

Project: Change in product mix of organic chemicals

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

EC F. No. J -11011/84/2009-IA II (I) dated 09.04.2009.

No.	Condition	Compliance							
	. Specific Condition								
i	The industrial effluent generation shall not exceed 326.8 m ³ /d. (Total process effluent generation	The average to 37.75 m³/day o	The average total industrial effluent generation for the report period is - 37.75 m³/day only which is well within the limit. Details given in below table:						
	after expansion will be	Wastewater	Oct 19	Nov 1	9 Dec 19	lan 20	Feb 20	Mar 20	Total
	588.6 m ³ /d- ref. point 4 of								
	EC)	m³/Month	729	1119	1241	1262	1484	1047	6882
		m³/day	23.51	37.3	40.03	40.70	51.17	33.77	37.75
									Avg.
		The maximum values during the compliance period confirms that at no							
		time the wastewater generation went beyond the stipulated value.							
		Summery is given below:							
		Wastewater	Stipu	lat V	alues for	the peri	od Oct 1	.9- Mar	
		generation	ed		0	•			
			value	· N	⁄lin.	Max.	Avg.	,	
		Wastewater	326.8	0 2	3.51	51.17	37.7	5	
		generation							
	0	m³/d							
	Out of 326.8 m ³ /d, 24 m ³ /d	Complied.		tia. la	iala COD	-t	(COD	50000 m	ام مینم (ممیر
	of high COD effluent shall	We have been same is being to		_	_				
	be incinerated in the incinerator (of Atul Ltd as	of COD < 2000						nest ledi i	remuent
	stated in point 4 of EC)								
	stated in point 4 of Ec,	All the high CO			_			, ,	
		than incineration			•				
		recovery of the						-	
		water stream this period.	remainii	ng and	tneretore	e no incir	neration '	was aon	e auring
	Remaining 302.8 m ³ /d of	•							
	normal effluent stream	Normal effluent	stream	is furth	er treated	l in Efflue	nt Treatr	nent Plar	nt of Atul
	after mixing with other	Ltd. (Ref. Point							
	effluent like cooling tower								
	$(111.8 \text{ m}^3/\text{d})$ shall be								
	treated in ETP for primary								
	and secondary treatment.								

The treated effluent after confirming to the prescribed standards shall be discharged into estuary of river Par through a 4km long pipe line.

Complied.

The treated effluent after confirming to the prescribed standards is being discharged into estuary of river Par through a 4km long pipe line of Atul Ltd. (Ref. Point 4 of EC). The discharged effluent is meeting all pollution board limits and values of various parameters of treated effluent is given in **Table 1**. (Pl. see pg. no.23)

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

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

Process emissions in the form of HCI shall be scrubbed with water and caustic scrubber and HCI recovered as by product.

ii

Complied.

Process emissions in the form of HCl is being recovered up to the possible extent and reused partially in process. Remaining HCl is scrubbed with water and caustic scrubber.

	The emissions shall be dispersed through stack of	Complied.
	adequate height as per CPCB standards.	The emissions is being dispersed through stack of adequate height as per CPCB standards. Gaseous emissions from process units are monitored regularly every month and same are given in Table 2 (Pl. see pg. no.23). The same is being monitored online and connected with CPCB and GPCB.
	The gaseous emissions	Complied.
	from the DG sets shall be	The process assisting from the DC anto is discovered the process of
	dispersed through stack of adequate height as per	The gaseous emission from the DG sets is dispersed through stack of adequate height as per CPCB standards.
	CPCB standards.	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
		However, DG sets are being used only during emergency.
	Acoustic enclosures shall	Complied.
	be provided to the DG set to control the noise pollution.	DG Sets are having inbuilt acoustic enclosure to control noise pollution.
iii	The company shall	Complied.
	upload the status of compliance of the	The status of compliance of stipulated environmental clearance conditions
	stipulated environmental	including results of monitored data is posted on our web site. And it can be
	clearance conditions, including results of	viewed at: http://www.atulbio.co.in/pdf/ABL-EC-Compliance-Report.pdf
	monitored data on its	
	website and shall update	
	the same periodically. It shall simultaneously be	Complied.
	sent to the Regional office	
	of MOEF, the respective Zonal office of CPCB and	Compliance status report is regularly submitted to the Regional office of MOEF, the respective Zonal office of CPCB and the State Pollution
	the State Pollution Control	Control Board.
	Board.	Committee
	The criteria pollutant levels namely: SPM. RSPM, S02.	Complied.
	NOx (ambient levels as	The critical pollutants parameters namely SPM, RSPM, SO ₂ , NOx are monitored regularly on monthly basis and displayed at board at the
	well as stack emissions) or critical sectorial	company entrance.
	parameters like VOC	Details of stack results, ambient air monitoring and VOC measured in
	indicated for the project shall be monitored and displayed at a convenient location	fugitive emission is given in Table 2, 3 and 4 respectively. (Pl. see pg. no.23,24,26)
	near the main gate of the company in the public domain.	The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards.

