Dyke wall with valve, which do not allow liquid spill to go to normal drain. PVC suit, washing facility, SOP, etc.
3	Benzene	180 MT	100 MT	Resorcinol	Liquid at RT atmos. pressure	Fire	Isolated storage, FLP, Flam arrester, Breather valve, LI, Fire hydrant, sand etc.
4	Xylene	60	30	MPSL-NICO Plant	Atmospheric Normal Temp.	Fire	Dyke wall, Fire hydrant line, FLP, Spark arrester, Prohibited for vehicle movement &unauthorized person.
5	Phenol 98% solution	200 MT	170 MT	Near Bisphenol plant	Liquid at RT atmos.	Toxic spill	Dyke wall water spraying & washing

						Pressure		facilities PEG 400 as antidote.
	6	Methanol	650 M3	50 M3	Methanol Tank farm north site.	Liquid at RT, atmos. Pressure	Fire & Toxic spill	Isolated storage, FLP, Flam arrester, Breather valve, LI, Fire hydrant, sand etc.
	7	Toluene	40 m3	30 m3	Phin& PO plant	Liquid at RT, atmos. Pressure	Fire	Isolated storage, FLP, Flam arrester, Breather valve, LI, Fire hydrant, sand etc.
	8	Toluene	120 KL	100 KL	Shed C	Atmo. Press and temp.	Fire &Chemical spillage	Underground tank, prohibited are, FLP, foam trolley etc.
	9	Ethanol /Methanol	51 KL	40 KL	Shed N & A	Atmo. Press and temp.	Gas leakage, Spill	Respirators, Dry Sand, Dyke wall, spare tank
	10	MCB	105 MT	100 Kl	Shed C	Atmo. Press and temp.	Fire &Chemical spillage	Underground tank, prohibited are, FLP, foam trolley etc.
	11	Formaldehyde 37 to 43 %	1200 MT	600 MT	Storage Tank Opp. UF plant, FDH Plant & Nr. UF Plant	Liquid at RT, atm. press.	Toxic spill	Water spraying facilities L.I. Empty space for emergency transfer

	Tank Farm:-  
e) Proper earthling shall be provided in all the electrical equipment wherever solvent handling is done.	**Complied.** Earthing pit is provided in all electrical equipment wherever solvent handling is done as below:- 

f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.	Complied. Entire plant is flame proof installations, Storage tanks are provided with breather valve for all prevention of losses. M/s. Atul Limited has made separate provision for solvent storage & is installed as per PESO regulation wherever applicable with all details of Storage area, operating temperature and pressure, types of possible hazards and control measures. Details For Solvent Storage Is given in above point vi d.

g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.	Complied. All the solvent storage tanks are being connected with condensers & chilled water circulation, Spent solvents are recovered as far as possible and all venting equipments are provided with condenser system & scrubber. VOC MITIGATION MEASURES: To prevent losses of these solvents in atmosphere, following infrastructure shall be used: · Leak Free Pumps for transfer of solvents. · MSW Gaskets in solvent pipelines to prevent leakage from flanges. · Minimum number of flanges, joints and valves in pipelines. · To eliminate chances of leakages from glands of pumps, mechanical seal will be provided at all solvent pumps. · All the rotating equipments like pumps will be installed with Mechanical Seals to arrest any sort of emissions. · Condenser and scrubber post Reactor with cooling arrangement. · Enclosures to chemical storage area, collection of emission from loading of raw materials in particular solvents through hoods and ducts by induced draft, and control by scrubber / dust collector to be ensured. · In case the small spillage or leakage observed, first pour the china clay (vermiculate) on material and collect the contaminated china clay (vermiculate) and send to ETP. · If the spillage is of inflammable liquid, switch off all the power supply in the area to prevent Electric Spark. · Two condensers are installed with cooling water and chilled water to recover the solvent. Primary Condenser -01: Cooling Tower water or Chilled water at 5 ^{0}C is used to condense the solvents depend on the vapor pressure at its operating conditions and the non-condensed vapors will be condensed in a Secondary Condenser.

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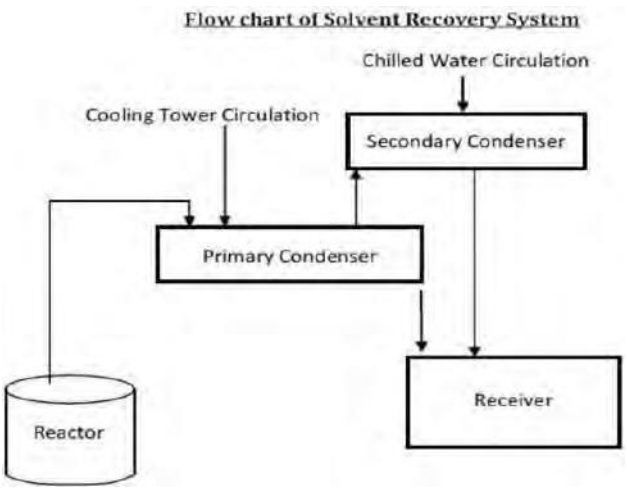
<td>VOC Trap Condenser -02: Chilled water at -15 ^{0}C is be used to trap any traces of Solvent which is slipped from Secondary condenser
 
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<td>vii.
Total fresh water requirement shall not exceed 21950 cum/day, proposed to be met from Par River. Prior permission in this regards Shall be Obtained from the concerned regulatory authority.</td>
<td>Complied.
The average water consumption for the referred expansion for the report period is Avg. 9047 KL/day only, which is well within the limit. Detail break up is given in below table:

<table>
<tr><th>SN</th><th>Month</th><th>Qty. F/W(KL/Month)</th><th>Avg. Qty. F/W (KL/Day)</th></tr>
<tr><td>1</td><td>October 2019</td><td>318286</td><td>10267</td></tr>
<tr><td>2</td><td>November 2019</td><td>279316</td><td>9311</td></tr>
<tr><td>3</td><td>December 2019</td><td>306901</td><td>9900</td></tr>
<tr><td>4</td><td>January 2020</td><td>274894</td><td>8868</td></tr>
<tr><td>5</td><td>February 2020</td><td>245425</td><td>8463</td></tr>
<tr><td>6</td><td>March 2020</td><td>231644</td><td>7472</td></tr>
</table>

The maximum values during the compliance period confirm that at no time the wastewater generation went beyond the stipulated value.
Fresh water requirement is met through the existing water supply system from river par.</td>
</tr>
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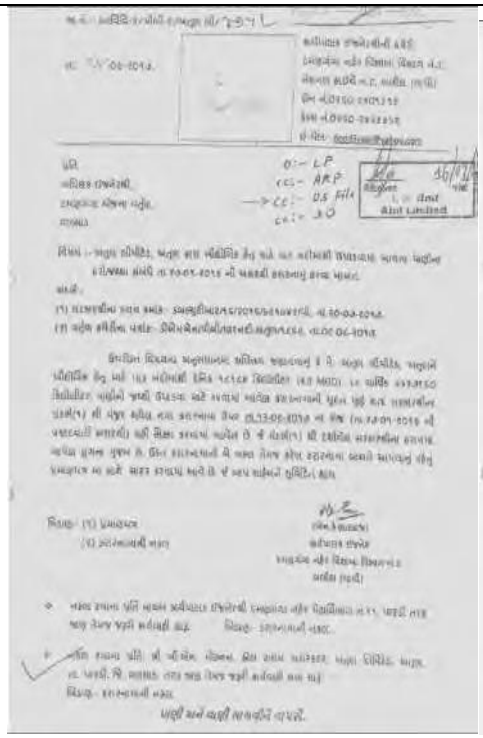

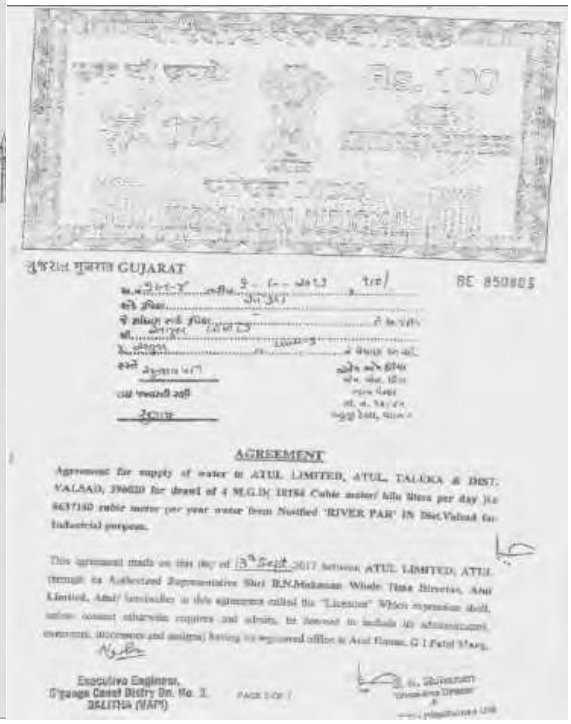

AGREEMENT

Agreement for supply of water to ATUL LIMITED, ATUL, TALUKA & DIST: VALSAD, 396020 for draw of 4 M.G.D(18184 Cubic meter/ kilo litres per day)i.e 6637160 cubic meter per year water from Notified 'RIVER PAR' IN Dist.Valsad for Industrial purpose.

This agreement made on this day of [illegible] 2017 between ATUL LIMITED, ATUL through its Authorised Representative Shri B.N.Mehanan Wholt Time Director, Atul Limited, Atul/ hereinafter in this agreement called the "Licensee" Which expression shall, unless context otherwise requires and admits, be deemed to include its administrators, successors, successors and assigns) having its registered office at Atul House, G I Patel Marg,

Executive Engineer,
D'ganga Canal Distry Dn. No. 2.
DELITHA (NAVI)

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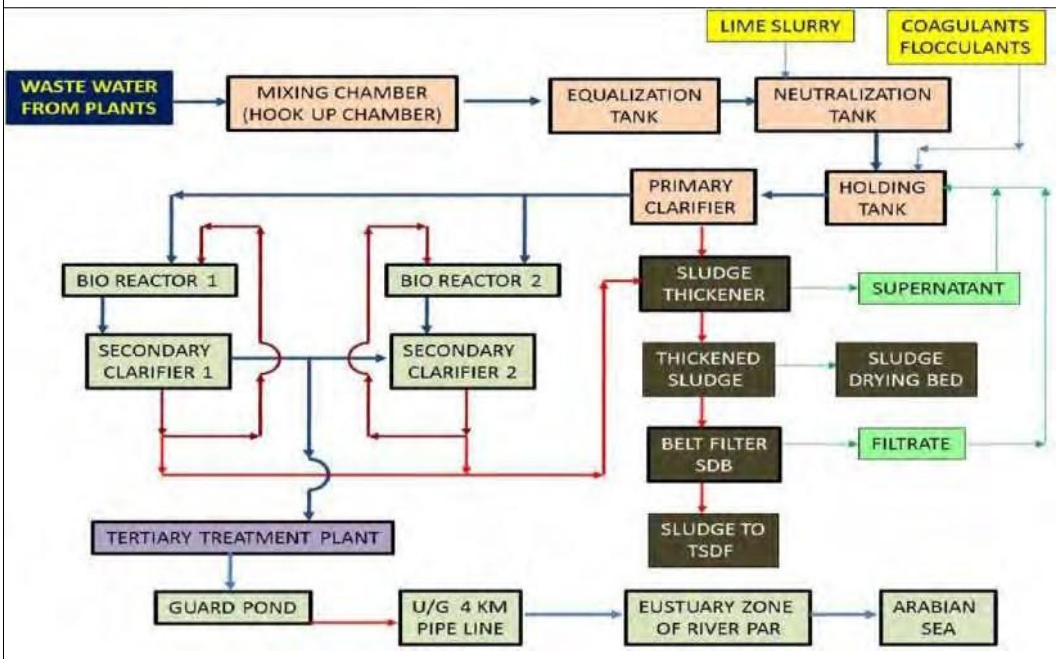
viii. Industrial/ trade effluent shall be segregated into High COD/TDS and Low COD/TDS Effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD. Low TDS effluent stream shall Be treated in ETP/ROto meet the prescribed standards.	**Complied.** Industrial/trade effluent is being segregated as shown below into High TDS/COD & Low TDS/COD. High COD/TDS stream is subjected to MEE and ATFD. Low TDS/COD stream is treated in in-house Effluent Treatment Plant and discharged as per stipulated norms. It's not exceeding then prescribed limit of EC & CCA. The average wastewater generation for the report period (last six month – October 2019 to March 2020) is as under:

Sr No	Month	Break up of effluent Kl/Day		
		High TDS/COD TDS/COD	Low TDS/COD	Total Effluent generation
1	October-19	153	9260	9413
2	November-19	140	8429	8569
3	December-19	112	8993	9105
4	January-20	143	8081	8224
5	February-20	149	7625	7775
6	March-20	135	6740	6875

The maximum values during the compliance period confirm that at no time the wastewater generation went beyond the stipulated value.

