

Atul Ltd

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

CRZ Compliance Report for CRZ Clearance no. ENV-1097-2942-P, dated January 17, 1998.

Report Period: October 2020 - March 2021

Sr No.	Condition	Compliance																								
1	The Company shall strictly adhere to all the provisions of CRZ notification of 1991 and subsequent amendments.	<p>Complied.</p> <p>Details are given below in the table:</p> <table border="1" data-bbox="724 831 1517 1570"> <thead> <tr> <th data-bbox="724 831 842 875">Sr No.</th> <th data-bbox="842 831 1299 875">Clause under CRZ notification</th> <th data-bbox="1299 831 1517 875">Compliance</th> </tr> </thead> <tbody> <tr> <td data-bbox="724 875 842 1039">1</td> <td data-bbox="842 875 1299 1039">Imposes the given restrictions in setting up and expansion of industries, operations or processes in CRZ.</td> <td data-bbox="1299 875 1517 1039">Noted</td> </tr> <tr> <td data-bbox="724 1039 842 1122">2</td> <td data-bbox="842 1039 1299 1122">List of prohibited activities within CRZ.</td> <td data-bbox="1299 1039 1517 1122">Noted</td> </tr> <tr> <td data-bbox="724 1122 842 1205">3</td> <td data-bbox="842 1122 1299 1205">Guideline for regulation of permissible activities.</td> <td data-bbox="1299 1122 1517 1205">Noted</td> </tr> <tr> <td data-bbox="724 1205 842 1288">4</td> <td data-bbox="842 1205 1299 1288">Procedure for monitoring and enforcement.</td> <td data-bbox="1299 1205 1517 1288">Applicable to Ministry</td> </tr> <tr> <td data-bbox="724 1288 842 1370">Ann. 1</td> <td data-bbox="842 1288 1299 1370">Classification of costal regular zone.</td> <td data-bbox="1299 1288 1517 1370">Noted</td> </tr> <tr> <td data-bbox="724 1370 842 1453">Ann. 2</td> <td data-bbox="842 1370 1299 1453">Guidelines for development of beach/resort/hotels.</td> <td data-bbox="1299 1370 1517 1453">NA</td> </tr> <tr> <td data-bbox="724 1453 842 1570">Ann. 3</td> <td data-bbox="842 1453 1299 1570">List of petroleum products permitted in storage in CRZ except CRZ-1.</td> <td data-bbox="1299 1453 1517 1570">NA</td> </tr> </tbody> </table>	Sr No.	Clause under CRZ notification	Compliance	1	Imposes the given restrictions in setting up and expansion of industries, operations or processes in CRZ.	Noted	2	List of prohibited activities within CRZ.	Noted	3	Guideline for regulation of permissible activities.	Noted	4	Procedure for monitoring and enforcement.	Applicable to Ministry	Ann. 1	Classification of costal regular zone.	Noted	Ann. 2	Guidelines for development of beach/resort/hotels.	NA	Ann. 3	List of petroleum products permitted in storage in CRZ except CRZ-1.	NA
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2	The company shall strictly adhere to the conditions stipulated by the Gujarat Pollution Control Board in their Consent order.	<p>Complied.</p> <p>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 Environmental audit report by S.N.Patel Institute of Technology & research Centre for Environment research, Bardoli, Surat for year 2020-21 is attached as Attachment 1.</p>																								

3 The company shall discharge the treated effluent meeting the norms prescribed by GPCB

Complied.

The discharged effluent is meeting all pollution board limits and values of various parameters of treated effluent is given in **Table 1**

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

Summary is given below:

Sr No.	Parameter	Limit	Values for the period October 20 - March 21		
			Min.	Max.	Avg.
1	pH	5.5-9.0	6.89	7.46	7.13
2	Temperature (°C)	40	30	30.4	30.2
3	Colour (pt. co. scale)	---	30	60	41.66
4	Suspended solids(mg/l)	100	34	72	52.16
5	Phenolic Compounds (mg/l)	5	0.58	1.2	0.87
6	Cyanides (mg/l)	0.2	ND	ND	ND
7	Fluorides (mg/l)	2	0.21	1.68	1.17
8	Sulphides (mg/l)	2	0.94	1.37	1.14
9	Ammonical Nitrogen (mg/l)	50	1.97	9.1	6.43
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	31	52	39.66
13	COD (mg/l)	250	153	230	189.17

The effluent quality at the ETP discharge point is regularly being monitored by the Environmental auditors appointed by GPCB. Latest Environmental audit report by S.N.Patel Institute of Technology & research Centre for Environment research, Bardoli , Surat for year 2020- 21 is attached as **Attachment 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, Kadam Environment consultancy –NABET accredited have also done the monitoring during the years.

		GPCB also monitor the treated effluent quality at intervals. Recent result by GPCB is attached as Annexure 1 .
	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 April 4, 2017.
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 April 4, 2017.
7	The company shall submit an Environmental Audit Report every year.	Complied. Latest Environmental audit report by S.N.Patel Institute of Technology & research Centre for Environment research, Bardoli , Surat for year 2020- 21 is attached as Attachment 1
8	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 December 22, 1998. Copy already submitted to Ministry vide our letter Atul/SHE/MoEF/visit/3 dated April 4, 2017.

9	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
		October 20	November r 20	December 20	January 21	February 21	March 21	
1	pH	7.04	7.13	7.46	7.34	6.97	6.89	5.5 to 9.0
2	Temperature °C	30.4	30.1	30.2	30	30.1	30.4	40 °C
3	Colour (pt. co. scale)	40	30	30	40	60	50	---
4	Suspended solids, mg/l	68	47	39	53	72	34	100
5	Phenolic Compounds, mg/l	0.8	1.2	0.58	0.94	0.83	ND	5
6	Cyanides, mg/l	ND	ND	ND	ND	ND	ND	0.2
7	Fluorides, mg/l	1.17	1.24	1.18	1.68	1.55	0.21	2
8	Sulphides, mg/l	1.12	0.98	0.94	1.37	1.16	ND	2
9	Ammonical Nitrogen, mg/l	7.56	8.42	7.28	4.26	1.97	9.1	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	38	31	40	35	42	52	100
13	COD, mg/l	153	164	216	204	230	168	250
		Note: ND is Not Detectable.						

Annexure 1: GPCB results for treated effluent water



ANALYSIS REPORT FOR
WATER / WASTE WATER SAMPLE

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

Sample ID:300539 - Analysis Completion:17/03/2021

Dyes and Dye- Intermediates / LAB Inward : 54856

TEST REPORT

Test Report No. : 54856 Date: 17/03/2021

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 Gide
3. Nature of Sample : REP-Representative/Grab, (Insp Type : COM-On Complaint)
4. Sample Collected By : Trivedi Vivek R
5. Quantity of Sample Received : 5 lit
6. Code No. of the Sample : 300539
7. Date & Time of Collection & Inwarding : 03/03/2021 , (1110 to 1110) & 04/03/2021
8. Date of Start & Completion of Analysis : 04/03/2021 & 17/03/2021
9. Sampling Point : ## Final Outlet of the ETP ~
10. Flow Details (Remarks) : Yes
11. Mode of Disposal : Estuary zone of River Par through pipeline
12. Ultimate Receiving Body : Estuary zone of river par
13. Temperature on Collection : 32 & pH Range on pH Strip :@ 7-8 on pH strip
14. Carboys Nos for : barcode & Color & Appearance :Brownish
15. Water Consumption & W.W.G (KLPD) : Ind :27956.000 , Dom :938.000 & Ind :23774.000 , 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	32
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi.2012	1 – 14 pH value As or	7.76
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	85
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 – 200000 mg/L	7620
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	82
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standai	1 - 2000 mg/l.	23.52
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard N	1 - 50000 mg/l	2049
8	Sulphate	mg/l	APHA(22nd edi)4500 SO4 E	2-40mg/l	2693
9	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	125
10	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	1.6
11	Phenolic Compounds	mg/l	4 Amino Antiprene method without Chloroform Extra	0.1 – 50 mg/l	0.30
12	Sulphide	mg/l	APHA (22nd Edi.)4500-s2-F –iodometric Method	1-500.0 mg/l	1.1
13	B.O.D (3 Days 27oC)	mg/l	3 – Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmex	05–50000 mg/l	26

Laboratory Remarks : Freeze By:335-vig_335 Dt: 17/03/2021

H. M. Ganvit,SSO

Field Observation :

Note :

- * - These parameters are NOT covered under the scope of NABL.
- The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
- Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
- 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.
- The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
- Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
- Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
- Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA.
- Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

N I C

22/05/2021

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

EC Compliance Report for EC F. No. J -11011/48/2003-IA II (I) dated February 20, 2004.

Report period: October 2020 - March 2021

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A. Specific Conditions :																																																																																												
i	The gaseous emissions (SO ₂ , NO _x , and HCl) and particulate matters from various process units should confirm to the standards prescribed by the concerned authorities from time to time.	<p>Complied.</p> <p>The gaseous emissions (SO₂, NO_x, and HCl) and particulate matters from various process units confirms to the standards prescribed by GPCB through CCA.</p> <p>Details are given in below Table:</p> <p>Summary of Process Stack results:</p> <table border="1"> <thead> <tr> <th rowspan="2">Sr 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 October 20 - March 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>SO₂</td> <td>40</td> <td>mg/Nm³</td> <td>4.0</td> <td>36.1</td> <td>22.58</td> </tr> <tr> <td>2</td> <td>SO₂ (kg/T)</td> <td>2</td> <td>kg/T</td> <td>0.8</td> <td>1.6</td> <td>1.16</td> </tr> <tr> <td>3</td> <td>NO_x</td> <td>25</td> <td>mg/Nm³</td> <td>9.3</td> <td>20.7</td> <td>14.05</td> </tr> <tr> <td>4</td> <td>HCl</td> <td>20</td> <td>mg/Nm³</td> <td>1.9</td> <td>16.8</td> <td>7.46</td> </tr> <tr> <td>5</td> <td>PM</td> <td>150</td> <td>mg/Nm³</td> <td>3.8</td> <td>71.8</td> <td>39.4</td> </tr> <tr> <td>6</td> <td>PM with Pesticide compound</td> <td>20</td> <td>mg/Nm³</td> <td>8.4</td> <td>15.8</td> <td>11.95</td> </tr> </tbody> </table> <p>Summary of Flue Stack results :</p> <table border="1"> <thead> <tr> <th rowspan="2">Sr 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 October 20 - March 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>PM</td> <td>100</td> <td>mg/Nm³</td> <td>48.4</td> <td>89.6</td> <td>62.34</td> </tr> <tr> <td>2</td> <td>PM (New Boiler)</td> <td>50</td> <td>mg/Nm³</td> <td>35.4</td> <td>46</td> <td>40.53</td> </tr> <tr> <td>3</td> <td>SO₂</td> <td>600</td> <td>mg/Nm³</td> <td>148</td> <td>330</td> <td>190</td> </tr> <tr> <td>4</td> <td>NO_x</td> <td>600</td> <td>mg/Nm³</td> <td>124</td> <td>559</td> <td>218.6</td> </tr> </tbody> </table>	Sr No.	Parameter	Standard values as per CCA	Unit	Values for the period October 20 - March 21			Min.	Max.	Avg.	1	SO ₂	40	mg/Nm ³	4.0	36.1	22.58	2	SO ₂ (kg/T)	2	kg/T	0.8	1.6	1.16	3	NO _x	25	mg/Nm ³	9.3	20.7	14.05	4	HCl	20	mg/Nm ³	1.9	16.8	7.46	5	PM	150	mg/Nm ³	3.8	71.8	39.4	6	PM with Pesticide compound	20	mg/Nm ³	8.4	15.8	11.95	Sr No.	Parameter	Standard values as per CCA	Unit	Values for the period October 20 - March 21			Min.	Max.	Avg.	1	PM	100	mg/Nm ³	48.4	89.6	62.34	2	PM (New Boiler)	50	mg/Nm ³	35.4	46	40.53	3	SO ₂	600	mg/Nm ³	148	330	190	4	NO _x	600	mg/Nm ³	124	559	218.6
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		Details of stack results for the compliance period is given in Table 1 .																						
	At no time, the emission levels should go beyond the stipulated standards.	<p>Complied.</p> <p>Monthly monitoring is being done by GPCB approved, NABL approved agencies.</p> <p>At no time, the emissions exceeded the prescribed limits during report period.</p> <p>Summary of stack results given in specific condition no. i as above.</p>																						
	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.	<p>Complied.</p> <p>No such case happened during compliance period.</p>																						
ii	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.	<p>Complied.</p> <p>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.</p> <p>List of our ambient air monitoring station is given below:</p> <table border="1"> <thead> <tr> <th>Sr No.</th> <th>Location</th> </tr> </thead> <tbody> <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>West Site ETP</td> </tr> <tr> <td>4</td> <td>North site ETP</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>Haria Water tank</td> </tr> </tbody> </table>	Sr No.	Location	1	66 KVA GEB substation	2	Opposite Shed D	3	West Site ETP	4	North site ETP	5	Near TSDF	6	Near Main Guest House	7	At Wyeth Colony	8	Gram panchayat hall	9	Near Main office, North site	10	Haria Water tank
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iii	Fugitive emission in work zone environment, product, raw material storage areas must be regularly monitored.	<p>Complied.</p> <p>Fugitive emissions in the work zone environment and raw material storage area is being regularly monitored by NABL approved third party.</p> <p>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:</p>																						

Plant	Area	Parameter	Prescribed Limit	Values of VOCs in Milligram per NM ³ for the period October 20 - March 21		
				Min.	Max.	Avg.
2,4 D	Reactor	Phenol	19	7.5	14.2	10.18
	Buffer tank	Chlorine	3	0.15	1.6	0.7
Resorcinol	Benzene storage tank area near vent	Benzene	15	1.2	7.8	3.59
	Near Extraction /scrubber unit	Butyl acetate	-	350	580	434.16
Pharma	At second floor work area	Ammonia	18	3.8	4.5	4.15
	Ammonia recovery area	Ammonia	18	5.1	6.3	5.7
Epoxy - I	At vacuum pump 2nd floor	ECH	10	3.1	5.6	4.26
	At vessel POS 1208 G.F	ECH	10	1.3	2.5	1.96
Shed H	At second floor work area	Nitrobenzene	5	1.8	3.5	2.58
Shed J	Buffer Tank	Chlorine	3	ND	ND	ND

Results for the compliance period is given in **Table 2**.

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.	<p>Complied.</p> <p>Liquid effluent generated from the scrubber is being sent to ETP along with plant effluent stream.</p>
All the process equipment/reaction vessels should be connected with central exhaust system.	<p>Complied.</p> <p>Central exhaust system has been provided at strategic locations and the critical operations evolving the hazardous gases are routed through multiple stage scrubbing system.</p>
Further measures should be taken to reduce the losses of solvents.	<p>Complied.</p> <p>Reactors are connected to chilled brine condenser system. Breather valves have been provided to all solvent storage tanks.</p>
Cooling arrangement should be made for all the solvent storage tanks to minimize evaporation losses.	<p>Complied.</p> <p>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.</p>
The company should monitor VOCs from the incinerator and data submitted regularly to SPCB and Ministry of Environment and forests.	<p>Complied.</p> <p>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.</p>

iv	<p>The effluent generation should not exceed 1191 m³/Day (936 m³/d of process effluent and 255 m³/d of domestic effluent).</p>	<p>Complied.</p> <p>However, since we have another EC granted in 2019 for expansion, we request to consider latest figures given in same.</p> <p>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 m³/d.</p> <p>The average wastewater generation for the report period is 9212 m³/Day only. Detail break up is given below:</p> <table border="1" data-bbox="624 562 1401 887"> <thead> <tr> <th>Wastewater generation m³</th> <th>October 20</th> <th>November 20</th> <th>December 20</th> </tr> </thead> <tbody> <tr> <td>Month wise</td> <td>284195</td> <td>274672</td> <td>265910</td> </tr> <tr> <td>Per Day</td> <td>9168</td> <td>9156</td> <td>8578</td> </tr> </tbody> </table> <table border="1" data-bbox="632 969 1393 1211"> <thead> <tr> <th>January 21</th> <th>February 21</th> <th>March 21</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>281096</td> <td>275625</td> <td>293120</td> <td>1674618</td> </tr> <tr> <td>9068</td> <td>9844</td> <td>9455</td> <td>9212 Avg.</td> </tr> </tbody> </table> <p>The maximum values during the compliance period confirms that at no time the wastewater generation went beyond the stipulated standards. Summary is given below:</p> <table border="1" data-bbox="531 1570 1493 1787"> <thead> <tr> <th rowspan="2">Wastewater generation</th> <th rowspan="2">Stipulated value</th> <th colspan="3">Values for the period October 20 - March 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> <tr> <td>Wastewater generation m³/d</td> <td>20514</td> <td>8578</td> <td>9844</td> <td>9212</td> </tr> </tbody> </table>	Wastewater generation m ³	October 20	November 20	December 20	Month wise	284195	274672	265910	Per Day	9168	9156	8578	January 21	February 21	March 21	Total	281096	275625	293120	1674618	9068	9844	9455	9212 Avg.	Wastewater generation	Stipulated value	Values for the period October 20 - March 21			Min.	Max.	Avg.	Wastewater generation m ³ /d	20514	8578	9844	9212
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	<p>The effluent should be segregated at source of generation.</p>	<p>Complied.</p> <p>Concentrated effluent is segregated and chemicals are being retrieved through recovery process/distillation.</p>																																					
	<p>The Concentrated effluent stream should be incinerated and non-</p>	<p>Complied.</p> <p>Among the referred expansion project, only one stream from 2, 4 D is concentrated. We have installed distillation plant where the stream is distilled</p>																																					

<p>concentrated effluent after tertiary treatment should be discharged into the CETP.</p>	<p>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.</p>																																																																																							
<p>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.</p>	<p>Complied.</p> <p>The discharged effluent is meeting all state pollution control board limits and values of various parameters of treated effluent is given in Table 3.</p> <p>The maximum values during the compliance period confirms that at no time the emission went beyond the stipulated standards. Summary is given below:</p> <table border="1" data-bbox="555 640 1469 1473"> <thead> <tr> <th rowspan="2">Sr No.</th> <th rowspan="2">Parameter</th> <th rowspan="2">Norms</th> <th colspan="3">Values for the period October 20 - March 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>pH</td> <td>5.5-9.0</td> <td>6.89</td> <td>7.46</td> <td>7.13</td> </tr> <tr> <td>2</td> <td>Temperature</td> <td>40 °C</td> <td>30</td> <td>30.4</td> <td>30.2</td> </tr> <tr> <td>3</td> <td>Colour (pt. co. scale)</td> <td>---</td> <td>30</td> <td>60</td> <td>41.66</td> </tr> <tr> <td>4</td> <td>Suspended solids</td> <td>100 mg/l</td> <td>34</td> <td>72</td> <td>52.16</td> </tr> <tr> <td>5</td> <td>Phenolic Compounds</td> <td>5 mg/l</td> <td>0.58</td> <td>1.2</td> <td>0.87</td> </tr> <tr> <td>6</td> <td>Cyanides</td> <td>0.2 mg/l</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td>7</td> <td>Fluorides</td> <td>2 mg/l</td> <td>0.21</td> <td>1.68</td> <td>1.17</td> </tr> <tr> <td>8</td> <td>Sulphides</td> <td>2 mg/l</td> <td>0.94</td> <td>1.37</td> <td>1.14</td> </tr> <tr> <td>9</td> <td>Ammonical Nitrogen</td> <td>50 mg/l</td> <td>1.97</td> <td>9.1</td> <td>6.43</td> </tr> <tr> <td>10</td> <td>Total Chromium</td> <td>2 mg/l</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td>11</td> <td>Hexavalent Chromium</td> <td>1 mg/l</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td>12</td> <td>BOD (3 Days at 27°C)</td> <td>100 mg/l</td> <td>31</td> <td>52</td> <td>39.66</td> </tr> <tr> <td>13</td> <td>COD</td> <td>250 mg/l</td> <td>153</td> <td>230</td> <td>189.17</td> </tr> </tbody> </table>	Sr No.	Parameter	Norms	Values for the period October 20 - March 21			Min.	Max.	Avg.	1	pH	5.5-9.0	6.89	7.46	7.13	2	Temperature	40 °C	30	30.4	30.2	3	Colour (pt. co. scale)	---	30	60	41.66	4	Suspended solids	100 mg/l	34	72	52.16	5	Phenolic Compounds	5 mg/l	0.58	1.2	0.87	6	Cyanides	0.2 mg/l	ND	ND	ND	7	Fluorides	2 mg/l	0.21	1.68	1.17	8	Sulphides	2 mg/l	0.94	1.37	1.14	9	Ammonical Nitrogen	50 mg/l	1.97	9.1	6.43	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	31	52	39.66	13	COD	250 mg/l	153	230	189.17
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<p>The domestic waste water should be disposed off through septic tank / soak pit system.</p>	<p>Complied.</p> <p>Domestic waste water goes to septic tank and subsequently in to ETP for further treatment.</p> <p>Detail of Domestic effluent generation is given in below table:</p> <table border="1" data-bbox="496 1715 1501 1890"> <thead> <tr> <th>Domestic Wastewater generation m³</th> <th>October 20</th> <th>November 20</th> <th>December 20</th> </tr> </thead> <tbody> <tr> <td>Month wise</td> <td>9583</td> <td>8455</td> <td>8796</td> </tr> <tr> <td>Per Day</td> <td>309</td> <td>273</td> <td>284</td> </tr> </tbody> </table> <table border="1" data-bbox="496 1928 1501 2067"> <thead> <tr> <th>January 21</th> <th>February 21</th> <th>March 21</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>8968</td> <td>8822</td> <td>9592</td> <td>54217</td> </tr> <tr> <td>289</td> <td>285</td> <td>309</td> <td>291</td> </tr> </tbody> </table>	Domestic Wastewater generation m ³	October 20	November 20	December 20	Month wise	9583	8455	8796	Per Day	309	273	284	January 21	February 21	March 21	Total	8968	8822	9592	54217	289	285	309	291																																																															
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The maximum, minimum and average values are given below:

Domestic Wastewater generation	Values for the period October 20- March 21		
	Min.	Max.	Avg.
Domestic Wastewater generation m ³ /d	273	309	291

v	<p>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.</p>	<p>Complied.</p> <p>We have set up a separate online fish pond using treated effluent at our ETP.</p>
	<p>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 Regional office at Bhopal/CPCB/GPCB</p>	<p>Complied.</p> <p>The effluent quality at the ETP discharge point is regularly being monitored by the Environmental auditors appointed by GPCB.</p> <p>GPCB also monitor the treated effluent quality at regular intervals. Recent Monitoring results of GPCB is attached as Annexure 1.</p> <p>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, Kadam environment consultants –both NABET accredited have also done the monitoring during the years.</p>
vi	<p>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.</p>	<p>Complied.</p> <p>ETP waste is disposed into our TSDF instead of incineration for which we have taken permission from MoEF vide letter dated May 6, 2004 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.</p>
	<p>The ground water quality in and around the unit and the</p>	<p>Complied.</p> <p>Ground water quality is being checked regularly for in and around the unit and the hazardous waste storage site. Groundwater analysis study is done by</p>

	hazardous waste storage site should be regularly monitored and the data recorded to ensure that there is no contamination of the groundwater.	MoEF approved agency Pollucon Pvt. Ltd for year 2020 and no contamination is observed. Report has been submitted vide our letter dated December 19, 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 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.	Complied. Detailed compliance report is already submitted to the Ministry vide our letter our letter Atul/SHE/MoEF/Visit/3 dated April 4, 2017.

ix	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	<p>Complied.</p> <p>Occupational health surveillance of the workers is being done on regular basis and record maintained as per the factory act. Details for report period is shown in below table:</p> <p>Medical Check-Up:</p> <table border="1" data-bbox="743 409 1281 622"> <thead> <tr> <th>Sr No.</th> <th>Employee</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Staff</td> <td rowspan="3">1895</td> </tr> <tr> <td>2</td> <td>Operators</td> </tr> <tr> <td>3</td> <td>Workers</td> </tr> </tbody> </table>	Sr No.	Employee	Quantity	1	Staff	1895	2	Operators	3	Workers
Sr No.	Employee	Quantity										
1	Staff	1895										
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3	Workers											
x	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 to reduce the drawl from the river Par.	<p>Complied.</p> <p>Company has expanded its harvesting pond capacity to 14000 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.</p>										
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.	<p>Complied.</p> <p>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 August 16, 2004.</p>										

<p>xii</p>	<p>The Company should developed a green belt in a 25% of the plant area as per the CPCB guidelines.</p>	<p>Complied.</p> <p>Proper plantation is done all around the plant boundary and also the roads to mitigate fugitive & transport dust emission.</p> <p>Total Industrial Plot area: 1126078.27 sq.mt</p> <p>Green belt area: 409030.00 sq.mt (approx. 36% of total plot area)</p> <p>Layout plan with green belt is shown as under:</p>  <p>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.</p>
<p>xiii</p>	<p>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.</p>	<p>Complied.</p> <p>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 May 17, 2004. 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 November 2, 2004. Copy of same again submitted to Ministry vide our letter Atul/SHE/MoEF/visit/3 dated April 4, 2017.</p>
	<p>The amount shall be deposited within three months in a separate account to be maintained by GPCB.</p>	<p>Complied.</p> <p>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 May 17, 2004.</p>

	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 November 2, 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.
A. 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 Environmental audit report by S.N.Patel Institute of Technology & research Centre for Environment research, Bardoli, Surat for year 2020- 21 is attached as Annexure 2
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 restarted until the desired efficiency has been achieved.	Complied. No such incident happened during compliance period.

iii 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.

Acoustic hood, silencer and acoustic enclosures and insulation are provided at appropriate high noise area like turbine, DG set, vents etc.

The ambient noise levels should confirm to the standards prescribed under EPA Rules, 1989, viz. 75 (Daytime) and 70bBA(night time)

Complied.

The ambient noise level is regularly monitored and its data are given in **Table 4 and 5**.