Summary of stack results:

No	Parameter	Standard values as	Unit	Values for the period Oct 19- Mar 20		
		per CCA		Min.	Max.	Avg.
1	HCI	20	mg/Nm³	7.4	15.7	10.8
2	Cl ₂	9		7.2	8.2	7.6

Summary of Ambient Air Quality results:

Station	Parameter	Limit	Values for the period Oct 19- Mar 20			
		microgm			1 4	
	5.551	/NM³	Min.	Max.	Avg.	
Behind MPP I Plant	RSPM (PM2.5)	60	47.3	58	53.48	
	PM10	100	83	99	90.50	
	SO ₂	80	10.6	21.7	16.12	
	NOx	80	13.8	30.2	20.88	
Opposite R & D lab	RSPM (PM2.5)	60	38.21	57	50.97	
	PM10	100	76	98	90.50	
	SO ₂	80	10.4	18.2	14.09	
	NOx	80	14.7	21.6	18.32	
66 KV	RSPM (PM2.5)	60	19.6	36.8	28.8	
	PM10	100	38.4	52.3	44.0	
	SO2	80	9.4	11.2	10.3	
	NOx	80	13.2	17.5	15.3	
	Ammonia	850	ND	ND	ND	
	HCI	200	ND	ND	ND	
Opposite Shed D	RSPM (PM2.5)	60	28	38	33	
	PM10	100	35	52	40.3	
	SO2	80	7.9	9.6	8.7	
	NOx	80	8.3	11.2	9.5	
	Ammonia	850	ND	ND	ND	
	HCI	200	28	38	33	
Near West site ETP	RSPM (PM2.5)	60	24	45	34.3	
	PM10	100	39	55	43.6	
	SO2	80	7.7	14.7	9.4	

			1	T _	T	T
		NOx	80	8.4	15.4	10.5
		Ammonia	850	ND	ND	ND
		HCI	200	ND	ND	ND
	Near North ETP	RSPM (PM2.5)	60	27	44	36.6
		PM10	100	40	54	44
		SO2	80	8.3	12.8	10.0
		NOx	80	8.2	14.2	10.8
		Ammonia	850	ND	ND	ND
		HCI	200	ND	ND	ND
	TSDF	RSPM (PM2.5)	60	26	46	37.8
		PM10	100	40	50	44.5
		SO2	80	7.4	10.6	9.0
		NOx	80	7.6	13.6	10.1
		Ammonia	850	ND	ND	ND
		HCI	200	ND	ND	ND
	Main Guest House	RSPM (PM2.5)	60	15	28	21.1
		PM10	100	22	45	37.1
		SO2	80	4.3	8.4	6.1
		NOx	80	5.2	9.4	7.5
		Ammonia	850	ND	ND	ND
		HCI	200	ND	ND	ND
	Wyeth Colony	RSPM (PM2.5)	60	10	20	19.6
	,	PM10	100	24	44	35.3
		SO2	80	4.1	7.6	6.35
		NOx	80	4.6	8.6	6.9
		Ammonia	850	ND	ND	ND
		HCI	200	ND	ND	ND
		RSPM (PM2.5)	60	12	30	24.3

2.5
4
4
D
D
6.5
3.3
5
5
D
D
7.5
9.9
4
3.4
3.4 D

Summary of VOC results:

Location	Parameter	Permissible limit mg/Nm³	Values for the period Oct 19- Mar 20		
			Min.	Max.	Avg.
Ground	Phosgene	0.4	ND	ND	ND
Floor MPP2	Chlorine	3	1.5	2.4	1.9
Ground Floor MPP1	Toluene	375	308	365	338

iv	The company shall adopt cleaner production technology to minimize the quantity of fresh water requirement and process effluent generation.	Complied. Steam condensate is being collected and used in place of raw water. Various wash water streams are being utilized in the further steps of the process. Details of water consumption break up is given below: Water Consumption Break up m³ Period Water consumption in Total Process Cooling Domestic					
		Oct 19	364	365	2237	2966	
		Nov 19	606	513	3052	4171	-
		Dec 19	746	495	2790	4031	-
		Jan 20	811	451	2413	3675	-
		Feb 20	929	555	3041	4525	-
		Mar 20	685	362	3684	4731	-
v	The Company shall obtain		000	302	3004	4/31	
	Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans boundary movement) Rules. 2008 for management of hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF.	2008 and avail storage and dis	able in our	valid curren	t CCA No. AV	•	
vi	The concerned company shall undertake measures for firefighting facilities in case of emergency. The project authorities shall	We have two nos. of fire tenders, fully adequate hydrant system and trained staff, emergency response team(ERT) of trained workers, power supply from two source with emergency backup power provision from D set as well grid and detailed on-site emergency plan. Mock drills are also being carried out at regular interval.					kers, power ion from DG
	strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules. 1989 as amended in October, 1994 and January, 2000	Complied. We are complying with all the requirement of MSIHC rule 1989 as amended in October, 1994 and January, 2000 and having proper storage and handling system, Onsite emergency plan, Licenses, reporting, etc. The company complies with all stipulated norms made in CCA by GPCB in this regard. This has been certified by our Environmental auditors, an authorized agency and nominated by GPCB; through Environmental audit every year. Latest compliance report by N. G. Patel Polytechnic, Surat for					

		year 18-19 was submitted to your good office vide our letter dated July 09 , 2019
	All Transportation of Hazardous Chemicals shall be as per the MVA. 1989.	Complied. Transportation of Hazardous chemicals are being done as per the MVA rule 1989.
vii	The company shall undertake following 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 . HCl and Solvent recovered are being used as raw material in further steps.
	Use of automated filling to minimize spillage.	Complied . Filling is done on weighing balance manually but in controlled manner to minimize spillage.
	Use of "Close Feed' system into batch reactors.	Complied . All reactors are in close loop and connected with condensers having cooling tower water, Chilled water or Brine water supply for control of fugitive emission.
	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.
	Use of high pressure hoses for equipment clearing to reduce wastewater generation.	Complied . Many equipment like reactors, spray dryers, condenser wherever necessary are being cleaned with high pressure sparger / jet to reduce waste water generation.
viii	Fugitive emissions in the work zone environment, product, raw material storage area shall be regularly monitored.	Complied . Fugitive emissions in the work zone environment and raw material storage area is being regularly monitored by GPCB approved third party. The emission is always being confirmed to the limits.
	The emissions shall conform to the limits imposed by SPCB.	Complied. The emissions confirms the limits. 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. iii.
		The detailed results are given in Table 2 . (Pl. see pg. no.23)
ix	The project authorities shall provide the chilled brine	Complied . Chilled brine solution is provided in secondary condenser for condensation of the VOCs.