Entire quantity of waste water is being utilized in ash quenching, coal storage yard to attend coal smoldering, dust suppression, fire hydrant make up, Gardening plants floor cleaning.

Effluent Treatment Plant, MEE:-



Prescribed Standards: The Waste Water analysis at ETP outlet is monitored at regular interval for ensuring the compliance. The testing lab appointed is M/s. Pollucon Laboratories Pvt Ltd, Surat NABL Approved **TC – 5945**, issue date-**28/05/2019** and valid till **27/05/2021.**

Monitoring details of final effluent discharged are as follows:-

S.NO	PARAMETER	UNIT	LIMIT	Values for the period Oct 19-Mar20		
				Min	Max	Avg
1	pH		5.5-9.0	6.23	8.19	7.19
2	Temperature	°C	40	30.1	31.8	31.09
3	Colour	Co-pt	---	78	140	92.86
4	Suspended solids	mg/L	100	62	98	79.57
5	Phenolic Compounds	mg/L	5	0.039	0.088	0.05
6	Cyanides	mg/L	0.2	ND	ND	ND
7	Fluorides	mg/L	2	0.62	0.75	0.69
8	Sulphides	mg/L	2	0.9	1.8	1.23
9	Ammonical Nitrogen	mg/L	50	34	48	41.00
10	Total Chromium	mg/L	2	ND	ND	ND
11	Hexavalent Chromium	mg/L	1	ND	ND	ND
12	BOD (3 days at 27°C)	mg/L	100	57	78	64.29
13	COD	mg/L	250	205	240	218.29

ix. Process effluent/any wastewater shall not be allowed to Mix with storm water. The storm water from the premises shall be collected and discharged through a separate Conveyance system.	Complied. Process effluent/any wastewater are being discharged to estuary of Par river through the existing pipeline at M/s. Atul Limited and are not mixed with storm water line. The generated wastewater is Segregated in Streams of High and Low TDS/COD. The high COD streams (COD >50000 ppm) is being taken for recovery to get economic benefit. Rest lean effluent of COD <2000 ppm is finally sent to ETP for treatment. All the high COD streams are being diverted to recovery system rather than incineration. The high TDS effluent is evaporated in MEE. Rooftop rain water from Coal sheds and New TG building is collected in well-constructed pond and used as make up water for cooling tower after giving necessary pre-treatment to remove suspended matter as we have pumped this rain water to clarifloculator units to remove suspended matter. We have three numbers of check dams in natural storm water drains to collect and harvest rain water in monsoon season. We are creating facility/capacity to cater our consumption with rain harvested water with almost zero river drawls of water during the rainy days. Besides this, there are three check dams and pumping facility to harvest rain water. We also construct temporary sand bag dam on top of dam towards the end of monsoon to store additional free flowing rain water in river Par. In addition to above, surface runoff water and roof top water is used to recharge bore wells .

x) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.	**Complied.** All Hazardous materials other than solvent are stored as per below mentioned details with Control Measures;

SN	Name of RM	MOC	Tank Type	Nos of Tank	Capacity	Control Measures Provided
1	65% Oleum	MS, IS-2825	Above ground	2	65 MT	Dyke wall with valve, do not allow the spill to mix with water, vent with Acid seal, spare storage tank for emergency transfer, Dry sand beds for spill Control, tank level meter.
2	Chlorine	CS	Above ground	4	200	Two standby tank, DCS controlling, Hypo scrubbing, SCBA, Emergency chlorine kit & hood blower etc.
3	Epichloro-hydrin	MS	Above ground	6	55 M3	Flame arrester earthing, dyke wall with valve which do not allow liquid spill to go to normal drain.
4	Sulphur Trioxide (Group 2)	MS	Above ground	2	13 MT	Dyke wall with valve, with valve do not allow the spill to mix with water, vent with Acid seal, spare storage tank for emergency transfer
5	Ammonia Anhydrous	MS	Above ground	1	10	High Alarm switch Water sprinkler, Fog Nozzles, Dyke wall
6	65% Oleum	MS	Above ground	2	72	Respirators, Dry Sand, Dyke wall, Spare tank, High alarm switch
7	Caustic	MS	Above ground	4	530 MT	Dyke wall, LI & LT, DCS controlling etc.
8	Hydrogen	MS	Above ground	1	100 nm3	Prohibited for men & vehicle movement, Isolated storage, FLP , Flam arrester, PG & PT, Fire hydrant, 7 Fire extinguisher etc.
9	Chloro Sulphonic Acid	SS 316	Above ground	4	30	Respirators, Dry Sand, Dyke wall, spare tank
10	Sulfuric acid	MS	Above ground	4	800	Emergency tank, Dyke wall, LT, DCS controlling, Level alarm etc.
11	liq. SO3,	MS	Above ground	3	40 MT	Emergency tank, LT & LI, DCS controlling, Level alarm etc.

	12	HCL	PP FRP	Above ground	3	200 KL	Dyke wall, LI & LT, DCS controlling etc.
	Mitigation Measures as per risk assessment report:- 1. Secondary Containment to all storage areas of Hazardous materials with leakage collection system is provided. 2. Spill kits are made available at all locations of hazardous materials. 3. Fire hydrant system is provided at Hazardous materials storage area.						

xi. Process organic residue and spent carbon, if any, shall be Sent tocement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	Complied. We have obtained necessary authorization for Hazardous and other waste by obtaining Amendment in Existing CTO after receiving EC. CTO amendment has been granted by GPCB Vide Letter No. GPCB/CCA-VSD-313(16)/ID: 23158/513897, Dated 17.7.2019 (CTO amendment No. AH 102080), Valid Till- 03/11/2019. Renewal for the same has been received with consent order no. 105110 valid up to 30.09. 2025. . Copy of CTE and CTO was submitted to Ministry vide our letter Atul/SHE/MoEF dated 19.12.2019
xii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules,1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.	Complied. We are complying all the rules and regulation led by MSIHC, 1989. We are complying with Hazardous and Other Wastes (Managements and transboundary Movement) Rules, 2016 towards ETP Sludge, Used Oil & Empty Drums- Handling, and Storage & Disposal to authorized Facility/TSDF. We have obtained necessary authorization for Hazardous and other waste by obtaining Amendment in Existing CTO after receiving EC. CTO amendment has been granted by GPCB Vide Letter No. GPCB/CCA-VSD-313(16)/ID: 23158/513897, Dated 17.7.2019 (CTO amendment No. AH 102080), Valid Till-03/11/2019. Renewals for the same has been received vide consent order no. 105110 valid up to 30.09. 2025. Company has obtained TSDF memberships from his own TSDF & Incineration Facility. Company has also obtained membership from Co-Processing Facilities i.e. RSPL & Cement Industry (Ambuja Cement).

CONDITIONS	COMPLIANCE
4. Responsibilities of the occupier for management of hazardous and other wastes. (1) For the management of hazardous and other wastes, an occupier shall follow the following steps, namely:- (a) prevention; (b) minimization; (c) reuse, (d) recycling; (e) recovery, utilization including co- processing; (f) safe disposal.	**1) Complied.** We are using advanced technology and processes to minimization of waste generation for prevention, reuse, recycling and safe disposal to the authorized actual user TSDF /CHWIF facility.
(2) The occupier shall be responsible for safe and environmentally sound management of hazardous and other wastes.	**2)Complied.** We are ensuring for safe and environmentally sound management of hazardous and other wastes.
(3) The hazardous and other wastes generated in the establishment of an occupier shall be sent or sold to an authorized actual user or shall be disposed of in an authorized disposal facility.	**3)Complied.** We have our own captive TSDF and Incinerator facility.
(4) The hazardous and other wastes shall be transported from an occupier's establishment to an authorized actual user or to an authorized disposal facility in accordance with the provisions of these rules.	**4) Noted &Complied.**
(5) The occupier who intends to get its hazardous and other wastes treated and disposed of by the operator of a treatment, storage and disposal facility shall give to the operator of that facility, such specific information as may be needed for safe storage and disposal.	**5)Complied.** We are having separate hazardous waste storage facility with all safety measures to avoid accident. Also we are adopting safe disposal and storage practices.
(6) The occupier shall take all the steps while managing hazardous and other waste to- (a) contain contaminants and prevent accidents and limit their consequences on human beings and theenvironment; and (b) Provide persons working in the site with	**6) Complied.**

		appropriate training, equipment and the information necessary to ensure their safety.	
		6. Grant of authorization for managing hazardous and other wastes.	**Complied.** We are strictly agreeing, complying & will continue to comply with all the stipulations made by GPCB as per CC & A Letter No. **GPCB/CCA-VSD-313(16)/ID: 23158/513897**, Dated **17.7.2019** (CTO amendment No. **AH 102080**), Valid Till **03/11/2019**. Renewal for the same has been received CCA (No. **AWH 105110** valid till 30.9.25).	