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 October 20 - March 21		
			Min.	Max.	Avg.
1	Near Main guest house	75	52.40	65.80	62.73
2	Near TSDF	75	57.60	67.30	64.27
3	At Wyeth Colony	75	56.20	59.80	58.53
4	Gram Panchayat Hall	75	55.60	68.50	65.20
5	Near Main Office North site	75	53.60	67.60	64.67
6	ETP North site	75	55.20	71.20	66.95
7	Opposite shed D	75	57.10	72.40	68.75
8	ETP West site	75	52.40	68.70	65.17
9	Haria Water tank	75	55.60	66.50	63.85
10	66KVA substation	75	53.50	68.00	64.75

Noise level monitoring data (Night Time)

Sr No.	Location	Permissible Limits, dBA	Values for the period October 20 - March 21		
			Min.	Max.	Avg.
		70			
1	Near Main guest house	70	54.20	64.20	56.60
2	Near TSDF	70	56.70	66.30	58.87
3	At Wyeth Colony	70	52.60	58.90	54.35

4	Gram Panchayat Hall	70	56.50	66.50	58.83
5	Near Main Office North site	70	56.30	64.20	58.62
6	ETP North site	70	52.50	63.20	55.98
7	Opposite shed D	70	51.70	72.10	59.50
8	ETP West site	70	54.20	65.70	57.12
9	Water tank Haria road	70	52.40	63.40	56.02
10	66KVA substation	70	55.30	66.00	58.05

iv	<p>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.</p>	<p>Complied.</p> <p>EMP measures are already implemented by 2010.</p> <p>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.</p> <table border="1" data-bbox="491 1196 1517 1751"> <thead> <tr> <th>Sr No.</th> <th>Parameter</th> <th>Recurring Cost (Rs. In lacs) For the report period October 20 – March 21</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Air Pollution Control</td> <td rowspan="2">2865</td> </tr> <tr> <td>2</td> <td>Liquid Pollution Control</td> </tr> <tr> <td>3</td> <td>Environmental Monitoring and Management</td> <td>21</td> </tr> <tr> <td>4</td> <td>Solid waste Disposal</td> <td>346</td> </tr> <tr> <td>5</td> <td>Occupational health</td> <td>20</td> </tr> <tr> <td>6</td> <td>Green belt</td> <td>7</td> </tr> <tr> <td colspan="2">Total</td> <td>3259</td> </tr> </tbody> </table>	Sr No.	Parameter	Recurring Cost (Rs. In lacs) For the report period October 20 – March 21	1	Air Pollution Control	2865	2	Liquid Pollution Control	3	Environmental Monitoring and Management	21	4	Solid waste Disposal	346	5	Occupational health	20	6	Green belt	7	Total		3259
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v	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.	<p>Complied.</p> <p>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 Environmental audit report by S.N.Patel Institute of Technology & research Centre for Environment research, Bardoli, Surat for year 2020-21 is attached as Annexure 2.</p>
	Authorization from the GPCB must be obtained for collections /treatment/ storage/ disposal of hazardous waste.	<p>Complied.</p> <p>We have valid authorization under our current CCA No. AWH-105110 for handling, storage and disposal of hazardous waste.</p>
vi	The stipulated conditions will be monitored by the Regional office of this Ministry at Bhopal/ GPCB.	<p>Noted.</p>
	A six monthly compliance report and the monitored data should be submitted to them regularly.	<p>Complied.</p> <p>Six monthly compliance report and the monitored data are being submitted to the Ministry at Bhopal with copy marked to GPCB regularly.</p>
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	<p>Complied.</p> <p>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.</p>

	<p>Environment and Forest at http://www.envfor.ni.in.</p>	
	<p>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.</p>	<p>Complied. Advertisement was published as directed and copy of the same was submitted to Ministry.</p>
3.0	<p>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.</p>	<p>Noted.</p>

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.
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. 2020	NOV. 2020	DEC.2020	JAN. 2021	FEB. 2021	MAR. 2021
Sr. No.	Stack-Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
Atul East Site									
1	furnace (Phosgene Plant)	PM	150.0 mg/Nm3	33	20	48	42	31	54
2	Reactor (Phosgene plant- New)	CO	---	ND	ND	ND	ND	ND	ND
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
Caustic Chlorine Plant									
3	Dechlorination Plant	Cl ₂	9.0 mg/Nm3	8.1	2.46	4.3	8.2	5.8	5
		HCl	20.0 mg/Nm3	8.29	1.9	4.42	8.4	5.94	5.1
4	Common stack of HCl Signi unit 1&2	Cl ₂	9.0 mg/Nm3	7.5	3.8	5.7	8.15	4.9	4.4
		HCl	20.0 mg/Nm3	7.68	3.6	5.86	7.9	5.01	4.5
FCB Plant									
5	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)									
6	Sulfuric Acid Plant	SO ₂	2.0 kg/T	1.5	0.8	1.25	1.35	1.1	1.32
		Acid Mist	50.0 mg/Nm3	13.6	16.2	24.8	12.9	19.8	10.6
7	ChloroSulfonic Acid plant reactor	Cl ₂	9.0 mg/Nm3	8.2	7.1	6.8	3.9	6.4	4.1
		HCl	20.0 mg/Nm3	8.85	7.3	6.99	3.7	6.55	4.3
Resorcinal Plant									
8	Spray Dryer (Resorcinal Plant)	PM	150.0 mg/Nm3	3.8	12.2	9.1	33.7	33.2	27.7
9	Scrubber vent (Resorcinal Plant)	SO ₂	40.0 mg/Nm3	24.7	4	20.6	24.1	32.6	28.4
Incinerator									
10	Incinerator	PM	150.0 mg/Nm3	71.8	56.2	Not Running	Not Running	30.8	Not Running
		SO ₂	40.0 mg/Nm3	9.2	4.8			12.4	
		NOx	25.0 mg/Nm3	19.7	15.3			9.3	
NI Plant									
11	Foul Gas Scrubber	SO ₂	40.0 mg/Nm3	25.2	23.2	26.4	14.9	20.6	22.3
		NOx	25.0 mg/Nm3	15.9	20.7	18.4	16.8	12.1	14.9
2-4-D Plant									
12	Common Scrubber; 2,4D Plant	Cl ₂	9.0 mg/Nm3	7.6	6.4	5.1	6.4	7.8	5.4
		HCl	20.0 mg/Nm3	13.51	6.63	5.24	6.8	7.48	5.7
		Phenol	---	ND	ND	4.2	ND	ND	ND
13	Dryer-1	PM with Pesticide compound	20.0 mg/Nm3	14.8	11.2	14.2	13.1	12.8	10.9
14	Dryer-2	PM with Pesticide compound	20.0 mg/Nm3	11.2	13.6	10.8	8.4	11.2	9.4
15	Dryer-3	PM with Pesticide compound	20.0 mg/Nm3	14.1	9.4	12.6	12.3	13.6	Not Running
16	Dryer-4	PM with Pesticide compound	20.0 mg/Nm3	11	12	8.4	10.2	14.2	12.6
17	Dryer-5	PM with Pesticide compound	20.0 mg/Nm3	15.8	13.1	15.6	9.7	9.9	10.5

NBD Plant .									
18	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
19	Scrubber S-902	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
		HCl	20 mg/Nm3	10.4	12.9	16.1	14.2	7.9	8.2
20	Scrubber S-801/802	NOx	25.0 mg/Nm3	17.1	10.8	17.4	10.1	10.6	12.2
Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
CP Plant									
21	MCPA	Cl ₂	9 mg/NM ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20 mg/NM ³						
		SO ₂	40 mg/NM ³						
22	Fipronil	SO ₂	40 mg/NM ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20 mg/Nm3						
23	Imidacloprid	NH ₃	175 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
24	Pyrethroids	SO ₂	40 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20 mg/Nm3						
25	Stack at Amine Plant	NH ₃	175 mg/Nm3	98	66	75	63	48.4	112
MPSL Plant									
26	Phosgene Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
27	Central Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
NICO plant									
28	Central scrubber at Nico Plant	Acetonitrile IPA	—	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
Ester Plant									
29	Scrubber at Ester plant for Glyphosate	Formaldehyde	10 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
30	Central Scrubber MCPA Plant	HCl	20 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
31	MPP plant scrubber	HCl	20 mg/Nm3	7.5	3.4	5.8	12.4	6.3	8.1
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
Atul West Site									
32	Shed A05/03/44	Cl ₂	9 mg/NM ³	Not Running	7.53	5.9	6.2	Not Running	Not Running
		HCl	20 mg/NM ³		9.8	7.2	6.5		
33	Shed B2/12/24 Reaction Vessel	Cl ₂	9.0 mg/Nm3	Not Running	Not Running	5.5	7.1	6.9	6.2
		HCl	20.0 mg/Nm3			5.2	7.3	7.2	5.9
34	Shed B18/02/24 Fan	SO ₂	40 mg/NM ³	19.6	33.6	20.8	32	23.9	19.8
		Cl ₂	9 mg/NM ³	7.2	4.6	7.3	8.1	4.4	6.8
		HCl	20 mg/NM ³	7.37	4.4	7.6	7.8	4.5	6.6
35	Shed C5/20/15 Chlorinator	Cl ₂	9.0 mg/Nm3	Not Running	Not Running	5.1	7.8	4.3	6.5
		HCl	20.0 mg/Nm3			5.4	7.6	6.2	6.7
36	Shed D Niro Spray dryer No. 45	PM	150.0 mg/Nm3	Not Running	Not Running	Not Running	71	Not Running	Not Running
37	Shed D Niro Spray dryer No.50	PM	150.0 mg/Nm3	Not Running	Not Running	58.4	69	Not Running	Not Running
38	Shed E 7/12/49 Spray Dryer	PM	150.0 mg/Nm3	Not Running	Not Running	69.1	Not Running	45.7	55.3
39	Shed F F6/1/15 Reaction Vessel	Cl ₂	9.0 mg/Nm3	5.7	7.68	7.98	7.2	6.16	Not Running
		HCl	20.0 mg/Nm3	14.6	7.9	8.2	7.37	6.34	
40	Shed G 10/8/1 (receiver)	Cl ₂	9.0 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20.0 mg/Nm3		Running	Running			

41	Shed H 11/6/17 chlorinator	Cl ₂	9.0 mg/Nm ³	6.5	7.58	8.36	8.46	8.32	5.73
		HCl	20.0 mg/Nm ³	12	7.8	8.9	8.66	8.55	5.9
42	Shed K K-13/3/4 Final of Sulfuric acid plant	SO ₂	2.0 kg/T	1.6	0.86	0.9	1.1	0.95	1.3
		Acid Mist	50.0 mg/Nm ³	3.2	2.5	3	3.7	2.4	3.2
43	Shed J15/09/25	HBr	--	7.6	11.3	8.9	ND	ND	ND
		SO ₂	40 mg/NM ³	14.8	16.8	13.2	1.1	30.6	22.7
Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
44	Shed J12/01/42	SO ₂	40 mg/NM ³	Not Running	Not Running	19.8	24.7	18.3	20.1
		Cl ₂	9.0 mg/Nm ³			6.1	7.2	6.9	5.2
		HCl	20.0 mg/Nm ³			6.4	7.4	6.3	5.4
45	Shed J12/03/36	SO ₂	40 mg/NM ³	Not Running	Not Running	26.6	28.9	19.2	23.6
		HCl	20.0 mg/Nm ³			16.8	11.4	15.7	12.9
46	Shed N Scrubber Fan N20/08/24	Cl ₂	9 mg/NM ³	6.2	7.6	5.2	7.2	5.7	6.6
		HCl	20 mg/NM ³	6.34	6.34	9.1	5.3	5.83	6.8
47	Shed N Scrubber Fan N20/02/41	SO ₂	40 mg/NM ³	28.6	36.1	32.4	27.1	31.7	24.9
48	Sulfur Black Plant	H ₂ S	--	ND	ND	ND	ND	ND	ND
		NH ₃	175 mg/NM ³	140	140	120	81.3	90.6	110
49	Sulfur Dyes plant	H ₂ S	--	ND	ND	ND	ND	ND	ND
		NH ₃	175 mg/NM ³	31.2	44.2	35.4	156	12.8	27.3
50	Flavors & Fragrances Plant	HCl	20 mg/NM ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
Atul North Site									
51	N-FDH Plant Catalytic Incinerator	PM	150.0 mg/Nm ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		SO ₂	40.0 mg/Nm ³						
		NO _x	25.0 mg/Nm ³						
		Formaldehyde	10.0 mg/Nm ³						
52	PHIN Plant	Phoagene	0.1 ppm	ND	ND	ND	ND	ND	ND
53	PHIN-II Plant	HCl	20 mg/NM ³	2.8	3.3	4.3	5	4.3	4.7
54	DDS Plant (Pharma Plant)	NH ₃	175 Mg/Nm ³	Not Running	Not Running	Not Running	Not Running	110	150
55	SPIC II Plant (DCDPS)	SO ₂	---	ND	ND	Not Running	24.1	4.6	3.8
56	SPIC I Plant	NH ₃	175 mg/Nm ³	Not Running	Not Running	Not Running	146	124	136
57	SPIC IV Plant	NH ₃	175 mg/NM ³	75	Not Running	Not Running	59	66	12.9
		SO ₂	---	ND	ND	ND	ND	14.4	17.3

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	Not Running	Not Running	61.4	56.4	48.6	Not Running
		SO ₂	600 mg/Nm3			156	184	288	
		NOx	600 mg/Nm3			124	165	302	
2	FBC boiler E2	PM	100 mg/Nm3	71.4	Not Running	56.1	66.3	66.3	48.4
		SO ₂	600 mg/Nm3	172		165	154	229	178
		NOx	600 mg/Nm3	146		134	161	279	192
3	FBC boiler E3	PM	100 mg/Nm3	59.1	71.4	Not Running	Not Running	64.9	56.1
		SO ₂	600 mg/Nm3	158	190			330	230
		NOx	600 mg/Nm3	559	181			376	252
4	Hot Oil Unit (Resorcinol Plant)	PM	150.0 mg/Nm3	18.4	12.2	44.6	11.6	29.6	18.6
		SO ₂	100 ppm	6.2	4	23.4	14.2	6.2	6.2
		NOx	50 ppm	23.6	19.1	11.2	5.2	15.4	30.5
5	DG set 1010 KVA (Standby)	PM	150 mg/Nm ³	51.7	50.3	36.4	59.4	39.6	30.4
		SO ₂	100 ppm	9.1	9.2	5.6	68.2	9.6	6.3
		NOx	50 ppm	34.6	30.8	23.7	20.1	21.6	26.7
West Site									
6	FBC boiler W1	PM	100 mg/Nm3	89.6	72	68.4	56.8	48.6	60.4
		SO ₂	600 mg/Nm3	172	184	160	198	218	180
		NOx	600 mg/Nm3	144	158	172	164	196	230
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	20.5	14.8	16.9	21.8	15.2	18.8
8	Oil burner Shed B (Stand By)	PM	150.0 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		SO ₂	100 ppm						
		NOx	50 ppm						
9	Boiler (50 TPH 2 Nos) (New boilers) W2,W3	PM	50 mg/Nm3	31.6	46	40.2	35.4	48.7	42.7
		SO ₂	600 mg/Nm3	164	160	148	174	156	182
		NOx	300 mg/Nm3	148	168	152	142	172	196
		Mercury	0.03 mg/Nm3	ND	ND	ND	ND	ND	ND
10	DG set 1500 KVA (Stand By)	PM	150.0 mg/Nm3	44.8	60.6	51.7	44.3	54.7	52.6
		SO ₂	100 ppm	10.8	11.4	7.4	10.4	11.8	8.4
		NOx	50 ppm	41.5	44.6	34.8	25.8	30.2	31.2
North Site									
11	Thermic fluid heater of DCO/DAP Plant	PM	150.0 mg/Nm3	29.6	40.2	31.7	49.3	29.6	34.4
		SO ₂	100 ppm	10.2	7.9	5.2	8.1	7.1	7.5
		NOx	50 ppm	17.1	23.8	31.7	23.3	25.7	20.1

Table 2: Fugitive Emission Monitoring details

Plant	Area	Parameter	Prescribed Limit	Results of VOCs in Milligram per NM ³					
				October 20	November 20	December 20	January 21	February 21	March 21
2,4 D	Reactor	Phenol	19	14.2	10.6	7.5	11.2	9.3	8.3
	Buffer tank	Chlorine	3.0	1.6	0.15	0.58	0.44	0.81	0.62
Resorcinol	Benzene storage tank area near vent	Benzene	15	7.8	6.5	1.2	1.72	2.56	1.8
	Near Extraction/scrubber unit	Butyl acetate	-	580	350	410	460	425	380
Pharma	At second floor work area	Ammonia	18	ND	ND	ND	ND	3.8	4.5
	Ammonia recovery area	Ammonia	18	ND	ND	ND	ND	5.1	6.3
Epoxy - I	At vacuum pump 2nd floor	ECH	10	3.8	4.8	5.6	3.9	3.1	4.4
	At vessel POS 1208 G.F	ECH	10	2.4	1.6	1.9	1.3	2.5	2.1
Shed H	At second floor work area	Nitrobenzene	5	2.6	3.5	2.4	1.8	2.1	3.1
Shed J	Buffer Tank	Chlorine	3	ND	ND	ND	ND	ND	ND

Table 3: Quality of treated effluent

Sr No.	Parameter	Results						GPCB Limits
		October 20	November 20	December 20	January 21	February 21	March 21	
1	pH	7.04	7.13	7.46	7.34	6.97	6.89	5.5 to 9.0
2	Temperature °C	30.4	30.1	30.2	30	30.1	30.4	40 °C
3	Colour (pt. co. scale)	40	30	30	40	60	50	---
4	Suspended solids, mg/l	68	47	39	53	72	34	100
5	Phenolic Compounds, mg/l	0.8	1.2	0.58	0.94	0.83	ND	5
6	Cyanides, mg/l	ND	ND	ND	ND	ND	ND	0.2
7	Fluorides, mg/l	1.17	1.24	1.18	1.68	1.55	0.21	2
8	Sulphides, mg/l	1.12	0.98	0.94	1.37	1.16	ND	2
9	Ammonical Nitrogen, mg/l	7.56	8.42	7.28	4.26	1.97	9.1	50
10	Total Chromium, mg/l	ND	ND	ND	ND	ND	ND	2
11	Hexavalent Chromium, mg/l	ND	ND	ND	ND	ND	ND	1

12	BOD (3 Days at 27°C), mg/l	38	31	40	35	42	52	100
13	COD, mg/l	153	164	216	204	230	168	250
Note: ND is Not Detectable.								

Table 4: Noise level monitoring data (Day Time)

Sr No.	Location	Noise Level, dBA						Permissible Limits, dBA
		October 20	November 20	December 20	January 21	February 21	March 21	
1	Near Main guest house	64.7	65.8	64.7	63.5	65.3	52.4	75
2	Near TSDF	66.6	65.6	64.8	63.7	67.3	57.6	75
3	At Wyeth Colony	57.8	58.7	59.8	58.9	59.8	56.2	75
4	Gram Panchayat Hall	67.6	68.5	67.4	66.5	65.6	55.6	75
5	Near Main Office North site	65.8	66.7	67.6	66.7	67.6	53.6	75
6	ETP North site	70.7	71.2	70.3	69.2	65.1	55.2	75
7	Opposite shed D	72.4	70.3	71.2	70.3	71.2	57.1	75
8	ETP West site	67.9	68.7	67.8	66.7	67.5	52.4	75
9	Water tank Haria road	65.4	66.5	65.6	64.5	65.5	55.6	75
10	Near 66KVA substation	67.0	68.0	67.0	66.0	67.0	53.5	75

Table 5: Noise level monitoring data (Night Time)

No.	Location	Noise Level, dBA						Permissible Limits, dBA
		October 20	November 20	December 20	January 21	February 21	March 21	
1	Near Main guest house	55.3	56.4	55.3	54.2	64.2	54.2	70
2	Near TSDF	57.4	58.5	57.6	56.7	66.3	56.7	70
3	At Wyeth Colony	53.7	54.6	53.7	52.6	58.9	52.6	70
4	Gram Panchayat Hall	57.6	58.5	57.4	56.5	66.5	56.5	70
5	Near Main Office North site	59.4	58.3	57.2	56.3	64.2	56.3	70
6	ETP North site	56.5	55.6	54.6	53.5	63.2	52.5	70
7	Opposite shed D	59.8	58.9	57.8	56.7	72.1	51.7	70
8	ETP West site	57.1	56.2	55.3	54.2	65.7	54.2	70
9	Water tank Haria road	55.7	54.6	53.5	52.4	63.4	56.5	70
10	Near 66KVA substation	58.2	57.3	56.2	55.3	66	55.3	70

Annexure 1: GPCB Result



ANALYSIS REPORT FOR WATER / WASTE WATER SAMPLE

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

Sample ID:300539 - Analysis Completion:17/03/2021

Dyes and Dye- Intermediates / LAB Inward : 54856

TEST REPORT

Test Report No. : 54856

Date: 17/03/2021

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 Gide
3. Nature of Sample : REP-Representative/Grab, (Insp Type : COM-On Complaint)
4. Sample Collected By : Trivedi Vivek R
5. Quantity of Sample Received : 5 lit
6. Code No. of the Sample : 300539
7. Date & Time of Collection & Inwarding : 03/03/2021 , (1110 to 1110) & 04/03/2021
8. Date of Start & Completion of Analysis : 04/03/2021 & 17/03/2021
9. Sampling Point : ## Final Outlet of the ETP ~
10. Flow Details (Remarks) : Yes
11. Mode of Disposal : Estuary zone of River Par through pipeline
12. Ultimate Receiving Body : Estuary zone of river par
13. Temperature on Collection : 32 & pH Range on pH Strip :@ 7-8 on pH strip
14. Carboys Nos for : barcode & Color & Appearance :Brownish
15. Water Consumption & W.W.G (KLPD) : Ind :27956.000 , Dom :938.000 & Ind :23774.000 , 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	32
2	pH	pH Units	4500 H+ B APHA Standard Methods 22nd edi.2012	1 - 14 pH value As or	7.76
3	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 22nd edi. 2012	2 - to 99 Hazen & 1-50	85
4	Total Dissolved Solids	mg/l	Gravimetric method. (2540 C APHA Standard Method	10 - 200000 mg/L	7620
5	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 - 10000 mg/L	82
6	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standai	1 - 2000 mg/l.	23.52
7	Chloride	mg/l	Argentometric method. (4500 Cl? B APHA Standard M	1 - 50000 mg/l	2049
8	Sulphate	mg/l	APHA(22nd edi)4500 SO4 E	2-40mg/l	2693
9	Chemical Oxygen Demand	mg/l	APHA (22nd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	125
10	Oil & Grease	mg/l	Liquid - Liquid Partition Gravimetric method. (5520 B	01 - 1000 mg/l	1.6
11	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 - 50 mg/l	0.30
12	Sulphide	mg/l	APHA (22nd Edi.)4500-s2-F -iodometric Method	1-500.0 mg/l	1.1
13	B.O.D (3 Days 27oC)	mg/l	3 - Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmex	05-50000 mg/l	26

Laboratory Remarks : Freeze By:335-vig_335 Dt: 17/03/2021

H. M. Ganvit, SSO

Field Observation :

Note :

- * - These parameters are NOT covered under the scope of NABL.
- The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.
- Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
- 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.
- The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
- Total liability of our laboratory is limited to the invoiced amount. Any dispute arising out of this report is subject to Gujarat Jurisdiction only.
- Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
- Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 22nd Edition by APHA.
- Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

N I C

22/05/2021

Annexure 2: Abstract of Environmental Audit Report

M/s. Atul Ltd.

Plot. No.5,6,29,30,33,34,35,37,38,80,81,84,91 &
amp; Survey No.274,275,276, At & amp; P.O.- Atul Pin - 396020
Dist. Valsad

THINK WITH
SUSTAINABLE DEVELOPMENT

Environment Audit Report April - 2020 to March - 2021



VIDYABHARTI TRUST - UMRAXH
S. N. PATEL INSTITUTE OF TECHNOLOGY & RESEARCH CENTRE
CENTRE FOR ENVIRONMENT RESEARCH
(NABL Accrediated Laboratory)

vidyabharti campus, At & Po., Umrahk, Ta. Bardoli, Dist. Surat (Gujarat) Pin - 394 345
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www.vidyabhartitrust.org
Mo. : +91 9537422112 • Phone No. (02622) 224581, 220581 • Fax : 227481, 225458

OBSERVATION

- 1 Company has done outstanding work to control COVID 19 infection by devising operational and systematic controls. Compliance more than the government COVID 19 guidelines was observed during all the three visits. Company has prepared and implemented its own stringent guidelines to control COVID 19 and to keep their employees and family safe in this difficult time.
- 2 It has been observed that company is having policy to donate and provide all the possible help to their neighbouring community and nation at large during all such natural calamities.
Company has donated total Rs. 5 Cr in PM & CM relief fund in addition to the distribution of kits worth 50 lacs to the needy people in the neighbouring villages as well as migrant labours.
- 3 Company has applied for EC for expansion project and 50 MW CPP project. Public Hearing for both the projects have been completed successfully complying with COVID 19 guidelines.
- 4 Company has received registration certificate as brand owner by CPCB under plastic waste Management rules, 2016 and started collecting and disposing plastic as per the plan.
- 5 Company has installed South ETP which is under commissioning stage.
- 6 Company has undertaken ZLD project for North ETP.
- 7 Company has received CTE (EC to CTE) for its expansion and 50 MW CPP projects.
- 8 5 S drive is going on in later and spirit and hence overall housekeeping was found satisfactory.
- 9 Company is submitting quarterly reports on CPCB portal for its captive TSDF. Company is also submitting quarterly calibration reports of OCEMS to CPCB.
- 10 Company has submitted annual returns like Form IV, Form V, Form 3 for E-waste, Form 4 for BMW and Form VIII for Batteries within the stipulated time frame.
- 11 Company is regularly submitting EC compliance report and also uploading the same on its website.



← →
RECOMMENDATIONS

- 1 Company shall prepare an action plan for the points emerged during the public hearing.
- 2 Company shall obtain fire NOC renewal as per the amended regulations
- 3 Company shall upgrade its coal | fly ash handling system for betterment.
- 4 Company shall install new Ambient Air Monitoring system | station
- 5 Company shall install digital display board at the gate as per the NGT order.
- 6 Company shall have membership of common facilities | pre | co processors for disposal of Hazardous wastes.
- 7 Company shall plan for above ground effluent network at other sites also in phased manner.

ENVIRONMENTAL
AUDIT REPORT
(APR. 2020 - MAR 2021)



**ANNEXURE-32
COMPLIENCE REPORT**

Sr. No.	NOC/Consent	Has Valid Consent/ Authorization	Complying With Standards And Other Conditions
(A)	Compliance Report of water as per Water Act, 1974; If NO, comment:	Yes, Consent No. AWH-105110 is valid upto 30/09/2025	Complied
(B)	Compliance Report for Air as per Air Act, 1981; If NO, comment:		Complied
(C)	Compliance Report for the storage and handling of hazardous waste/chemicals under The Hazardous Waste (Management and Handling) Rule, 1989 & EPA-86 If NO, comment:		Complied



Project: Expansion of Pesticide and Synthetic Organic Chemicals manufacturing unit
 EC Compliance Report for EC F. No. J - 11011/85/2009 - IA II (I) dated May 13, 2009

Report Period: October 2020 - March 2021

Sr No	Condition	Compliance																																					
A. Specific Conditions																																							
i	Industrial Waste water generation shall not exceed 17,283 m ³ /d.	<p>Complied.</p> <p>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 February 11, 2019. Industrial Waste water generation shall not exceed 20,514 m³/Day .</p> <p>The average wastewater generation for the report period is 9212 m³/Day only which is well within the limit. Detail break up is given in below table:</p> <table border="1"> <thead> <tr> <th>Waste water generation m³</th> <th>October 20</th> <th>November 20</th> <th>December 20</th> <th>January 21</th> <th>February 21</th> <th>March 21</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Month wise</td> <td>284195</td> <td>274672</td> <td>265910</td> <td>281096</td> <td>275625</td> <td>293120</td> <td>1674618</td> </tr> <tr> <td>Per Day</td> <td>9168</td> <td>9156</td> <td>8578</td> <td>9068</td> <td>9844</td> <td>9455</td> <td>9212 Avg.</td> </tr> </tbody> </table> <p>The maximum values during the compliance period confirms that at no time the wastewater generation went beyond the stipulated value. Summary is given below:</p> <table border="1"> <thead> <tr> <th rowspan="2">Wastewater generation</th> <th rowspan="2">Stipulated value</th> <th colspan="3">Values for the period October 20 – March 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> <tr> <td>Wastewater generation m³/d</td> <td>20514</td> <td>8578</td> <td>9844</td> <td>9212</td> </tr> </tbody> </table>	Waste water generation m ³	October 20	November 20	December 20	January 21	February 21	March 21	Total	Month wise	284195	274672	265910	281096	275625	293120	1674618	Per Day	9168	9156	8578	9068	9844	9455	9212 Avg.	Wastewater generation	Stipulated value	Values for the period October 20 – March 21			Min.	Max.	Avg.	Wastewater generation m ³ /d	20514	8578	9844	9212
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<p>23 m³/d High COD effluent shall be incinerated.</p>	<p>Complied.</p> <p>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) dated February 11, 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."</p> <p>Accordingly the High TDS and High COD waste water quantity are now 291 m³/d and 81 m³/d respectively.</p> <p>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.</p> <p>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.</p>																																								
<p>97 m³/d High TDS effluent shall be evaporated through MEE.</p>	<p>Complied.</p> <p>As stated above, the High TDS effluent quantity is now 291 m³/d. The average 132.5 m³/d high TDS waste water was evaporated in MEE during report period. Detail break up is given in below table:</p> <table border="1" data-bbox="435 1227 1533 1641"> <thead> <tr> <th colspan="5">Break up of effluent KI/Day</th> </tr> <tr> <th>Sr No.</th> <th>Month</th> <th>High TDS/COD</th> <th>Low TDS/COD</th> <th>Total Effluent generation</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>October - 20</td> <td>107</td> <td>9061</td> <td>9168</td> </tr> <tr> <td>2</td> <td>November - 20</td> <td>125</td> <td>9031</td> <td>9156</td> </tr> <tr> <td>3</td> <td>December - 20</td> <td>136</td> <td>8442</td> <td>8578</td> </tr> <tr> <td>4</td> <td>January - 21</td> <td>146</td> <td>8922</td> <td>9068</td> </tr> <tr> <td>5</td> <td>February - 21</td> <td>149</td> <td>9695</td> <td>9844</td> </tr> <tr> <td>6</td> <td>March - 21</td> <td>132</td> <td>9323</td> <td>9455</td> </tr> </tbody> </table>	Break up of effluent KI/Day					Sr No.	Month	High TDS/COD	Low TDS/COD	Total Effluent generation	1	October - 20	107	9061	9168	2	November - 20	125	9031	9156	3	December - 20	136	8442	8578	4	January - 21	146	8922	9068	5	February - 21	149	9695	9844	6	March - 21	132	9323	9455
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<p>Total quantity of 17283 m³/d shall be treated at company's own effluent treatment plant.</p>	<p>Complied.</p> <p>According to specific condition of EC F No. J 11011/108/2015 - IA - II - (I) dated February 11, 2019 Industrial Waste water generation shall not exceed 20,514 m³/d.</p> <p>The average 9212 m³/Day wastewater was treated in the company's own effluent treatment plant during the reporting period.</p>																																								
<p>Final Discharge of Treated</p>	<p>Complied.</p>																																								

<p>effluent is being discharge into river par through 4 km line constructed by M/s Atul.</p>	<p>Final discharged effluent meeting all state pollution control board's limit is being discharged into river Par through 4 km line.</p>																																													
<p>Ammonia bearing effluent shall be subject to ammonia recovery before mixing with normal effluent stream.</p>	<p>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:</p> <table border="1" data-bbox="435 600 1528 734"> <thead> <tr> <th>Recover Ammonia (MT)</th> <th>October 20</th> <th>November 20</th> <th>December 20</th> <th>January 21</th> <th>February 21</th> <th>March 21</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td></td> <td>0</td> <td>0</td> <td>25.30</td> <td>170</td> <td>284</td> <td>372</td> <td>851.3</td> </tr> </tbody> </table>	Recover Ammonia (MT)	October 20	November 20	December 20	January 21	February 21	March 21	Total		0	0	25.30	170	284	372	851.3																													
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<p>Phenol will be recovered from phenol containing effluent.</p>	<p>Complied. 20 Kg 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:</p> <table border="1" data-bbox="427 987 1536 1406"> <thead> <tr> <th></th> <th>October 20</th> <th>November 20</th> <th>December 20</th> <th>January y 21</th> <th>February y 21</th> <th>March 21</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>DCP crude distilled</td> <td>725</td> <td>1106</td> <td>1390</td> <td>1245</td> <td>1548</td> <td>1621</td> <td>7635</td> </tr> <tr> <td>2,4DCP recovered</td> <td>636</td> <td>970</td> <td>1215</td> <td>1087</td> <td>1354</td> <td>1422</td> <td>6684</td> </tr> <tr> <td>2,6DCP recovered</td> <td>48</td> <td>100</td> <td>93</td> <td>83</td> <td>103</td> <td>108</td> <td>535</td> </tr> <tr> <td>OCP/ Residue</td> <td>41</td> <td>78</td> <td>82</td> <td>76</td> <td>91</td> <td>91</td> <td>459</td> </tr> </tbody> </table>		October 20	November 20	December 20	January y 21	February y 21	March 21	Total	DCP crude distilled	725	1106	1390	1245	1548	1621	7635	2,4DCP recovered	636	970	1215	1087	1354	1422	6684	2,6DCP recovered	48	100	93	83	103	108	535	OCP/ Residue	41	78	82	76	91	91	459					
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<p>The treated effluent shall confirm the discharge norms.</p>	<p>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. The maximum values during the compliance period confirms that at no time the emission went beyond the stipulated standards. Summary is given below:</p> <table border="1" data-bbox="512 1688 1449 2074"> <thead> <tr> <th rowspan="2">Sr No.</th> <th rowspan="2">Parameter</th> <th rowspan="2">Norms</th> <th colspan="3">Values for the period October 20 - March 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>pH</td> <td>5.5 - 9.0</td> <td>6.89</td> <td>7.46</td> <td>7.13</td> </tr> <tr> <td>2</td> <td>Temperature</td> <td>40°C</td> <td>30</td> <td>30.4</td> <td>30.2</td> </tr> <tr> <td>3</td> <td>Colour (pt. co. scale)</td> <td>- - -</td> <td>30</td> <td>60</td> <td>41.66</td> </tr> <tr> <td>4</td> <td>Suspended solids</td> <td>100 mg/l</td> <td>34</td> <td>72</td> <td>41.66</td> </tr> <tr> <td>5</td> <td>Phenolic Compounds</td> <td>5 mg/l</td> <td>0.58</td> <td>1.2</td> <td>0.87</td> </tr> <tr> <td>6</td> <td>Cyanides</td> <td>0.2 mg/l</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> </tbody> </table>	Sr No.	Parameter	Norms	Values for the period October 20 - March 21			Min.	Max.	Avg.	1	pH	5.5 - 9.0	6.89	7.46	7.13	2	Temperature	40°C	30	30.4	30.2	3	Colour (pt. co. scale)	- - -	30	60	41.66	4	Suspended solids	100 mg/l	34	72	41.66	5	Phenolic Compounds	5 mg/l	0.58	1.2	0.87	6	Cyanides	0.2 mg/l	ND	ND	ND
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6	Cyanides	0.2 mg/l	ND	ND	ND																																									

	7	Fluorides	2 mg/l	0.21	1.68	1.17
	8	Sulphides	2 mg/l	0.94	1.37	1.14
	9	Ammonical Nitrogen	50 mg/l	1.97	9.1	6.43
	10	Total Chromium	2 mg/l	ND	ND	ND
	11	Hexavalent Chromium	1 mg/l	ND	ND	ND
	12	BOD (3 Day s at 27°C)	100 mg/l	31	52	39.66
	13	COD	250 mg/l	153	230	189.17

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

Complied.