	1 11	
	solution in secondary	
	condenser for	
	condensation of the VOCs.	0 11 10 1 1 10 1
	The project authority shall	Complied. Solvent recovery is >95%.
	ensure that the solvent	
	recovery shall not be less	
	than 95%.	
	The VOC monitoring shall	Complied . We are monitoring VOC as well as other chemicals in work area
	be carried in the solvent	j '
	storage area and data	monitoring done on regular bases and the results are given in Table 4 (Pl.
	submitted to the Ministry.	see pg. no. 26).
X	Solvent management shall	
	be as follows :	
	Reactor shall be connected	Complied . Reactors are connected to chilled brine condenser system
	to chilled brine condenser	
	system	
	Reactor and solvent	Complied. Reactor and solvent handling pump do have mechanical
	handling pump shall have	seals to prevent leakages.
	mechanical seals to	
	prevent leakages.	
	The condensers shall be	Complied. The condensers are provided with sufficient HTA and
	provided with sufficient	residence time.
	HTA and residence time so	
	as to achieve more than	
	95% recovery.	
	Solvents shall be stored in a	Complied. Solvents are stored in tank farms in separate tanks with proper
	separate space specified	earthing, flame arresters, lightening arresters, fencing, Fire hydrant
	with all safety measures.	system, Fir e extinguishers, flame proof equipment, etc. safety measures.
	Proper earthing shall be	
	provided in all the	the same is being done and recorded.
	electrical equipment	<u> </u>
	wherever solvent handling	
	is done.	
	Entire plant shall be flame	Complied. Plants are equipped with Jumpers, flame proof electrical fittings
	proof. The solvent storage	and proper earthing as per the Hazardous area classification of PESO.
	tanks shall be provided with	
	breather valve to prevent	
	losses.	
xi	Hazardous chemicals shall	Complied. Hazardous chemicals are being stored in tanks, drums and
- "	be stored in tanks in tank	carboys considering the storage quantity and chemical stored.
	farms, drums, carboys, etc.	
	An area of 33% green belt	Complied. Company is having green belt in 33% area of plant and doing
	and selection of plant	, , , , , , , , , , , , , , , , , , , ,
	species shall be as per the	
	guideline of CPCB.	
xii	The Company shall harvest	Complied. We have installed 120 KL underground tank and 2 nos 30 Kl
^"	surface as well as	overhead tank to collect rain water from roof tops.
	rainwater from the	overhead tank to concertain water nom root tops.
	runiwater mom the	

_					
xiii	rooftops of the buildings and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water. Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act.	Complied. Sr. No. 1	Details given in below Month of Examination Oct 19- Mar 20	table: Total No. of Employees 38	
B. Ge	neral Conditions				
i	The project authorities shall strictly adhere to the stipulations made by the GPCB.	the stipula authorized every year Latest com	tion. This has been ce I agency and nominate npliance report by N. (to the compliances and has not excertified by our Environmental auditored by GPCB; through Environmenta 6. Patel Polytechnic, Surat for year the vide later dated July, 09, 2019	ors, an I audit
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 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.	Last chang which refe Further ex	ge in product mix of or red EC has been sough pansion will be carried be deviation or alteration	organic chemicals was done in 20	nly.
iii	At no time, the emissions shall exceed the prescribed limits. 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	At no time period.	agencies. e, the emissions exce of stack emission is gi	s being done by GPCB approved, eded the prescribed limits during ven in special condition iii. ed during the compliance period.	

	desired efficiency has been				
	desired efficiency has been achieved.				
iv	The Gaseous emission (NOx, HCl, SO2 and SPM) and Particulate matter along with RSPM levels from various process units shall confirm to the standards prescribed by the concerned authorities from time to time.	Complied . The gaseous emissions (HCI) from process units confirms to the standards prescribed by GPCB through CCA Gaseous emission is regularly monitored. Results given in Table 2 (Pl. see pg. no. 23).			
	At no time, the emission levels shall go beyond the stipulated standards.	Complied. The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards. Summary of stack emission is given in special condition iii.			
	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, Nox and SPM shall be carried.	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.			
V	The Location of ambient air quality monitoring stations shall be decided in consultation with sated 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.	There are two locations have 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 fo ambient air monitoring. The same had been shown to authority like SPCB CPCB & MoEF during their visit to our factory. List of our ambient air monitoring station is given below: No. Location			
vi	Dedicated Scrubbers and stacks of appropriate height as per the central pollution control board guideline shall be provided to control the emission from various vents. The scrubber water shall be	Dedicated Scrubbers and stacks of appropriate height as per the central pollution control board guideline have been provided to control the emission from various vents. Details of stack results along with its height data is given in Table 2 (Pl. see pg. no. 23)			
	sent to ETP for further	Complied.			