7. Power to suspend or cancel an authorization.	Not Applicable
8. Storage of hazardous and other wastes	Complied
9. Utilization of hazardous and other wastes	Complied. Recovered Spent Solvent are being reused. Used Oil & Discarded drums are being sent to authorize recycler.
10. Standard Operating Procedure or guidelines for actual users	Noted.
11. Import and export (transboundary movement) of hazardous and other wastes.	Not Applicable
12. Strategy for Import and export of hazardous and other wastes.	Not Applicable
13. Procedure for import of hazardous and other wastes.	Not Applicable
14. Procedure for Export of hazardous and other wastes from India	Not Applicable
15. Illegal traffic.	Not Applicable
16. Treatment, storage and disposal facility for hazardous and other wastes.	Complied. We have our own captive TSDF and Incinerator. We also send waste to Authorized facility as per the valid authorization.
17. Packaging and Labeling – Form 8	Complied. All hazardous Waste transportation is being done through appropriate packing and labeling as per Form-8.
18. Transportation of hazardous and other wastes	Complied. Waste is being transported through TREM Card as per Haz. Rules.
19. Manifest system (Movement Document) for hazardous and other waste to be used within the country only	Complied. We are sending waste through Online Manifest system of GPCB XGN.
20. Records and returns	Complied. We are maintaining & submitting all records like Form-III, Form-IV & Environment Statement Form-V periodically to GPCB.
21. Responsibility of authorities The authority specified in column (2) of Schedule VII shall perform the duties as specified in column (3) of the said Schedule subject to the provisions of these rules.	Noted

22. Accident reporting. Where an accident occurs at the facility of the occupier handling hazardous or other wastes and operator of the disposal facility or during transportation, the occupier or the operator or the transporter shall immediately intimate the State Pollution Control Board through telephone, e-mail about the accident and subsequently send a report in Form 1.	**Noted.** No accidents were reported during OCtober2019 to March 2020 period during handling and transportation of hazardous or other wastes.
23. Liability of occupier, importer or exporter and operator of a disposal facility.	
(1) The occupier, importer or exporter and operator of the disposal facility shall be liable for all damages caused to the environment or third party due to improper handling and management of the hazardous and other waste.	**Noted.**
(2) The occupier and the operator of the disposal facility shall be liable to pay financial penalties as levied for any violation of the provisions under these rules by the State Pollution Control Board with the prior approval of the Central Pollution Control Board.	**Noted.**

	24. Appeal	
	(1) Any person aggrieved by an order of suspension or cancellation or refusal of authorization or its renewal passed by the State Pollution Control Board may, within a period of thirty days from the date on which the order is communicated to him, prefer an appeal in Form 12 to the Appellate Authority, namely, the Environment Secretary of the State. (2) The Appellate Authority may entertain the appeal after expiry of the said period of thirty days, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time. (3) Every appeal filed under this rule shall be disposed of within a period of sixty days from the date of its filing.	**Noted & Complied**

xiii. Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.

Complied.

We have not constructed ash pond for the CPP unit. We have closed three silo of 200 MT and Two silo of 300 MT capacity of each, total 1200 MT capacity, which is well enough for our average generation of approx. 300 TPD. We dispatch the fly ash daily from these silos so we have not prepare ash pond.

Fly ash / bottom ash generation data for period (October-2019 to March – 2020) as shown below table:

Fly Ash	Unit	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20
Generation	MT	4765	4848	4712	5170	5188	4985
Disposal	MT	4765	4848	4712	5170	5188	4985

Photograph of Closed silos for Fly ash / Bottom ash storage:-

xiv
The company shall undertake waste minimization measures as below:-

a) Metering and control of quantities of active ingredients to minimize waste.

Complied.

Metering of water is done. Meter is provided at the inlet of the collection tank and reuse system of waste water and records are being maintained.

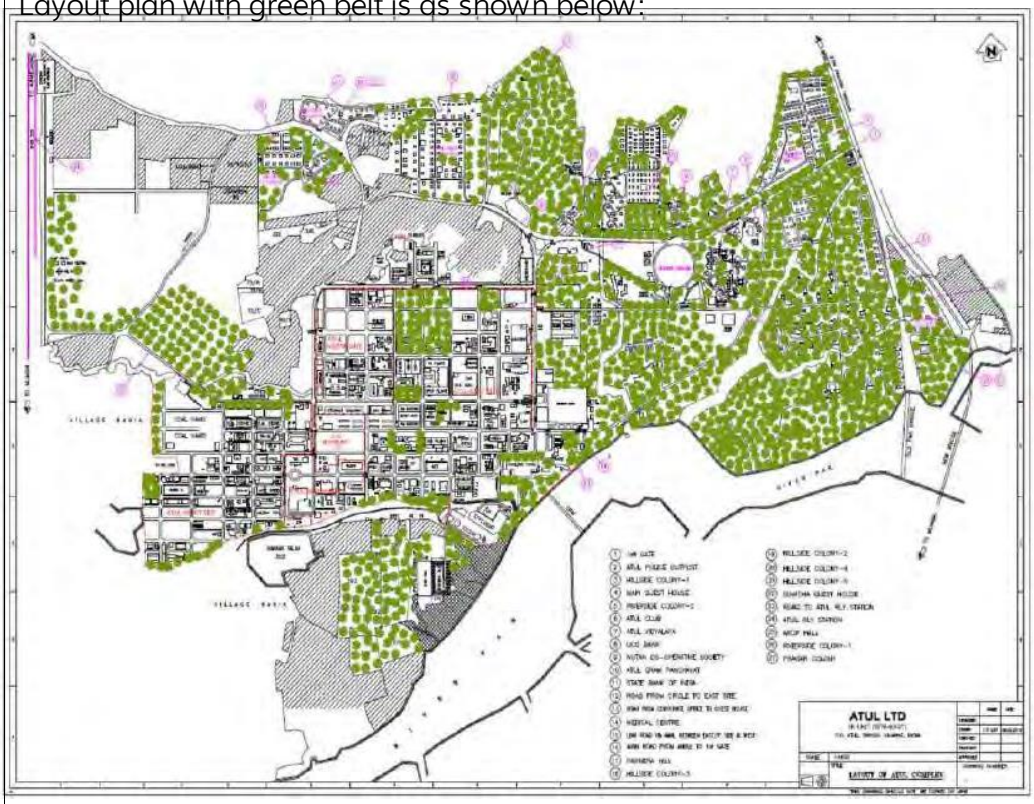
Photograph of water meter shown below:

Month wise water consumption, waste water generation and reuse data are shown below table:

SN	Month	Water consumption (KL/Month)	Waste water generation (KL/Month)
1	October 19	318286	291813
2	November19	279316	257071
3	December 19	306901	282245
4	January 20	274894	254951
5	February 20	245425	225463
6	March 20	231644	213113

We are reusing 100% treated water in ash quenching , coal storage yard to attend coal smoldering, dust suppression, fire hydrant make up, Gardening plants & floor cleaning.

b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.	Sodium Sulfate, Sodium Thio Sulphate, Brine, MEE salt, Sodium hypochlorite, Copper Hydroxide, spent acid, etc. are few by-products from the process which are being sold for using the same either as raw material or as substitute to raw materials. Also, fly ash and Gypsum are being used as raw material for Brick Manufacturing. Sodium Hypochlorite, Sodium hydro sulfide, etc. are being used as raw material in other processes.
c) Use of automated filling to minimize spillage.	Filling/transfer system is being provided to minimized the spillage i.e. Chain conveyor system provided.
d) Use of Close Feed system into batch reactors.	"Close feed system" is available to our plant.
e) Venting equipment through vapour recovery system.	At all venting equipment condenser recovery system & scrubbers are provided.
f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.	We are using high pressure jet nozzle for equipment cleaning to minimize wastewater generation.

xv. The green belt of at least 5-10 m width shallbe developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along roadsides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department .	**Complied**. Proper plantation is done all around the plant boundary and also the roads to mitigate fugitive & transport dust emission. Total Plot area: **1126078.27 sq.mt** Green belt area: **409030.00 sq.mt** (approx. 36% of total plot area) Layout plan with green belt is as shown below:  We plant more than 50000 plants every year on road sides and other open areas in nearby villages or schools in consultation with the Gram panchayat.  

	 
xvi. All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.	**Complied.** All the issued raised during public hearing were replied satisfactorily. Towards commitment company has been satisfactorily implementing CER/CSR as per the action plan / schedule; details given in next point xvii. Of compliance report. Commitment towards coal transportation in Covered truck is complied. Now coal transportation is being done 100% in closed / covered mechanical trucks. Towards employment of local Atul Ltd. Is consistent in hiring local as per the eligibility / educational cretier.80% of Total Employees are from local.

xvii As committed, funds allocation for the Corporate Environment Responsibility(CER) shall be 2% of the total project cost. Item- wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	CSR projects (April 2019 to March 2020):

S.N	Description	Location	Final Implementing Agency	Budget from Apr 19 to Mar 20	Expenditure
1	Enhancement of education practices in Kalyani Shala	Atul, Valsad (Gujarat)	AFT |Atul Kelavani Mandal	38.60	38.60
2	Support to tribal children in Atul Vidyamandir	Pardi, Valsad (Gujarat)	AFT |Atul Vidyalaya Trust	6.00	6.00
3	Improvement of teaching methodology in primary schools Adhyapika Project	91 villages, Valsad (Gujarat)	AFT |ARDF	48.00	48.00
4	Enhancement of rural education	20 villages, Valsad (Gujarat)	AFT |ARDF	10.97	10.97
5	Promotion of educational facilities in an ashram shala	Pardi, Valsad (Gujarat	AFT |Shree Vallabh Seva Kendra	3.00	3.00
6	Conservation of manuscripts	Ahmedabad (Gujarat)	AFT |L D Bhartiya Sanskruti Vidyamandir	40.00	40.00
7	Contribution towards publication of books on Indian culture |ecology |	Jaipur (Rajasthan)	AFT |Prakrit Bharati Academy	5.00	5.00

		philosophy				
	8	Support to develop a school in a tribal area	Chondha, Navsari (Gujarat)	AFT	5.00	5.00
	9	Conduct science workshops for rural teachers	Sabarkantha (Gujarat)	AFT |Vikram A Sarabhai Community Science Centre	3.00	3.00
	10	Support needy children with educational kits	Valsad (Gujarat)	AFT	2.70	2.70
	11	Capacity building of teachers through training	Atul, Valsad (Gujarat)	AFT	0.94	0.94
	12	Introduction of digital education at Sanskrit Mahavidyalaya	Pardi, Valsad (Gujarat)	AFT | Swadhyay Mandal	4.50	4.50
	13	Support children with special needs	Bharuch (Gujarat)	AFT |Osmosis Play Centre and Educational Games Library	2.00	2.00
	14	Empowerment of women through various vocational training courses	Atul, Valsad (Gujarat)	AFT |ARDF	13.48	13.48
	15	Skill training to youth as apprentices	Atul, Valsad (Gujarat)	Atul Ltd	179.25	179.25
	16	Skill developme	Valsad (Gujarat)	AFT |ARDF	36.20	36.20

		nt of youth through vocational training				
	17	Capacity building of tribal farmers in bee keeping	15 villages, Valsad (Gujarat)	AFT |Under The Mango Tree Society	1.40	1.40
	18	Empowerment of tribal families by creating home stay facilities	six villages, Narmada (Gujarat)	AFT	85.00	85.00
	19	Create livelihood opportunities among tribal families by providing cows	28 villages, Valsad (Gujarat)	AFT |BAIF Institute for Sustainable Livelihoods and Development	66.37	66.37
	20	Develop micro entrepreneurs to provide sustainable livelihood	Ozarpada, Valsad (Gujarat)	AFT	37.50	37.50
	21	Support tribal farmers by providing seeds	three villages, Valsad (Gujarat)	AFT |ARDF	1.14	1.14
	22	Improvement of hygiene through construction of toilets	15 villages, Valsad (Gujarat)	AFT |ARDF	32.00	32.00
	23	Enhancement of rural health through	35 villages, Valsad (Gujarat)	AFT |ARDF	9.79	9.79

		health camps				
	24	Upgradation of medical equipment in a hospital	Laxmipura, Sabarkantha (Gujarat)	AFT |Gyan Mandal Laxmipura Group Prerit Arogya Mandal	15.00	15.00
	25	Provision of blood units to the needy and deserted patients	Bharuch (Gujarat)	AFT |Seva Yagna Samiti	2.40	2.40
	26	Promotion of sports among rural youth	Atul, Valsad (Gujarat)	Atul Ltd	11.00	11.00
	27	Contribution for establishing CT scan facility in a hospital	Valsad (Gujarat)	AFT |ARDF | Kasturba Vaidyakiya Rahat Mandal	10.00	10.00
	28	Promotion of health and fitness through marathon	Atul, Valsad (Gujarat)	AFT |ARDF	9.09	9.09
	29	Promotion of sports in rural schools by providing sport kits	Valsad (Gujarat)	AFT	6.15	6.15
	30	Provision of medical assistance to the needy people	Atul, Valsad (Gujarat)	AFT |ARDF	2.79	2.79
	31	Upliftment of quality of life of salt pan	Kharaghoda, Surendranagar	AFT |ARDF	2.70	2.70