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

Domestic Wastewater generation m ³	October 20	November 20	December 20	January 21	February 21	March 21	Total
Month wise	9583	8455	8796	8968	8822	9592	54217
Per day	309	273	284	289	285	309	291

The maximum, minimum and average values are given below:

Domestic Wastewater generation	Values for the period October 21 - March 21		
	Min.	Max.	Avg.
Domestic Wastewater generation m ³ /d	273	309	291

ii The process emissions (SO₂, NH₃, Cl₂, and HCl, shall be scrubbed with Scrubbers.

Complied.

All the SO₂, NH₃, Cl₂, 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**. Gaseous emissions from process units are monitored regularly on monthly basis. During the report period no case varies from standard.

	<p>The gaseous emission from the DG sets shall be dispersed through stack of adequate height as per CPCB standards.</p>	<p>Complied.</p> <p>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): $H = h + 0.2 \times \sqrt{KVA}$ 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</p> <p>However, DG sets are being used only during emergency startups.</p>
	<p>Acoustic enclosures shall be provided to the DG set to control the noise pollution.</p>	<p>Complied.</p> <p>All DG sets are having inbuilt acoustic enclosures to control the noise pollution and meeting the prescribed norms.</p>
iii	<p>The company shall upload the status of compliance of stipulated environmental clearance conditions including results of monitored data on its web site.</p>	<p>Complied.</p> <p>The status of compliance of stipulated environmental clearance conditions including results of monitored data is posted on our web site www.atul.co.in</p>
	<p>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.</p>	<p>Complied.</p> <p>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.</p>

The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (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, SO₂, NO_x are monitored regularly on monthly basis and displayed at board at the company entrance.

Photograph of main gate digital display board for ambient air quality:



Details of stack results, ambient air monitoring and VOC measured in fugitive emission is given in **Table 2, 3 and 4** respectively.

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 October 20 - March 21		
				Min.	Max.	Avg.
1	SO ₂	40	mg/Nm ³	1.1	36.1	22.05
2	SO ₂ (kg/T)	2	kg/T	0.8	1.6	1.16
3	NO _x	25	mg/Nm ³	9.3	20.7	14.05
4	HCl	20	mg/Nm ³	1.9	16.8	7.46
5	PM	150	mg/Nm ³	3.8	71.8	39.4

6	PM with Pesticide compound	20	mg/Nm ³	8.4	15.8	11.95
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Summary of Flue Stack results:

No.	Parameter	Standard values as per CCA	Unit	Values for the period October 20 - March 21		
				Min.	Max.	Avg.
1	PM	100	mg/Nm ³	48.4	89.6	62.34
2	PM (New Boiler)	50	mg/Nm ³	35.4	46	40.53
3	SO ₂	600	mg/Nm ³	148	330	190
4	NO _x	600	mg/Nm ³	124	559	218.6
5	NO _x (New Boiler)	300	mg/Nm ³	142	196	166

Summary of Ambient Air Quality results:

Station	Parameter	Limit micro - gm/NM ³	Values for the period October 20 – March 21		
			Min.	Max.	Avg.
66 KV	RSPM (PM2.5)	60	30.8	38.3	33.55
	PM10	100	50.1	55.4	53.68
	SO ₂	80	12.3	20.5	14.75
	NO ₂	80	12.8	18.2	14.38
	Ammonia	400	ND	ND	ND
	HCl	200	ND	ND	ND
Opposite Shed D	RSPM (PM2.5)	60	31.6	37.2	33.45
	PM10	100	50.1	53.7	51.61
	SO ₂	80	11.1	18.5	14.43
	NO ₂	80	10.1	16.2	13.98
	Ammonia	400	ND	ND	ND
	HCl	200	ND	ND	ND
West site ETP	RSPM (PM2.5)	60	22	26	23.66
	PM10	100	44	48	45.66
	SO ₂	80	7.9	12.1	9.533
	NO ₂	80	8.1	9.3	8.7
	Ammonia	400	ND	ND	ND
	HCl	200	ND	ND	ND
North site ETP	RSPM (PM2.5)	60	23	30	27
	PM10	100	43	47	44.66
	SO ₂	80	6.7	8.4	7.7

			NO ₂	80	6.7	9.3	7.71	
			Ammonia	400	ND	ND	ND	
			HCl	200	ND	ND	ND	
		TSDf	RSPM (PM2.5)	60	21	28	25	
			PM10	100	47	51	48.66	
			SO ₂	80	6.2	10.3	8.23	
			NO ₂	80	6.5	10.5	8.25	
			Ammonia	400	ND	ND	ND	
			HCl	200	ND	ND	ND	
			Main Guest House	RSPM (PM2.5)	60	23	27	24.67
				PM10	100	52	56	53.67
		SO ₂		80	8.1	11.2	9.67	
		NO ₂		80	6.8	11.5	9.23	
		Ammonia		400	ND	ND	ND	
		HCl		200	ND	ND	ND	
		Wyeth Colony	RSPM (PM2.5)	60	26	30	28.17	
			PM10	100	49	53	50.83	
			SO ₂	80	6.6	11.5	8.98	
			NO ₂	80	7.3	10.3	8.53	
			Ammonia	400	ND	ND	ND	
			HCl	200	ND	ND	ND	
		Gram panchayat hall	RSPM (PM2.5)	60	26	31	28.17	
			PM10	100	51	55	52.67	
			SO ₂	80	7.5	12.3	9.93	
			NO ₂	80	7.7	10.4	8.82	
			Ammonia	400	ND	ND	ND	
			HCl	200	ND	ND	ND	
		Main office, North site	RSPM (PM2.5)	60	25	30	27.17	
			PM10	100	45	49	46.67	
			SO ₂	80	7.4	11.3	9.18	
			NO ₂	80	7.8	8.7	8.25	
			Ammonia	400	ND	ND	ND	
			HCl	200	ND	ND	ND	
		Haria water tank	RSPM (PM2.5)	60	31	35	32.58	
			PM10	100	52.6	57.7	55.20	
			SO ₂	80	14.8	18.4	16.67	
			NO ₂	80	12.3	16.2	13.92	
			Ammonia	400	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 October 20 – March 21
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					Min.	Max.	Avg.
2,4 D	Reactor	Phenol	19	7.5	14.2	10.18	
	Buffer tank	Chlorine	3	0.15	1.6	0.7	
Resorcinol	Benzene storage tank area near vent	Benzene	15	1.2	7.8	3.59	
	Near Extraction /scrubber unit	Butyl acetate	-	350	580	434.1	
Pharma	At second floor work area	Ammonia	18	3.8	4.5	4.15	
	Ammonia recovery area	Ammonia	18	5.1	6.3	5.7	
Epoxy - I	At vacuum pump 2nd floor	ECH	10	3.1	5.6	4.26	
	At vessel POS 1208 G.F	ECH	10	1.3	2.5	1.96	
Shed H	At second floor work area	Nitrobenzene	5	1.8	3.5	2.58	
Shed J	Buffer Tank	Chlorine	3	ND	ND	ND	


v	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	<p>Complied.</p> <p>We have obtained authorization for our own TSDF through GPCB notification no. GPCB/HAZ/GEN - 55/9647 dated March 13, 2000 and NOC no. CTE - 65621 dated November 19, 2004. Also we have valid authorization under our current CCA No. AWH - 105110 for handling, storage and disposal of hazardous waste.</p>
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	<p>permission from GPCB shall be obtained for disposal of solid waste in the TSDF.</p>	
	<p>The concerned company shall undertake measures for the firefighting facility in case of emergency.</p>	<p>Compiled.</p> <p>A well designed Fire hydrant system is adequate and as per standards.</p> <p>Fire hydrant Network details:</p> <ul style="list-style-type: none"> • Four full - fledged fire hydrant system in the company Water Storage Capacity - 50 million Liters • Total length of hydrant line – 15 km • Fire Fighting Equipment <ul style="list-style-type: none"> ◦ DCP1350 ◦ CO₂ 776 ◦ Foam :05Trolley • Fire Tenders <ul style="list-style-type: none"> ◦ One fire tender having 1800 Lit water capacity ◦ Second multipurpose fire tenders having 5000 Lit water &500Foam ◦ Third Multipurpose tender having facility of DCP - 500 Kg, Foam – 500 lit and Water – 4500 Lit. • 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.
vi	<p>The project authorities shall strictly comply with the rules and guidelines under manufacturing, storage and import of hazardous</p>	<p>Complied.</p> <p>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.</p> <p>The company complies with all stipulated norms of act made in CCA by GPCB are being complied. Excerpts of latest Environmental audit report by S.N.Patel Institute of Technology & research Centre for Environment research, Bardoli, Surat for year 2020 - 21 is attached as Annexure 1.</p>

	chemicals rule 1989 as amended in October, 1994 and January, 2000.	
	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 thiosulphate, 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, and 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

	cleaning to reduce wastewater generation.	cleaned with high pressure sprayer / jet to reduce waste water 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.	<p>Complied.</p> <p>Fugitive emissions in the work zone environment and raw material storage area is being regularly monitored by NABL approved third party.</p> <p>Data for the reporting period is given in Table 4. Besides this online monitors in work area for parameters like Chlorine, HCl and Phosgene are also installed.</p> <p>The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards.</p> <p>Summary is given in specific condition iii.</p>
ix	The project authority shall provide chilled brine solution in secondary condenser for condensation of the VOCs.	<p>Complied.</p> <p>All the VOCs/solvent recovery systems are attached with chilled brine solution in secondary condenser for condensation of VOCs.</p>
	The project authority shall ensure that solvent recovery shall not be less than 95%	<p>Complied.</p> <p>On an average solvent recovery is 96%.</p>
	The VOC monitoring shall be carried in the solvent storage area and data submitted to the Ministry.	<p>Complied.</p> <p>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.</p> <p>VOC monitoring in solvent storage area is being done and data are submitted through EC compliance report.</p> <p>Data for the report period is given in Table 4.</p>

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 to prevent leakages.	Complied. All the reactors and pumps handling solvent are equipped with mechanical seals 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	Complied.

	chemicals shall be stored in tanks in tank farms, drums, carboys etc.	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.	<p>Complied.</p> <p>Proper plantation the plant the roads to transport dust Total Industrial 1126078.27 Green belt area: (approx. 36% of Layout plan with as under:</p>  <p>is done all around boundary and also mitigate fugitive & emission. Plot area: sq.mt 409030.00 sq.mt (total plot area) green belt is shown</p> <p>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.</p>
xii	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	<p>Complied.</p> <p>Company has expanded its harvesting pond capacity to 14000 KL capacity pond to harvest rain water</p> <p>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.</p> <p>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.</p>

	conserve fresh water.											
xiii	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	<p>Complied.</p> <p>Occupational health surveillance of the workers is being done on regular basis and record maintained as per the factory act. Details for the report period is shown in below table:</p> <p>Medical Check - Up:</p> <table border="1"> <thead> <tr> <th>Sr No.</th> <th>Employee</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Staff</td> <td rowspan="3">1895</td> </tr> <tr> <td>2</td> <td>Operators</td> </tr> <tr> <td>3</td> <td>Workers</td> </tr> </tbody> </table>	Sr No.	Employee	Quantity	1	Staff	1895	2	Operators	3	Workers
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B. General Conditions:												
i	The project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board.	<p>Complied.</p> <p>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.</p> <p>Excerpts of latest Environmental audit report by S.N.Patel Institute of Technology & research Centre for Environment research, Bardoli, Surat for year 2020 - 21 is attached as Annexure 1</p>										
ii	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal	<p>Complied.</p> <p>Any expansion will be done only after getting EC.</p>										

	<p>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.</p>	
iii	<p>At no time, the emissions shall exceed the prescribed limits.</p>	<p>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.</p>
	<p>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.</p>	<p>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.</p>
iv	<p>The Gaseous emission (NO_x, HCl, SO₂ and SPM) and Particulate matter along with RSPM levels from various process units shall conform to the standards prescribed by the</p>	<p>Complied. The gaseous emissions (SO₂, NO_x, 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.</p>

	<p>concerned authorities from time to time.</p>	
	<p>At no time, the emission levels shall go beyond the stipulated standards.</p>	<p>Complied.</p> <p>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.</p> <p>Summary of stack results given in specific condition no. ii.</p>
	<p>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 SO₂, NO_x and SPM shall be carried.</p>	<p>Complied.</p> <p>No such case happened during compliance period. Stack monitoring for SO₂, NO_x and SPM has been carried out and details given in Table 2. Whenever such incident of failure of pollution control system happened, we will stop the operation and rectify the problem and then only restart.</p>

v	<p>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.</p>	<p>Complied.</p> <p>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.</p> <p>List of our ambient air monitoring station is given below:</p> <table border="1" data-bbox="603 501 1295 963"> <thead> <tr> <th>No.</th> <th>Location</th> </tr> </thead> <tbody> <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>West site ETP</td> </tr> <tr> <td>4</td> <td>North site ETP</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>Haria Water tank</td> </tr> </tbody> </table> <p>Details of ambient air quality results is given in Table 3.</p>	No.	Location	1	66 KVA GEB substation	2	Opposite Shed D	3	West site ETP	4	North site ETP	5	Near TSDF	6	Near Main Guest House	7	At Wyeth Colony	8	Gram panchayat hall	9	Near Main office, North site	10	Haria Water tank
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vi	<p>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.</p>	<p>Complied.</p> <p>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.</p>																						
	<p>The scrubber water shall be sent to ETP for further treatment or sell to actual end users.</p>	<p>Complied.</p> <p>The scrubber water is being sent to ETP for further treatment.</p>																						

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.	<p>Complied.</p> <p>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.</p>																																																																														
	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)	<p>Complied.</p> <p>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.</p> <p>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:</p> <p>Noise level monitoring data (Day Time):</p> <table border="1" data-bbox="472 1160 1497 1753"> <thead> <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 October 20 - March 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> <tr><td>1</td><td>Near Main guest house</td><td>75</td><td>52.40</td><td>65.80</td><td>62.73</td></tr> <tr><td>2</td><td>Near TSDF</td><td>75</td><td>57.60</td><td>67.30</td><td>64.27</td></tr> <tr><td>3</td><td>At Wyeth Colony</td><td>75</td><td>56.20</td><td>59.80</td><td>58.53</td></tr> <tr><td>4</td><td>Gram Panchayat Hall</td><td>75</td><td>55.60</td><td>68.50</td><td>65.20</td></tr> <tr><td>5</td><td>Near Main Office North site</td><td>75</td><td>53.60</td><td>67.60</td><td>64.67</td></tr> <tr><td>6</td><td>North site ETP</td><td>75</td><td>55.20</td><td>71.20</td><td>66.95</td></tr> <tr><td>7</td><td>Opposite shed D</td><td>75</td><td>57.10</td><td>72.40</td><td>68.75</td></tr> <tr><td>8</td><td>West site ETP</td><td>75</td><td>52.40</td><td>68.70</td><td>65.17</td></tr> <tr><td>9</td><td>Haria water tank</td><td>75</td><td>55.60</td><td>66.50</td><td>63.85</td></tr> <tr><td>10</td><td>66KVA substation</td><td>75</td><td>53.50</td><td>68.00</td><td>64.75</td></tr> </tbody> </table> <p>Noise level monitoring data (Night Time):</p> <table border="1" data-bbox="472 1883 1497 2065"> <thead> <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 October 20 - March 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> </tbody> </table>	Sr No.	Location	Permissible Limits, dBA	Values for the period October 20 - March 21			Min.	Max.	Avg.	1	Near Main guest house	75	52.40	65.80	62.73	2	Near TSDF	75	57.60	67.30	64.27	3	At Wyeth Colony	75	56.20	59.80	58.53	4	Gram Panchayat Hall	75	55.60	68.50	65.20	5	Near Main Office North site	75	53.60	67.60	64.67	6	North site ETP	75	55.20	71.20	66.95	7	Opposite shed D	75	57.10	72.40	68.75	8	West site ETP	75	52.40	68.70	65.17	9	Haria water tank	75	55.60	66.50	63.85	10	66KVA substation	75	53.50	68.00	64.75	Sr No.	Location	Permissible Limits, dBA	Values for the period October 20 - March 21			Min.	Max.	Avg.
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			4	Gram Panchayat Hall	70	56.50	66.50	58.83		
			5	Near Main Office North site	70	56.30	64.20	58.62		
			6	North site ETP	70	52.50	63.20	55.98		
			7	Opposite shed D	70	51.70	72.10	59.50		
			8	West site ETP	70	54.20	65.70	57.12		
			9	Haria Water tank	70	52.40	63.40	56.02		
			10	66KVA substation	70	55.30	66.00	58.05		
viii	Training shall be imparted to all employees on safety and health aspects of chemicals handling.	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.								
	Pre - employment and routine periodical medical examination for all employees shall be undertaken on regular basis.	Complied. Pre- medical checkup and routine medical checkup for the employees is being done on regular basis. Summary of medical checkup given in specific condition no. xiii.								
ix	Usage of PPE's by employee/workers shall be ensured.	Complied. Company have PPE policy in place and is strictly followed. Company is providing adequate PPEs to all the employees.								
x	The project proponent shall also comply with all the environmental protection measures and safeguards proposed in project report submitted to the ministry.	Complied. Company has complied with all the environmental protection measures and safeguards proposed in the report apart from the recommendations made their in.								

	All the recommendations made in respect of environmental management and risk mitigation measures relating to the project shall be implemented.	Since ToR didn't suggest for EIA or public hearing, no such recommendations mentioned. However, recommendations made in respect of adequacy report for the referred project are complied and compliance report submitted vide our letter dated December 19, 2020
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 for up gradation of surrounding area and well fare of nearby localities. List of CSR activities is given in Table 7 .
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	<p>A Separate environmental management cell equipped with full flagged laboratory facility shall be set up to carry out the environmental management and monitoring function.</p>	<p>Complied.</p> <p>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.</p> <p>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.</p>																							
xiv	<p>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.</p>	<p>Complied.</p> <p>EMP measures are implemented by 2010.</p> <p>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.</p> <table border="1" data-bbox="518 1122 1449 1637"> <thead> <tr> <th data-bbox="518 1122 635 1256">Sr No.</th> <th data-bbox="635 1122 986 1256">Parameter</th> <th data-bbox="986 1122 1449 1256">Recurring Cost (Rs. In lacs) For the report period October 20 – March 21</th> </tr> </thead> <tbody> <tr> <td data-bbox="518 1256 635 1294">1</td> <td data-bbox="635 1256 986 1294">Air Pollution Control</td> <td data-bbox="986 1256 1449 1294" rowspan="2">2865</td> </tr> <tr> <td data-bbox="518 1294 635 1339">2</td> <td data-bbox="635 1294 986 1339">Liquid Pollution Control</td> </tr> <tr> <td data-bbox="518 1339 635 1462">3</td> <td data-bbox="635 1339 986 1462">Environmental Monitoring and Management</td> <td data-bbox="986 1339 1449 1462">21</td> </tr> <tr> <td data-bbox="518 1462 635 1507">4</td> <td data-bbox="635 1462 986 1507">Solid waste Disposal</td> <td data-bbox="986 1462 1449 1507">346</td> </tr> <tr> <td data-bbox="518 1507 635 1552">5</td> <td data-bbox="635 1507 986 1552">Occupational health</td> <td data-bbox="986 1507 1449 1552">20</td> </tr> <tr> <td data-bbox="518 1552 635 1597">6</td> <td data-bbox="635 1552 986 1597">Green belt</td> <td data-bbox="986 1552 1449 1597">7</td> </tr> <tr> <td colspan="2" data-bbox="518 1597 986 1637">Total</td> <td data-bbox="986 1597 1449 1637">3259</td> </tr> </tbody> </table>	Sr No.	Parameter	Recurring Cost (Rs. In lacs) For the report period October 20 – March 21	1	Air Pollution Control	2865	2	Liquid Pollution Control	3	Environmental Monitoring and Management	21	4	Solid waste Disposal	346	5	Occupational health	20	6	Green belt	7	Total		3259
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xv	<p>A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila parishad/Municipal Corporation. Urban local body and the local NGO, if any, from who suggestions/representation, if any, were received while processing the proposal.</p>	<p>Complied.</p> <p>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 April 4, 2017.</p>
	<p>The clearance letter shall also be put on the web site of the company by the proponent.</p>	<p>Complied.</p> <p>Available at company's website at www.atul.co.in</p>
xvi	<p>The implementation of the project vis-à-vis environmental action plan shall be monitored by Ministry's Regional office at Bhopal / SPCB / CPCB.</p>	<p>Complied.</p> <p>SPCB and MoEF is monitoring through their regular visits.</p>

xvii	<p>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.nic.in.</p>	<p>Complied.</p> <p>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.</p>
	<p>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.</p>	<p>Complied.</p> <p>Advertisement was published as directed and copy of the same was submitted to Ministry vide our letter dated November 14, 2009.</p>

xvii i	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 conditions is not satisfactory.	Noted.
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.

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 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 Transboundary movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their	Noted.

	amendments and rules.	
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Table1: Quality of treated effluent

Sr No.	Parameter	Results						GPCB Limits
		October 20	November 20	December 20	January 21	February 21	March 21	
1	pH	7.04	7.13	7.46	7.34	6.97	6.89	5.5 to 9.0
2	Temperature °C	30.4	30.1	30.2	30	30.1	30.4	40 °C
3	Colour (pt. co. scale)	40	30	30	40	60	50	- - -
4	Suspended solids, mg/l	68	47	39	53	72	34	100
5	Phenolic Compounds, mg/l	0.8	1.2	0.58	0.94	0.83	ND	5
6	Cyanides, mg/l	ND	ND	ND	ND	ND	ND	0.2
7	Fluorides, mg/l	1.17	1.24	1.18	1.68	1.55	0.21	2
8	Sulphides, mg/l	1.12	0.98	0.94	1.37	1.16	ND	2
9	Ammonical Nitrogen, mg/l	7.56	8.42	7.28	4.26	1.97	9.1	50
10	Total Chromium, mg/l	ND	ND	ND	ND	ND	ND	2
11	Hexavalent Chromium, mg/l	ND	ND	ND	ND	ND	ND	1
12	BOD (3 days at 27°C), mg/l	38	31	40	35	42	52	100
13	COD, mg/l	153	164	216	204	230	168	250
Note: ND is Not Detectable.								

Table: 2 Stack Results

				OCT. 2020	NOV. 2020	DEC.2020	JAN. 2021	FEB. 2021	MAR. 2021
Details of Process and Flue stack									
Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
Atul East Site									
1	furnace (Phosgene Plant)	PM	150.0 mg/Nm3	33	20	48	42	31	54
2	Reactor (Phosgene plant- New)	CO	---	ND	ND	ND	ND	ND	ND
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
Caustic Chlorine Plant									
3	Dechlorination Plant	Cl ₂	9.0 mg/Nm3	8.1	2.46	4.3	8.2	5.8	5
4	Common stack of HCl Sigri unit 1&2	HCl	20.0 mg/Nm3	8.29	1.9	4.42	8.4	5.94	5.1
		Cl ₂	9.0 mg/Nm3	7.5	3.8	5.7	8.15	4.9	4.4
		HCl	20.0 mg/Nm3	7.68	3.6	5.86	7.9	5.01	4.5
FCB Plant									
5	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)									
6	Sulfuric Acid Plant	SO ₂	2.0 kg/T	1.5	0.8	1.25	1.35	1.1	1.32
		Acid Mist	50.0 mg/Nm3	13.6	16.2	24.8	12.9	19.8	10.6
7	ChloroSulfonic Acid plant reactor	Cl ₂	9.0 mg/Nm3	8.2	7.1	6.8	3.9	6.4	4.1
		HCl	20.0 mg/Nm3	8.85	7.3	6.99	3.7	6.55	4.3
Resorcinol Plant									
8	Spray Dryer (Resorcinol Plant)	PM	150.0 mg/Nm3	3.8	12.2	9.1	33.7	33.2	27.7
9	Scrubber vent (Resorcinol Plant)	SO ₂	40.0 mg/Nm3	24.7	4	20.6	24.1	32.6	28.4
Incinerator									
10	Incinerator	PM	150.0 mg/Nm3	71.8	56.2	Not Running	Not Running	30.8	Not Running
		SO ₂	40.0 mg/Nm3	9.2	4.8			12.4	
		NOx	25.0 mg/Nm3	19.7	15.3			9.3	
NI Plant									
11	Foul Gas Scrubber	SO ₂	40.0 mg/Nm3	25.2	23.2	26.4	14.9	20.6	22.3
		NOx	25.0 mg/Nm3	15.9	20.7	18.4	16.8	12.1	14.9
2-4-D Plant									
12	Common Scrubber; 2,4D Plant	Cl ₂	9.0 mg/Nm3	7.6	6.4	5.1	6.4	7.8	5.4
		HCl	20.0 mg/Nm3	13.51	6.63	5.24	6.8	7.48	5.7
		Phenol	--	ND	ND	4.2	ND	ND	ND
13	Dryer-1	PM with Pesticide compound	20.0 mg/Nm3	14.8	11.2	14.2	13.1	12.8	10.9
14	Dryer-2	PM with Pesticide compound	20.0 mg/Nm3	11.2	13.6	10.8	8.4	11.2	9.4
15	Dryer-3	PM with Pesticide compound	20.0 mg/Nm3	14.1	9.4	12.6	12.3	13.6	Not Running
16	Dryer-4	PM with Pesticide compound	20.0 mg/Nm3	11	12	8.4	10.2	14.2	12.6
17	Dryer-5	PM with Pesticide compound	20.0 mg/Nm3	15.8	13.1	15.6	9.7	9.9	10.5

NBD Plant .									
18	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
19	Scrubber S-902	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
20	Scrubber S-801/802	HCl	20 mg/Nm3	10.4	12.9	16.1	14.2	7.9	8.2
		NOx	25.0 mg/Nm3	17.1	10.8	17.4	10.1	10.6	12.2
Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
CP Plant									
21	MCPA	Cl ₂	9 mg/NM ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20 mg/NM ³						
		SO ₂	40 mg/NM ³						
22	Fipronil	SO ₂	40 mg/NM ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20 mg/Nm3						
23	Imidacloprid	NH ₃	175 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
24	Pyrethroids	SO ₂	40 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20 mg/Nm3						
25	Stack at Amine Plant	NH ₃	175 mg/Nm3	98	66	75	63	48.4	112
MPSL Plant									
26	Phosgene Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
27	Central Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
NICO plant									
28	Central scrubber at Nico Plant	Acetonytryle IPA	—	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
Ester Plant									
29	Scrubber at Ester plant for Glyphosate	Formaldehyde	10 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
30	Central Scrubber MCPA Plant	HCl	20 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
31	MPP plant scrubber	HCl	20 mg/Nm3	7.5	3.4	5.8	12.4	6.3	8.1
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
Atul West Site									
32	Shed A05/03/44	Cl ₂	9 mg/NM ³	Not Running	7.53	5.9	6.2	Not Running	Not Running
		HCl	20 mg/NM ³						
33	Shed B2/12/24 Reaction Vessel	Cl ₂	9.0 mg/Nm3	Not Running	Not Running	5.5	7.1	6.9	6.2
		HCl	20.0 mg/Nm3						
34	Shed B18/02/24 Fan	SO ₂	40 mg/NM ³	19.5	33.6	20.8	32	23.9	19.8
		Cl ₂	9 mg/NM ³	7.2	4.6	7.3	8.1	4.4	6.8
		HCl	20 mg/NM ³	7.37	4.4	7.6	7.8	4.5	6.6
35	Shed C5/20/15 Chlorinator	Cl ₂	9.0 mg/Nm3	Not Running	Not Running	5.1	7.8	4.3	6.5
		HCl	20.0 mg/Nm3						
36	Shed D Niro Spray dryer No. 45	PM	150.0 mg/Nm3	Not Running	Not Running	Not Running	71	Not Running	Not Running
37	Shed D Niro Spray dryer No.50	PM	150.0 mg/Nm3	Not Running	Not Running	58.4	69	Not Running	Not Running
38	Shed E 7/12/49 Spray Dryer	PM	150.0 mg/Nm3	Not Running	Not Running	69.1	Not Running	45.7	55.3
39	Shed F F6/1/15 Reaction Vessel	Cl ₂	9.0 mg/Nm3	5.7	7.68	7.98	7.2	6.16	Not Running
		HCl	20.0 mg/Nm3	14.6	7.9	8.2	7.37	6.34	
40	Shed G 10/8/1 (receiver)	Cl ₂	9.0 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20.0 mg/Nm3						