	treatment or sell to actual	Thas	crubber water is being se	ant to ETP for	further	troatmen	<u>.</u>	
	end users.	lile 5	Crubber Water is being s	ent to ETE TOI	Turmer	treatmen	≀ て.	
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. The ambient noise level shall confirm to the standards prescribed	In buse source stand	Complied. In built Acoustic enclosure, silencer and insulation are provided on all source of noise generation to keep over all noise level within the stipulated standards like DG set, etc. Complied. The ambient noise level confirm to the standard prescribed under EPA.					
	Environment(Protection) Act-1986 Rules,1989 viz 75 dBA (day time) and 70 dBA (night time)	The n	The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards. Noise level monitoring data (Day Time)					
	!	No.	Location	Limits, dBA	19- M		Deriou Oct	
	!			75	Min.	Max.	Avg.	
		1	Near Main guest house	75	55.7	61.2	57.4	
	ļ ,	2	Near TSDF	75	61.2	64.2	62.6	
	!	3	At Wyeth Colony	75	49.7	57.3	53.6	
	!	4	Gram Panchayat Hall	75	60.8	63.5	62.7	
		5	Near Main Office North site	75	59.2	64.5	62.18	
	!	6	ETP North site	75	63.2	68.5	64.4	
	!	7	Opposite shed D	75	64.7	67.3	66.0	
		8	ETP West site	75	62.8	68.5	64.5	
		9	Water tank Haria road	75	53.5	62.6	57.1	
		10	Near 66KVA substation	75	62.5	68.6	65.0	

		Noise	e level monitoring data (N	Night Time)				
		Sr. No	Location	Permissible Limits, dBA		s for the 9- Mar 2	•	
		•		70	Min.	Max.	Avg.	
		1	Near Main guest house	70	50.2	52.2	51.2	•
		2	Near TSDF	70	43.7	58.7	55.0	•
		3	At Wyeth Colony	70	43.7	51.1	47.0	
		4	Gram Panchayat Hall	70	53.4	58.4	56.1	
		5	Near Main Office North site	70	53.2	57.3	55.5	
		6	ETP North site	70	53.2	58.6	54.7	
		7	Opposite shed D	70	54.7	62.7	59.7	
		8	ETP West site	70	50.3	60.8	57.6	
		9	Water tank Haria road	70	50.3	55.8	53.1	
		10	Near 66KVA substation	70	53.8	63.2	57.1	
		Detai	ils are given in Table 5 a	nd 6 (Pl. see p	g. no.27	').	•	1
∨iii	Training shall be imparted to all employees on safety and health aspects of chemicals handling.	empl	pany is imparting trainir oyees at regular interva g communicated through	ls. Safety prec	autions	and ha	zards are c	also
	Pre-employment and routine periodical medical examination for all employees shall be undertaken on regular basis.	Complied. Company is doing all the new employment with pre medical checkup and routine medical checkup for on roll employee has been done on regular frequency.						
ix	Usage of PPE's by employee/ workers shall be ensured.	empl	oany have PPE policy oyee.	in place and	strictly	follow f	or all level	l of
X	The project proponent shall also comply with all the environmental protection measures and safeguards proposed in project report submitted to the ministry.	and s	olied. Dany has complied with safeguards proposed in etheir in.					

All t	he re	ecomme	endo	ation
made	in	respe	ect	of
enviro	nment	al mana	agen	nent
and	risk	. m	itigo	ition
meası	ires r	elating	to	the
projec		shall		be
impler	nented			
TI				4 - 1

Since the project did not require EIA or public hearing, no such recommendations mentioned. However, we are committed for healthy work environment and safe work practices.

xi The company will undertake all relevant measures for improving the socio economic condition for the surrounding area, CSR activities will be undertaken by involving local villages and administration.

Complied.