		workers	(Gujarat)			
	32	Provision of blood units to thalassemia patients	Valsad (Gujarat)	AFT |Valsad Raktdan Kendra	7.00	7.00
	33	Contribution for advance treatment of cancer patients	Karamsad, Anand (Gujarat)	AFT |Charutar Arogya Mandal	5.00	5.00
	34	Contribution for community marriage of underprivileged couples	Valsad (Gujarat)	AFT |Shree Chandramauleshwar Mahadevji Sansthapan Trust |Shree Valsad Taluka Patel Samaj Pragati Mandal	2.50	2.50
	35	Support to children with special needs	Bangalore (Karnataka)	AFT |Mathru Foundation	1.00	1.00
	36	Provide financial support to critically ill patients	Valsad (Gujarat)	AFT |Kasturba Vaidyakiya Rahat Mandal	31.25	31.25
	37	Support to families of Indian solders	Pulwama (Jammu and Kashmir)	AFT	2.50	2.50
	38	Provision of free farm kits and fertilisers at subsidised rates to farmers	Haria, Valsad (Gujarat)	AFT |ARDF	3.00	3.00
	39	Support to disaster relief for COVID-19	Valsad (Gujarat)	AFT |ARDF	50.00	50.00

		pandemic				
	40	Support to families of special children	Valsad (Gujarat)	AFT	19.44	19.44
	41	Provision of infrastructure support for institution building	Chanvai, Valsad (Gujarat)	AFT |World Renewal Spiritual Trust	1.50	1.50
	42	Renovation of anganwadi infrastructure (model anganwadi project)	seven villages, Valsad (Gujarat)	AFT |ARDF	51.00	51.00
	43	Provision of infrastructure support to a crematorium	Atul, Valsad (Gujarat)	AFT |Atul Parnadi Muktidham Trust	5.00	5.00
	44	Provision of infrastructure support to school	Surwadi, Bharuch (Gujarat)	AFT	4.00	4.00
	45	Support to small development activities in nearby villages	Atul, Valsad (Gujarat)	AFT |ARDF	0.48	0.48
	46	Afforestation	Atul, Valsad (Gujarat)	Atul Ltd |ARDF	5.00	5.00
	47	Establishment of solid waste management system in Atul village	Atul, Valsad (Gujarat)	AFT |ARDF	30.00	30.00
	48	Conservation of coastal area	Daman (Daman and Diu)	AFT	1.00	1.00

		through cleanliness drive				
	49	Plantation of medicinal plants at Kalyani Shala	Atul, Valsad (Gujarat)	AFT	5.51	5.51
	Total				914.35	914.35

<table>
<tr>
<td>xviii.
For the DG sets, emission limits and
The stack height shall be in conformity with the extant regulations and the CPCB guidelines.
Acoustic enclosure shall be provided to DG set for controlling thenoise pollution.</td>
<td>
Complied.
We ensured that at no time the emission level will go beyond the stipulated standards and or prescribed limits. In such cases / Occurrences we will intimate to board & authority time to time. Acoustic enclosures are provided on DG sets. Silencers have been provided on main stream vent valves of Boilers.

Stack details:-
<table>
<tr><th>SN</th><th>Stack Details</th><th>Capacity/ Stack Ht mtr</th><th>Para</th><th>Permissible Limits</th><th>APCD</th><th>Fuel</th></tr>
<tr><td rowspan="3">1</td><td rowspan="3">DG Set 1010 KVA(Standby)</td><td rowspan="3">H: 10</td><td>PM</td><td>150 mg/Nm3</td><td rowspan="3">Adequate Stack Ht & Acoustic Enclosure</td><td rowspan="3">Diesel</td></tr>
<tr><td>SO2</td><td>100 ppm</td></tr>
<tr><td>NOx</td><td>50 ppm</td></tr>
<tr><td rowspan="3">2</td><td rowspan="3">DG Set 1500 KVA
(Stand By)</td><td rowspan="3">H: 11</td><td>PM</td><td>150 mg/Nm3</td><td rowspan="3">Adequate Stack Ht & Acoustic Enclosure</td><td rowspan="3">Diesel</td></tr>
<tr><td>SO2</td><td>100 ppm</td></tr>
<tr><td>NOx</td><td>50 ppm</td></tr>
</table>
Photograph of Stack & Stack Attached to D.G Sets:-


</td>
</tr>
<tr>
<td>Xix
The unit shall make the arrangement for</td>
<td>
Complied.
A well designed Fire hydrant system is adequate and as per standards.
Fire hydrant Network details:

Four full fledged fire hydrant system in the company
Water Storage Capacity - 50 million Liters

</td>
</tr>
</table>

Protection of possible fire hazards during manufacture ng process in material handling. Fire-fighting system shall be as per the norms.	• Total hydrant post/ monitors –780
	• Total length of hydrant line – 15 km
	• Fire Fighting Equipment
	  o DCP1350 o CO_2 776 Foam : 05Trolly
	• Fire Tenders
	  o One fire tender having 1800 Lit water capacity
	  o Second multipurpose fire tenders having 5000 Lit water &500Foam
	  o Third Multipurpose tender having facility of DCP- 500 Kg, Foam – 500 litand Water – 4500Lit.
	• SCBA sets – 35nos.
	• Emergency alarm system – 532 nos. points spread across the company
	• Fire station manned round the clock with Siren and Annunciation System.
	• Regular Testing on every Monday
	• Smoke detectors in the office and labs
	• Auto water deluging system at critical reactors
	• Auto water sprinkler system at tank farms
	  
	  
	  

xx Occupation al health surveillance of the workers shall be done on a regular basis And records maintained as per the Factories Act.	**Complied.** Being done on regular basis as per the Factories Act & rules. Occupational health surveillance of the workers is carried out on a regular basis as per section-41 C of the factories act and ruke-68T of Gujarat Factories Rules and records are maintained. Regular Medical Checkup of all employees are done by in-house Dr.Vishal Mehta (M.B.B.S), Dr.Suman Patel (M.D. Physician) & Dr.Sandip Bhandare (M.B.B.S, AFIH) in following manner; The following medical checkup has been completed; **Pre-Employment Check-Up (In-house): FY April-19 to March-20**

SN	Employee	Qty	Check-Up
1	Staff	6361	Pre-Employment
2	Operators		
3	Workers		

Annual Medical Check-Up: FY April-19 to March-20

SN	Employee	Qty	Check-Up
1	Staff	3145	Annual Checkup
2	Operators		
3	Workers		

Various types of tests being performed are as below;
A. Pre- employment Checkup:
1.Vision 2.Colour blindness 3.CBC 4.Urine 5.Heig ht 6.Weight 7.B/P
8.Pulse 9.Habit 10.Personal History 11.Family History
12.Identification Mark
B. Annual Checkup:
1. Physical checkup
2. Vision
3. Blood
4. Urine
5. PFT
6. ECG

Our occupational health centre & Pathology Lab is equipped with necessary facilities under supervision of factory medical officer with trained three EHS persons.

Medical Facilities:
First Aid boxes in all plants
Central Ambulance Room in the middle of the factory
Two Ambulance Vans. Out of which one is equipped with ICU facilities.
Medical Center
Three full time AFIH certified doctors.
Equipped with 3Beds
Full equipped Pathological lab with advanced diagnostic equipment

	ECG Equipment Cardiac monitor Defibrillator Finger pulse Oxymeter Pulmonary Function Test Apparatus 02Administration Antidotes with routine Important and Vital life saving Drugs Tie-up with Kasturba Hospital, Valsad, and Pardi Hospital, Pardi, respectively 7 kms and 3 kms. away from Atul •  • 

We also have tie up with external two hospitals (Pardi Hospital and Kasturba Hospital). We have medical checkup schedule once in quarter for Insecticide plant's employees Other necessary items including First-aid medicines, antidotes and equipment as prescribed in the schedule the under Rule-68 U (b) of the Gujarat factories rules are also been provided. Attached sample medical checkup report sample was submitted to your good office vide our letter dated **19.12.2019** the main report.

Atul Ltd
Department of Health

Laboratory Report

Haematology

Test Description	Result	Unit	Reference Range
CBC + DIFF : Complete Haemogram			
WBC : White Blood Cell Count	7.07	10^3/uL	Normal 4.21 - 9.07
RBC : Red Blood Cell Count	5.89	10^6/uL	Normal 4.63 - 6.89
HGB : Haemoglobin	15.00	g/dL	Normal 13.7 - 17.5
HCT : Haematocrit (PCV)	48.90	%	Normal 40.7 - 51.0
MCV : Mean Cell Volume	88.80	fL	Normal 79.0 - 92.2
MCH : Mean Cell Haemoglobin	30.70	pg	Normal 26.7 - 32.2
MCHC : Mean Cell Haemoglobin Concentration	34.70	g/dL	Normal 32.3 - 36.5
PLT : Platelet Count	302.00	10^3/uL	Normal 163 - 337
RDW-SD : RBC Distribution Width Standard Deviation	41.00	fL	Normal 35.1 - 43.9
RDW-CV : RBC Distribution Width Coefficient Variation	12.90	%	Normal 11.6 - 14.4
PDW : PLT Distribution Width	9.20	fL	
MPV : Mean Platelet Volume	9.10	fL	
P-LCR : PLT Large Cell Ratio	17.90	%	
PCT : Plateletcrit	0.28	%	
NEUT : Neutrophil Count	65.90	%	Normal 34.0 - 67.9
LYMPH : Lymphocyte Count	26.20	%	Normal 21.8 - 53.1
MONO : Monocyte Count	4.80	%	Normal 1.3 - 12.2
EO : Eosinophil Count	2.40	%	Normal 0.8 - 7.0
BASO : Basophil Count	0.60	%	Normal 0.2 - 1.2

Key: *Abnormal Low, **Critical Low, ***Hypokalemia Low, #=Abnormal High, ##=Critical High, ###=Hyperkalemia High
Haematology Analyzer : Sysmex XS-500i (fully automated 5-part blood cell counter) [Chemistry]
Biochemistry Analyzer : Tebow D-131 (fully automated) [Electro]