41	Shed H 11/6/17 chlorinator	Cl ₂	9.0 mg/Nm ³	6.5	7.58	8.36	8.46	8.32	5.73
		HCl	20.0 mg/Nm ³	12	7.8	8.9	8.66	8.55	5.9
42	Shed K K-13/3/4 Final of Sulfuric acid plant	SO ₂	2.0 kg/T	1.6	0.86	0.9	1.1	0.95	1.3
		Acid Mist	50.0 mg/Nm ³	3.2	2.5	3	3.7	2.4	3.2
43	Shed J15/09/25	HBr	--	7.6	11.3	8.9	ND	ND	ND
		SO ₂	40 mg/NM ³	14.8	16.8	13.2	1.1	30.6	22.7
Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
44	Shed J12/01/42	SO ₂	40 mg/NM ³	Not Running	Not Running	19.8	24.7	18.3	20.1
		Cl ₂	9.0 mg/Nm ³			6.1	7.2	6.9	5.2
		HCl	20.0 mg/Nm ³			6.4	7.4	6.3	5.4
45	Shed J12/03/36	SO ₂	40 mg/NM ³	Not Running	Not Running	26.6	28.9	19.2	23.6
		HCl	20.0 mg/Nm ³			16.8	11.4	15.7	12.9
46	Shed N Scrubber Fan N20/08/24	Cl ₂	9 mg/NM ³	6.2	7.6	5.2	7.2	5.7	6.6
		HCl	20 mg/NM ³	6.34	6.34	9.1	5.3	5.83	6.8
47	Shed N Scrubber Fan N20/02/41	SO ₂	40 mg/NM ³	28.6	36.1	32.4	27.1	31.7	24.9
48	Sulfer Black Plant	H ₂ S	--	ND	ND	ND	ND	ND	ND
		NH ₃	175 mg/NM ³	140	140	120	81.3	90.6	110
49	Sulfer Dyes plant	H ₂ S	--	ND	ND	ND	ND	ND	ND
		NH ₃	175 mg/NM ³	31.2	44.2	35.4	156	12.8	27.3
50	Flavors & Fragrances Plant	HCl	20 mg/NM ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
Atal North Site									
51	N-FDH Plant Catalytic Incinerator	PM	150.0 mg/Nm ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		SO ₂	40.0 mg/Nm ³						
		NOx	25.0 mg/Nm ³						
		Formaldehyde	10.0 mg/Nm ³						
52	PHIN Plant	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
53	PHIN-II Plant	HCl	20 mg/NM ³	2.8	3.3	4.3	5	4.3	4.7
54	DDS Plant (Pharma Plant)	NH ₃	175 Mg/Nm ³	Not Running	Not Running	Not Running	Not Running	110	150
55	SPIC II Plant (DCDPS)	SO ₂	---	ND	ND	Not Running	24.1	4.6	3.8
56	SPIC I Plant	NH ₃	175 mg/Nm ³	Not Running	Not Running	Not Running	146	124	136
57	SPIC IV Plant	NH ₃	175 mg/NM ³	75	Not Running	Not Running	59	66	12.9
		SO ₂	---	ND	ND	ND	ND	14.4	17.3

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	Not Running	Not Running	61.4	56.4	48.6	Not Running
		SO ₂	600 mg/Nm3			156	184	288	
		NOx	600 mg/Nm3			124	165	302	
2	FBC boiler E2	PM	100 mg/Nm3	71.4	Not Running	56.1	66.3	66.3	48.4
		SO ₂	600 mg/Nm3	172		165	154	229	178
		NOx	600 mg/Nm3	146		134	161	279	192
3	FBC boiler E3	PM	100 mg/Nm3	59.1	71.4	Not Running	Not Running	64.9	56.1
		SO ₂	600 mg/Nm3	158	190			330	230
		NOx	600 mg/Nm3	559	181			376	252
4	Hot Oil Unit (Resorcinal Plant)	PM	150.0 mg/Nm3	18.4	12.2	44.6	11.6	29.6	18.6
		SO ₂	100 ppm	6.2	4	23.4	14.2	6.2	6.2
		NOx	50 ppm	23.6	19.1	11.2	5.2	15.4	30.5
5	DG set 1010 KVA (Standby)	PM	150 mg/Nm ³	51.7	50.3	36.4	59.4	39.6	30.4
		SO ₂	100 ppm	9.1	9.2	5.6	68.2	9.6	6.3
		NOx	50 ppm	34.6	30.8	23.7	20.1	21.6	26.7
West Site									
6	FBC boiler W1	PM	100 mg/Nm3	89.6	72	68.4	56.8	48.6	60.4
		SO ₂	600 mg/Nm3	172	184	160	198	218	180
		NOx	600 mg/Nm3	144	158	172	164	196	230
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	20.5	14.8	16.9	21.8	15.2	18.8
8	Oil burner Shed B (Stand By)	PM	150.0 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		SO ₂	100 ppm						
		NOx	50 ppm						
9	Boiler (50 TPH 2 Nos) (New boilers) W2,W3	PM	50 mg/Nm3	31.6	46	40.2	35.4	48.7	42.7
		SO ₂	600 mg/Nm3	164	160	148	174	156	182
		NOx	300 mg/Nm3	148	168	152	142	172	196
		Mercury	0.03 mg/Nm3	ND	ND	ND	ND	ND	ND
10	DG set 1500 KVA (Stand By)	PM	150.0 mg/Nm3	44.8	60.6	51.7	44.3	54.7	52.6
		SO ₂	100 ppm	10.8	11.4	7.4	10.4	11.8	8.4
		NOx	50 ppm	41.5	44.6	34.8	25.8	30.2	31.2
North Site									
11	Thermic fluid heater of DCO/DAP Plant	PM	150.0 mg/Nm3	29.6	40.2	31.7	49.3	29.6	34.4
		SO ₂	100 ppm	10.2	7.9	5.2	8.1	7.1	7.5
		NOx	50 ppm	17.1	23.8	31.7	23.3	25.7	20.1

Table 3: Ambient Air Monitoring details

Station	Parameter	Limit micro gm/NM ³	October 20	November r20	December r 20	January 21	February 21	March 21
66 KV	PM 2.5	60	30.8	31.7	31.7	32.6	36.2	38.3
	PM10	100	55.4	54.4	55.1	54.3	50.1	52.8
	SO2	80	15.2	14.1	13.2	12.3	13.2	20.5
	NO ₂	80	14.4	13.5	14.6	12.8	18.2	12.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Opposite Shed D	PM 2.5	60	33.8	32.7	31.6	32.7	37.2	32.7
	PM10	100	52.6	53.7	52.1	50.1	51.1	50.1
	SO2	80	13.7	14.8	13.7	11.1	14.8	18.5
	NO ₂	80	14.8	15.7	14.6	16.2	12.5	10.1
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
West site ETP	PM 2.5	60	22	24	26	24	22	24
	PM10	100	44	46	48	46	44	46
	SO2	80	8.4	7.9	8.7	9.6	10.5	12.1
	NO ₂	80	8.1	9.3	8.1	9.2	8.3	9.2
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
North ETP	PM 2.5	60	28	30	29	27	25	23
	PM10	100	43	45	47	45	43	45
	SO2	80	7.6	6.7	7.6	8.4	7.5	8.4
	NO ₂	80	6.7	7.6	6.7	7.6	8.4	9.3
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
TSDF	PM 2.5	60	26	28	27	25	23	21
	PM10	100	47	49	51	49	47	49
	SO2	80	6.2	7.3	7.5	8.6	9.5	10.3
	NO ₂	80	7.3	6.5	7.3	8.5	9.4	10.5
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Main Guest House	PM 2.5	60	23	25	27	25	23	25
	PM10	100	52	54	56	54	52	54
	SO2	80	8.9	8.1	9.2	10.3	11.2	10.3
	NO ₂	80	8.6	6.8	8.6	9.5	10.4	11.5
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Wyeth Colony	PM 2.5	60	26	28	30	29	27	29
	PM10	100	50	51	53	51	49	51
	SO2	80	6.6	7.5	8.4	9.5	10.4	11.5
	NO ₂	80	7.3	8.3	7.4	8.5	9.4	10.3
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
	PM 2.5	60	27	29	31	28	26	28

Gram panchayat hall	PM10	100	51	53	55	53	51	53
	SO2	80	7.5	8.4	9.3	10.6	11.5	12.3
	NO ₂	80	7.7	8.8	7.7	8.7	9.6	10.4
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Main office, North site	PM 2.5	60	25	27	30	29	27	25
	PM10	100	45	47	49	47	45	47
	SO2	80	8.6	7.4	8.3	9.2	10.3	11.3
	NO ₂	80	7.8	8.7	7.8	8.7	7.8	8.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
Haria water tank	HCl	200	ND	ND	ND	ND	ND	ND
	PM 2.5	60	33.8	32.7	31	32	31	35
	PM10	100	57.7	56.5	55.6	52.6	56.2	52.6
	SO2	80	16.7	17.6	16.7	15.8	18.4	14.8
	NO ₂	80	16.2	15.3	14.2	12.3	13.2	12.3
	Ammonia	400	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					
				October 20	November 20	December 20	January 21	February 21	March 21
2,4 D	Reactor	Phenol	19	14.2	10.6	7.5	11.2	9.3	8.3
	Buffer tank	Chlorine	3.0	1.6	0.15	0.58	0.44	0.81	0.62
Resorcinol	Benzene storage tank area near vent	Benzene	15	7.8	6.5	1.2	1.72	2.56	1.8
	Near Extraction/scrubber unit	Butyl acetate	-	580	350	410	460	425	380
Pharma	At second floor work area	Ammonia	18	ND	ND	ND	ND	3.8	4.5
	Ammonia recovery area	Ammonia	18	ND	ND	ND	ND	5.1	6.3
Epoxy - I	At vacuum pump 2nd floor	ECH	10	3.8	4.8	5.6	3.9	3.1	4.4
	At vessel POS 1208 G.F	ECH	10	2.4	1.6	1.9	1.3	2.5	2.1
Shed H	At second floor work area	Nitrobenzene	5	2.6	3.5	2.4	1.8	2.1	3.1
Shed J	Buffer Tank	Chlorine	3	ND	ND	ND	ND	ND	ND

Table 5: Noise level monitoring data (Day Time)

Sr No.	Location	Noise Level, dBA						Permissible Limits, dBA
		October 20	November 20	December 20	January 21	February 21	March 21	

1	Near Main guest house	64.7	65.8	64.7	63.5	65.3	52.4	75
2	Near TSDF	66.6	65.6	64.8	63.7	67.3	57.6	75
3	At Wyeth Colony	57.8	58.7	59.8	58.9	59.8	56.2	75
4	Gram Panchayat Hall	67.6	68.5	67.4	66.5	65.6	55.6	75
5	Near Main Office North site	65.8	66.7	67.6	66.7	67.6	53.6	75
6	ETP North site	70.7	71.2	70.3	69.2	65.1	55.2	75
7	Opposite shed D	72.4	70.3	71.2	70.3	71.2	57.1	75
8	ETP West site	67.9	68.7	67.8	66.7	67.5	52.4	75
9	Water tank Haria road	65.4	66.5	65.6	64.5	65.5	55.6	75
10	Near 66KVA substation	67.0	68.0	67.0	66.0	67.0	53.5	75

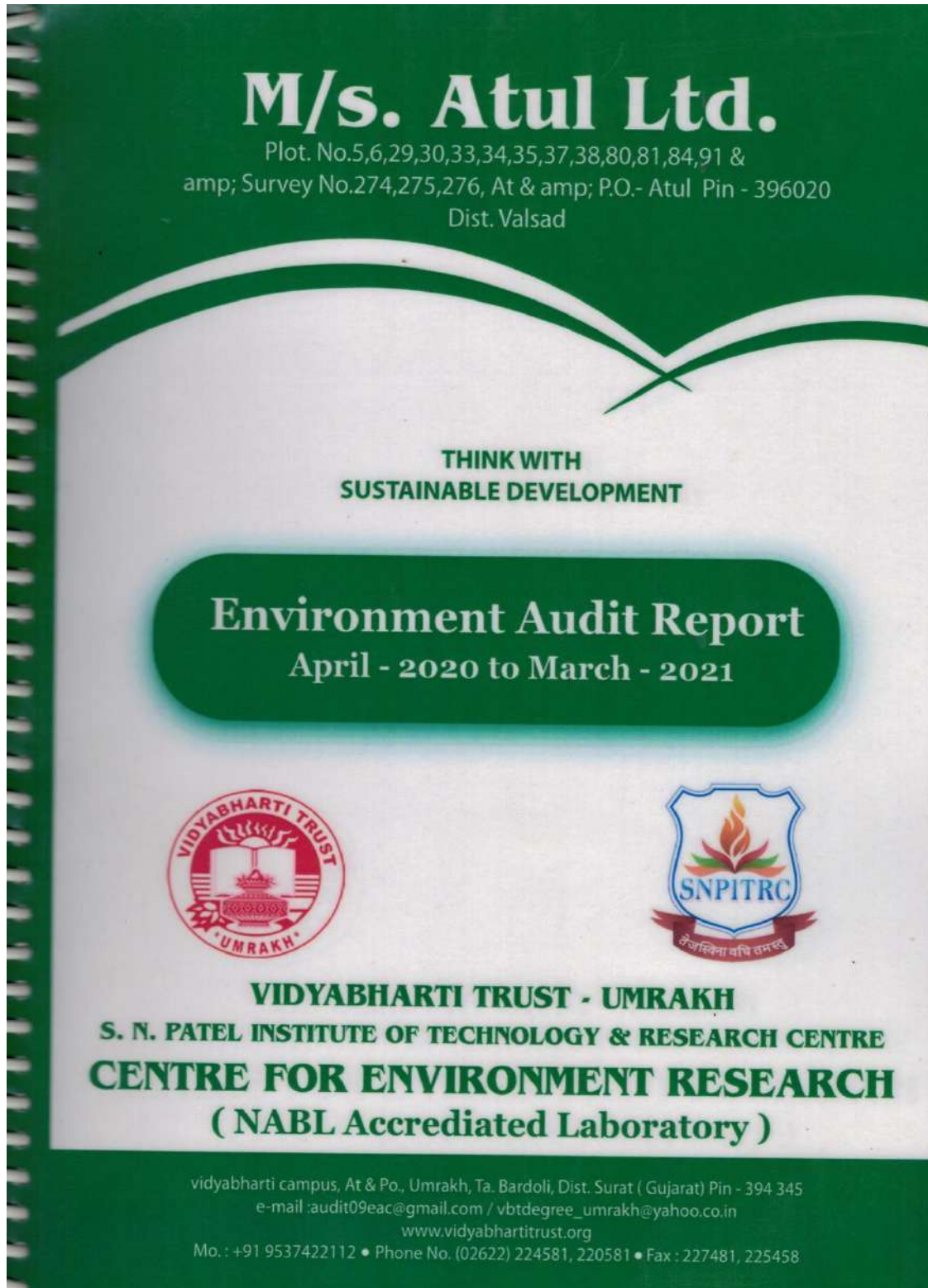
Table 6 : Noise level monitoring data (Night Time)

Sr No.	Location	Noise Level, dBA						Permissible Limits, dBA
		October 20	November 20	December 20	January 21	February 21	March 21	
1	Near Main guest house	55.3	56.4	55.3	54.2	64.2	54.2	70
2	Near TSDF	57.4	58.5	57.6	56.7	66.3	56.7	70
3	At Wyeth Colony	53.7	54.6	53.7	52.6	58.9	52.6	70
4	Gram Panchayat Hall	57.6	58.5	57.4	56.5	66.5	56.5	70
5	Near Main Office North site	59.4	58.3	57.2	56.3	64.2	56.3	70
6	ETP North site	56.5	55.6	54.6	53.5	63.2	52.5	70
7	Opposite shed D	59.8	58.9	57.8	56.7	72.1	51.7	70
8	ETP West site	57.1	56.2	55.3	54.2	65.7	54.2	70
9	Water tank Haria road	55.7	54.6	53.5	52.4	63.4	56.5	70
10	Near 66KVA substation	58.2	57.3	56.2	55.3	66	55.3	70

Table 7: CSR Activities

CSR activity report 2020-21

No.	Program	Project Activity	Location	Outlay for the year		Implementing agency
			District (State)	Budget	Spent	
	(A)	(B)	(C)	(D)	(E)	(G)
1	Education	Enhancement of education practices in Kalyani Shala	Valsad (Gujarat)	24.00	24.00	Atul Foundation
2		Support to tribal children in Atul Vidyamandir	Valsad (Gujarat)	3.75	3.75	Atul Foundation
3		Improvement of teaching methodology for primary school children - <i>Adhyapika</i> project	Valsad (Gujarat)	57.50	57.50	Atul Foundation
4		Support to develop a school in a tribal area	Navasari (Gujarat)	5.00	5.00	Atul Foundation
5		Enhancement of rural education	Valsad (Gujarat)	6.25	6.25	Atul Foundation
6		Conservation of manuscripts	Ahmedabad (Gujarat)	10.00	10.00	Atul Foundation
7	Empowerment	Empowerment of women through various vocational training courses	Valsad (Gujarat)	5.00	5.00	Atul Foundation
8		Skills training to youth as apprentices	Valsad (Gujarat)	110.17	110.17	Atul Ltd.
9		Capacity building of tribal farmers in beekeeping	Valsad (Gujarat)	3.00	3.00	Atul Foundation
10	Health	Nutrition Garden Project	Valsad (Gujarat)	12.00	12.00	Atul Foundation
11		Enhancement of rural health through health camps	Valsad (Gujarat)	6.50	6.50	Atul Foundation
12	Relief	Support to disaster relief for COVID-19 pandemic	Valsad (Gujarat)	20.00	20.00	Atul Foundation
13		Contribution to PM Cares Fund	Valsad (Gujarat)	300.00	300.00	Atul Ltd.
14		Provision of fertilisers to farmers	Valsad (Gujarat)	2.50	2.50	Atul Foundation
15	Infrastructure	Infrastructure development activities in villages	Valsad (Gujarat)	44.59	44.59	Atul Foundation
16		Construction of white topping road	Valsad (Gujarat)	554.28	554.28	Atul Ltd.
17	Conservation	Establishment of solid waste management system in Atul village	Valsad (Gujarat)	10.00	10.00	Atul Foundation
18		Implementation of afforestation initiatives	Valsad (Gujarat)	4.31	4.31	Atul Ltd.
19		Conservation of water in villages	Valsad (Gujarat)	2.91	2.91	Atul Foundation
Total direct expenditure				1181.76	1181.76	
Administrative overheads (OH)				59.59	59.59	
Total (direct expenditure + OH)				1241.35	1241.35	



OBSERVATION

- 1 Company has done outstanding work to control COVID 19 infection by devising operational and systematic controls. Compliance more than the government COVID 19 guidelines was observed during all the three visits. Company has prepared and implemented its own stringent guidelines to control COVID 19 and to keep their employees and family safe in this difficult time.
- 2 It has been observed that company is having policy to donate and provide all the possible help to their neighbouring community and nation at large during all such natural calamities.
Company has donated total Rs. 5 Cr in PM & CM relief fund in addition to the distribution of kits worth 50 lacs to the needy people in the neighbouring villages as well as migrant labours.
- 3 Company has applied for EC for expansion project and 50 MW CPP project. Public Hearing for both the projects have been completed successfully complying with COVID 19 guidelines.
- 4 Company has received registration certificate as brand owner by CPCB under plastic waste Management rules, 2016 and started collecting and disposing plastic as per the plan.
- 5 Company has installed South ETP which is under commissioning stage.
- 6 Company has undertaken ZLD project for North ETP.
- 7 Company has received CTE (EC to CTE) for its expansion and 50 MW CPP projects.
- 8 5 S drive is going on in later and spirit and hence overall housekeeping was found satisfactory.
- 9 Company is submitting quarterly reports on CPCB portal for its captive TSDF. Company is also submitting quarterly calibration reports of OCEMS to CPCB.
- 10 Company has submitted annual returns like Form IV, Form V, Form 3 for E-waste, Form 4 for BMW and Form VIII for Batteries within the stipulated time frame.
- 11 Company is regularly submitting EC compliance report and also uploading the same on its website.



RECOMMENDATIONS

- 1 Company shall prepare an action plan for the points emerged during the public hearing.
- 2 Company shall obtain fire NOC renewal as per the amended regulations
- 3 Company shall upgrade its coal | fly ash handling system for betterment.
- 4 Company shall install new Ambient Air Monitoring system | station
- 5 Company shall install digital display board at the gate as per the NGT order.
- 6 Company shall have membership of common facilities | pre | co processors for disposal of Hazardous wastes.
- 7 Company shall plan for above ground effluent network at other sites also in phased manner.



**ANNEXURE-32
COMPLIENCE REPORT**

Sr. No.	NOC/Consent	Has Valid Consent/ Authorization	Complying With Standards And Other Conditions
(A)	Compliance Report of water as per Water Act, 1974: If NO, comment:	Yes, Consent No. AWH-105110 is valid upto 30/09/2025	Complied
(B)	Compliance Report for Air as per Air Act, 1981: If NO, comment:		Complied
(C)	Compliance Report for the storage and handling of hazardous waste/chemicals under The Hazardous Waste (Management and Handling) Rule, 1989 & EPA-86 If NO, comment:		Complied



Project: Setting up of an additional captive power plant of 22 MW within the existing chemical manufacturing complex at post Atul, Dist. Valsad.

EC Compliance Report for EC No. SEIAA | GUJ | EC | 1(d) | 340 | 2016

Report period: October 2020 – March 2021

Sr No.	Condition	Compliance Status																																				
A. Conditions :																																						
A.1 Specific Condition:																																						
1.	Unit shall comply the emission standards mentioned in the Notification by MoEF & CC vide S.O. 3305(E) dated 07/12/2015.	<p>Complied.</p> <p>We ensure that at no time the emission level will go beyond the stipulated standards prescribed limits. In such cases occurrences we will intimate to the board & authority time to time. In event of failure of APCM, the unit shall not restart until the control measures are rectified to achieve efficiency.</p> <p>We have installed Online Continuous Emission Monitoring System (OCEMS) in all the Boiler stacks as per CPCB guideline and the same is connected with CPCB and GPCB server. Apart from continuous online monitoring, flue gas stack analysis is also monitored offline at regular interval (Monthly) for ensuring the compliance. The testing Lab appointed for flue gas analysis is GPCB approved (schedule - II) M/s. Pollucon Laboratories Pvt. Ltd, Surat which also has NABL approval. (TC - 5945, issue date - May 28, 2019 and validity till May 27, 2021, valid for the report period).</p>																																				
		<p>The maximum value (SPM, SO₂ & NO_x) during the report period confirms that at no time the emission level went beyond the stipulated standards. Parameter wise summary is given below:</p>																																				
		<table border="1"> <thead> <tr> <th data-bbox="604 1715 874 1892" rowspan="2">Parameter</th> <th data-bbox="874 1715 1054 1892" rowspan="2">Standard values as per CCA</th> <th data-bbox="1054 1715 1198 1892" rowspan="2">Unit</th> <th colspan="3" data-bbox="1198 1715 1544 1848">Values for the period October 20 – March 21</th> </tr> <tr> <th data-bbox="1198 1848 1294 1892">Min.</th> <th data-bbox="1294 1848 1390 1892">Max.</th> <th data-bbox="1390 1848 1544 1892">Avg.</th> </tr> </thead> <tbody> <tr> <td data-bbox="604 1892 874 1933">PM</td> <td data-bbox="874 1892 1054 1933">100</td> <td data-bbox="1054 1892 1198 1933">mg/Nm³</td> <td data-bbox="1198 1892 1294 1933">48.4</td> <td data-bbox="1294 1892 1390 1933">89.6</td> <td data-bbox="1390 1892 1544 1933">62.34</td> </tr> <tr> <td data-bbox="604 1933 874 1973">PM(New Boiler)</td> <td data-bbox="874 1933 1054 1973">50</td> <td data-bbox="1054 1933 1198 1973">mg/Nm³</td> <td data-bbox="1198 1933 1294 1973">35.4</td> <td data-bbox="1294 1933 1390 1973">46</td> <td data-bbox="1390 1933 1544 1973">40.53</td> </tr> <tr> <td data-bbox="604 1973 874 2013">SO₂</td> <td data-bbox="874 1973 1054 2013">600</td> <td data-bbox="1054 1973 1198 2013">mg/Nm³</td> <td data-bbox="1198 1973 1294 2013">148</td> <td data-bbox="1294 1973 1390 2013">330</td> <td data-bbox="1390 1973 1544 2013">190</td> </tr> <tr> <td data-bbox="604 2013 874 2054">NO_x</td> <td data-bbox="874 2013 1054 2054">600</td> <td data-bbox="1054 2013 1198 2054">mg/Nm³</td> <td data-bbox="1198 2013 1294 2054">124</td> <td data-bbox="1294 2013 1390 2054">559</td> <td data-bbox="1390 2013 1544 2054">218.6</td> </tr> </tbody> </table>				Parameter	Standard values as per CCA	Unit	Values for the period October 20 – March 21			Min.	Max.	Avg.	PM	100	mg/Nm ³	48.4	89.6	62.34	PM(New Boiler)	50	mg/Nm ³	35.4	46	40.53	SO ₂	600	mg/Nm ³	148	330	190	NO _x	600	mg/Nm ³	124	559	218.6
Parameter	Standard values as per CCA	Unit	Values for the period October 20 – March 21																																			
			Min.	Max.	Avg.																																	
PM	100	mg/Nm ³	48.4	89.6	62.34																																	
PM(New Boiler)	50	mg/Nm ³	35.4	46	40.53																																	
SO ₂	600	mg/Nm ³	148	330	190																																	
NO _x	600	mg/Nm ³	124	559	218.6																																	

NOx (New Boiler)	300	mg/Nm ³	142	196	166
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Flue gas stack results for the report period is attached as **Annexure I**.



**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, Rajkot NABL Approved TC – 5948, issue date - June 01, 2019 and valid till May 31, 2021, valid for the report period.

The maximum value (PM2.5, PM10, SO₂, NO₂, Ammonia, and Hall) during the compliance period confirms that at no time the emission level went beyond the stipulated standards. Parameter wise summary is given below:

Ambient air monitoring Reports:

Station	Parameter	Limit micro - gm/NM ³	Values for the period October 20 – March 2021		
			Min.	Max.	Avg.
66 KV	PM2.5	60	30.8	38.3	33.55
	PM10	100	50.1	55.4	53.68
	SO ₂	80	12.3	20.5	14.75
	NO ₂	80	12.8	18.2	14.38
	Ammonia	400	ND	ND	ND
	HCl	200	ND	ND	ND
Opposite Shed D	PM2.5	60	31.6	37.2	33.45
	PM10	100	50.1	53.7	51.61
	SO ₂	80	11.1	18.5	14.43

		NO2	80	10.1	16.2	13.98
		Ammonia	400	ND	ND	ND
		HCl	200	ND	ND	ND
	Near West Site ETP	PM2.5	60	22	26	23.66
		PM10	100	44	48	45.66
		SO ₂	80	7.9	12.1	9.533
		NO2	80	8.1	9.3	8.7
		Ammonia	400	ND	ND	ND
		HCl	200	ND	ND	ND
		Near North ETP	PM2.5	60	23	30
	PM10		100	43	47	44.66
	SO ₂		80	6.7	8.4	7.7
	NO2		80	6.7	9.3	7.71
	Ammonia		400	ND	ND	ND
	HCl		200	ND	ND	ND
	TSDF	PM2.5	60	21	28	25
		PM10	100	47	51	48.66
		SO ₂	80	6.2	10.3	8.23
		NO2	80	6.5	10.5	8.25
		Ammonia	400	ND	ND	ND
		HCl	200	ND	ND	ND
	Main Guest House	PM2.5	60	23	27	24.67
		PM10	100	52	56	53.67
		SO ₂	80	8.1	11.2	9.67
		NO2	80	6.8	11.5	9.23
		Ammonia	400	ND	ND	ND
		HCl	200	ND	ND	ND
	Wyeth Colony	PM2.5	60	26	30	28.17
		PM10	100	49	53	50.83
		SO ₂	80	6.6	11.5	8.98
		NO2	80	7.3	10.3	8.53
		Ammonia	400	ND	ND	ND
		HCl	200	ND	ND	ND
	Gram Panchayat Hall	PM2.5	60	26	31	28.17
		PM10	100	51	55	52.67
		SO ₂	80	7.5	12.3	9.93
		NO2	80	7.7	10.4	8.82
		Ammonia	400	ND	ND	ND
		HCl	200	ND	ND	ND
	Main Office North Site	PM2.5	60	25	30	27.17
		PM10	100	45	49	46.67
		SO ₂	80	7.4	11.3	9.18
		NO2	80	7.8	8.7	8.25
		Ammonia	400	ND	ND	ND
		HCl	200	ND	ND	ND
	Haria Water	PM2.5	60	31	35	32.58
		PM10	100	52.6	57.7	55.20

		<table border="1"> <tr> <td>Tank</td> <td>SO₂</td> <td>80</td> <td>14.8</td> <td>18.4</td> <td>16.67</td> </tr> <tr> <td></td> <td>NO₂</td> <td>80</td> <td>12.3</td> <td>16.2</td> <td>13.92</td> </tr> <tr> <td></td> <td>Ammonia</td> <td>400</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td></td> <td>HCl</td> <td>200</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> </table> <p>The results are below permissible emission standards mentioned in the Notification by MOEF&CC vide S.O. 3305(E) dated December 07, 2015 during the report period is attached as Annexure II.</p>	Tank	SO ₂	80	14.8	18.4	16.67		NO ₂	80	12.3	16.2	13.92		Ammonia	400	ND	ND	ND		HCl	200	ND	ND	ND
Tank	SO ₂	80	14.8	18.4	16.67																					
	NO ₂	80	12.3	16.2	13.92																					
	Ammonia	400	ND	ND	ND																					
	HCl	200	ND	ND	ND																					
2.	All measures shall be taken to prevent soil and ground water contamination	<p>Complied.</p> <p>Kindly note that we are not extracting ground water as a source of water. We have adequate control measured for any leakages from the plant to prevent groundwater contamination. 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.</p> <p>We are regularly monitoring ground water and soil quality through reputed institute (M/s. Pollucon Laboratories Pvt. Ltd, Surat) to access the impacts on soil and ground water quality. The study shows that there is no soil and ground water contamination found.</p>																								
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.	<p>Complied.</p> <p>Ground water and soil quality is being checked regularly for in and around the unit by reputed and NABL approved agency M/s. Pollucon Laboratories Pvt. Ltd, Surat.</p> <p>Soil and Groundwater analysis report for year 2020 has been already submitted to your good office vide our letter Atul Assurance EC Compliance 22 MW 19 - 20 Dated December 19, 2020.</p>																								
A.2: WATER:																										
4.	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.	<p>Complied.</p> <p>The average water consumption for the report period is 934 KL/Day only which is well within the permissible limit of 2095 KL/Day. Detailed break up is given in below table:</p> <table border="1"> <thead> <tr> <th>Sr No.</th> <th>Month</th> <th>Quantity (KL/Month)</th> <th>Average Quantity</th> </tr> </thead> </table>	Sr No.	Month	Quantity (KL/Month)	Average Quantity																				
Sr No.	Month	Quantity (KL/Month)	Average Quantity																							

			(KL/Day)
1	October - 20	15227	491
2	November - 20	29580	986
3	December - 20	31637	1021
4	January - 21	32448	1047
5	February - 21	30994	1107
6	March - 21	29487	951

The maximum value during the report period confirms that at no time the water consumption went beyond the stipulated value. Fresh water requirement is met through the existing water supply system from river Par.