Company is doing CSR activities through its Atul Rural Development Fund trust and is specially designed for up gradation of surrounding area and well fare of nearby localities. List of **CSR activities** carried out during **Apr 19- Mar 20** is given below table:

Sr. No	Activity	Implementing agency	Budget (lakhs)	Spent (lakhs)
1	Enhancement of education practices in Kalyani Shala	AFT Atul Kelavani Mandal	36.80	36.80
2	Support to tribal children in Atul Vidyamandir	AFT Atul Vidyalaya Trust	6.00	6.00
3	Improvement of teaching methodology in primaryschoo Is Adhyapika Project	AFT ARDF	48.00	48.00
4	Enhancement of rural education	AFT ARDF	10.97	10.97
5	Promotion of educational facilities in an ashram shala	AFT Shree Vallabh Seva Kendra	3.00	3.00
6	Conservation of manuscripts	AFT L D Bhartiya Sanskruti Vidyamandir	40.00	40.00
7	Contribution towards publication of books On Indian culture ecology	AFT Prakrit Bharati Academy	5.00	5.00

	philosophy			
8	Support to	AFT	5.00	5.00
	develop a			
	school in a			
	tribal area			
9	Conduct	AFT Vikram	3.00	3.00
	science	A Sarabhai		
	workshops	Community		
	for rural	Science		
	teachers	Centre		
10	upport needy	AFT	2.70	2.70
	children with			
	educational			
	kits			
11	Capacity	AFT	0.94	0.94
	building of			
	teachers			
	through			
	training			
12	Introduction	AFT	4.50	4.50
	of digital	Swadhyay		
	education at	Mandal		
	Sanskrit			
	Mahavidyala			
	ya			
13	Support	AFT I	2.00	2.00
	children with	Osmosis Play		
	special needs	Centre an		
	'	Educational		
		Games		
		Library		
14	Empowerme	AFT ARDF	13.48	13.48
	nt of women	,		
	through			
	various			
	vocational			
	training			
	courses			
15	Skill training	Atul Ltd	179.25	179.25
	to youth as	, ttdi Etd	1,0.20	1, 3.23
	apprentices			
16	Skill	AFT ARDF	36.20	36.20
10	development	ALLIANDE	50.20	30.20
	-			
	,			
	through			
	vocational			
17	training	AFT I II.I.	1.40	1.40
17	Capacity	AFT Under	1.40	1.40
	building of	The Mango		

	tribal farmers in bee keeping	Tree Society		
18	Empowerme nt of tribal families by creating home stay facilities	AFT	85.00	85.00
19	Create livelihood opportunities among tribal families by providing cows	AFT BAIF Institute for Sustainable Livelihoods and Development	66.37	66.37
20	Develop micro entrepreneur s to provide sustainable livelihood	AFT	37.50	37.50
21	Support tribal farmers by providing seeds	AFT ARDF	1.14	1.14
22	Improvement of hygiene through construction of toilets	AFT ARDF	32.00	32.00
23	Enhancement of rural health through health camps	AFT ARDF	9.79	9.79
24	Up gradation of medical equipment in a hospital	AFT Gyan Mandal Laxmipura Group Prerit Arogya Mandal	15.00	15.00
25	Provision of blood units to the needy and deserted patients	AFT Seva Yagna Samiti	2.40	2.40
26	Promotion of sports among	Atul Ltd	11.00	11.00

	rural youth			
27	Contribution for establishing CT scan facility in a hospital	AFT ARDF Kasturba Vaidyakiya Rahat Mandal	10.00	10.00
28	Promotion of health and fitness through marathon	AFT ARDF	9.09	9.09
29	Promotion of sports in rural schools by providing sport kits	AFT	6.15	6.15
30	Provision of medical assistance to the needy people	AFT ARDF	2.79	2.79
31	Upliftment of quality of life of salt pan workers	AFT ARDF	2.70	2.70
32	Provision of blood units to thalassemia patients	AFT Valsad Raktdan Kendra	7.00	7.00
33	Contribution for advance treatment of cancer patients	AFT Charutar Arogya Mandal	5.00	5.00
34	Contribution for community marriage of underprivileg ed couples	AFT Shree Chandramaul es hwar Mahadevji Sansthapan Trust Shree Valsad Taluka Patel Samaj Pragati Mandal	2.50	2.50
35	Support to children with	AFT Mathru Foundation	1.00	1.00