Lab Technician
Med Path Doctor

Address : Atul 396020, Valsad District, Gujarat State, India

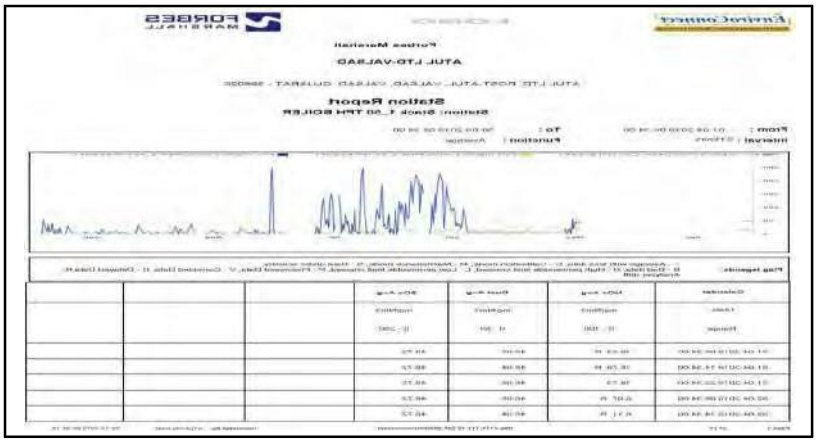
Atul Ltd
Department of Health

Laboratory Report

Biochemistry

Test Description	Result	Units	Reference Range
FBS - Fasting Blood Sugar			
Specimen Blood			Sample Date: 12/07/19 8:16 AM
Lab ID No: LA0000000			Test Date: 12/07/19 9:03 AM
Blood Sugar - Fasting	89	mg/dL	Normal 70.0 - 110.0
Lipid Profile			
Specimen Serum			Sample Date: 12/07/19 8:16 AM
Lab ID No: LA0000000			Test Date: 12/07/19 12:00 PM
Total Cholesterol	179.61	mg/dL	Normal upto 200
HDL Cholesterol	41.50	mg/dL	Normal 30.0 - 70.0
Triglycerides	90.26	mg/dL	Normal 60.0 - 150
VLDL Cholesterol	18.05	mg/dL	Normal 7.0 - 30.0
LDL Cholesterol	120.2	mg/dL	Normal 50.0 - 190.0
LDL/HDL Ratio	2.89		Normal Upto 3.0
TC/HDL Ratio	4.33 *		Normal Upto 4.0
Specimen Serum			Sample Date: 12/07/19 8:16 AM
Lab ID No: LA0000000			Test Date: 12/07/19 12:00 PM
SGOT / AST	49.70	U/mL	Normal 5.0 - 40.0
Specimen Serum			Sample Date: 12/07/19 8:16 AM
Lab ID No: LA0000000			Test Date: 12/07/19 12:00 PM
SGPT / ALT	37.70	U/mL	Normal 5.0 - 40.0
Bilirubin (Serum)			
Specimen Serum			Sample Date: 12/07/19 8:16 AM
Lab ID No: LA0000000			Test Date: 12/07/19 12:00 PM
Total Bilirubin	0.70	mg/dL	Normal 0.3 - 1.0
Direct Bilirubin	0.30 *		Normal Upto 0.2
Indirect Bilirubin	0.40		Normal Upto 0.8

Remark: All employ found medically fit to work, no non-contagious diseases were observed.

xxi .Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel /dra in carrying effluent within the premises.	**Complied**. Online monitoring system for SPM, SOx and NOx is already been made and connected to CPCB server. **Photograph of main gate digital display board for ambient air quality.**    **Photograph of online monitoring system (CEMS) connected to the CPCB server:**

B. GENERAL CONDITIONS:		
i.	The mproject authorities shall adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.	Compliance of CCA for Consent No. AWH-67717 dated 4/11/2014 is attached as below:-

Compliance of CCA

Compliance of CCA AWH- 67717 issued on 4/11/2014 valid till 03/11/2019

Sr. No.	Condition	Compliance
1	Consent No. AWH 67717 dated 4/11/2014	
2	Validity up to 03/11/19	CC &A renewal application done and Provisional consent is received. Our new CCA is valid till 30.9.2023. Since detailed order is yet to be issued by GPCB, compliance of referred CCA is given
	Production capacities of different products (Total: 32137.96 / 33137.96 MTPM; 69 products)	Matches with consent. Pl. see production details for 18-19 as Annexure 1
3	***Condition under Water Act:***	
3.1	Quantity of industrial effluent shall not exceed 17283Kl/day; excluding ARI.	Complied. Pl. see water balance for year 18-19 as Annexure 2.
3.2	High COD effluent shall be incinerated (28 KLPD) in own incinerator within premises.	We have been segregating high COD streams (COD >50000 ppm) and same is being taken for recovery to get economic benefit. Rest lean effluent of COD <2000 ppm is finally sent to ETP for treatment. All the high COD streams are being diverted to recovery system rather than incineration. Streams containing Ammonia, Methanol, Copper, Solvents, Phenolics, etc. are taken for the recovery of the same and reused. Hence, there is **no High COD Waste water stream remaining** and therefore no incineration is needed.
	High TDS effluent shall be evaporate in MEE.	Complied. High TDS effluent is evaporated in MEE.
3.3	Quantity of domestic sewage shall not exceed 937 Kl/day.	Complied. Pl. see water balance for year 18-19 as Annexure 2.
3.4	**Trade Effluent**	
	Treated effluent Norms to be achieved	Complied. Pl. refer latest GPCB result as annexure 3.
	All efforts to be made for removal of color and unpleasant odor.	Complied
3.5	The final treated effluent confirming the above standard shall be collected in guard pond and then discharged through closed pipe line to estuary zone of Tar river via diffuser.	Complied

3.6	Sewage shall be disposed off through septic tank/ sink pit system.	Sewage is being disposed off through Septic tank followed by soak pit and overflows are designed to go to ETP
4	***Condition under Air Act:***	
4.1a	Fuel consumption figures for boilers / Heaters	Complied
4.1b	List of boilers for captive power consumption	Noted
4.2	Install and operate air pollution control system to achieve norms.	Complied
4.3	Flue gas Emission Norms	Complied. Pl. refer latest GPCB result as annexure 4.
4.4	Process Emission Norms	Complied. Pl. refer latest GPCB result as annexure 5.
4.5	Ambient air monitoring Norms	Complied. Pl. refer third party result as annexure-6.
4.6	Operate industrial plant / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified.	Complied
4.7	The consent shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limit specified.	Noted
4.8	The applicant shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions, and the same shall be open for inspection by and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted /displayed to facilitate identification	Complied
4.9	Noise Levels in ambience (75 dbA) from 6 am to 10 pm day time; and 70dB(A) from 10 pm to 6 am night time.	Complied
5	**Authorization** for the Management, Handling & Transboundary Movement of Hazardous Waste- Form-2 (See rule 5 (4) for grant of Authorization for occupier or Operator handling Hazardous Waste Rules-2008	
5.1	Authorization no. AWH 67717 dated 4/11/2014	
	Haz. Waste disposal as stipulated	Complied. Pl. refer Haz waste data for year 18-19 as Annexure 7.

5.2	The authorization is granted to operate a facility for collection, storage, within the factory premises and treatment, transportation and ultimate disposal of Hazardous wastes as mentioned in the above as per Hazardous Waste [Management, Handling & Transboundary Movement] Rules-2008.	Complied
5.3	The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.	Complied
5.4	Validity up to 3/11/19	CC &A renewal application done and Provisional consent is received. Our new CCA is valid till 30.9.2023. Since detailed order is yet to be issued by GPCB, compliance of referred CCA is given
5.5	Terms and conditions for authorization:	
5.5.1	The applicant shall comply with the provisions of the Environment (Protection) Act 1986 and the rules made there under.	Complied
5.5.2	The authorization shall be produced for inspection at the request of officer by the GPCB.	Complied
5.5.4	Any unauthorized Change personnel, equipment or working conditions as mentioned in the authorization order by the persons authorized shall constitute a breach of this authorization.	Noted
5.5.4	An application for the renewal of an authorization shall be made as laid down in rule 5 (7) (ii)	Noted
5.5.5	Industry shall submit annual report within 15 days and ash subsequently by 31st January every year.	Complied.
6	***General Conditions :***	
6.1	Any change in personnel, equipment or working conditions as mentioned in the consent form/order should immediately be intimated to this Board.	Noted

ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the MoEF&CC in case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Complied. We ensure that there is no further expansion or modifications related to EC in the plant. For any deviations or alteration in the plant we will opt prior permission from MoEF.
iii.	The locations of Ambient air quality monitoring stations shall be decided in consultation with SPCB and it shall be ensured that at least one stationeach is installed in the upwindand downwind direction as well	Complied. The Location of ambient air quality monitoring stations had been decided in consultation with GPCB so that at least one station is installed in the up wind and downwind direction as well as where maximum ground level concentration are anticipated. This also covers the impact, if any, of the project plant. The same had been shown to authority like SPCB, CPCB &MoEF during their visit to our factory. The maximum values during the compliance period confirm that at no time the emission level went beyond the stipulated standards. Parameter wise summary is given below:

as where max. ground level concentrations are anticipated.

		SUMMARY OF AMBIENT AIR QUALITY RESULTS:					
		Station	Parameter	Limit microgram/NM3	Values for the period Oct 19 - Mar 20		
					Min.	Max.	Avg.
		66 KV	RSPM (PM2.5)	60	19.6	36.8	28.8
			PM10	100	38.4	52.3	44.0
			SO2	80	9.4	11.2	10.3
			NOx	80	13.2	17.5	15.3
			Ammonia	850	ND	ND	ND
			HCl	200	ND	ND	ND
iv.	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E)dated 16""November, 2009 shall be followed.	Opposite Shed D	RSPM (PM2.5)	60	28 35	38 52	33 40.3
			PM10	100	7.9	9.6	8.7
			SO2	80	8.3	11.2	9.5
			NOx	80	28	38	33
			Ammonia	850	ND	ND	ND
			HCl	200	ND	ND	ND
		Near West site ETP	RSPM (PM2.5)	60	24	45	34.3
			PM10	100	39	55	43.6
			SO2	80	7.7	14.7	9.4
			NOx	80	8.4	15.4	10.5
			Ammonia	850	ND	ND	ND
			HCl	200	ND	ND	ND
		Near North ETP	RSPM (PM2.5)	60	27	44	36.6
			PM10	100	40	54	44
			SO2	80	8.3	12.8	10.0
			NOx	80	8.2	14.2	10.8
			Ammonia	850	ND	ND	ND
			HCl	200	ND	ND	ND
		TSDF	RSPM (PM2.5)	60	26	46	37.8
			PM10	100	40	50	44.5
			SO2	80	7.4	10.6	9.0
			NOx	80	7.6	13.6	10.1
			Ammonia	850	ND	ND	ND
			HCl	200	ND	ND	ND
		Main Guest House	RSPM (PM2.5)	60	15	28	21.1
			PM10	100	22	45	37.1

				SO2	80	4.3	8.4	6.1
				NOx	80	5.2	9.4	7.5
				Ammonia	850	ND	ND	ND

				HCl	200	ND	ND	ND
			Wyeth Colony	RSPM (PM2.5)	60	10	20	19.6
				PM10	100	24	44	35.3
				SO2	80	4.1	7.6	6.35
				NOx	80	4.6	8.6	6.9
				Ammonia	850	ND	ND	ND
				HCl	200	ND	ND	ND
			Gram panchayat hall	RSPM (PM2.5)	60	12	30	24.3
				PM10	100	29	52	42.5
				SO2	80	6.2	8.6	7.4
				NOx	80	5.7	9.4	7.4
				Ammonia	850	ND	ND	ND
				HCl	200	ND	ND	ND
			Main office, North site	RSPM (PM2.5)	60	19	35	26.5
				PM10	100	35	52	43.3
				SO2	80	6.4	9.2	7.5
				NOx	80	7.3	10.6	8.5
				Ammonia	850	ND	ND	ND
				HCl	200	ND	ND	ND
			Haria water tank	RSPM (PM2.5)	60	24.4	52.2	39.9
				PM10	100	8.8	11.2	9.4
				SO2	80	10.2	15.8	13.4
				NOx	80	24.4	52.2	39.9
				Ammonia	850	ND	ND	ND
				HCl	200	ND	ND	ND

<table>
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<td>v.</td>
<td>The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules,1989</td>
<td>
Complied.

The ambient and workplace noise level confirms to the standard prescribed under EPA. The same is being regularly monitored at regular interval for ensuring the compliance. The testing lab appointed is M/s. Royal Environment Auditing & Consultancy Service, Surat NABL Approved TC – 5948, issue date- 01/06/2019 and valid till 31/05/2021.