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. Our source of water is river Par.





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, floor cleaning.	<p>Complied.</p> <p>Waste water generation in not exceeding prescribed limit of 270 KL/Day during report period. The average wastewater generation for the report period is 131 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.</p> <p>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 discharged to ETP. Detail break up is given in below table.</p> <table border="1" data-bbox="635 622 1508 1048"> <thead> <tr> <th>Sr No.</th> <th>Month</th> <th>Waste Water Generation (KL/Month)</th> <th>Average Waste Water Generation Reused Quantity (KL/Day)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>October - 20</td> <td>3678</td> <td>119</td> </tr> <tr> <td>2</td> <td>November - 20</td> <td>4544</td> <td>151</td> </tr> <tr> <td>3</td> <td>December - 20</td> <td>4791</td> <td>155</td> </tr> <tr> <td>4</td> <td>January - 21</td> <td>3755</td> <td>121</td> </tr> <tr> <td>5</td> <td>February - 21</td> <td>3782</td> <td>135</td> </tr> <tr> <td>6</td> <td>March - 21</td> <td>3248</td> <td>105</td> </tr> </tbody> </table>	Sr No.	Month	Waste Water Generation (KL/Month)	Average Waste Water Generation Reused Quantity (KL/Day)	1	October - 20	3678	119	2	November - 20	4544	151	3	December - 20	4791	155	4	January - 21	3755	121	5	February - 21	3782	135	6	March - 21	3248	105
Sr No.	Month	Waste Water Generation (KL/Month)	Average Waste Water Generation Reused Quantity (KL/Day)																											
1	October - 20	3678	119																											
2	November - 20	4544	151																											
3	December - 20	4791	155																											
4	January - 21	3755	121																											
5	February - 21	3782	135																											
6	March - 21	3248	105																											
7.	There shall be no discharge of industrial effluent from the proposed project in any case.	<p>Complied.</p> <p>Industrial Waste water generation is not exceeding prescribed limit of 270 KL/Day during report period. Neutralization pit has been put in service for waste water generated from D.M. Plant followed by RO system. RO permeate is recycled back and reject is utilized in ash quenching and coal storage yard to attend coal smoldering, dust suppression, fire hydrant make up, Gardening plants, floor cleaning.</p> <p>Please refer table of waste water generation (KLD) in point no.6.</p> <p>Hence, Our CPP unit is achieved ZLD. No Discharge of industrial effluent from the project in any case.</p>																												

8.	Domestic waste water generation shall not exceed 1 KL/Day Which shall be disposed of into soak system.	<p>Complied.</p> <p>Domestic water generation in not exceeding the prescribed limit of EC during report period.</p> <p>The average wastewater generation for the report period is 0.56 KL/Day only which is well within the limit. Domestic waste water disposed through soak pit / septic tank system.</p> <table border="1" data-bbox="671 465 1474 801"> <thead> <tr> <th>Sr No.</th> <th>Month</th> <th>Domestic Waste Water Generation (KL/Day)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>October - 20</td> <td>0.44</td> </tr> <tr> <td>2</td> <td>November - 20</td> <td>0.40</td> </tr> <tr> <td>3</td> <td>December - 20</td> <td>0.61</td> </tr> <tr> <td>4</td> <td>January - 21</td> <td>0.51</td> </tr> <tr> <td>5</td> <td>February - 21</td> <td>0.67</td> </tr> <tr> <td>6</td> <td>March - 21</td> <td>0.76</td> </tr> </tbody> </table>	Sr No.	Month	Domestic Waste Water Generation (KL/Day)	1	October - 20	0.44	2	November - 20	0.40	3	December - 20	0.61	4	January - 21	0.51	5	February - 21	0.67	6	March - 21	0.76
Sr No.	Month	Domestic Waste Water Generation (KL/Day)																					
1	October - 20	0.44																					
2	November - 20	0.40																					
3	December - 20	0.61																					
4	January - 21	0.51																					
5	February - 21	0.67																					
6	March - 21	0.76																					
9.	The unit shall provide metering facility at the inlets and outlets of the collection cum reuse system of waste water and maintain records of the same.	<p>Complied.</p> <p>Magnetic Flow Meter is provided at the inlet of the collection tank and reuse system of waste water and records are being maintained.</p> <p>Photograph of water meter is shown below:</p> <div style="display: flex; justify-content: space-around;">   </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <p>Water meter @Inlet line</p> <p>Water meter @Reuse line</p> </div> <p>We are reusing treated waste 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 22 MW Captive power plant.</p>																					

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.	<p>Complied.</p> <p>We are properly maintaining logbook of water consumption, waste water generation & reuse data showing quantity and quality of effluent. The data is furnished through EC compliance reports to GPCB.</p>
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.	<p>Complied.</p> <p>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.</p> <p>We have already three 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 from river 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.</p> <p>Total No. of Pond: 2 Nos. Capacity of Pond: (1 Nos. x 12000 KL) & (1 Nos. x 2000 KL) Company has harvest 6.55 lac KL rain water during 2020.</p>

A.3 Air:

12.	Existing two coal fired steam boilers shall be replaced with two AFBC Boilers having capacity 50 TPH each.	<p>Complied.</p> <p>The old coal fired steam boilers are replaced with higher efficiency AFBC boilers with adequate APC facility (4 field ESP).</p>						
13.	Fuel (Indian coal/and or Imported coal and or Lignite) to the tune of 16725 MT/M shall be used for proposed boilers.	<p>Complied.</p> <p>The average fuel consumption for the report period is 14208 MT/M only which is well within the limit. Detail break up is given in below table:</p> <table border="1" data-bbox="722 1939 1422 2067"> <thead> <tr> <th data-bbox="722 1939 842 2067">Sr No.</th> <th data-bbox="842 1939 1125 2067">Month</th> <th data-bbox="1125 1939 1422 2067">Fuel consumption MT</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Sr No.	Month	Fuel consumption MT			
Sr No.	Month	Fuel consumption MT						

1	October - 20	9673
2	November - 20	15727
3	December - 20	14789
4	January - 21	15313
5	February - 21	16299
6	March - 21	13448

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

14. Sulfur and ash content of the fuel to be used shall be analyzed and its record shall be maintained.

Complied.

We are using Indian coal or Imported coal and lignite in different proportion as per availability. We are regularly monitor and analyze the proximate & ultimate analysis of coal |Lignite which show % Ash content, GCV, Sulphur content and heavy metal present in coal |lignite.

Ash Content: 30 - 35 % (Indian Coal), 10 - 12% (Imported coal)
Sulphur Content: <0.1% (Indian Coal), <0.2% (Imported coal)

15	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 for radio activity and heavy metals in coal/lignite and Fly ash (Including bottom ash) shall be put in place.	<p>Complied.</p> <p>The radio activity and heavy metal contents in coal lignite had been carried out and report submitted vide our letter Atul/SHE/EC Compliance/03 dated June 30, 2018.</p> <p>Further to your letter no. F. No. 18 - A - 30/2019(SEAC)/201, It may please be noted that we are in discussion with recommended institute for carrying out above analysis and report will be submitted.</p> <p>We have not found the inbuilt continuous monitoring for radio activity and heavy metal in coal lignite anywhere in India as well as abroad. Even though we have still continued our search for agencies supplying such online system and we will install the same as soon as we get the same.</p>								
16.	Height of flue gas stacks attached to boilers shall be minimum 74.58 meters.	<p>Complied.</p> <p>Height of the stack is 106 meters. The emission is dispersed through adequate height of stacks as per CPCB standard as given below:</p> <table border="1" data-bbox="619 904 1543 1077"> <thead> <tr> <th data-bbox="619 904 742 1037">Stack No.</th> <th data-bbox="742 904 1086 1037">Stack attached to</th> <th data-bbox="1086 904 1241 1037">Stack Height In meter</th> <th data-bbox="1241 904 1543 1037">APCM</th> </tr> </thead> <tbody> <tr> <td data-bbox="619 1037 742 1077">1</td> <td data-bbox="742 1037 1086 1077">Boiler (50 TPH x 2Nos.)</td> <td data-bbox="1086 1037 1241 1077">106</td> <td data-bbox="1241 1037 1543 1077">ESP with 4 field</td> </tr> </tbody> </table> <p>For Boilers: Stack Height $H=14(Q)^{0.3}$ Height of the stack is 106 meters, which is actually higher than norms.</p>	Stack No.	Stack attached to	Stack Height In meter	APCM	1	Boiler (50 TPH x 2Nos.)	106	ESP with 4 field
Stack No.	Stack attached to	Stack Height In meter	APCM							
1	Boiler (50 TPH x 2Nos.)	106	ESP with 4 field							
17.	A flue gas stack of 74.58m height shall be provided with online monitoring system to proposed steam boiler.	<p>Complied.</p> <p>Height of the stack is 106 meters attached to Boiler (50 TPH x 2 Nos.). We have installed online monitoring system to boiler for SPM, SO₂ and NO_x and the same is connected to CPCB server.</p>								
	Mercury gas emission from stacks shall also be monitored on periodic basis.	<p>Complied.</p> <p>Mercury emission is also monitored on monthly basis by NABL approved agency.</p> <p>For Mercury stack emission data please refer specific condition No.1. No Mercury is detected in Flue gas stack in the monitoring results.</p>								

<p>18.</p>	<p>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.</p>	<p>Complied.</p> <p>We have installed high efficiency Electro Static Precipitator (ESP) (4 field) with 99.9% efficiency to control of flue gas emission within the permissible limit. The monitoring reports shows that average SPM emission is identify 40.53 mg/Nm³ which is below permissible limit of 50mg/Nm³. Photograph of ESP is shown below:</p> <div data-bbox="844 421 1295 864" data-label="Image"> </div> <p style="text-align: center;">ESP</p>
	<p>The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms.</p>	<p>Complied.</p> <p>GPCB Permissible limit for PM is 50 mg/NM³. Particulate matter emission did not exceed the GPCB norms during report period Which shows that ESP is working efficiently (99.9%).</p> <p>For PM stack emission data please refer specific condition No.1</p>
	<p>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.</p>	<p>Complied.</p> <p>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.</p> <p>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.</p> <p>For stack emission data please refer specific condition No.1</p>

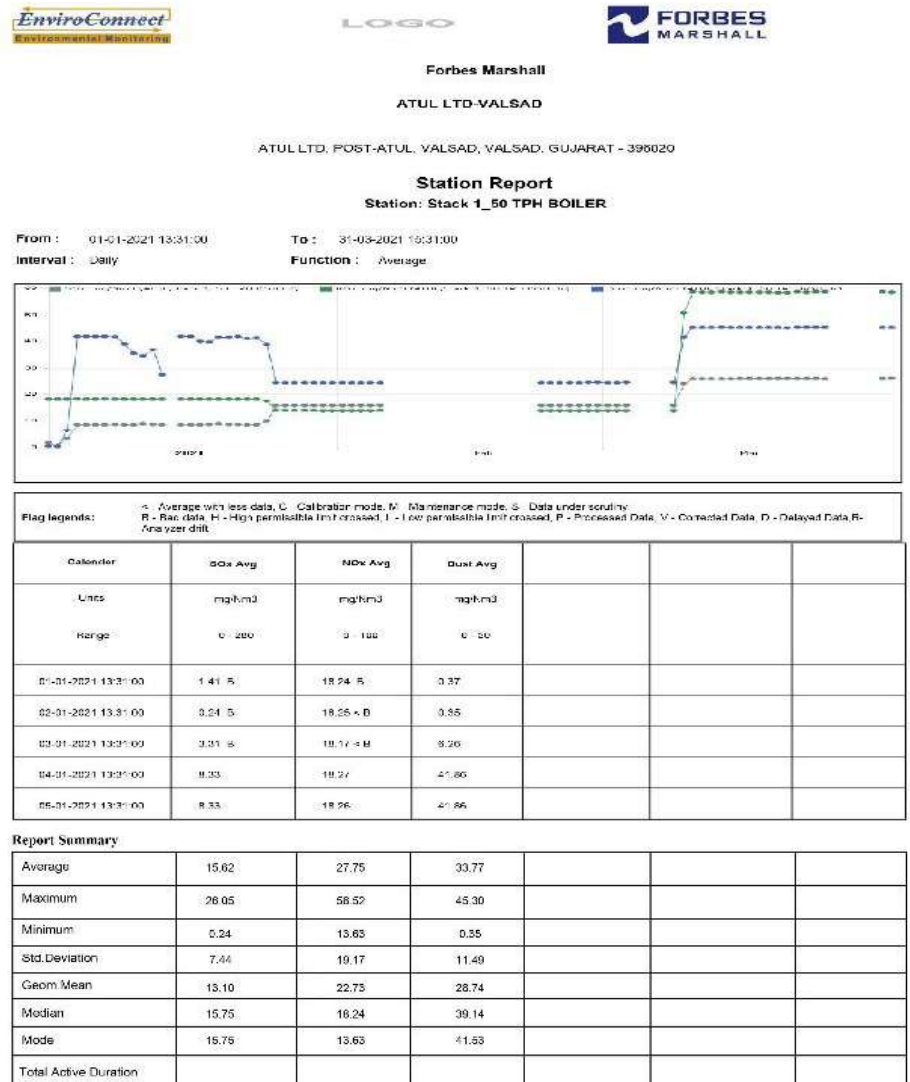
19.	Third party monitoring of the functioning of ESP along with efficiency shall be carried out once in a year through a reputed institute / organization.	<p>Complied.</p> <p>We are regularly monitoring the functioning of ESP along with efficiency once in a year through NABL accredited and MoEF approved agency.</p> <p>The monitoring has been carried out by GPCB approved (schedule - II) M/s. Pollucon Laboratories Pvt.Ltd, Surat NABL approved TC - 5945, issue date May 28, 2019 and validity till May 27, 2021 and ESP efficacy found satisfactory (i.e. 99.9% efficiency).</p>																					
20.	Lime stone injection technology shall be adopted to control SO ₂ and it shall be ensured that SO ₂ levels in the ambient air do not exceed the prescribed standards.	<p>Complied.</p> <p>We already have lime injection system to control SO₂ emission. Ambient Air quality analysis report shows that SO₂ levels is below the prescribed standards during the report period.</p> <p>For Ambient Air quality data please refer specific condition No.1</p>																					
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.	<p>Complied.</p> <p>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 schedules has been prepared and reviewed approved by senior officer of the company.</p>																					
22.	Diesel to the tune of 300 Lit/Hr shall be used as a fuel in stand – by D. G. Set (1500 KVA)	<p>Complied.</p> <p>Diesel consumption during report period is given in below table:</p> <table border="1" data-bbox="710 1346 1434 1686"> <thead> <tr> <th>Sr No.</th> <th>Month</th> <th>Diesel Consumption (KL/Month)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>October - 20</td> <td>3.2</td> </tr> <tr> <td>2</td> <td>November - 20</td> <td>5.5</td> </tr> <tr> <td>3</td> <td>December - 20</td> <td>1.6</td> </tr> <tr> <td>4</td> <td>January - 21</td> <td>11.0</td> </tr> <tr> <td>5</td> <td>February - 21</td> <td>1.5</td> </tr> <tr> <td>6</td> <td>March - 21</td> <td>7.0</td> </tr> </tbody> </table>	Sr No.	Month	Diesel Consumption (KL/Month)	1	October - 20	3.2	2	November - 20	5.5	3	December - 20	1.6	4	January - 21	11.0	5	February - 21	1.5	6	March - 21	7.0
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6	March - 21	7.0																					
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.	<p>Complied.</p> <p>Adequate stack height of 11mt of DG set (1500 KVA) and 10mt of D.G. set (1010 KVA) as per CPCB standards.</p>																					

	<p>Acoustic enclosure be provided to DG set to mitigate the noise pollution.</p>	<p>Complied.</p> <p>We have provided Acoustic enclosure to both DG sets to mitigate the noise pollution in day time and night time</p>
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24. Online monitoring system shall be installed to monitor the SO_x, NO_x and SPM in the flue gas stack.

Complied.

Online monitoring system for SPM, SO₂ and NO_x is already been made and connected to CPCB server.



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 accessible by the constructed.

25. Adequate storage facility for the fly ash in terms of closed silos shall be provided at site. No pond shall be constructed.

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 report period 173 TPD. We dispatch the fly ash daily from these silos so we have not prepare ash pond.

Fly ash / bottom ash generation and disposal data for report period is shown in below table:


Fly Ash	Unit	October 20	November 20	December 20	January 21	February 21	March 2021
Generation	MT	4011	5016	3190	1704	2777	3517
Disposal	MT	4011	5016	3190	1704	2777	3517

Photograph of Closed silos for Fly ash / Bottom ash:





26.	Handling of the fly ash shall be through a closed pneumatic system.	<p>Complied.</p> <p>We are handling of fly ash through a closed pneumatic system which is shown below:</p>  <p style="text-align: center;">Dense phase pneumatic ash handling system</p>
27.	Ash shall be handled only in dry state.	<p>Complied.</p> <p>We are handling ash only in dry state. Sold to cement and brick manufacturer.</p>

28.	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.	<p>Complied.</p> <p>We are strictly complying fly ash notification under EPA and we are doing 100 % utilization of fly ash to be generated from the unit.</p> <p>For Fly ash / bottom ash generation and disposal data please refer condition No. 25.</p>
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.	<p>Complied.</p> <p>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.</p> <p>Measures adopted to control fugitive emission:</p> <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> • 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 equipment are to be done regularly. • All the workers are working with proper PPE's. i.e. boiler suit, dust mask, safety goggles, face shield, safety shoes etc. • Adequate green belt is developed around the plant to arrest the fugitive emissions.

<p>All handing & transport of coal & Lignite shall be exercised through covered coal conveyors only.</p>	<p>Complied.</p> <p>All handing & transport of coal & Lignite is done through covered coal conveyors only.</p> 
<p>Enclosure shall be provided at coal / lignite loading and unloading operations.</p>	<p>Noted and Complied.</p> <p>Enclosure is provided at coal Lignite loading and unloading operations.</p>
<p>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.</p>	<p>Complied.</p> <p>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.</p>  <p style="text-align: center;">Close Shed for coal storage</p>
<p>All transfer enclosed.</p>	<p>Noted and Complied.</p> <p>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 fully enclosed. Fly ash in terms of closed silos shall be provided at site. Handling of the fly ash shall be through a closed pneumatic system.</p>

<p>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.</p>	<p>Complied.</p> <p>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.</p>
<p>Accumulated coal dust / fly ash on the ground and surfaces shall be removed / swept regularly and water the area after sweeping.</p>	<p>Complied.</p> <p>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.</p>
<p>Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.</p>	<p>Complied.</p> <p>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.</p> <div data-bbox="794 1032 1406 1451" data-label="Image"> </div> <p style="text-align: center;">Concrete road at Captive Power Plant</p>

<p>Air borne dust shall be controlled with water sprinkles at suitable locations in the plant.</p> <p>Coal /Lignite shall be transported through covered trucks only whereas fly ash shall be transported through closed trucks only.</p>	<p>Complied.</p> <p>Waste water of neutralization pit is being used for dust suppression in coal plant and fly ash handling units. Covered trucks closed bulkers are being utilized for handling coal and fly ash.</p> 
<p>A green belt shall be developed all around the plant boundary and also the roads to mitigate fugitive & transport dust emission.</p>	<p>Complied.</p> <p>Proper plantation is done all around the plant bounder and also the roads to mitigate fugitive & transport dust emission.</p> <p>Total industrial area: 1126078.27 sq.mt. Green belt area: 409030.00 sq.mt (approx. 36% of total industrial plot area) Layout plan with green belt is as shown below:</p> 
<p>30. Regular Monitoring of ground level concentration of PM2.5, PM10, NO2, SO2 and Hg shall in the impact zone and its records shall be maintained.</p>	<p>Complied.</p> <p>We are regularly monitoring ground level concentration of PM_{2.5}, PM₁₀, NO₂, SO₂ in ambient air of impact zone and its records are maintained as per schedule.</p>

	<p>Ambient air quality levels shall not exceed the standards stipulated by GPCB.</p>	<p>Complied.</p> <p>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 our factory.</p> <p>The maximum values during the report period confirms that at no time the emission level went beyond the stipulated standards. Parameter wise summary is given in condition no.1.</p>
	<p>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.</p>	<p>Complied.</p> <p>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.</p>
<p>A.4 SOLID/ HAZARDOUS WASTE:</p>		
<p>31.</p>	<p>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.</p>	<p>Complied</p> <p>There is only one Hazardous waste from the project i.e. Used oil. The used oil generation and disposal quantity from the project for the report period is 40 Liter only. The same was given to GPCB authorized vendors only in line with the regulation.</p>
	<p>Authorization from the GPCB shall be obtained for collection /treatment /storage disposal of hazardous waste</p>	<p>Complied.</p> <p>We have CCA Amendment No. AWH – 105110, dated November 16, 2019</p>
<p>32.</p>	<p>Hazardous waste sludge shall be packed stored in separate designated hazardous waste storage facility with impervious bottom and leachate collection facility, before its disposal.</p>	<p>Complied</p> <p>There is only one Hazardous waste from the project i.e. Used oil. It is stored in drum. The used oil generation and disposal quantity from the project for the report period is 40 Liter only. The same was given to GPCB authorized vendors only in line with the regulation.</p>

33.	The used oil shall be sold to only to the registered recyclers / refiners.	<p>Complied.</p> <p>Used oil is being sold to GPCB authorized vendor.</p>																														
34.	The discarded containers / barrels /bags/ liners shall be sold only to the registered recycler.	<p>Complied.</p> <p>No bags / liners are being utilized for Power Plant.</p>																														
35.	For storage of fly ash closed silos of adequate capacity shall be provided.	<p>Complied.</p> <p>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 173 TPD.</p>																														
	No ash pond shall be construed in the project.	<p>Complied.</p> <p>No ash pond is construed in the project.</p>																														
36.	The fly ash shall be supplied to the manufacturers of fly ash based products such as cement, concrete blocks, bricks, panels, etc.	<p>Complied.</p> <p>Fly ash is being given to cement and bricks manufacturers and also being used for our own Bricks Manufacturing unit.</p>																														
	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 the unit.	<p>Complied.</p> <p>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.</p> <p>Fly ash / bottom ash generation data for report period is shown in below table:</p> <table border="1" data-bbox="647 1435 1498 1630"> <thead> <tr> <th>Fly Ash</th> <th>Unit</th> <th>October 20</th> <th>November 20</th> <th>December 20</th> </tr> </thead> <tbody> <tr> <td>Generation</td> <td>MT</td> <td>4011</td> <td>5016</td> <td>3190</td> </tr> <tr> <td>Disposal</td> <td>MT</td> <td>4011</td> <td>5016</td> <td>3190</td> </tr> </tbody> </table> <table border="1" data-bbox="644 1693 1501 1892"> <thead> <tr> <th>Fly Ash</th> <th>Unit</th> <th>January 21</th> <th>February 21</th> <th>March 2021</th> </tr> </thead> <tbody> <tr> <td>Generation</td> <td>MT</td> <td>1704</td> <td>2777</td> <td>3517</td> </tr> <tr> <td>Disposal</td> <td>MT</td> <td>1704</td> <td>2777</td> <td>3517</td> </tr> </tbody> </table> <p>We have done agreement with Ambuja Cement for supply of dry ash.</p>	Fly Ash	Unit	October 20	November 20	December 20	Generation	MT	4011	5016	3190	Disposal	MT	4011	5016	3190	Fly Ash	Unit	January 21	February 21	March 2021	Generation	MT	1704	2777	3517	Disposal	MT	1704	2777	3517
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37.	All possible efforts shall be made for co - processing of the Hazardous waste prior to disposal into TSD/CHWIF.	<p>Complied</p> <p>The used oil generation and disposal quantity from the project for the report period is 40 Liter only. The same was given to GPCB authorized vendors only in line with the regulation.</p>
A.5 SAFETY:		
38.	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 as amended in 2000 for handling of hazardous chemicals.	<p>Complied.</p> <p>We are complying all the provisions of Factories act, all the rules and regulation led by MSIHC, 1989.</p>
39.	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 hazard	<p>Complied.</p> <p>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.</p>
40.	All the risk mitigation measures, general & specific recommendations mentioned in risk Assessments Report shall be implemented.	<p>Complied.</p> <p>All the risk mitigation measures, general & specific recommendations mentioned in risk assessments report are implemented.</p>
41.	A well designed fire hydrants system shall be installed as per the prevailing standards	<p>Complied.</p> <p>A well designed tender hydrant system is adequate and as per standards.</p> <p>Fire hydrant Network details:</p> <p>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 liter Foam generator with high expansion foam: 2 Nos.</p>

42.	Personal protective Equipment shall be provided to worker and its usage shall be ensured and supervised.	<p>Complied.</p> <p>PPEs like nose masks, safety goggles, chemical resistive aprons, fire proof apron, Hand gloves, safety helmet, welding goggles, ear mugs, safety shoes etc. are provided to the workers and utilization of the PPEs is followed strictly in Power Plant.</p>										
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	<p>Complied.</p> <p>First aid box are kept in each plant and at strategic locations whereas antidotes are kept in the medical Centre.</p>										
44.	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.	<p>Complied.</p> <p>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 rule - 68T of Gujarat Factories Rules and records are maintained. Regular Medical Checkup of all employees are done by in - house doctors in following manner;</p> <p>The following medical checkup has been completed during report period:</p> <p>Medical Check - Up:</p> <table border="1" data-bbox="810 1630 1334 1843"> <thead> <tr> <th>Sr No.</th> <th>Employee</th> <th>Number s</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Staff</td> <td rowspan="3">1895</td> </tr> <tr> <td>2</td> <td>Operators</td> </tr> <tr> <td>3</td> <td>Workers</td> </tr> </tbody> </table> <p>Various types of tests being performed are as below;</p> <p>A. Pre - employment check - up:</p>	Sr No.	Employee	Number s	1	Staff	1895	2	Operators	3	Workers
Sr No.	Employee	Number s										
1	Staff	1895										
2	Operators											
3	Workers											

1. Vision
2. Colour blindness
3. CBC
4. Urine
5. Height
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 center & 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 3 Beds.
- ❑ Full equipped Pathological lab with advanced diagnostic equipment.
- ❑ ECG Equipment.
- ❑ Cardiac monitor.
- ❑ Defibrillator.
- ❑ Finger pulse Oxymeter.
- ❑ Pulmonary Function Test Apparatus.
- ❑ O2 Administration.
- ❑ Antidotes with routine Important and Vital lifesaving 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.

Remark: All employs were found medically fit to work, no contiguous diseases were observed.

45.	Flameproof fittings shall be provided at the proposed power plant.	<p>Complied.</p> <p>Flame proof fittings are provided.</p>
46.	Adequate firefighting facilities shall be provided at the proposed power plant	<p>Complied.</p> <p>Firefighting facilities are adequate.</p> <p>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 firefighting network. Details regarding the firefighting capacity of the unit are given below:</p> <ul style="list-style-type: none"> ❑ 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 <ul style="list-style-type: none"> ▪ DCP 1350 ▪ CO2 776 ▪ Foam 05Trolly ❑ Fire Tenders <ul style="list-style-type: none"> ▪ 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

		<p style="text-align: center;">Kg, Foam– 500 lit and Water – 4500Lit.</p> <ul style="list-style-type: none"> ❑ 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 firefighting Training.
47.	Proper ventilation shall be provide in the work area.	<p>Complied.</p> <p>Proper ventilation provided in work area.</p>
48.	All transporting routes within the factory premise shall have paved roads to minimize splashes and spillages.	<p>Complied.</p> <p>The roads inside factory are either of cement concrete or Bitumen concrete.</p> 
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.	<p>Complied.</p> <p>Detailed disaster management plan is already prepared and submitted to your good office vide letter Ref. Atul/SHE/EC Compliance/01 dated December 19, 2019 for the project as the guidelines from Directors of Industrial safety and health.</p>
A.6 NOISE:		

50.	To minimize the noise pollution the following noise control measures shall be implemented.	<p>Complied.</p> <p>We are regularly implemented noise control measures to minimize the noise pollution.</p>
	Selection of any new plant equipment shall be made with specifications of low levels.	<p>Complied.</p> <p>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.</p>
	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.	<p>Complied.</p> <p>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.</p>
	Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.	<p>Complied.</p> <p>We have routine and preventive maintenance schedule of machinery / equipment and vehicles to be undertaken to reduce the noise impact.</p>
	Noise suppression measures such as enclosures, buffers and / or protective measures shall be provided.	<p>Complied.</p> <p>Acoustic enclosures are provided on DG sets. Silencers have been provided on main steam vent valves of Boilers.</p>

<p>Employees shall be provided with ear protection measures like earplugs or earmuffs.</p>	<p>Complied.</p> <p>We have provided ear protection measures like earplugs or ear muffs to all employees on regular basis.</p>
<p>Proper oiling lubrication and preventive maintenance shall be carried out of the machinery and equipment to reduce noise generation.</p>	<p>Complied.</p> <p>Proper oiling lubrication and preventive maintenance is carried out of the machinery and equipment to reduce noise generation.</p>
<p>Construction equipment generating minimum noise vibration shall be chosen.</p>	<p>Noted & Complied.</p> <p>We always use minimum noise vibration generation construction equipment.</p>
<p>Ear plugs and / muffs shall be made compulsory for the construction workers working near the noise generating activities / machines / equipment.</p>	<p>Complied.</p> <p>Our company has well laid down OHS policy to use Proper PPE's by all employees in plant area. Ear plugs and / muffs are compulsory for the construction workers working near the noise generating activities / machines / equipment.</p>
<p>Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate.</p>	<p>Noted & Complied.</p> <p>We are permitted those vehicles and construction equipment with internal combustion engines with proper silencer and spark arrestor.</p>
<p>Construction equipment meeting the norms specified by EP Act, 1986 shall only be used.</p>	<p>Noted & Complied.</p> <p>We are only using construction equipment meeting the norms specified by EP Act, 1986.</p>
<p>Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.</p>	<p>Noted & Complied.</p> <p>We do take care of Noise control equipment and baffling will be employed on generators especially when they are operated near the residential and sensitive areas.</p>

	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.	<p>Complied.</p> <p>The ambient and workplace noise level confirms to the standard prescribed under EPA. The same is being regularly monitored.</p> <p>The maximum values during the compliance period confirms that at no time the noise emission level went beyond the stipulated standards.</p> <p>Noise monitoring data (October 20 to March 21) is attached as Annexure III. Summary is given below:</p> <table border="1"> <thead> <tr> <th rowspan="2">Sr No.</th> <th rowspan="2">Location</th> <th rowspan="2">Permissible Limits, 75dB</th> <th colspan="3">Values for the period October 20 - March 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Near Main guest house</td> <td>75</td> <td>52.40</td> <td>65.80</td> <td>62.73</td> </tr> <tr> <td>2</td> <td>Near TSDF</td> <td>75</td> <td>57.60</td> <td>67.30</td> <td>64.27</td> </tr> <tr> <td>3</td> <td>At Wyeth Colony</td> <td>75</td> <td>56.20</td> <td>59.80</td> <td>58.53</td> </tr> <tr> <td>4</td> <td>Gram Panchayat Hall</td> <td>75</td> <td>55.60</td> <td>68.50</td> <td>65.20</td> </tr> <tr> <td>5</td> <td>Near Main Office North site</td> <td>75</td> <td>53.60</td> <td>67.60</td> <td>64.67</td> </tr> <tr> <td>6</td> <td>ETP North site</td> <td>75</td> <td>55.20</td> <td>71.20</td> <td>66.95</td> </tr> <tr> <td>7</td> <td>Opposite shed D</td> <td>75</td> <td>57.10</td> <td>72.40</td> <td>68.75</td> </tr> <tr> <td>8</td> <td>ETP West site</td> <td>75</td> <td>52.40</td> <td>68.70</td> <td>65.17</td> </tr> <tr> <td>9</td> <td>Haria Water tank</td> <td>75</td> <td>55.60</td> <td>66.50</td> <td>63.85</td> </tr> <tr> <td>10</td> <td>66KVA substation</td> <td>75</td> <td>53.50</td> <td>68.00</td> <td>64.75</td> </tr> </tbody> </table> <p style="text-align: center;">Noise level monitoring data (Day Time)</p> <p style="text-align: center;">Noise level monitoring data (Night Time)</p>	Sr No.	Location	Permissible Limits, 75dB	Values for the period October 20 - March 21			Min.	Max.	Avg.	1	Near Main guest house	75	52.40	65.80	62.73	2	Near TSDF	75	57.60	67.30	64.27	3	At Wyeth Colony	75	56.20	59.80	58.53	4	Gram Panchayat Hall	75	55.60	68.50	65.20	5	Near Main Office North site	75	53.60	67.60	64.67	6	ETP North site	75	55.20	71.20	66.95	7	Opposite shed D	75	57.10	72.40	68.75	8	ETP West site	75	52.40	68.70	65.17	9	Haria Water tank	75	55.60	66.50	63.85	10	66KVA substation	75	53.50	68.00	64.75
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Sr No.	Location	Permissible Limits, 70dB	Values for the period October 20 - March 21		
			Min.	Max.	Avg.
1	Near Main guest house	70	54.20	64.20	56.60
2	Near TSDF	70	56.70	66.30	58.87
3	At Wyeth Colony	70	52.60	58.90	54.35
4	Gram Panchayat Hall	70	56.50	66.50	58.83
5	Near Main Office North site	70	56.30	64.20	58.62
6	ETP North site	70	52.50	63.20	55.98
7	Opposite shed D	70	51.70	72.10	59.50
8	ETP West site	70	54.20	65.70	57.12
9	Haria Water tank	70	52.40	63.40	56.02
10	66KVA substation	70	55.30	66.00	58.05

A.7 GREEN BELT AND OTHER PLANTATION:

52. The unit shall develop green belt in at least 68000 sq. 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.

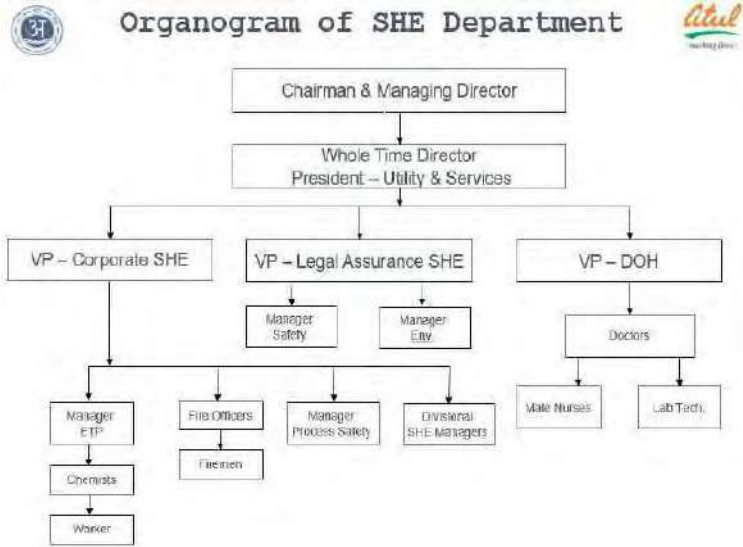
Green belt is developed and we plant more than 50000 plants every year. Green belt is comprised of at least minimum 3 to 4 raw plantation with minimum height of native trees is 5 to 6 Mtr with thick foliage in the periphery of the factory premises. Proper plantation is done all around the plant boundary and also the roads to mitigate fugitive & transport dust emission.

Total Industrial area: 1126078.27 sq.mt

Total Green belt area: 409030.00 sq.mt (approx. 36% of total industrial plot area)



53.	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.	<p>Complied.</p> <p>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.</p>
B.OTHER CONDITIONS:		
54.	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	<p>Complied.</p> <p>No such case during the report period. However, if such case happens we ensure to close down the unit.</p>
55.	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.	<p>Complied.</p> <p>All environmental protection measures and safeguards proposed in the project report has been fully complied and report submitted to your good office vide letter Atul/SHE/EC Compliance/06 dated December 19, 2019.</p>
56.	All the recommendation of CREP guidelines as may be applicable from time to time shall be following vigorously.	<p>Complied.</p> <p>Company is following strictly recommendations mentioned in CREP guidelines and compliance status is given as Annexure IV.</p>

57.	A separate environment management cell with qualified staff shall be set up for implementation of stipulated environmental safeguards	<p>Complied.</p> <p>Implementation of stipulated environmental safeguards were ensured by the Company's SHE department.</p>  <pre> graph TD A[Chairman & Managing Director] --> B[Whole Time Director President -- Utility & Services] B --> C[VP - Corporate SHE] B --> D[VP - Legal Assurance SHE] B --> E[VP - DOH] C --> C1[Manager ETP] C --> C2[Fire Officers] C --> C3[Manager Process Safety] C --> C4[Divisional SHE Managers] C1 --> C1a[Chemists] C1a --> C1b[Worker] C2 --> C2a[Firemen] D --> D1[Manager Safety] D --> D2[Manager Env.] E --> E1[Doctors] E1 --> E1a[Male Nurses] E1 --> E1b[Lab Techn.] </pre>
58.	The project authorities must strictly adhere to stipulations made by the Gujarat Pollution Control Board (GPCB), state government and statutory authority.	<p>Noted & Complied</p> <p>We are strictly adhere to stipulations made by the Gujarat Pollution Control Board (GPCB), state government and statutory authority.</p>
59.	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.	<p>Complied.</p> <p>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.</p>
60.	The above conditions will be enforced, inter - all 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	<p>Noted.</p>

	Movements) Rules 2016 and the public liability insurance Act, 1991 along with their amendments and rules.	
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. Details of CSR projects done during report period is given in Annexure - V.
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 report as well as proposed by project proponent.	Complied. All the recommendations suggested in the EMP report and Risk assessments study report as well as proposed by us have been implemented.

63.	<p>The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as GPCB along with the implementation scheduled for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.</p>	<p>Complied.</p> <p>EMP measures for the project are implemented and investment details submitted vide our letter Atul/SHE/EC Compliance/06 dated December 19, 2019.</p> <p>Further, 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 made for EMS compliance during the report period is given in below table:</p> <table border="1" data-bbox="619 622 1506 1135"> <thead> <tr> <th>Sr No.</th> <th>Parameter</th> <th>Recurring Cost (Rs. In lacs) October 20 – March 2021</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Air Pollution Control</td> <td rowspan="2">2865</td> </tr> <tr> <td>2</td> <td>Liquid Pollution Control</td> </tr> <tr> <td>3</td> <td>Environmental Monitoring and Management</td> <td>21</td> </tr> <tr> <td>4</td> <td>Solid waste Disposal</td> <td>346</td> </tr> <tr> <td>5</td> <td>Occupational health</td> <td>20</td> </tr> <tr> <td>6</td> <td>Green belt</td> <td>7</td> </tr> <tr> <td colspan="2">Total</td> <td>3259</td> </tr> </tbody> </table>	Sr No.	Parameter	Recurring Cost (Rs. In lacs) October 20 – March 2021	1	Air Pollution Control	2865	2	Liquid Pollution Control	3	Environmental Monitoring and Management	21	4	Solid waste Disposal	346	5	Occupational health	20	6	Green belt	7	Total		3259
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64.	<p>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.</p>	<p>Complied.</p> <p>We have informed 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 also be seen at website of SEIAA/SEAC/GPCB.</p>																							
	<p>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.</p>	<p>Complied.</p> <p>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.</p>																							
	<p>A copy each of the same shall be forwarded to the concerned Regional office of the Ministry.</p>	<p>Complied.</p> <p>A copy each of the same forwarded to the concerned Regional office of the ministry vide our letter dated January 27, 2017.</p>																							

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.	<p>Complied.</p> <p>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.</p>
66.	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.	<p>Complied.</p> <p>We regularly submit the half - yearly compliance report.</p> <p>The implementation of the project along with environmental actions plans are monitored by the authority time to time. We are regularly submitting half yearly compliance reports to the authority & same is being updated on website.</p>
67.	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.	<p>Noted.</p>
68.	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	<p>Complied.</p>
69.	The SEIAA may revoke or suspend the clearance. If implementation of any of the above conditions is not found satisfactory.	<p>Noted</p>

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.
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 Results

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	Not Running	Not Running	61.4	56.4	48.6	Not Running
		SO ₂	600 mg/Nm3			156	184	288	
		NOx	600 mg/Nm3			124	165	302	
2	FBC boiler E2	PM	100 mg/Nm3	71.4	Not Running	56.1	66.3	66.3	48.4
		SO ₂	600 mg/Nm3	172		165	154	229	178
		NOx	600 mg/Nm3	146		134	161	279	192
3	FBC boiler E3	PM	100 mg/Nm3	59.1	71.4	Not Running	Not Running	64.9	56.1
		SO ₂	600 mg/Nm3	158	190			330	230
		NOx	600 mg/Nm3	559	181			376	252
4	Hot Oil Unit (Resorcinal Plant)	PM	150.0 mg/Nm3	18.4	12.2	44.6	11.6	29.6	18.6
		SO ₂	100 ppm	6.2	4	23.4	14.2	6.2	6.2
		NOx	50 ppm	23.6	19.1	11.2	5.2	15.4	30.5
5	DG set 1010 KVA (Standby)	PM	150 mg/Nm ³	51.7	50.3	36.4	59.4	39.6	30.4
		SO ₂	100 ppm	9.1	9.2	5.6	68.2	9.6	6.3
		NOx	50 ppm	34.6	30.8	23.7	20.1	21.6	26.7
West Site									
6	FBC boiler W1	PM	100 mg/Nm3	89.6	72	68.4	56.8	48.6	60.4
		SO ₂	600 mg/Nm3	172	184	160	198	218	180
		NOx	600 mg/Nm3	144	158	172	164	196	230
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	20.5	14.8	16.9	21.8	15.2	18.8
8	Oil burner Shed B (Stand By)	PM	150.0 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		SO ₂	100 ppm						
		NOx	50 ppm						
9	Boiler (50 TPH 2 Nos) (New boilers) W2,W3	PM	50 mg/Nm3	31.6	46	40.2	35.4	48.7	42.7
		SO ₂	600 mg/Nm3	164	160	148	174	156	182
		NOx	300 mg/Nm3	148	168	152	142	172	196
		Mercury	0.03 mg/Nm3	ND	ND	ND	ND	ND	ND
10	DG set 1500 KVA (Stand By)	PM	150.0 mg/Nm3	44.8	60.6	51.7	44.3	54.7	52.6
		SO ₂	100 ppm	10.8	11.4	7.4	10.4	11.8	8.4
		NOx	50 ppm	41.5	44.6	34.8	25.8	30.2	31.2
North Site									
11	Thermic fluid heater of DCO/DAP Plant	PM	150.0 mg/Nm3	29.6	40.2	31.7	49.3	29.6	34.4
		SO ₂	100 ppm	10.2	7.9	5.2	8.1	7.1	7.5
		NOx	50 ppm	17.1	23.8	31.7	23.3	25.7	20.1

Annexure II: Ambient Air Result

Station	Parameter	Limit micro gm/NM ³	October 20	November 20	December 20	January 21	February 21	March 21
66 KV	PM 2.5	60	30.8	31.7	31.7	32.6	36.2	38.3
	PM10	100	55.4	54.4	55.1	54.3	50.1	52.8
	SO2	80	15.2	14.1	13.2	12.3	13.2	20.5
	NO2	80	14.4	13.5	14.6	12.8	18.2	12.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Opposite Shed D	PM 2.5	60	33.8	32.7	31.6	32.7	37.2	32.7
	PM10	100	52.6	53.7	52.1	50.1	51.1	50.1
	SO2	80	13.7	14.8	13.7	11.1	14.8	18.5
	NO2	80	14.8	15.7	14.6	16.2	12.5	10.1
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Near West site ETP	PM 2.5	60	22	24	26	24	22	24
	PM10	100	44	46	48	46	44	46
	SO2	80	8.4	7.9	8.7	9.6	10.5	12.1
	NO2	80	8.1	9.3	8.1	9.2	8.3	9.2
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Near North ETP	PM 2.5	60	28	30	29	27	25	23
	PM10	100	43	45	47	45	43	45
	SO2	80	7.6	6.7	7.6	8.4	7.5	8.4
	NO2	80	6.7	7.6	6.7	7.6	8.4	9.3
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
TSDF	PM 2.5	60	26	28	27	25	23	21
	PM10	100	47	49	51	49	47	49
	SO2	80	6.2	7.3	7.5	8.6	9.5	10.3
	NO2	80	7.3	6.5	7.3	8.5	9.4	10.5
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Main Guest House	PM 2.5	60	23	25	27	25	23	25
	PM10	100	52	54	56	54	52	54
	SO2	80	8.9	8.1	9.2	10.3	11.2	10.3
	NO2	80	8.6	6.8	8.6	9.5	10.4	11.5
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Wyeth Colony	PM 2.5	60	26	28	30	29	27	29

	PM10	100	50	51	53	51	49	51
	SO2	80	6.6	7.5	8.4	9.5	10.4	11.5
	NO2	80	7.3	8.3	7.4	8.5	9.4	10.3
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Gram panchayat hall	PM 2.5	60	27	29	31	28	26	28
	PM10	100	51	53	55	53	51	53
	SO2	80	7.5	8.4	9.3	10.6	11.5	12.3
	NO2	80	7.7	8.8	7.7	8.7	9.6	10.4
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Main office, North site	PM 2.5	60	25	27	30	29	27	25
	PM10	100	45	47	49	47	45	47
	SO2	80	8.6	7.4	8.3	9.2	10.3	11.3
	NO2	80	7.8	8.7	7.8	8.7	7.8	8.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Haria water tank	PM 2.5	60	33.8	32.7	31	32	31	35
	PM10	100	57.7	56.5	55.6	52.6	56.2	52.6
	SO2	80	16.7	17.6	16.7	15.8	18.4	14.8
	NO2	80	16.2	15.3	14.2	12.3	13.2	12.3
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND

Annexure III: Noise Data

Noise level monitoring data (Day Time):

Sr No.	Location	Noise Level, dBA						Permissible Limits, dBA
		October 20	November 20	December 20	January 21	February 21	March 21	
1	Near Main guest house	64.7	65.8	64.7	63.5	65.3	52.4	75
2	Near TSDF	66.6	65.6	64.8	63.7	67.3	57.6	75
3	At Wyeth Colony	57.8	58.7	59.8	58.9	59.8	56.2	75
4	Gram Panchayat Hall	67.6	68.5	67.4	66.5	65.6	55.6	75
5	Near Main Office North site	65.8	66.7	67.6	66.7	67.6	53.6	75
6	ETP North site	70.7	71.2	70.3	69.2	65.1	55.2	75
7	Opposite shed D	72.4	70.3	71.2	70.3	71.2	57.1	75
8	ETP West site	67.9	68.7	67.8	66.7	67.5	52.4	75
9	Water tank Haria road	65.4	66.5	65.6	64.5	65.5	55.6	75
10	Near 66KVA substation	67	68	67	66	67	53.5	75

Noise level monitoring data (Night Time):

Sr No.	Location	Noise Level, dBA						Permissible Limits, dBA
		October 20	November 20	December 20	January 21	February 21	March 2021	
1	Near Main guest house	55.3	56.4	55.3	54.2	64.2	54.2	70
2	Near TSDF	57.4	58.5	57.6	56.7	66.3	56.7	70
3	At Wyeth Colony	53.7	54.6	53.7	52.6	58.9	52.6	70
4	Gram Panchayat Hall	57.6	58.5	57.4	56.5	66.5	56.5	70
5	Near Main Office North site	59.4	58.3	57.2	56.3	64.2	56.3	70
6	ETP North site	56.5	55.6	54.6	53.5	63.2	52.5	70
7	Opposite shed D	59.8	58.9	57.8	56.7	72.1	51.7	70
8	ETP West site	57.1	56.2	55.3	54.2	65.7	54.2	70
9	Water tank Haria road	55.3	56.4	55.3	54.2	64.2	54.2	70
10	Near 66KVA substation	57.4	58.5	57.6	56.7	66.3	56.7	70

Annexure IV: CREP Compliance

Activity Code No.	Action Point	Compliance Status	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 prescribed limits.
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.
3	New / expansion power projects to be accorded Environment Clearance	Complied	EC awarded for setting up an additional power plant of 22 MW, Dated May 20, 2016 EC No. SEIAA/GUJ/EC/1(d)/340/2016
4	Development of SO ₂ & NO _x emission standards.	NA	Action by CPCB
	Development standards for of guide mercury lines / & other	NA	Action by CPCB

	Review of stack height requirement	NA	Action by CPCB
5	Install / activate meters / continuous monitoring systems with calibration system.	Complied	The boiler stack is equipped with online continuous monitoring and also kept in CC TV camera surveillance.
	Use of beneficiated coal	As soon as it is viable option with respect to its limited availability and proximity of source, will be used.	We are purchasing Indian coal from government collieries and hence forced to use the same. We will use Beneficiated coal as & when 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.
	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 September 30, 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.

Annexure V: CSR Activities

CSR activity report 2020-21

No.	Program	Project Activity	Location	Outlay for the year		Implementing agency
			District (State)	Budget	Spent	
	(A)	(B)	(C)	(D)	(E)	(G)
1	Education	Enhancement of education practices in Kalyani Shala	Valsad (Gujarat)	24.00	24.00	Atul Foundation
2		Support to tribal children in Atul Vidyamandir	Valsad (Gujarat)	3.75	3.75	Atul Foundation
3		Improvement of teaching methodology for primary school children - <i>Adhyapika</i> project	Valsad (Gujarat)	57.50	57.50	Atul Foundation
4		Support to develop a school in a tribal area	Navasari (Gujarat)	5.00	5.00	Atul Foundation
5		Enhancement of rural education	Valsad (Gujarat)	6.25	6.25	Atul Foundation
6		Conservation of manuscripts	Ahmedabad (Gujarat)	10.00	10.00	Atul Foundation
7	Empowerment	Empowerment of women through various vocational training courses	Valsad (Gujarat)	5.00	5.00	Atul Foundation
8		Skills training to youth as apprentices	Valsad (Gujarat)	110.17	110.17	Atul Ltd.
9		Capacity building of tribal farmers in beekeeping	Valsad (Gujarat)	3.00	3.00	Atul Foundation
10	Health	Nutrition Garden Project	Valsad (Gujarat)	12.00	12.00	Atul Foundation
11		Enhancement of rural health through health camps	Valsad (Gujarat)	6.50	6.50	Atul Foundation
12	Relief	Support to disaster relief for COVID-19 pandemic	Valsad (Gujarat)	20.00	20.00	Atul Foundation
13		Contribution to PM Cares Fund	Valsad (Gujarat)	300.00	300.00	Atul Ltd.
14		Provision of fertilisers to farmers	Valsad (Gujarat)	2.50	2.50	Atul Foundation
15	Infrastructure	Infrastructure development activities in villages	Valsad (Gujarat)	44.59	44.59	Atul Foundation
16		Construction of white topping road	Valsad (Gujarat)	554.28	554.28	Atul Ltd.
17	Conservation	Establishment of solid waste management system in Atul village	Valsad (Gujarat)	10.00	10.00	Atul Foundation
18		Implementation of afforestation initiatives	Valsad (Gujarat)	4.31	4.31	Atul Ltd.
19		Conservation of water in villages	Valsad (Gujarat)	2.91	2.91	Atul Foundation
Total direct expenditure				1181.76	1181.76	
Administrative overheads (OH)				59.59	59.59	
Total (direct expenditure + OH)				1241.35	1241.35	

Atul Ltd

Project: Expansion of Chemicals Manufacturing Unit

EC Compliance Report for EC F. No. J-11011/108/2015-IA-II (I), Dated February 11, 2019

Report Period: October 2020 - March 2021

Sr No.	Condition	Compliance																																																								
Term and Conditions:																																																										
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.	<p>Complied.</p> <p>The treated effluent recycled in system is Avg.267 KL/Day during the reported period.</p> <table border="1" data-bbox="683 898 1422 1245"> <thead> <tr> <th>Sr No.</th> <th>Month</th> <th>Total Recycle</th> <th>Avg. KL/Day</th> </tr> </thead> <tbody> <tr><td>1</td><td>October - 20</td><td>7409</td><td>239</td></tr> <tr><td>2</td><td>November - 20</td><td>8419</td><td>281</td></tr> <tr><td>3</td><td>December - 20</td><td>9060</td><td>292</td></tr> <tr><td>4</td><td>January - 21</td><td>8306</td><td>268</td></tr> <tr><td>5</td><td>February - 21</td><td>7979</td><td>285</td></tr> <tr><td>6</td><td>March - 21</td><td>7261</td><td>234</td></tr> </tbody> </table> <p>Remaining about Avg 9212 KL/Day treated effluent has been discharged to estuary of Par river through the existing pipeline after achieving norms stipulated, which is well within below limit as prescribed in stipulated condition.</p> <table border="1" data-bbox="683 1485 1422 1917"> <thead> <tr> <th>Sr No.</th> <th>Month</th> <th>Effluent Discharged to Estuary of Par River</th> <th>Avg. KL/Day</th> </tr> </thead> <tbody> <tr><td>1</td><td>October - 20</td><td>284195</td><td>9168</td></tr> <tr><td>2</td><td>November - 20</td><td>274672</td><td>9156</td></tr> <tr><td>3</td><td>December - 20</td><td>265910</td><td>8578</td></tr> <tr><td>4</td><td>January - 21</td><td>281096</td><td>9068</td></tr> <tr><td>5</td><td>February - 21</td><td>275625</td><td>9844</td></tr> <tr><td>6</td><td>March - 21</td><td>293120</td><td>9455</td></tr> </tbody> </table> <p>The final discharged treated waste water quality is also monitored by NABL approved laboratory at regular interval for</p>	Sr No.	Month	Total Recycle	Avg. KL/Day	1	October - 20	7409	239	2	November - 20	8419	281	3	December - 20	9060	292	4	January - 21	8306	268	5	February - 21	7979	285	6	March - 21	7261	234	Sr No.	Month	Effluent Discharged to Estuary of Par River	Avg. KL/Day	1	October - 20	284195	9168	2	November - 20	274672	9156	3	December - 20	265910	8578	4	January - 21	281096	9068	5	February - 21	275625	9844	6	March - 21	293120	9455
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ensuring the compliance. The testing Lab appointed is GPCB approved (schedule-II) M/s. Pollucon Laboratories Pvt.Ltd, Surat which also has NABL approval. (TC-5945, issue date-May 28, 2019 and validity till May 27, 2021, valid for the report period).

Apart from the above, we are continuously monitoring pH, TOC, flow, of treated effluent as per CPCB guidelines and also connected with GPCB and CPCB server.

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 **Annexure 1**.

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	Limit	Values for the period October 20 - March 21		
			Min.	Max.	Avg.
1	pH	5.5-9.0	6.89	7.46	7.13
2	Temperature (°C)	40	30	30.4	30.2
3	Colour (pt. co. scale)	---	30	60	41.66
4	Suspended solids (mg/l)	100	34	72	41.66
5	Phenolic Compounds (mg/l)	5	0.58	1.2	0.87
6	Cyanides (mg/l)	0.2	ND	ND	ND
7	Fluorides (mg/l)	2	0.21	1.68	1.17
8	Sulphides (mg/l)	2	0.94	1.37	1.14
9	Ammonical Nitrogen (mg/l)	50	1.97	9.1	6.43
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	31	52	39.66
13	COD (mg/l)	250	153	230	189.17

iii	<p>Necessary authorization required under the Hazardous and other Wastes Management Rule, 2016 shall be obtain and the Provisions contained in the Rules shall be strictly adhered to.</p>	<p>Complied.</p> <p>We have obtained necessary authorization for Hazardous and other waste by obtaining Amendment in Existing CTO after receiving EC.</p> <p>CTO amendment has been granted by GPCB Vide Letter No. GPCB/CCA-VSD-313(16)/ID: 23158/513897, Dated July 17, 2019 (CTO amendment No. AH 102080), Valid Till-November 03, 2019 Renewal for the same has been received vide CCA (AWH-105110 valid till September 30, 2025.</p>
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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.	<p>Noted & Complied.</p> <p>We have been following the 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.</p> <p>The Ambient Air Quality is being monitored at regular interval for ensuring the compliance by NABL approved reputed agency.</p> <p>The analysis reports were within the permissible limits. A detail of analysis report of monitoring report is attached in Annexure 2</p> <p>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:</p> <p>Summary of Ambient Air Quality results:</p> <table border="1" data-bbox="624 1160 1426 1984"> <thead> <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 October 20 – 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> <tr> <td rowspan="6">66 KV</td> <td>RSPM (PM2.5)</td> <td>60</td> <td>30.8</td> <td>38.3</td> <td>33.55</td> </tr> <tr> <td>PM10</td> <td>100</td> <td>50.1</td> <td>55.4</td> <td>53.68</td> </tr> <tr> <td>SO₂</td> <td>80</td> <td>12.3</td> <td>20.5</td> <td>14.75</td> </tr> <tr> <td>NO₂</td> <td>80</td> <td>12.8</td> <td>18.2</td> <td>14.38</td> </tr> <tr> <td>Ammonia</td> <td>400</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td>HCl</td> <td>200</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td rowspan="4">Opposite Shed D</td> <td>RSPM (PM2.5)</td> <td>60</td> <td>31.6</td> <td>37.2</td> <td>33.45</td> </tr> <tr> <td>PM10</td> <td>100</td> <td>50.1</td> <td>53.7</td> <td>51.61</td> </tr> <tr> <td>SO₂</td> <td>80</td> <td>11.1</td> <td>18.5</td> <td>14.43</td> </tr> <tr> <td>NO₂</td> <td>80</td> <td>10.1</td> <td>16.2</td> <td>13.98</td> </tr> </tbody> </table>	Station	Parameter	Limit micro-gm/ NM ³	Values for the period October 20 – 21			Min.	Max.	Avg.	66 KV	RSPM (PM2.5)	60	30.8	38.3	33.55	PM10	100	50.1	55.4	53.68	SO ₂	80	12.3	20.5	14.75	NO ₂	80	12.8	18.2	14.38	Ammonia	400	ND	ND	ND	HCl	200	ND	ND	ND	Opposite Shed D	RSPM (PM2.5)	60	31.6	37.2	33.45	PM10	100	50.1	53.7	51.61	SO ₂	80	11.1	18.5	14.43	NO ₂	80	10.1	16.2	13.98
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		Ammonia	400	ND	ND	ND
		HCl	200	ND	ND	ND
	Near West Site ETP	RSPM (PM2.5)	60	22	26	23.66
		PM10	100	44	48	45.66
		SO ₂	80	7.9	12.1	9.533
		NO ₂	80	8.1	9.3	8.7
		Ammonia	400	ND	ND	ND
		HCl	200	ND	ND	ND
		Near North ETP	RSPM (PM2.5)	60	23	30
	PM10		100	43	47	44.66
	SO ₂		80	6.7	8.4	7.7
	NO ₂		80	6.7	9.3	7.71
	Ammonia		400	ND	ND	ND
	HCl		200	ND	ND	ND
	TSDF	RSPM (PM2.5)	60	21	28	25
		PM10	100	47	51	48.66
		SO ₂	80	6.2	10.3	8.23
		NO ₂	80	6.5	10.5	8.25
		Ammonia	400	ND	ND	ND
		HCl	200	ND	ND	ND
	Main Guest House	RSPM (PM2.5)	60	23	27	24.67
		PM10	100	52	56	53.67
		SO ₂	80	8.1	11.2	9.67
		NO ₂	80	6.8	11.5	9.23
		Ammonia	400	ND	ND	ND
		HCl	200	ND	ND	ND
	Wyeth Colony	RSPM (PM2.5)	60	26	30	28.17
		PM10	100	49	53	50.83
		SO ₂	80	6.6	11.5	8.98
		NO ₂	80	7.3	10.3	8.53

			Ammonia	400	ND	ND	ND
			HCl	200	ND	ND	ND
		Gram Panchayat Hall	RSPM (PM2.5)	60	26	31	28.17
			PM10	100	51	55	52.67
			SO ₂	80	7.5	12.3	9.93
			NO ₂	80	7.7	10.4	8.82
			Ammonia	400	ND	ND	ND
			HCl	200	ND	ND	ND
			Main Office North Site	RSPM (PM2.5)	60	25	30
		PM10		100	45	49	46.67
		SO ₂		80	7.4	11.3	9.18
		NO ₂		80	7.8	8.7	8.25
		Ammonia		400	ND	ND	ND
		HCl		200	ND	ND	ND
		Haria Water Tank	RSPM (PM2.5)	60	31	35	32.58
			PM10	100	52.6	57.7	55.20
			SO ₂	80	14.8	18.4	16.67
			NO ₂	80	12.3	16.2	13.92
			Ammonia	400	ND	ND	ND
			HCl	200	ND	ND	ND

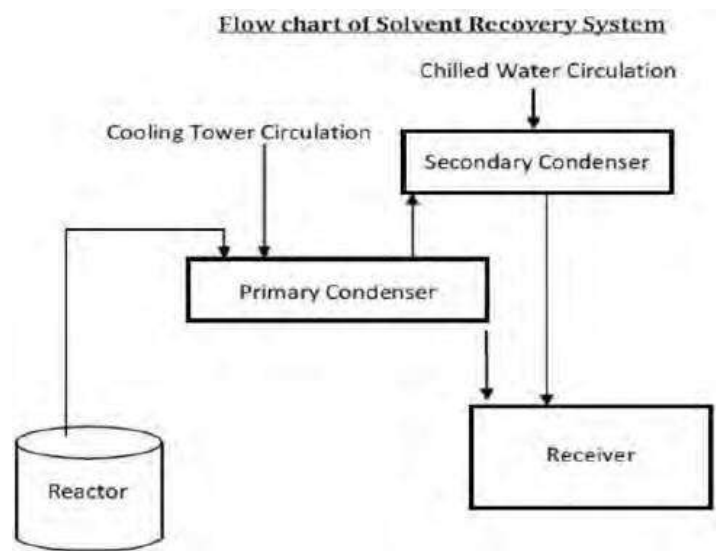
<p>v</p>	<p>To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS.</p> <p>The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB Guidelines.</p>	<p>Complied.</p> <p>For controlling 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. We have 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.</p> <p>We are also monitoring VOC as well as other chemicals in work area as per Factories Act and records are being maintained in Form No. 37.</p> <p>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.</p> <p>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 3.</p> <p>The Flue & Process Stack is being monitored at regular interval for ensuring the compliance by NABL approved reputed agency. Detailed analysis report are attached as Annexure 4.</p>
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<p>vi</p>	<p>Solvent management shall be carried out as follows:</p> <p>(a) Reactor shall be connected to chilled brine condenser system.</p> <p>Complied.</p> <p>Condensers with chilling systems are provided at point of Solvent recovery to minimized vapour loss as shown below:-</p> <div data-bbox="671 439 1329 712" data-label="Image"> </div> <p style="text-align: center;">Condenser at Solvent recovery</p>
	<p>(b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.</p> <p>Complied.</p> <p>We have provided seals at all Reactors and pump's in order to prevent leakage as shown below:-</p> <div data-bbox="711 1088 1351 1361" data-label="Image"> </div> <p style="display: flex; justify-content: space-around;"> Seal at Stirrer Pump Seal </p>

(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.