The analysis reports were below the limits of quantization and within the permissible limit. A detail of analysis report of Monitoring report is attached in Annexure- IV

The maximum values during the compliance period confirm that at no time the emission level went beyond the stipulated standards. Parameter wise summary is given below:

Noise level monitoring data (Day Time)
<table>
<tr><th rowspan="2">Sr. No.</th><th rowspan="2">Location</th><th rowspan="2">Permissible Limits, dBA</th><th colspan="3">Values for the Period Oct 19- Mar 20</th></tr>
<tr><th>75</th><th>Min.</th><th>Max.</th><th>Avg.</th></tr>
<tr><td>1</td><td>Near Main guest house</td><td>75</td><td>55.7</td><td>61.2</td><td>57.4</td></tr>
<tr><td>2</td><td>Near TSDF</td><td>75</td><td>61.2</td><td>64.2</td><td>62.6</td></tr>
<tr><td>3</td><td>At Wyeth Colony</td><td>75</td><td>49.7</td><td>57.3</td><td>53.6</td></tr>
</table>
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</table>

	viz. 75 dBA (day time) and 70 dBA (night time).		4	Gram Panchayat Hall	75	60.8	63.5	62.7
			5	Near Main Office North site	75	59.2	64.5	62.18
			6	ETP North site	75	63.2	68.5	64.4
			7	Opposite shed D	75	64.7	67.3	66.0
			8	ETP West site	75	62.8	68.5	64.5
			9	Water tank Haria road	75	53.5	62.6	57.1
			10	Near 66KVA substation	75	62.5	68.6	65.0

Noise level monitoring data (Night Time)

Sr. No.	Location	Permissible Limits, dBA	Values for the period Oct 19-Mar 20		
		70	Min.	Max.	Avg.
1	Near Main guest house	70	50.2	52.2	51.2
2	Near TSDF	70	43.7	58.7	55.0
3	At Wyeth Colony	70	43.7	51.1	47.0
4	Gram Panchayat Hall	70	53.4	58.4	56.1
5	Near Main Office North site	70	53.2	57.3	55.5
6	ETP North site	70	53.2	58.6	54.7
7	Opposite shed D	70	54.7	62.7	59.7
8	ETP West site	70	50.3	60.8	57.6
9	Water tank Haria road	70	50.3	55.8	53.1
10	Near 66KVA substation	70	53.8	63.2	57.1

vi.	The Company Shall harvest rainwater from the roof tops of the Buildings and Storm water Drains to Recharge the ground water and to utilize the	Complied. Rooftop rain water from Coal sheds and New TG building is collected in well-constructed pond and used as make up water for cooling tower. We have already two numbers of check dams in natural storm water drains to collect and harvest rain water in monsoon season after giving necessary pre-treatment to remove suspended matter as we have pumped these rain water to clarifloculator units to remove suspended matter. We are creating facility/ capacity to cater our consumption with rain harvested water with zero river drawls of water during the rainy days. Besides this, there are three check dams and pumping facility to harvest rain water. We also construct temporary sand bag dam on top of dam

	same For process Requirements.	towards the end of monsoon to store additional free flowing rain water in river Par. In addition to above, surface runoff water and roof top water is used to recharge bore wells. Total No. of Pond: 2 Nos. Capacity of Pond:(1 Nos. x 10000 KL) & (1 Nos. x 2000 KL) Company has harvest 9.63 lac KL rain water during 2019. **Photograph of rain water harvesting structure (Pond) as shown below:**  **Water Harvesting Project at Colony**  **Water Harvesting Project Near Coconut circle**

vii.	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on Handling of chemicals shall be imparted.	Complied. Annual training plan are being carried out every calendar year from January to December for safety purpose. Company is providing Training which cover all relevant workplace policies, procedures and practices to ensure that staff have the appropriate skills and knowledge to perform their work safety and according to the legislative requirements and the departments and work place procedures. All Employees and others have a duty to comply with instructions given for workplace health and safety. Employee training which generally include: • First aid training • Fire fighting training – Use of Fire Hydrant /Extinguisher • Handling of Compressed Gas Cylinder • Work Permit System, Use of Spill Kit • Handling of Solvents • Operation of ETP &MEE • Handling of Hazardous waste • Handling of Biomedical waste • Scrap yard management • 111 – A training as per factory Act • General instruction training; e.g. workplace communication processes, incident reporting, lock down, evacuation and medical emergency procedures, mock drill. • Job-specific training e.g. safe work procedures for the use of equipment, SOP of manufacturing process & safety and health aspect of chemical handling. • Conducted OSHAS & EMS Programme. • Hygiene, Stress management & skill development.

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<td>viii.</td>
<td>The company shall also comply With all the environmental protection Measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in Respect of environmental management, and risk mitigation measures relating To the project shall be implemented.</td>
<td>Complied.
Compliance to all environmental protection measures and safeguards proposed in the project report submitted to ministry is compiled as below:-
<table>
<tr><th>S. N</th><th>Potential Impact</th><th>Action to be followed</th><th>Parameters for monitoring</th><th>Frequency of monitoring</th><th>Status of Compliance</th></tr>
<tr><td>1.</td><td>Air emission</td><td>Adequate stack height APCM- Multi Cyclone & Scrubber is provided as APCM AAQ within the project premises and nearby habitations to be monitored. All vehicles to be PUC certificate.</td><td>SPM, RSPM, SO2 and NOx, Vehicle logs to be maintained.</td><td>Monthly through external agency NABL Approved.</td><td>Stack and APCM Details are provided in EC Compliance Point No.4 of Conditions. Quality of gaseous emission and AAQ</td></tr>
<tr><td>2.</td><td>Noise</td><td>Noise generating from operation of boiler, cooling towers &plant &</td><td>Spot noise level Recording.</td><td>Monthly through NABL Approved external agency</td><td>Carried out at the periphery of whole plant premises</td></tr>
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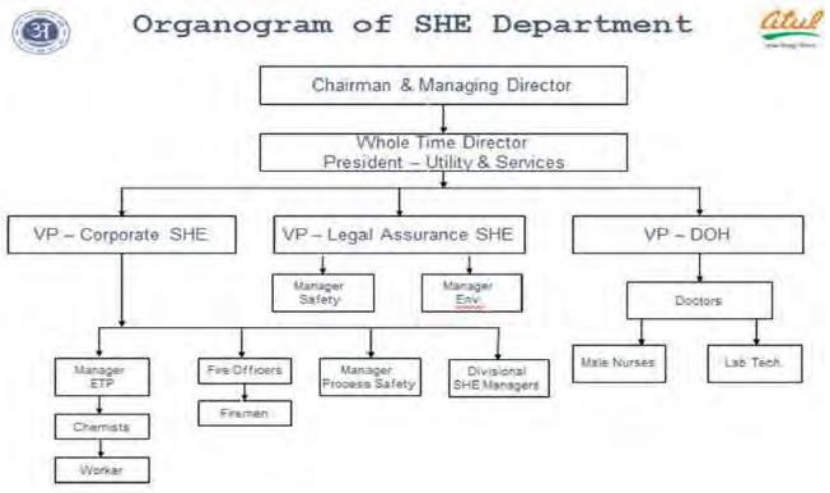
					M/c area to be monitored.					

			3.	Waste water discharge	Compliance to the wastewater discharge standards complete effluent treatment Plant- Primary+ Secondary & MEE, ZLD is achieved.	pH, TSS,TDS,COD,BOD, oil & Grease	Monthly through NABL Approved external agency	Discharge effluent is analyzed on daily basis.
			4.	Solid/ Haz Waste	Check compliance of HWM rules.	Quantity and quality monitoring	Periodically	Details are providedin EC Compliance Point No.10 of specific Conditions.
			5.	Non routine events and accidental release.	Plant drawn, considering likely emergencies and steps required to prevent/limit consequences.	Mock drills and records of the same.	Periodic during process activities.	Every year 4 nos. mock drills carried out in the premise on rotational basis covering all plants.
			6.	Green Belts	Vegetation, green belt development	More than 50,000 Trees /Year	Once a year	Green belt area is abou36% land area. Totaarea: 1126078.27 sq.mt

								Green belt area: 409030.00 sq.mt	

x.	The company shall undertake eco-developmental measures including community welfare measures in the project area for the Overall improvement of the environment.	**Complied. CSR projects (April 2019 to March 2020): is given in condition (vii)**
xi.	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	**Complied.** A separate Environmental Management Cell is equipped along with internal lab such as COD Analyzer, TOC Analyzer, pH Meter, TDS Meter etc. For all External Environmental Monitoring we have appointed M/s. Pollucon Laboratories Pvt Ltd, Surat NABL Approved **TC – 5945**, issue date- **28/05/2019** and valid till **27/05/2021.** 

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<td>xii.</td>
<td>The company Shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the Conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.</td>
<td>
Complied.

EMP measures are implemented. A separate budget is being allocated every year to comply with the entire legal requirement stipulated by SPCB, CPCB & MoEF apart from upkeep of pollution control systems and facilities. Total expenditure is given in below table including EMS implementation:
Adequate fund embarked for EMP, Fy. 2019-2020:
<table>
<tr><th>S.N.</th><th>Parameter</th><th>Capital Cost per annum (Rs. in lacs) 2019-20</th><th>Recurring Cost per annum (Rs. in lacs) 2019-20</th></tr>
<tr><td>1</td><td>Air Pollution Control</td><td>124.17</td><td rowspan="2">2444.5</td></tr>
<tr><td>2</td><td>Liquid Pollution Control</td><td>341.7</td></tr>
<tr><td>3</td><td>Environmental Monitoring and Management</td><td>29.3</td><td>35</td></tr>
<tr><td>4</td><td>Solid waste Disposal</td><td>-</td><td>263.87</td></tr>
<tr><td>5</td><td>Occupational health</td><td>-</td><td>12</td></tr>
<tr><td>6</td><td>Green belt</td><td>-</td><td>5.0</td></tr>
<tr><td colspan="2">Total</td><td>495.17</td><td>2760.37</td></tr>
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xiii.	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	**Complied.** We have informed the public that the project has been accorded environmental clearance by the EAC, MoEF&CC Delhi and that the copies of the clearance letter are available with the GPCB and also be seen at website of EAC/GPCB.
		 Infrastructure ATUL LTD Ref : Atul/Assurance/EC Date : February 16, 2019 To, Sarpanch Shri Atul Village, Atul Subject : Environmental Clearance (EC) Ref. : F. No. J-11011/108/2018-IA-II(I) dated 11.02.2019 Respected Madam, We hereby inform you that Atul Ltd located at Atul 396 020, Gujarat has been accorded environmental clearance vide F no. J-11011/108/2018-IA-II(I) dated February 11, 2019 by the Ministry of Environment, Forest and Climate Change, Government of India for the proposed project of expansion of chemicals manufacturing unit. Pl find attached herewith the hard copy of the same in accordance to the condition stipulated in the referred EC for your reference and record. Kindly acknowledge the receipt of the same. Thanking you. Yours truly, For Atul Ltd (H. M. Desai) (General Manager- Assurance EHS) Received copy 8/10/2019  ATUL LTD Ref. : Atul/Assurance/EC 2019/Adv Through Reg. AD Post Date : February 22, 2019 To, Regional Officer, Regional Office, Western Region, Kendriya Parvavaran Bhavan, Link Road No. 3, E-5, Ravi Shankar Nagar, Bhopal 462016, Madhya Pradesh. Subject : Advertisement for recinding EC Reference : EC F no. J-11011/109/2013-IA-II(I) dated February 11, 2019 Respected Sir, We have been accorded environmental clearance vide F no. J-11011/108/2013-IA-II(I) dated February 11, 2019 by the Ministry of Environment, Forest and Climate Change, Government of India for the proposed project of expansion of chemicals manufacturing unit. As per the condition no. xvi of referred EC, we have published the advertisement of receiving EC in leading newspapers of region, 2 nos. in vernacular language and one in English. All three advertise were published on 17th February 2019. Copy of same is attached herewith. Trust the same is in order. Submitted for your record please. Thanking you, Yours truly, For Atul Ltd. H. M. Desai (General Manager- Assurance EHS)

<table>
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<td>xiv.</td>
<td>The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e- mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of EC and six monthly compliance status report shall be posted onthe website of the company.</td>
<td>Complied.