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

MEASURES:

To prevent losses of 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.

<p>(d) Solvents shall be stored in a separate space specified with all safety measures.</p>	<p>Complied.</p> <p>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.</p>  <p style="text-align: center;">Tank Farm</p> <p>Details For Solvent Storage is as per Annexure 5.</p>
<p>(e) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.</p>	<p>Complied.</p> <p>Earthing pit is provided in all electrical equipment wherever solvent handling is done as below:-</p> 
<p>(f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.</p>	<p>Complied.</p> <p>Entire plant is flame proof installations, storage tanks are provided with breather valve for all prevention of losses. Separate provision is made 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.</p> <p>Details for solvent storage is given in above point vi (d).</p>

	<p>(g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.</p>	<p>Complied.</p> <p>All the solvent storage tanks are being connected with condensers & chilled water circulation, Spent solvents are recovered as far as possible and all venting equipment are provided with condenser system & scrubber.</p> <p>Details for VOC mitigation is given in above point vi ©.</p>																												
<p>vii</p>	<p>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.</p>	<p>Complied.</p> <p>The average water consumption for the report period is Avg. 10040 KL/Day only, which is well within the limit. Detail break up is given in below table:</p> <table border="1" data-bbox="678 808 1428 1189"> <thead> <tr> <th>Sr No.</th> <th>Month</th> <th>Quantity (KL/Month)</th> <th>Average Quantity (KL/Day)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>October - 20</td> <td>318276</td> <td>10267</td> </tr> <tr> <td>2</td> <td>November - 20</td> <td>296637</td> <td>9888</td> </tr> <tr> <td>3</td> <td>December - 20</td> <td>286338</td> <td>9237</td> </tr> <tr> <td>4</td> <td>January - 21</td> <td>305128</td> <td>9843</td> </tr> <tr> <td>5</td> <td>February - 21</td> <td>303361</td> <td>10834</td> </tr> <tr> <td>6</td> <td>March - 21</td> <td>315346</td> <td>10172</td> </tr> </tbody> </table> <p>The maximum values during the compliance period confirm that at no time the wastewater generation went beyond the stipulated value.</p> <p>Fresh water requirement is met through the existing water supply system from river Par.</p>	Sr No.	Month	Quantity (KL/Month)	Average Quantity (KL/Day)	1	October - 20	318276	10267	2	November - 20	296637	9888	3	December - 20	286338	9237	4	January - 21	305128	9843	5	February - 21	303361	10834	6	March - 21	315346	10172
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viii	<p>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/RO to meet the prescribed standards.</p>	<p>Complied.</p> <p>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 is as under:</p> <table border="1" data-bbox="612 595 1493 1120"> <thead> <tr> <th colspan="5">Break up of effluent KI/Day</th> </tr> <tr> <th>Sr No.</th> <th>Month</th> <th>High TDS COD</th> <th>Low TDS COD</th> <th>Total Effluent generatio n</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>October - 20</td> <td>107</td> <td>9061</td> <td>9168</td> </tr> <tr> <td>2</td> <td>November - 20</td> <td>125</td> <td>9031</td> <td>9156</td> </tr> <tr> <td>3</td> <td>December - 20</td> <td>136</td> <td>8442</td> <td>8578</td> </tr> <tr> <td>4</td> <td>January - 21</td> <td>146</td> <td>8922</td> <td>9068</td> </tr> <tr> <td>5</td> <td>February - 21</td> <td>149</td> <td>9695</td> <td>9844</td> </tr> <tr> <td>6</td> <td>March - 21</td> <td>132</td> <td>9323</td> <td>9455</td> </tr> </tbody> </table> <p>The maximum values during the compliance period confirm that at no time the wastewater generation went beyond the stipulated value.</p> <p>Prescribed Standards: The final discharged treated waste water quality is also monitored by NABL approved laboratory at regular interval for ensuring the compliance. The testing Lab appointed is GPCB approved (schedule-II) M/s. Pollucon Laboratories Pvt.Ltd, Surat which also has NABL approval. (TC-5945, issue date- May 28, 2019 and validity till May 27, 2021, valid for the report period).</p> <p>Apart from the above, we are continuously monitoring pH, TOC, flow, of treated effluent as per CPCB guidelines and also connected with GPCB and CPCB server.</p> <p>Details for monitoring results is given in condition ii.</p>	Break up of effluent KI/Day					Sr No.	Month	High TDS COD	Low TDS COD	Total Effluent generatio n	1	October - 20	107	9061	9168	2	November - 20	125	9031	9156	3	December - 20	136	8442	8578	4	January - 21	146	8922	9068	5	February - 21	149	9695	9844	6	March - 21	132	9323	9455
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ix	<p>Process effluent/any wastewater shall not be allowed to mix with storm water.</p> <p>The storm water from the premises shall be collected and discharged through a separate conveyance system.</p>	<p>Complied.</p> <p>Process effluent/any wastewater are being discharged to estuary of Par river through the existing pipeline and are not mixed with storm water line.</p> <p>We have already three 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 the rain water to clarifloculator units to remove suspended matter. We have facility capacity to cater our consumption with rain harvested water with zero river drawls of water from river 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.</p> <p>Total No. of Pond: 2 Nos. Capacity of Pond: (1 Nos. x 12000 KL) & (1 Nos. x 2000 KL) Company has harvest 6.55 lac KL rain water during 2020.</p>
x	<p>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.</p>	<p>Complied.</p> <p>Storage details of Hazardous materials along with control measure are as per Annexure 6.</p>
xi	<p>Process organic residue and spent carbon, if any, shall be Sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.</p>	<p>Complied.</p> <p>We have obtained necessary authorization for Hazardous and other waste by obtaining amendment in existing CTO after receiving EC and waste is disposed off accordingly.</p> <p>CTO amendment has been granted by GPCB Vide Letter No. GPCB/CCA-VSD- 313(16)/ID: 23158/513897, Dated July 17, .2019 (CTO amendment No. AH 102080), Valid Till- November 03, 2019. Renewal for the same has been received with consent order no. 105110 valid up to September 30, 2025.</p> <p>Copy of CTE and CTO was submitted to Ministry vide our letter Atul/SHE/EC Compliance/01 dated December 19, 2019.</p>

xii	<p>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.</p> <p>All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.</p>	<p>Complied.</p> <p>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 July 17, 2019, further renewed vide consent order no. AWH 105110 valid up to September 30, 2025.</p> <p>We have obtained common TSDf memberships apart from our own TSDf & Incineration facility.</p> <table border="1" data-bbox="678 875 1428 1973"> <thead> <tr> <th data-bbox="678 875 1031 920">Conditions</th> <th data-bbox="1031 875 1428 920">Compliance</th> </tr> </thead> <tbody> <tr> <td colspan="2" data-bbox="678 920 1428 1003">4. Responsibilities of the occupier for management of hazardous and other wastes.</td> </tr> <tr> <td data-bbox="678 1003 1031 1686"> (1) For the management of hazardous and other wastes, an occupier shall follow the following steps, namely:- <ul style="list-style-type: none"> • Prevention; • Minimization; • Reuse, • Recycling; • Recovery, utilization including co-processing; • Safe disposal. </td> <td data-bbox="1031 1003 1428 1686"> <p>Complied.</p> <p>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.</p> </td> </tr> <tr> <td data-bbox="678 1686 1031 1973"> (2) The occupier shall be responsible for safe and environmentally sound management of </td> <td data-bbox="1031 1686 1428 1973"> <p>Complied.</p> <p>We are ensuring for safe and environmentally sound management of hazardous and other wastes.</p> </td> </tr> </tbody> </table>	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:- <ul style="list-style-type: none"> • Prevention; • Minimization; • Reuse, • Recycling; • Recovery, utilization including co-processing; • Safe disposal. 	<p>Complied.</p> <p>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.</p>	(2) The occupier shall be responsible for safe and environmentally sound management of	<p>Complied.</p> <p>We are ensuring for safe and environmentally sound management of hazardous and other wastes.</p>
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(2) The occupier shall be responsible for safe and environmentally sound management of	<p>Complied.</p> <p>We are ensuring for safe and environmentally sound management of hazardous and other wastes.</p>									

			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.	<p>Complied.</p> <p>We have our own captive TSDF and Incinerator facility.</p>
			(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.	<p>Noted & Complied.</p>
			(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	<p>Complied.</p> <p>We are having separate hazardous waste storage facility with all safety measures to avoid accident. Also we are adopting safe disposal and storage practices.</p>



			may be needed for safe storage and disposal.	
			<p>(6) The occupier shall take all the steps while managing hazardous and other waste to-</p> <ul style="list-style-type: none"> • contain contaminants and prevent accidents and limit their consequences on human beings and the environment; and <p>Provide persons working in the site with appropriate training, equipment and the information necessary to ensure their safety.</p>	Complied
			(6) Grant of authorization for managing hazardous and other wastes.	<p>Complied.</p> <p>We are strictly agreeing, complying & will continue to comply with all the stipulations made by GPCB as per latest CC&A no. AWH 105110 valid till September 30, 2025.</p>
			(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.	<p>Complied.</p> <p>Recovered spent solvent are being reused. Used oil & discarded drums are being sent to authorize recycler.</p>


		(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 labelling – Form 8.	Complied. All hazardous waste transportation is being done through appropriate packing and labelling as per Form-8.
		(18) Transportation of hazardous and other wastes.	Complied. Waste is being transported through TREM Card as per Hazardous waste 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 report period during handling and transportation of hazardous or other wastes.	
			(23) Liability of occupier, importer or exporter and operator of a disposal facility.		
			(a) 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	Noted.	

		<p>handling and management of the hazardous and other waste.</p>			
		<p>(b) 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.</p>	<p>Noted.</p>		
		<p>(24) Appeal</p>			
		<p>(a) 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.</p> <p>(b) 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</p>	<p>Noted & Complied</p>		

		<p>cause from filing the appeal in time.</p> <p>(c) Every appeal filed under this rule shall be disposed of within a period of sixty days from the date of its filing.</p>	
xiii	Fly ash should be stored separately as per CPCB	Complied.	

	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.	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.
xiv	The company shall undertake waste minimization measures as below:-	
	(a) Metering and control of quantities of active ingredients to minimize waste.	<p>Complied.</p> <p>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.</p> <p>Photograph of water meter shown below:</p> <div style="display: flex; justify-content: space-around;">   </div>
	(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 waste water generation.	We are using high pressure jet nozzle for equipment cleaning to minimize wastewater generation.

<p>xv</p>	<p>The green belt of at least 5-10 m width shall be 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.</p>	<p>Complied.</p> <p>Proper plantation is done all around the plant boundary and also the roads to mitigate fugitive & transport dust emission.</p> <p>Total Industrial Plot area: 1126078.27 sq.mt</p> <p>Green belt area: 409030.00 sq.mt (approx. 36% of total plot area) Layout plan with green belt is shown as under:</p> 
<p>xvi</p>	<p>All the commitments made regarding issues raised during the public hearing/consultation meeting shall be satisfactorily implemented.</p>	<p>Complied. Please refer below full compliance with this condition as under;</p> <ol style="list-style-type: none"> 1. Local employment is going on and is above 80 % at present. 2. Coal handling guidelines are fully complied. <p>Point wise detailed compliance report was submitted wide our letter Dated March 23, 2020.</p>
<p>xvii</p>	<p>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.</p>	<p>Complied.</p> <p>CSR projects as per Annexure 7.</p>

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 the noise pollution.

Complied.
 We ensured that at no time the emission level go beyond the stipulated standards | prescribed limits. In such cases | Occurrences we will intimate to board & authority time to time. Adequate stack height and acoustic enclosures are provided on DG sets.

Stack details:

Sr No.	Stack Details	Stack Ht mtr	Parameter	Permissible Limits	APCD	Fuel
1	DG Set 1010KVA (Stand by)	H: 10	PM	150 mg/Nm3	Adequate Stack Ht & Acoustic Enclosure	Diesel
			SO2	100 ppm		
			NOx	50 ppm		
2	DG Set 1500KVA (Stand By)	H: 11	PM	150 mg/Nm3	Adequate Stack Ht & Acoustic Enclosure	Diesel
			SO2	100 ppm		
			NOx	50 ppm		

Photograph of Stack & Stack Attached to D.G Sets:



However, DG sets are being used only during emergency.

<p>xix</p>	<p>The unit shall make the arrangement for Protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.</p>	<p>Complied.</p> <p>A well designed Fire hydrant system is adequate and as per standards.</p> <p>Fire hydrant Network details:</p> <ul style="list-style-type: none"> • Four full-fledged fire hydrant system in the company Water Storage Capacity - 50 million Liters • Total length of hydrant line – 15 km • Fire Fighting Equipment <ul style="list-style-type: none"> ◦ DCP1350 ◦ CO2 776 ◦ Foam :05Trolley • Fire Tenders <ul style="list-style-type: none"> ◦ One fire tender having 1800 Lit water capacity ◦ Second multipurpose fire tenders having 5000 Lit water &500Foam ◦ 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.
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xx Occupational 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 check-up of all employees are done by in-house doctors.

The following medical check-up has been carried out during report period:

Medical Check-Up:

Sr No.	Employee	Numbers
1	Staff	1895
2	Operators	
3	Workers	

Various types of tests being performed are as below;

1. Pre-employment check-up:

1. Vision
2. Colour blindness
3. CBC
4. Urine
5. Height
6. Weight
7. B/P
8. Pulse
9. Habit
10. Personal History
11. Family History
12. Identification k

2. Annual Check-up:

1. Physical check-up
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 Oxy meter
- ❑ Pulmonary Function Test Apparatus
- ❑ O2Administration
- ❑ Antidotes with routine Important and Vital lifesaving 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 check-up 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.

Rek: All employ found medically fit to work, no contiguous diseases were observed.




xi	<p>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.</p>	<p>Complied.</p> <p>Online monitoring system for SPM, SOx and NOx is already been made and connected to CPCB server.</p> <p>Photograph of online monitoring system (CEMS) connected to the CPCB server:</p>
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B. General Conditions:		
i	The project authorities shall adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.	The company complies with all stipulations prescribed by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority. Our compliance are further monitored by our Environmental auditors appointed by GPCB. Latest Environmental audit report by S. N. Patel Institute of Technology & research Centre for Environment research, Bardoli, Surat for year 2020-21 is attached as Annexure 8.
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. 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 the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	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 above in Specific Condition IV.
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.	

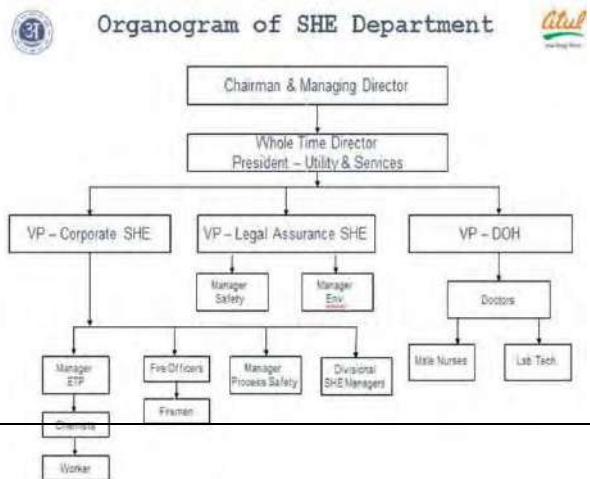
v	<p>The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).</p>	<p>Complied.</p> <p>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.</p> <p>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:</p> <p>Noise level monitoring data (Day Time)</p> <table border="1" data-bbox="647 680 1458 1520"> <thead> <tr> <th rowspan="2">Sr No.</th> <th rowspan="2">Location</th> <th rowspan="2">Permissible Limits, dB</th> <th colspan="3">Values for the period October 20 - 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Near Main guest house</td> <td>75</td> <td>52.40</td> <td>65.80</td> <td>62.73</td> </tr> <tr> <td>2</td> <td>Near TSDF</td> <td>75</td> <td>57.60</td> <td>67.30</td> <td>64.27</td> </tr> <tr> <td>3</td> <td>At Wyeth Colony</td> <td>75</td> <td>56.20</td> <td>59.80</td> <td>58.53</td> </tr> <tr> <td>4</td> <td>Gram Panchayat Hall</td> <td>75</td> <td>55.60</td> <td>68.50</td> <td>65.20</td> </tr> <tr> <td>5</td> <td>Near Main Office North site</td> <td>75</td> <td>53.60</td> <td>67.60</td> <td>64.67</td> </tr> <tr> <td>6</td> <td>ETP North site</td> <td>75</td> <td>55.20</td> <td>71.20</td> <td>66.95</td> </tr> <tr> <td>7</td> <td>Opposite shed D</td> <td>75</td> <td>57.10</td> <td>72.40</td> <td>68.75</td> </tr> <tr> <td>8</td> <td>ETP West site</td> <td>75</td> <td>52.40</td> <td>68.70</td> <td>65.17</td> </tr> <tr> <td>9</td> <td>Haria Water tank</td> <td>75</td> <td>55.60</td> <td>66.50</td> <td>63.85</td> </tr> <tr> <td>10</td> <td>Near 66KVA substation</td> <td>75</td> <td>53.50</td> <td>68.00</td> <td>64.75</td> </tr> </tbody> </table> <p>Noise level monitoring data (Night Time):</p> <table border="1" data-bbox="647 1617 1458 1960"> <thead> <tr> <th rowspan="2">Sr No.</th> <th rowspan="2">Location</th> <th rowspan="2">Permissible Limits, dB</th> <th colspan="3">Values for the period October 20 - 21</th> </tr> <tr> <th>Min.</th> <th>Max.</th> <th>Avg.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Near Main guest house</td> <td>70</td> <td>54.20</td> <td>64.20</td> <td>56.60</td> </tr> <tr> <td>2</td> <td>Near TSDF</td> <td>70</td> <td>56.70</td> <td>66.30</td> <td>58.87</td> </tr> <tr> <td>3</td> <td>At Wyeth Colony</td> <td>70</td> <td>52.60</td> <td>58.90</td> <td>54.35</td> </tr> </tbody> </table>	Sr No.	Location	Permissible Limits, dB	Values for the period October 20 - 21			Min.	Max.	Avg.	1	Near Main guest house	75	52.40	65.80	62.73	2	Near TSDF	75	57.60	67.30	64.27	3	At Wyeth Colony	75	56.20	59.80	58.53	4	Gram Panchayat Hall	75	55.60	68.50	65.20	5	Near Main Office North site	75	53.60	67.60	64.67	6	ETP North site	75	55.20	71.20	66.95	7	Opposite shed D	75	57.10	72.40	68.75	8	ETP West site	75	52.40	68.70	65.17	9	Haria Water tank	75	55.60	66.50	63.85	10	Near 66KVA substation	75	53.50	68.00	64.75	Sr No.	Location	Permissible Limits, dB	Values for the period October 20 - 21			Min.	Max.	Avg.	1	Near Main guest house	70	54.20	64.20	56.60	2	Near TSDF	70	56.70	66.30	58.87	3	At Wyeth Colony	70	52.60	58.90	54.35
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		6	ETP North site	70	52.50	63.20	55.98
		7	Opposite shed D	70	51.70	72.10	59.50
		8	ETP West site	70	54.20	65.70	57.12
		9	Water tank Haria road	70	52.40	63.40	56.02
		10	Near 66KVA substation	70	55.30	66.00	58.05

<p>vi</p>	<p>The company shall harvest rainwater from the rooftops of the Buildings and Storm water Drains to recharge the ground water and to utilize the same for process requirements.</p>	<p>Complied.</p> <p>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.</p> <p>We have already three 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.</p> <p>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.</p> <p>Total No. of Pond: 2 Nos. Capacity of Pond:(1 Nos. x 12000 KL) & (1 Nos. x 2000 KL) Company has harvest 6.55 lac KL rain water during 2020.</p> <p>Photograph of rain water harvesting structure (Pond) as shown below:</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="667 1272 1040 1581">  </div> <div data-bbox="1056 1272 1414 1581">  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div data-bbox="667 1637 1040 1715"> <p>Water Harvesting Project at Colony</p> </div> <div data-bbox="1056 1637 1414 1749"> <p>Water Harvesting Project near Coconut Circle</p> </div> </div>
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vii	<p>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.</p>	<p>Complied.</p> <p>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.</p> <p>All employees and others have a duty to comply with instructions given for workplace health and safety.</p> <p>Employee training which generally include:</p> <ul style="list-style-type: none"> • First aid training • Firefighting 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, mockdrill. • 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.
viii	<p>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</p>	<p>Complied.</p> <p>Compliance to all environmental protection measures and safeguards proposed in the project report submitted to ministry is compiled as mention in Annexure 9</p>

	to the project shall be implemented.	
ix	The company shall undertake all the relevant measures for improving the socio economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration.	Complied. Details of CER CSR is given in Annexure 10.
x	The company shall undertake eco- developmental measures including community welfare measures in the project area for the Overall improvement of the environment.	Complied. Details of CER CSR is given general condition (ix)
xi	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carryout the Environmental management and monitoring functions.	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. 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. Currently the parameters measured in-house are pH, COD, TDS, MLVSS, and MLSS.A For all external environmental monitoring we have appointed NABL approved reputed agencies.



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<p>xii</p>	<p>The company shall mark 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.</p>	<p>Complied.</p> <p>EMP measures are implemented.</p> <p>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.</p> <table border="1" data-bbox="687 555 1420 1160"> <thead> <tr> <th>Sr No.</th> <th>Parameter</th> <th>Recurring Cost (Rs. in lakhs) October 20- 21</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Air Pollution Control</td> <td rowspan="2">2865</td> </tr> <tr> <td>2</td> <td>Liquid Pollution Control</td> </tr> <tr> <td>3</td> <td>Environmental Monitoring and Management</td> <td>21</td> </tr> <tr> <td>4</td> <td>Solid waste Disposal</td> <td>346</td> </tr> <tr> <td>5</td> <td>Occupational health</td> <td>20</td> </tr> <tr> <td>6</td> <td>Green belt</td> <td>7</td> </tr> <tr> <td colspan="2">Total</td> <td>3259</td> </tr> </tbody> </table>	Sr No.	Parameter	Recurring Cost (Rs. in lakhs) October 20- 21	1	Air Pollution Control	2865	2	Liquid Pollution Control	3	Environmental Monitoring and Management	21	4	Solid waste Disposal	346	5	Occupational health	20	6	Green belt	7	Total		3259
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<p>xiii</p>	<p>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.</p>	<p>Complied.</p> <p>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.</p>																							

<p>xiv</p>	<p>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 on the website of the company.</p>	<p>Complied.</p> <p>We regularly submit the half-yearly compliance report & same is being updated on website.</p>
<p>xv</p>	<p>The environmental statement for each financial year ending 31st ch 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 Regional Offices of MoEF&CC by e- mail.</p>	<p>Complied.</p> <p>The Env. Statement (Form-V) for each financial year ending 31stch is being submitted to State Pollution Control Board (GPCB) every year time to time on XGN portal as well as hard copy submission. Form V for year 2019- 20 was submitted to your good office vide our letter dated December 19, 2020 and also uploaded on the website along with compliance report.</p>

<p>xvi</p>	<p>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</p> <p>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.</p>	<p>Complied.</p> <p>We have been granted EC Dated: February 11, 2019 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 Gujarati and another in English on February 17, 2019. Details submitted vide our letter Atul/SHE/EC Compliance/01 dated December 19, 2019.</p>
<p>xvii</p>	<p>The project authorities shall inform the Regional Office as well as the Ministry, the Date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.</p>	<p>Complied.</p> <p>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.</p>

Annexure 1: Quality of Treated Effluent

Sr No.	Parameter	Results						GPCB Limits
		October 20	November 20	December 20	January 21	February 21	March 21	
1	pH	7.04	7.13	7.46	7.34	6.97	6.89	5.5 to 9.0
2	Temperature °C	30.4	30.1	30.2	30	30.1	30.4	40 °C
3	Colour (pt. co. scale)	40	30	30	40	60	50	---
4	Suspended solids, mg/l	68	47	39	53	72	34	100
5	Phenolic Compounds, mg/l	0.8	1.2	0.58	0.94	0.83	ND	5
6	Cyanides, mg/l	ND	ND	ND	ND	ND	ND	0.2
7	Fluorides, mg/l	1.17	1.24	1.18	1.68	1.55	0.21	2
8	Sulphides, mg/l	1.12	0.98	0.94	1.37	1.16	ND	2
9	Ammonical Nitrogen, mg/l	7.56	8.42	7.28	4.26	1.97	9.1	50
10	Total Chromium, mg/l	ND	ND	ND	ND	ND	ND	2
11	Hexavalent Chromium, mg/l	ND	ND	ND	ND	ND	ND	1
12	BOD (3 days at 27°C), mg/l	38	31	40	35	42	52	100
13	COD, mg/l	153	164	216	204	230	168	250
Note: ND is Not Detectable.								