We regularly submit the half-yearly compliance report. The implementation of the project along with environmental actions plans are monitored by the authority time to time. We have already submitted the 6 monthly compliance reports to the authority for all six monthly periods between 2016 to 2019 & same is being updated on website.

<table>
<tr><th>SN</th><th>EC Compliance Report Period</th><th>Submission Date</th></tr>
<tr><td>1</td><td>April 2019- September 2019</td><td>27.11.2019</td></tr>
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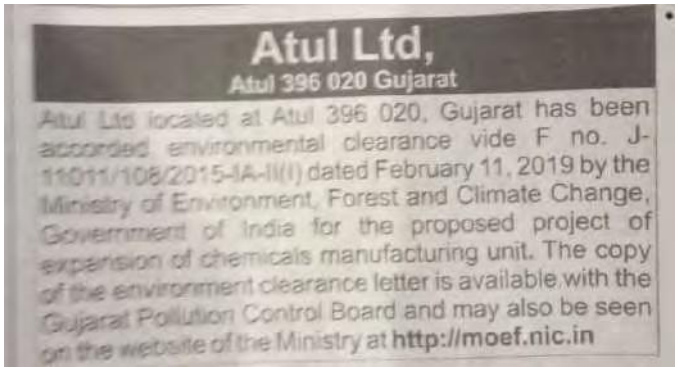
</table>

xv.	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended Subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective RegionalOffices of MoEF&CC by e- mail.	**Complied.** The Env. Statement (Form-V) for each financial year ending 31stMarch is being submitted to State Pollution Control Board (GPCB) every year time to time on XGN portal as well as hard copy submission. We have also submitted six monthly EC Compliance report periodically in which said information were updated time to time.

xvi.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://moef.nic.in This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	**Complied.** We have granted EC Dated:11th Feb, 2019 Online, and inform the public that the project has been accorded environmental clearance and advertised in local newspapers that are widely circulated in the region with vernacular language Guajarati and another in English as per below details: New Paper Add Dated: 17th Feb,2019 1. Gujarati news paper: "Gujarat Samachar" 2. Gujarati news paper:"Sandesh" 3. English news paper: Times of India "Surat Edition" Photographs of newspaper ADD: **Gujarat Samachar Dt.17.2.19**  **Sandesh dt.17.2.19**  **Time of India dt.17.2.19**  Atul Ltd, Atul 396 020 Gujarat Atul Ltd located at Atul 396 020, Gujarat has been accorded environmental clearance vide F no. J-11011/108/2015-IA-II(I) dated February 11, 2019 by the Ministry of Environment, Forest and Climate Change, Government of India for the proposed project of expansion of chemicals manufacturing unit. The copy of the environment clearance letter is available with the Gujarat Pollution Control Board and may also be seen on the website of the Ministry at http://moef.nic.in

xvii.	The project authorities shall inform the Regional Office as well as the Ministry, the Date ofinancial closure and final approval of the project by the concerned authorities and the date of start of the project.	**Complied.** We have communicated with the regional officer & MoEF&CC towards the status of work and financial closure time to time. We have also submitted six monthly EC Compliance report periodically in which said information were updated time to time. We have obtained CTE after receiving ToR. CTE was granted by GPCB Vide No. **GPCB/CCA- VSD-313(12)/ID: 23158/363958** on **25.7.2016** (CTE no. 80394) Valid Till- **17/7/2023.** We had applied for amendment in existing CTO after receiving EC. CTO amendment has been granted by GPCB Vide Letter No. **GPCB/CCA-VSD-313(16)/ID:23158/513897**, Dated **17.7.2019** (CTO amendment No. **AH 102080**), Valid Till-**03/11/2019**. Renewal for the same has been received with consent order no. **105110** valid up to **30.09. 2025.**

Annexure I

Quality of treated effluent

Sr. No.	Parameter	Results						GPCB Limits
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	
1	pH	8.19	7.95	6.91	7.02	7.45	6.23	5.5 to 9.0
2	Temperature oC	31.4	31.8	30.9	30.4	31.6	30.1	40 oC
3	Colour (pt. co. scale)in units	100	90	80	140	80	78	---
4	Suspended solids, mg/l	92	76	92	98	65	72	100
5	Phenolic Compounds, mg/l	0.088	0.056	0.044	0.056	0.041	0.047	5
6	Cyanides, mg/l	ND	ND	ND	ND	ND	ND	0.2
7	Fluorides, mg/l	0.75	0.7	0.65	0.75	0.68	0.62	2
8	Sulphides, mg/l	1.2	0.9	1.2	1.8	1.2	1.1	2
9	Ammonical Nitrogen, mg/l	48	38	43	46	34	37	50
10	Total Chromium, mg/l	ND	ND	ND	ND	ND	ND	2
11	Hexavelent Chromium, mg/l	ND	ND	ND	ND	ND	ND	1
12	BOD (3 days at 27oC), mg/l	78	65	60	65	59	66	100
13	COD, mg/l	240	220	218	215	208	222	250
Note : ND is Not Detectable.								

Annexure II

Ambient Air Monitoring details

Station	Parameter	Limit microg m/NM 3	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20
66 KV	PM 2.5	60	21.3	19.6	32.2	29.6	33.7	36.8
	PM10	100	43.5	38.4	45.3	40.4	44.2	52.3
	SO2	80	9.8	10.4	9.4	10.4	11.2	10.8
	NOx	80	16.4	17.5	16.2	13.5	13.2	15.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Opposite Shed D	PM 2.5	60	21.3	28	32	38	32	36
	PM10	100	43.5	35	39	35	39	42
	SO2	80	9.8	7.9	9.6	8.4	9.6	8.2
	NOx	80	16.4	8.3	9.3	9.2	9.3	10.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Near West site ETP	PM 2.5	60	24	24	27	45	36	38
	PM10	100	39	39	42	39	42	45
	SO2	80	8.7	8.7	8.4	14.7	8.4	8.7
	NOx	80	9.4	9.4	8.4	15.4	8.4	11.4
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Near North ETP	PM 2.5	60	27	27	29	40	40	44
	PM10	100	40	40	44	40	42	44
	SO2	80	8.3	8.3	9.6	12.8	9.6	10.8
	NOx	80	8.6	8.6	8.2	14.2	8.2	12.8
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
TSDF	PM 2.5	60	26	26	28	42	43	46
	PM10	100	46	46	46	42	40	43
	SO2	80	7.4	7.4	8.2	10.6	8.2	9.8
	NOx	80	8.1	8.1	7.6	11.5	7.6	13.6
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Main Guest House	PM 2.5	60	15	15	15	28	19	24
	PM10	100	25	25	22	45	42	44

	SO2	80	4.5	4.5	4.3	8.4	7.8	6.3
	NOx	80	5.2	5.2	6.2	9.4	8.2	7.8
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Wyeth Colony	PM 2.5	60	10	10	17	25	20	22
	PM10	100	26	26	24	42	39	37
	SO2	80	4.1	4.1	5.4	7.2	6.7	7.6
	NOx	80	4.6	4.6	5.3	8.2	7.4	8.6
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Gram panchayat hall	PM 2.5	60	12	12	22	30	28	29
	PM10	100	29	29	32	49	48	45
	SO2	80	6.2	6.2	6.3	8.6	7.8	8.2
	NOx	80	5.7	5.7	7.2	9.4	8.2	7.3
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Main office, North site	PM 2.5	60	19	19	24	35	30	26
	PM10	100	35	35	38	52	48	49
	SO2	80	7.2	7.2	6.8	9.2	8.4	7.3
	NOx	80	7.3	7.3	8.1	10.6	9.6	8.3
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Haria water tank	PM 2.5	60	18.3	18.3	17.8	28.2	37.8	30.8
	PM10	100	24.4	24.4	32.7	42.2	42.7	45.2
	SO2	80	9.5	9.5	8.8	11.2	8.8	8.8
	NOx	80	15.8	15.8	14.5	14.3	11.5	10.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND

Annexure III

Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
East site									
1	FBC boiler E1	PM	100 mg/Nm3	65	53	71	63	76	78
		SO_2	600 mg/Nm3	110	124	112	104	112	115
		NOx	600 mg/Nm3	137	145	126	125	106	103
2	FBC boiler E2	PM	100 mg/Nm3	73	68	68	78	82	88
		SO_2	600 mg/Nm3	126	132	107	112	109	108
		NOx	600 mg/Nm3	140	137	119	117	121	116
3	FBC boiler E3	PM	100 mg/Nm3	78	59	75	65	72	75
		SO_2	600 mg/Nm3	136	128	116	108	113	114
		NOx	600 mg/Nm3	129	132	126	112	126	120
4	Hot Oil Unit (Resorcinol Plant)	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	24	24	36	28	22	25
5	DG set 1010 KVA (Standby)	PM	150 mg/Nm^3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
West Site									
6	FBC boiler W1	PM	100 mg/Nm3	53	60	52	70	58	55
		SO_2	600 mg/Nm3	102	112	104	118	119	120
		NOx	600 mg/Nm3	122	124	123	104	113	116
7	Hot Oil Plant shed-B	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	30	30	40	32	20	21
8	Oil burner Shed B (Stand By)	PM	150.0 mg/Nm3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
9	Boiler (50 TPH 2 Nos) (New boilers) W2,W3	PM	50 mg/Nm3	25	32	34	37	39	35
		SO_2	600 mg/Nm3	127	132	108	116	120	110
		NOx	300 mg/Nm3	93	102	98	102	103	105
		Mercury	0.03 mg/Nm3	ND	ND	ND	ND	ND	ND
10	DG set 1500 KVA (Stand By)	PM	150.0 mg/Nm3	Stand by	Stand by	Stand by	Stand by	Stand by	Stand by
		SO_2	100 ppm						
		NOx	50 ppm						
North Site									
11	Thermic fluid heater of DCO/DAP Plant	PM	150.0 mg/Nm3	ND	ND	ND	ND	ND	ND
		SO_2	100 ppm	ND	ND	ND	ND	ND	ND
		NOx	50 ppm	24	24	32	30	28	26