Annexure 2: Ambient Air Quality Monitoring Results

Station	Parameter	Limit microgm/NM ³	October 20	November 20	December 20	January 21	February 21	March 21
66 KV	PM 2.5	60	30.8	31.7	31.7	32.6	36.2	38.3
	PM10	100	55.4	54.4	55.1	54.3	50.1	52.8
	SO2	80	15.2	14.1	13.2	12.3	13.2	20.5
	NO2	80	14.4	13.5	14.6	12.8	18.2	12.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Opposite Shed D	PM 2.5	60	33.8	32.7	31.6	32.7	37.2	32.7
	PM10	100	52.6	53.7	52.1	50.1	51.1	50.1
	SO2	80	13.7	14.8	13.7	11.1	14.8	18.5
	NO2	80	14.8	15.7	14.6	16.2	12.5	10.1
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
West site ETP	PM 2.5	60	22	24	26	24	22	24
	PM10	100	44	46	48	46	44	46
	SO2	80	8.4	7.9	8.7	9.6	10.5	12.1
	NO2	80	8.1	9.3	8.1	9.2	8.3	9.2
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
North ETP	PM 2.5	60	28	30	29	27	25	23
	PM10	100	43	45	47	45	43	45
	SO2	80	7.6	6.7	7.6	8.4	7.5	8.4
	NO2	80	6.7	7.6	6.7	7.6	8.4	9.3
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
TSDF	PM 2.5	60	26	28	27	25	23	21
	PM10	100	47	49	51	49	47	49
	SO2	80	6.2	7.3	7.5	8.6	9.5	10.3
	NO2	80	7.3	6.5	7.3	8.5	9.4	10.5
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Main Guest House	PM 2.5	60	23	25	27	25	23	25
	PM10	100	52	54	56	54	52	54
	SO2	80	8.9	8.1	9.2	10.3	11.2	10.3
	NO2	80	8.6	6.8	8.6	9.5	10.4	11.5
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Wyeth Colony	PM 2.5	60	26	28	30	29	27	29
	PM10	100	50	51	53	51	49	51
	SO2	80	6.6	7.5	8.4	9.5	10.4	11.5
	NO2	80	7.3	8.3	7.4	8.5	9.4	10.3
	Ammonia	400	ND	ND	ND	ND	ND	ND

	HCl	200	ND	ND	ND	ND	ND	ND
Gram panchayat hall	PM 2.5	60	27	29	31	28	26	28
	PM10	100	51	53	55	53	51	53
	SO2	80	7.5	8.4	9.3	10.6	11.5	12.3
	NO2	80	7.7	8.8	7.7	8.7	9.6	10.4
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Main office, North site	PM 2.5	60	25	27	30	29	27	25
	PM10	100	45	47	49	47	45	47
	SO2	80	8.6	7.4	8.3	9.2	10.3	11.3
	NO2	80	7.8	8.7	7.8	8.7	7.8	8.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND
Haria water tank	PM 2.5	60	33.8	32.7	31	32	31	35
	PM10	100	57.7	56.5	55.6	52.6	56.2	52.6
	SO2	80	16.7	17.6	16.7	15.8	18.4	14.8
	NO2	80	16.2	15.3	14.2	12.3	13.2	12.3
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCl	200	ND	ND	ND	ND	ND	ND

Annexure 3: Stack Details

Details of Process and Flue stack				OCT. 2020	NOV. 2020	DEC. 2020	JAN. 2021	FEB. 2021	MAR. 2021
Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
Atul East Site									
1	furnace (Phosgene Plant)	PM	150.0 mg/Nm3	33	20	48	42	31	54
2	Reactor (Phosgene plant- New)	CO	---	ND	ND	ND	ND	ND	ND
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
Caustic Chlorine Plant									
3	Dechlorination Plant	Cl ₂	9.0 mg/Nm3	8.1	2.46	4.3	8.2	5.8	5
		HCl	20.0 mg/Nm3	8.29	1.9	4.42	8.4	5.94	5.1
4	Common stack of HCl Sign unit 1&2	Cl ₂	9.0 mg/Nm3	7.5	3.8	5.7	8.15	4.9	4.4
		HCl	20.0 mg/Nm3	7.68	3.6	5.86	7.9	5.01	4.5
FCB Plant									
5	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)									
6	Sulfuric Acid Plant	SO ₂	2.0 kg/T	1.5	0.8	1.25	1.35	1.1	1.32
		Acid Mist	50.0 mg/Nm3	13.6	16.2	24.8	12.9	19.8	10.6
7	Chloro Sulfonic Acid plant reactor	Cl ₂	9.0 mg/Nm3	8.2	7.1	6.8	3.9	6.4	4.1
		HCl	20.0 mg/Nm3	8.85	7.3	6.99	3.7	6.55	4.3
Resorcinol Plant									
8	Spray Dryer (Resorcinol Plant)	PM	150.0 mg/Nm3	3.8	12.2	9.1	33.7	33.2	27.7
9	Scubber vent (Resorcinol Plant)	SO ₂	40.0 mg/Nm3	24.7	4	20.6	24.1	32.6	28.4
Incinerator									
10	Incinerator	PM	150.0 mg/Nm3	71.8	56.2	Not Running	Not Running	30.8	Not Running
		SO ₂	40.0 mg/Nm3	9.2	4.8			12.4	
		NOx	25.0 mg/Nm3	15.7	15.3			9.3	
NI Plant									
11	Foul Gas Scubber	SO ₂	40.0 mg/Nm3	25.2	23.2	26.4	14.9	20.6	22.3
		NOx	25.0 mg/Nm3	15.9	20.7	18.4	16.8	12.1	14.9
2-4-D Plant									
12	Common Scrubber; 2,4D Plant	Cl ₂	9.0 mg/Nm3	7.6	6.4	5.1	6.4	7.8	5.4
		HCl	20.0 mg/Nm3	13.51	6.63	5.24	6.8	7.48	5.7
		Phenol	---	ND	ND	4.2	ND	ND	ND
13	Dryer-1	PM with Pesticide compound	20.0 mg/Nm3	14.8	11.2	14.2	13.1	12.8	10.9
14	Dryer-2	PM with Pesticide compound	20.0 mg/Nm3	11.2	13.6	10.8	8.4	11.2	9.4
15	Dryer-3	PM with Pesticide compound	20.0 mg/Nm3	14.1	9.4	12.6	12.3	13.6	Not Running
16	Dryer-4	PM with Pesticide compound	20.0 mg/Nm3	11	12	8.4	10.2	14.2	12.6
17	Dryer-5	PM with Pesticide compound	20.0 mg/Nm3	15.8	13.1	15.6	9.7	9.9	10.5

Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
NBD Plant.									
18	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
19	Scrubber S-902	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
20	Scrubber S-801/802	HCl	20 mg/Nm3	10.4	12.9	16.1	14.2	7.9	8.2
		NOx	25.0 mg/Nm3	17.1	10.8	17.4	10.1	10.6	12.2
CP Plant									
21	MCPA	Cl ₂	9 mg/NM ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20 mg/NM ³						
		SO ₂	40 mg/NM ³						
22	Fipronil	SO ₂	40 mg/NM ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20 mg/Nm3						
23	Imidacloprid	NH ₃	175 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
24	Pyrethroids	SO ₂	40 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20 mg/Nm3						
25	Stack at Amine Plant	NH ₃	175 mg/Nm3	98	66	75	63	48.4	112
MPSL Plant									
26	Phosgene Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
27	Central Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
NICO plant									
28	Central scrubber at Nico Plant	Acetonitrile IPA	—	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
Ester Plant									
29	Scrubber at Ester plant for Glyphosate	Formaldehyde	10 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
30	Central Scrubber MCPA Plant	HCl	20 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
31	MPP plant scrubber	HCl	20 mg/Nm3	7.5	3.4	5.8	12.4	6.3	8.1
		Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
Atul West Site									
32	Shed A05/03/44	Cl ₂	9 mg/NM ³	Not Running	7.53	5.9	6.2	Not Running	Not Running
		HCl	20 mg/NM ³						
33	Shed B2/12/24 Reaction Vessel	Cl ₂	9.0 mg/Nm3	Not Running	Not Running	5.5	7.1	6.9	6.2
		HCl	20.0 mg/Nm3						
34	Shed B18/02/24 Fan	SO ₂	40 mg/NM ³	19.6	33.6	20.8	32	23.9	19.8
		Cl ₂	9 mg/NM ³	7.2	4.6	7.3	8.1	4.4	6.8
		HCl	20 mg/NM ³	7.37	4.4	7.6	7.8	4.5	6.6
35	Shed C5/20/15 Chlorinator	Cl ₂	9.0 mg/Nm3	Not Running	Not Running	5.1	7.8	4.3	6.5
		HCl	20.0 mg/Nm3			5.4	7.6	6.2	6.7
36	Shed D Nira Spray dryer No. 45	PM	150.0 mg/Nm3	Not Running	Not Running	Not Running	71	Not Running	Not Running
37	Shed D Nira Spray dryer No.50	PM	150.0 mg/Nm3	Not Running	Not Running	58.4	69	Not Running	Not Running
38	Shed E 7/12/49 Spray Dryer	PM	150.0 mg/Nm3	Not Running	Not Running	69.1	Not Running	45.7	55.3
39	Shed F F6/1/15 Reaction Vessel	Cl ₂	9.0 mg/Nm3	5.7	7.68	7.98	7.2	6.16	Not Running
		HCl	20.0 mg/Nm3	14.6	7.9	8.2	7.37	6.34	Not Running
40	Shed G 10/8/1 (receiver)	Cl ₂	9.0 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		HCl	20.0 mg/Nm3			Running	Running		

41	Shed H 11/5/17 chlorinator	Cl ₂	9.0 mg/Nm ³	6.5	7.58	8.36	8.46	8.32	5.73
		HCl	20.0 mg/Nm ³	12	7.8	8.9	8.66	8.55	5.9
42	Shed K K-13/3/4 Final of Sulfuric acid plant	SO ₂	2.0 kg/T	1.6	0.86	0.9	1.1	0.95	1.3
		Acid Mist	50.0 mg/Nm ³	3.2	2.5	3	3.7	2.4	3.2
43	Shed J15/09/25	HBr	--	7.6	11.3	8.9	ND	ND	ND
		SO ₂	40 mg/NM ³	14.8	16.8	13.2	1.1	30.6	22.7
Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
44	Shed J12/01/42	SO ₂	40 mg/NM ³	Not Running	Not Running	19.8	24.7	18.3	20.1
		Cl ₂	9.0 mg/Nm ³			6.1	7.2	6.9	5.2
		HCl	20.0 mg/Nm ³			6.4	7.4	6.3	5.4
45	Shed J12/03/36	SO ₂	40 mg/NM ³	Not Running	Not Running	26.6	28.9	19.2	23.6
		HCl	20.0 mg/Nm ³			16.8	11.4	15.7	12.9
46	Shed N Scrubber Fan N20/08/24	Cl ₂	9 mg/NM ³	6.2	7.6	5.2	7.2	5.7	6.6
		HCl	20 mg/NM ³	6.34	6.34	9.1	5.3	5.83	6.8
47	Shed N Scrubber Fan N20/02/41	SO ₂	40 mg/NM ³	28.6	36.1	32.4	27.1	31.7	24.9
48	Sulfur Black Plant	H ₂ S	--	ND	ND	ND	ND	ND	ND
		NH ₃	175 mg/NM ³	140	140	120	81.3	90.6	110
		H ₂ S	--	ND	ND	ND	ND	ND	ND
49	Sulfur Dyes plant	NH ₃	175 mg/NM ³	31.2	44.2	35.4	156	12.8	27.3
50	Flavors & Fragrances Plant	HCl	20 mg/NM ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
Atul North Site									
51	N-FDH Plant Catalytic Incinerator	PM	150.0 mg/Nm ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		SO ₂	40.0 mg/Nm ³						
		NOx	25.0 mg/Nm ³						
		Formaldehyde	10.0 mg/Nm ³						
52	PHIN Plant	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
53	PHIN-II Plant	HCl	20 mg/NM ³	2.8	3.3	4.3	5	4.3	4.7
54	DDS Plant (Pharma Plant)	NH ₃	175 Mg/Nm ³	Not Running	Not Running	Not Running	Not Running	110	150
55	SPIC II Plant (DCDPS)	SO ₂	---	ND	ND	Not Running	24.1	4.6	3.8
56	SPIC I Plant	NH ₃	175 mg/Nm ³	Not Running	Not Running	Not Running	146	124	136
57	SPIC IV Plant	NH ₃	175 mg/NM ³	75	Not Running	Not Running	59	66	12.9
		SO ₂	---	ND	ND	ND	ND	14.4	17.3

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/Nm ³	Not Running	Not Running	61.4	56.4	48.6	Not Running
		SO ₂	600 mg/Nm ³			156	184	288	
		NO _x	600 mg/Nm ³			124	165	302	
2	FBC boiler E2	PM	100 mg/Nm ³	71.4	Not Running	56.1	66.3	66.3	48.4
		SO ₂	600 mg/Nm ³	172		165	154	229	178
		NO _x	600 mg/Nm ³	146		134	161	279	192
3	FBC boiler E3	PM	100 mg/Nm ³	59.1	71.4	Not Running	Not Running	64.9	56.1
		SO ₂	600 mg/Nm ³	158	190			330	230
		NO _x	600 mg/Nm ³	559	181			376	252
4	Hot Oil Unit (Resarcinal Plant)	PM	150.0 mg/Nm ³	18.4	12.2	44.6	11.6	29.6	18.6
		SO ₂	100 ppm	6.2	4	23.4	14.2	6.2	6.2
		NO _x	50 ppm	23.6	19.1	11.2	5.2	15.4	30.5
5	DG set 1010 KVA (Standby)	PM	150 mg/Nm ³	51.7	50.3	36.4	59.4	39.6	30.4
		SO ₂	100 ppm	9.1	9.2	5.6	68.2	9.6	6.3
		NO _x	50 ppm	34.6	30.8	23.7	20.1	21.6	26.7
West Site									
6	FBC boiler W1	PM	100 mg/Nm ³	89.6	72	68.4	56.8	48.6	60.4
		SO ₂	600 mg/Nm ³	172	184	160	198	218	180
		NO _x	600 mg/Nm ³	144	158	172	164	196	230
7	Hot Oil Plant shed-B	PM	150.0 mg/Nm ³	ND	ND	ND	ND	ND	ND
		SO ₂	100 ppm	ND	ND	ND	ND	ND	ND
		NO _x	50 ppm	20.5	14.8	16.9	21.8	15.2	18.8
8	Oil burner Shed B (Stand By)	PM	150.0 mg/Nm ³	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
		SO ₂	100 ppm						
		NO _x	50 ppm						
9	Boiler (50 TPH 2 Nos) (New boilers) W2,W3	PM	50 mg/Nm ³	31.6	46	40.2	35.4	48.7	42.7
		SO ₂	600 mg/Nm ³	164	160	148	174	156	182
		NO _x	300 mg/Nm ³	148	168	152	142	172	196
		Mercury	0.03 mg/Nm ³	ND	ND	ND	ND	ND	ND
10	DG set 1500 KVA (Stand By)	PM	150.0 mg/Nm ³	44.8	60.6	51.7	44.3	54.7	52.6
		SO ₂	100 ppm	10.8	11.4	7.4	10.4	11.8	8.4
		NO _x	50 ppm	41.5	44.6	34.8	25.8	30.2	31.2
North Site									
11	Thermic fluid heater of DCO/DAP Plant	PM	150.0 mg/Nm ³	29.6	40.2	31.7	49.3	29.6	34.4
		SO ₂	100 ppm	10.2	7.9	5.2	8.1	7.1	7.5
		NO _x	50 ppm	17.1	23.8	31.7	23.3	25.7	20.1

Annexure 4: Flue Gas Stack Details

1. Flue Gas Stack And it's Emission Control Measures:

Sr No.	Stack Details	Capacity TPH/ Stack Ht in m	Parameter	Permissible limit	APCD	Fuel
1.	FBC boiler E1	34/56	PM	100 mg/Nm ³	Electro Static Precipitator	Coal/Lignite
			SO ₂	600 mg/Nm ³		
			NO _x	600 mg/Nm ³		
2	FBC boiler E2	34/56	PM	100 mg/Nm ³	Electro Static Precipitator	Coal/Lignite
			SO ₂	600 mg/Nm ³		
			NO _x	600 mg/Nm ³		
3	FBC boiler E3	50/80	PM	100 mg/Nm ³	Electro Static Precipitator	Coal/Lignite
			SO ₂	600 mg/Nm ³		
			NO _x	600 mg/Nm ³		
4	FBC boiler W 1	45/70	PM	100 mg/Nm ³	Electro Static Precipitator	Coal/Lignite
			SO ₂	600 mg/Nm ³		
			NO _x	600 mg/Nm ³		
5	Boiler (50 TPH2 Nos) (New boilers)W 2,W 3	50/106	PM	100 mg/Nm ³	Electro Static Precipitator	Coal/Lignite
			SO ₂	600 mg/Nm ³		
			NO _x	600 mg/Nm ³		
6	Hot Oil Unit (Resorcinol Plant)	H: 32.5	PM	150 mg/Nm ³	-	CNG
			SO ₂	100 ppm		
			NO _x	50 ppm		
7	Hot Oil Plant shed-B	H: 19	PM	150 mg/Nm ³	-	CNG
			SO ₂	100 ppm		
			NO _x	50 ppm		
8	Hot Oil Plant shed-B (Stand By)	H: 17	PM	150 mg/Nm ³	-	CNG
			SO ₂	100 ppm		
			NO _x	50 ppm		
9	Thermic fluid heater of DCO/DAP Plant	H: 12	PM	150 mg/Nm ³	-	CNG
			SO ₂	100 ppm		
			NO _x	50 ppm		
10	DG set 1010 KVA(Standby)	H: 10	PM	150 mg/Nm ³	Adequate stack Height	Diesel
			SO ₂	100 ppm		
			NO _x	50 ppm		
11	DG set 1500 KVA (Stand By)	H: 11	PM	150 mg/Nm ³	Adequate stack Height	Diesel
			SO ₂	100 ppm		
			NO _x	50 ppm		

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

Sr No.	Stack Details	Stack Height (meters)	Parameter	Permissible Limit	APCD
Atul East Site					
1	New Phosgene plant-Furnace	15	PM	150 mg/Nm ³	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	9 mg/Nm ³	Alkali Scrubber
			HCl	20 mg/Nm ³	
4	Common Stack of HCl Sigri unit 1& 2	25	Cl ₂	9.mg/Nm ³	Alkali Scrubber
			HCl	20 mg/Nm ³	
Sulfuric Acid (East Site)					
5	Sulfuric Acid plant	30	SO ₂	2.0 kg/T	Water Scrubber With DCDA System
			Acid Mist	50 mg/Nm ³	
6	Chloro Sulfonic Acid plant reactor	11	Cl ₂	9mg/Nm ³	Caustic And Water Scrubber
			HCl	20mg/Nm ³	
FCB Plant					
7	Foul Gas Scrubber	26.5	SO ₂	40mg/Nm ³	Caustic scrubber
			NO _x	25mg/Nm ³	
Incinerator					
8	Incinerator	40	PM	150mg/Nm ³	Alkali& water scrubber
			SO ₂	40mg/Nm ³	
			NO _x	25mg/Nm ³	
NI Plant					
9	Foul Gas Scrubber	26.5	SO ₂	40mg/Nm ³	Caustic scrubber
			NO _x	25mg/Nm ³	
NBD Plant					
10	Spray Dryer	21	PM	150mg/Nm ³	Water Scrubber
			NO _x	25mg/Nm ³	
11	Scrubber S-902	25	Phosgene	0.1 ppm	Caustic scrubber
12	Scrubber S-801/802	25	HCl	20mg/Nm ³	Caustic scrubber
			NO _x	25mg/Nm ³	
2-4- D & related Products:					
13		5	Cl ₂	9mg/Nm ³	Caustic scrubber
			HCl	20mg/Nm ³	

	Common Scrubber; 2,4D Plant		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	150 mg/Nm ³	water scrubber
23	Scrubber vent	15	SO ₂	40mg/NM3	Caustic scrubber
24	Scrubber at Ester plant for Glyphosate	12	Formaldehyde	10mg/Nm3	water scrubber
Other					
25	MCPA	19	Cl ₂	9 mg/NM3	Alkali & Water Scrubber
			HCl	20mg/NM3	
			SO ₂	40mg/NM3	
26	Fipronil	19	SO ₂	40mg/NM3	Alkali & Water Scrubber
			HCl	20mg/Nm3	
27	Imidacloprid	20	NH ₃	175 mg/Nm3	Water Followed By Acid Scrubber
28	Pyrethroids	19	SO ₂	40mg/Nm3	Alkali & Water Scrubber
			HCl	20mg/Nm3	
29	Stack at Amine Plant	5	NH ₃	175 Mg/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	H ₂ S	--	Alkali & Water Scrubber
			NH ₃	175 mg/Nm3	
34	Sulphur Dyes Plant	19	H ₂ S	--	

			NH ₃	175 mg/Nm ³	Alkali & Water Scrubber
Atul West Site					
35	Shed A05/03/44	19	Cl ₂	9 mg/NM ³	Caustic Scrubber
			HCl	20 mg/NM ³	
36	Shed B2/12/24 Reaction Vessel	19	Cl ₂	9 mg/NM ³	Caustic Scrubber
			HCl	20 mg/NM ³	
37	Shed B18/02/24 Fan	19	SO ₂	40 mg/NM ³	Caustic Scrubber
			Cl ₂	9.0mg/Nm ³	
			HCl	20 mg/Nm ³	
38	Shed C5/20/15 Chlorinator	19	Cl ₂	9 mg/NM ³	Alkali& Water Scrubber
			HCl	20 mg/NM ³	
39	Shed D Niro Spray dryerNo.45	19	PM	150 mg/Nm ³	Water Scrubber
40	Shed D Niro Spray dryer No. 50	19	PM	150 mg/Nm ³	Water Scrubber
41	Shed E 7/12/49 Spray Dryer	19	PM	150 mg/Nm ³	Water Scrubber
42	Shed F 6/1/15 Reaction Vessel	19	Cl ₂	9 mg/NM ³	Alkali& Water Scrubber
			HCl	20 mg/NM ³	
43	Shed G 10/8/1 (receiver)	19	Cl ₂	9 mg/NM ³	Alkali& Water Scrubber
			HCl	20 mg/NM ³	
44	Shed H11/6/17 Chlorinator	19	Cl ₂	9 mg/NM ³	Alkali& Water Scrubber
			HCl	20 mg/NM ³	
45	Shed K K-13/3/4 Final of Sulfuric acid plant	19	SO ₂	2 kg/T	Alkali& Water Scrubber
			Acid Mist	50 mg/NM ³	
46	Shed J15/09/25	19	HBr	--	Alkali& Water Scrubber
			SO ₂	40 mg/NM ³	
47	Shed J12/01/42	19	SO ₂	40mg/NM ³	Alkali& Water Scrubber
			Cl ₂	9.0mg/Nm ³	
			HCl	20 mg/Nm ³	
48	Shed J12/03/36	19	SO ₂	40 mg/NM ³	Caustic Scrubber
49	Shed N Scrubber Fan N20/08/24	19	Cl ₂	9 mg/NM ³	Caustic Scrubber
			HCl	20mg/Nm ³	
50	Shed N Scrubber Fan N20/02/41	19	SO ₂	40mg/NM ³	Alkali& Water Scrubber

North Site:					
51	N-FDH Plant Catalytic Incinerator	31.5	PM	150 mg/Nm ³	Bag Filter
			SO ₂	40mg/Nm ³	
			NO _x	25mg/Nm ³	
			Formaldehyde	10mg/Nm ³	
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	NH ₃	175mg/Nm ³	Water Followed By Acid Scrubber
54	SPIC II Plant (DCDPS)	30	SO ₃	---	Alkali & Water Scrubber
55	SPIC I Plant	30	NH ₃	175mg/Nm ³	Water Scrubber Followed By Two Stage Caustic Scrubber With Ammonia/Steam Injection At Stack
56	SPIC IV Plant	2	NH ₃	175mg/Nm ³	Alkali & Water Scrubber
			SO ₃	---	
57	PHIN II Plant	21	HCl	20mg/Nm ³	Water Scrubber Followed By Two Stage Caustic Scrubber With Ammonia/Steam injection At Stack
			Phosgene	0.1 ppm	

Annexure 5: Details of Solvent Storage

Sr No.	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	Benzene	180 MT	100 MT	Resorcinol	Liquid at RT atmos. pressure	Fire	Isolated storage, FLP, Flam arrester, Breather valve, LI, Fire hydrant, sand etc.
3	Xylene	60	30	MPSL-NICO Plant	Atmospheric Normal Temp.	Fire	Dyke wall, Fire hydrant line, FLP, Spark arrester, Prohibited for vehicle movement & unauthorized person.
4	Methanol	650 m ³	50 m ³	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.
5	Toluene	40 m ³	30 m ³	Phin & PO plant	Liquid at RT, atmos. Pressure	Fire	Isolated storage, FLP, Flam arrester, Breather valve, LI, Fire hydrant, sand etc.
6	Toluene	120 KL	100 KL	Shed C	Atmo. Press and temp.	Fire & Chemical spillage	Underground tank, prohibited are, FLP, foam trolley etc.
7	Ethanol /Methanol	51 KL	40 KL	Shed N & A	Atmo. Press and temp.	Gas leakage, Spill	Respirators, Dry Sand, Dyke wall, spare tank
8	MCB	105 MT	100 KI	Shed C	Atmo. Press and temp.	Fire & Chemical spillage	Underground tank, prohibited are, FLP, foam trolley etc.

Annexure 6: All Hazardous materials other than solvent are stored with details along with control measure

Sr No.	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 M ³	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 nm ³	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. SO ₃	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:-

- Secondary Containment to all storage areas of Hazardous materials with leakage collection system is provided.
- Spill kits are made available at all locations of hazardous materials.
- Fire hydrant system is provided at Hazardous materials storage area.

Annexure 7: CSR Activities

CSR activity report 2020-21

No.	Program	Project Activity	Location	Outlay for the year		Implementing agency
			District (State)	Budget	Spent	
	(A)	(B)	(C)	(D)	(E)	(G)
1	Education	Enhancement of education practices in Kalyani Shala	Valsad (Gujarat)	24.00	24.00	Atul Foundation
2		Support to tribal children in Atul Vidyamandir	Valsad (Gujarat)	3.75	3.75	Atul Foundation
3		Improvement of teaching methodology for primary school children - <i>Adhyapika</i> project	Valsad (Gujarat)	57.50	57.50	Atul Foundation
4		Support to develop a school in a tribal area	Navasari (Gujarat)	5.00	5.00	Atul Foundation
5		Enhancement of rural education	Valsad (Gujarat)	6.25	6.25	Atul Foundation
6		Conservation of manuscripts	Ahmedabad (Gujarat)	10.00	10.00	Atul Foundation
7	Empowerment	Empowerment of women through various vocational training courses	Valsad (Gujarat)	5.00	5.00	Atul Foundation
8		Skills training to youth as apprentices	Valsad (Gujarat)	110.17	110.17	Atul Ltd.
9		Capacity building of tribal farmers in beekeeping	Valsad (Gujarat)	3.00	3.00	Atul Foundation
10	Health	Nutrition Garden Project	Valsad (Gujarat)	12.00	12.00	Atul Foundation
11		Enhancement of rural health through health camps	Valsad (Gujarat)	6.50	6.50	Atul Foundation
12	Relief	Support to disaster relief for COVID-19 pandemic	Valsad (Gujarat)	20.00	20.00	Atul Foundation
13		Contribution to PM Cares Fund	Valsad (Gujarat)	300.00	300.00	Atul Ltd.
14		Provision of fertilisers to farmers	Valsad (Gujarat)	2.50	2.50	Atul Foundation
15	Infrastructure	Infrastructure development activities in villages	Valsad (Gujarat)	44.59	44.59	Atul Foundation
16		Construction of white topping road	Valsad (Gujarat)	554.28	554.28	Atul Ltd.
17	Conservation	Establishment of solid waste management system in Atul village	Valsad (Gujarat)	10.00	10.00	Atul Foundation
18		Implementation of afforestation initiatives	Valsad (Gujarat)	4.31	4.31	Atul Ltd.
19		Conservation of water in villages	Valsad (Gujarat)	2.91	2.91	Atul Foundation
Total direct expenditure				1181.76	1181.76	
Administrative overheads (OH)				59.59	59.59	
Total (direct expenditure + OH)				1241.35	1241.35	

Annexure 8: Abstract of Environmental Audit Report

M/s. Atul Ltd.

Plot. No.5,6,29,30,33,34,35,37,38,80,81,84,91 &
amp; Survey No.274,275,276, At & amp; P.O.- Atul Pin - 396020
Dist. Valsad

THINK WITH
SUSTAINABLE DEVELOPMENT

Environment Audit Report April - 2020 to March - 2021



VIDYABHARTI TRUST - UMRAKH
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OBSERVATION

- 1 Company has done outstanding work to control COVID 19 infection by devising operational and systematic controls. Compliance more than the government COVID 19 guidelines was observed during all the three visits. Company has prepared and implemented its own stringent guidelines to control COVID 19 and to keep their employees and family safe in this difficult time.
- 2 It has been observed that company is having policy to donate and provide all the possible help to their neighbouring community and nation at large during all such natural calamities. Company has donated total Rs. 5 Cr in PM & CM relief fund in addition to the distribution of kits worth 50 lacs to the needy people in the neighbouring villages as well as migrant labours.
- 3 Company has applied for EC for expansion project and 50 MW CPP project. Public Hearing for both the projects have been completed successfully complying with COVID 19 guidelines.
- 4 Company has received registration certificate as brand owner by CPCB under plastic waste Management rules, 2016 and started collecting and disposing plastic as per the plan.
- 5 Company has installed South ETP which is under commissioning stage.
- 6 Company has undertaken ZLD project for North ETP.
- 7 Company has received CTE (EC to CTE) for its expansion and 50 MW CPP projects.
- 8 5 S drive is going on in later and spirit and hence overall housekeeping was found satisfactory.
- 9 Company is submitting quarterly reports on CPCB portal for its captive TSDF. Company is also submitting quarterly calibration reports of OCEMS to CPCB.
- 10 Company has submitted annual returns like Form IV, Form V, Form 3 for E-waste, Form 4 for BMW and Form VIII for Batteries within the stipulated time frame.
- 11 Company is regularly submitting EC compliance report and also uploading the same on its website.



RECOMMENDATIONS

- 1 Company shall prepare an action plan for the points emerged during the public hearing.
- 2 Company shall obtain fire NOC renewal as per the amended regulations
- 3 Company shall upgrade its coal | fly ash handling system for betterment.
- 4 Company shall install new Ambient Air Monitoring system | station
- 5 Company shall install digital display board at the gate as per the NGT order.
- 6 Company shall have membership of common facilities | pre | co processors for disposal of Hazardous wastes.
- 7 Company shall plan for above ground effluent network at other sites also in phased manner.

ENVIRONMENTAL
AUDIT REPORT
(APR. 2020 – MAR. 2021)



ANNEXURE-32 COMPLIANCE REPORT

Sr. No.	NOC/Consent	Has Valid Consent/ Authorization	Complying With Standards And Other Conditions
(A)	Compliance Report of water as per Water Act, 1974: If NO, comment:	Yes, Consent No. AWH-105110 is valid upto 30/09/2025	Complied
(B)	Compliance Report for Air as per Air Act, 1981: If NO, comment:		Complied
(C)	Compliance Report for the storage and handling of hazardous waste/chemicals under The Hazardous Waste (Management and Handling) Rule, 1989 & EPA-86 If NO, comment:		Complied



Annexure 9 : Environmental protection measures and safeguards proposed in the project

Sr No.	Potential impact	Action to be followed	Parameters for monitoring	Frequency of monitoring	Status of Compliance
1	Air Emission	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	SPM, RSPM, SO ₂ and NO _x , Vehicle logs to be maintained.	Monthly through external agency NABL Approved	Stack and APCM details are provided in EC Compliance Point No.4 of Conditions. Quality of gaseous emission and AAQ
2	Noise	Noise generating from operation of boiler, cooling towers & plant & M/c area to be monitored.	Spot noise level Recording	Monthly through NABL Approved external agency	Carried out at the periphery Of whole plant premises
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/ Hazardous 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 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 4nos. 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 about 36% land area. Total area: 1126078.27 sq.mt Green belt area: 409030.00 sq.mt