Details of Process and Flue stack				Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
Sr. No.	Stack Details	Paramenter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
Atul East Site									
1	Phosgene Plant (Old Plant)	Phosgene	0.1 ppm	Not in use	Not in use	Not in use	Not in use	Not in use	Not in use
Caustic Chlorine Plant									
2	Dechlorination Plant	Cl_2	9.0 mg/Nm3	6.2	5.3	7.2	5.8	4.2	4.4
		HCl	20.0 mg/Nm3	8.3	6.8	9.3	6.3	8	6.5
3	Common stack of HCl Sigri unit 1&2	Cl_2	9.0 mg/Nm3	6.7	4.3	5.6	5.3	6.4	5.2
		HCl	20.0 mg/Nm3	9.4	7.6	8.2	7.3	8.4	9.3
FCB Paint									
4	Foul Gas Scubber	SO_2	40.0 mg/Nm3	Not in use	Not in use	Not in use	Not in use	Not in use	Not in use
		NOx	25.0 mg/Nm3						
Sulfuric Acid (East Site)									
5	Sulfuric Acid Plant	SO_2	2.0 kg/T	0.4	0.6	0.8	0.6	0.4	0.5
		Acid Mist	50.0 mg/Nm3	14.3	12.4	16.7	13.4	11.7	10.2
6	ChloroSulfonic Acid plant reactor	Cl_2	9.0 mg/Nm3	6.8	5.2	7.3	6.2	5.7	3.2
		HCl	20.0 mg/Nm3	12.5	11.7	14.6	12.7	14.8	12.5
Resorcinol plant									
7	Scrubber vent-Resorcinol Plant	SO_2	40.0 mg/Nm3	Not running during visit	Not running during visit	Not running during visit	6.2	8.6	7.2
8	Spray Dryer -Resorcinol Plant	PM	150.0 mg/Nm^3	Not running during visit	Not running during visit	Not running during visit	Not running during visit	32	32
Incinerator									
9	Incinerator	PM	150.0 mg/Nm3	52	61	62	46	38	45
		SO_2	40.0 mg/Nm3	17.8	16.7	16.2	14.2	12.5	10.2
		NOx	25.0 mg/Nm3	8.6	7.2	9.8	9.8	10.8	14.5
NI Plant									
10	Foul Gas Scubber	SO_2	40.0 mg/Nm3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
		NOx	25.0 mg/Nm3						
NBD Plant .									
11	Spray Dryer	PM	150.0 mg/Nm3	Not in use	Not in use	Not in use	Not in use	Not in use	Not in use
12	Scrubber S-902	Phosgene	0.1 ppm	Not running during visit	Not running during visit	Not running during visit	ND	ND	ND
13	Scrubber S-801/802	HCl	20.0 mg/Nm3	Not running during visit	Not running during visit	Not running during visit	2.5	3.4	3.5
		NOx	25.0 mg/Nm3	Not running during visit	Not running during visit	Not running during visit	11.3	9.2	8.8
2-4-D I									
14	Common Scrubber; 2,4D Plant	Cl_2	9.0 mg/Nm3	7.3	6.5	5.8	6.5	4.3	4.6
		HCl	20.0 mg/Nm3	6.5	10.3	7.3	8.4	6.3	6
		Phenol	--	ND	ND	ND	ND	ND	ND
15	Dryer-1	PM with Pesticide compound	20.0 mg/Nm3	7.5	6.3	8.6	6.8	7.2	6.5
12	Dryer-2	PM with Pesticide compound	20.0 mg/Nm3	9.2	8.2	7.2	9.2	8.6	7.2
16	Dryer-3	PM with Pesticide compound	20.0 mg/Nm3	8.5	7.5	10.7	7.5	6.4	6.5
17	Dryer-4	PM with Pesticide compound	20.0 mg/Nm3	11.3	13.4	9.5	10.4	11.7	10.2
18	Dryer-5	PM with Pesticide compound	20.0 mg/Nm4				8.2	7.6	8.1

Sr. No.	Stack Details	Paramenter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
CP Plant									
20	MCPA	Cl_2	9 mg/NM^3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
		HCl	20 mg/NM^3						
		SO_2	40 mg/NM^3						
21	Fipronil	SO_2	40 mg/NM^3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
		HCl	20 mg/Nm3						
17	Imidacloprid	NH_3	175 mg/Nm3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
18	Pyrathroids	SO_2	40 mg/Nm3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
		HCl	20 mg/Nm3						
19	Stack at Amine Plant	NH_3	175 mg/Nm3	21.5	30.2	20.4	25.5	20.8	15.2
MPSL Plant									
20	Phosgene Scrubbr at MPSL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
21	Central Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
NICO plant									
22	Central scrubber at Nico Plant	Acetonytryle, IPA	---	-	-	-	-	-	-
Ester Plant									
23	Scrubber at Ester plant for Glyphosate	Formaldehyde	10 mg/Nm3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
24	Central Scrubber MCPA Plant	HCl	20 mg/Nm3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
25	MPP plant scrubber	HCl	20 mg/Nm3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
		Phosgene	0.1 ppm						
Atul West Site									
26	Shed A05/03/44	Cl_2	9 mg/NM^3	7.8	6.7	5.8	6.7	7.1	6.5
		HCl	20 mg/NM^3	10.3	9.6	8.4	9.2	12.7	10.2
27	Shed B2/12/24 Reaction Vessel	Cl_2	9.0 mg/Nm3	6.7	6.5	5.4	6.5	5.3	4.5
		HCl	20.0 mg/Nm3	8.3	8.8	12.6	9.3	8.6	7.3
28	Shed B18/02/24 Fan	SO_2	40 mg/NM^3	14.2	16.3	Not Runnig During Visit	16.2	14.7	13.3
		Cl_2	9 mg/NM^3	5.6	4.6		5.2	4.8	4.5
		HCl	20 mg/NM^3	12.4	10.6		9.3	7.3	6.8
29	Shed C5/20/15 Chlorinator	Cl_2	9.0 mg/Nm3	6.4	5.2	7.3	5.2	6.3	7.2
		HCl	20.0 mg/Nm3	10.2	12.3	9.8	11.8	10.7	13.3
30	Shed D Niro Spray dryer No. 45	PM	150.0 mg/Nm3	63	56	46	55	32	40
31	Shed D Niro Spray dryer No.50	PM	150.0 mg/Nm3	58	48	62	48	24	Not Runnig During Visit
32	Shed E 7/12/49 Spray Dryer	PM	150.0 mg/Nm3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
33	Shed F F6/1/15 Reaction Vessel	Cl_2	9.0 mg/Nm3	5.4	6.7	6.2	6.7	5.1	3.2
		HCl	20.0 mg/Nm3	7.3	8.4	8.2	8.4	7.3	6.8
34	Shed G 10/8/1 (receiver)	Cl_2	9.0 mg/Nm3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
		HCl	20.0 mg/Nm3						
35	Shed H 11/6/17 chlorinator	Cl_2	9.0 mg/Nm3	6.3	6.8	5.8	5.8	3.2	2.5
		HCl	20.0 mg/Nm3	15.2	12.5	12.4	11.4	9.7	7.2
36	Shed K K-13/3/4 Final of Sulfuric acid plant	SO_2	2.0 kg/T	0.8	0.6	0.8	0.5	0.4	0.5
		Acid Mist	50.0 mg/Nm3	17.3	20.5	15.4	10.6	14.3	10.2
37	Shed J15/09/25	HBr	--	ND	ND	ND	ND	ND	Not Runnig During Visit
		SO_2	40 mg/NM^3	12.8	13.2	16.8	13.2	11.7	

Sr. No.	Stack Details	Paramenter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
38	Shed J12/01/42	SO_2	40 mg/NM^3	15.2	10.3	17.2	10.3	13.5	Not Runnig During Visit
		Cl_2	9.0 mg/Nm3	6.3	6.7	7.1	6.2	5.8	
		HCl	20.0 mg/Nm3	9.4	8.2	12.3	8.6	7.3	
39	Shed J12/03/36	SO_2	40 mg/NM^3	14.8	14.8	16.7	14.5	12.5	Not Runnig During Visit
		HCl	20.0 mg/Nm3	9.7	8.4	9.2	8.2	7.2	
40	Shed N Scrubber Fan N20/08/24	Cl_2	9 mg/NM^3	7.2	6.3	6.2	6.7	5.6	7.3
		HCl	20 mg/NM^3	13.6	12.8	15.5	12.2	10.4	12.8
41	Shed N Scrubber Fan N20/02/41	SO_2	40 mg/NM^3	17.3	13.6	20.4	13.9	14.6	10.2
42	Sulfer Black Plant	H_2S	--	ND	ND	ND	ND	ND	ND
		NH_3	175 mg/NM^3	15.7	13.5	22.6	13.5	17.2	16.4
43	Sulfer Dyes plant	H_2S	--	ND	ND	ND	ND	ND	ND
		NH_3	175 mg/NM^3	29.6	27.4	34.2	20.4	12.8	10.2
44	MPP plant	HCl	20 mg/NM^3	12.7	9.7	11.6	10.8	9.8	-
45	Flavors & Fragrances Plant	HCl	20 mg/NM^3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
Atul North Site									
46	N-FDH Plant Catalytic Incinerator	PM	150.0 mg/Nm3	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit	Not Runnig During Visit
		SO_2	40.0 mg/Nm3						
		NOx	25.0 mg/Nm3						
		Formaldehyde	10.0 mg/Nm3						
47	PHIN Plant vessel	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
48	PHIN - II Plant	HCl	20.0 mg/Nm3	12.3	12.3	9.8	11.3	9.8	8.2
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
49	DCDPS Plant	SO_3	---	ND	ND	ND	ND	ND	ND
50	DDS Plant	NH_3	175 Mg/Nm3	55.3	55.3	58.4	52.3	48.3	44.1
51	SPIC II Plant	SO_3	---	ND	ND	ND	ND	ND	ND
52	SPIC I Plant	NH_3	175 mg/Nm3	68.2	68.2	101.2	72.2	68.2	64.3
53	SPIC IV Plant	NH_3	175 mg/NM^3	45.5	45.5	132.6	88.6	73.4	70.5
		SO_3	---	7.3	7.3	4.3	3.6	4.2	3.5
54	Furnace (Phosgene plant-New)	PM	150 mg/NM^3	62	62	72	52	46	42
55	Reactor (Phosgene plant- New)	CO	--	ND	ND	ND	ND	ND	ND
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND

Annexure IV

Noise level monitoring data (Day Time)

Sr. No.	Location	Noise Level, dBA						Permissible Limits, dBA
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	75
1	Near Main guest house	56.7	59.7	55.7	55.7	55.7	61.2	75
2	Near TSDF	64.2	61.2	62.3	62.3	62.3	63.7	75
3	At Wyeth Colony	57.3	49.7	53.5	53.5	53.5	54.4	75
4	Gram Panchayat Hall	62.4	60.8	63.5	63.5	63.5	62.5	75
5	Near Main Office North site	60.2	59.2	64.5	64.5	64.5	60.2	75
6	ETP North site	64.3	68.5	63.2	63.2	63.2	64.4	75
7	Opposite shed D	64.8	64.7	66.4	66.4	66.4	67.3	75
8	ETP West site	68.5	62.8	63.7	63.7	63.7	65.5	75
9	Water tank Haria road	59.7	62.6	53.5	53.5	53.5	60.2	75
10	Near 66KVA substation	63.3	68.6	65.2	65.2	65.2	62.5	75

Noise level monitoring data (Night Time)

Sr. No	Location	Noise Level, dBA						Permissible Limits, dBA
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	70
1	Near Main guest house	50.2	52.2	50.6	50.6	51.6	52.2	70
2	Near TSDF	55.7	58.7	54.2	54.2	53.2	54.4	70
3	At Wyeth Colony	44.7	43.7	46.1	46.1	51.1	50.3	70
4	Gram Panchayat Hall	57.3	54.8	58.4	58.4	53.4	54.3	70
5	Near Main Office North site	57.3	54.8	54.2	54.2	56.8	56.2	70
6	ETP North site	58.6	55.3	53.6	53.6	53.2	54.4	70
7	Opposite shed D	60.2	57.3	62.7	60.7	59.2	58.3	70
8	ETP West site	57.8	59.8	60.8	57.8	54.7	55.1	70
9	Water tank Haria road	52.3	55.8	50.3	52.3	54.7	53.2	70
10	Near 66KVA substation	57.2	53.8	63.2	57.2	56.4	55.1	70