	1	1	1	1
	special needs			
36	Provide	AFTI	31.25	31.25
	financial	Kasturba		
	support to	Vaidyakiya		
	critically ill	Rahat		
	patients	Mandal		
37	Support to	AFT	2.50	2.50
	families of	7 (1 1	2.00	2.50
	Indian solders			
	Provision of	A CT L A D D C	3.00	3.00
		AFT ARDF	3.00	3.00
38	free farm kits			
	and fertilisers			
	at			
	subsidised			
	rates to			
	farmers			
39	Support to	AFT ARDF	50.00	50.00
	disaster relief			
	for COVID-19			
	pandemic			
40	Support to	AFT	19.44	19.44
	families of	7 (1 1	10.11	13.11
	special			
	children			
41		1	1.50	1.50
41		AFT World	1.50	1.50
	infrastructure	Renewal		
	support for	Spiritual		
	institution	Trust		
	building			
42	Renovation of	AFT ARDF	51.00	51.00
	anganwadi			
	infrastructure			
	(model			
	anganwadi			
	project)			
43	Provision of	AFT Atul	5.00	5.00
	infrastructure	Parnadi		
	support to a	Muktidham		
	crematorium	Trust		
44	Provision of	AFT	4.00	4.00
	infrastructure			
	support to			
	school			
45	Support to	AFT ARDF	0.48	0.48
	small		0.40	0.40
	development			
	activities in			
	nearby			
	villages			

		46	Afforestation	Atul ARD	Ltd	5.00	5.00	
		47	Establishmen t of solid waste management system in Atul village		ARDF	30.00	30.00	
		48	Conservation of coastal area through cleanliness drive	AFT		1.00	1.00	
		49	Plantation of medicinal plants at Kalyani Shala	AFT		5.51	5.51	
			Total	1		914.35	914.35	_
		listed	summary of expens I below: Iget for Financial ye in lakhs)		Actual Exp Apr 19- Mo lakhs)	ense durii	ng year	ree years is
		914	.35		914.35			
xii	The company shall undertake eco developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Com	plied as mentioned	in xi a	oove.			
xiii	A Separate environmental management cell equipped with full flagged laboratory facility shall be set up to carry out the environmental management and monitoring function.	Com _l Envir facilit	Complied. Company has tie up with its parent company Atul Limited where separate Environmental Management Cell equipped with full-fledged laboratory facilities to carry out the environment management and monitoring functions.					

xiv	The project authorities shall	Complied.				
	provide adequate funds both recurring and non- recurring to implement the	EMP measures are implemented by 2010 and many things have alread been at place.				
	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	Non recurring cost: Recurring cost: A separate budge requirement stipu pollution control speriod is given in l	MoEF apart fron	n upkeep of		
	provided shall not be diverted for any other	Expenditure for months	Particular	Expenses Rs. (in lacs)		
	purposes.		Electricity	123.65		
		Oct 19- Mar 20	Waste disposal	38.89		
		Including,	Salary	180.51		
		recurring maintenance, modifications and monitoring.	Chemicals (Raw Material), Maintenance, modifications & Monitoring	16.95		
			Total	360.00		
	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.	Complied. Latest submission to the Panchayat, Zila parishad, District Industrial Centre was distributed on 11.11.2016. Copy of the same was submitted to Ministry vide our letter Atul/SHE/MoEF/Visit/3 dated 4.4.17.				
	The clearance letter shall also be put on the web site of the company by the proponent.	•	vailable at com o.co.in/pdf/ABL-EC-Complid	pany's web ance-Report.pdf	osite at	
xvi	The implementation of the project vis-à-vis environmental action plan shall be monitored by Ministry's Regional office at Bhopal / SPCB / CPCB.	Complied. SPCB and MoEF is monitoring through their regular visits.				
xvii	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are		public through advertiseme Zila parishad, District Indust	•	•	

1		
	available with the SPCB/Committee and may also be seen at website of the Ministry of Environment and Forest at	
	http://www.envfor.ni.in.	
	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	Advertisement was published and copy of the same was submitted to Ministry vide our letter Atul/SHE/MoEF/Visit/3 dated 4.4.17.
	Bhopal.	
xviii	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closures and final approval of the project by the concerned authorities and the date of	Completion date: March 2010 Final approval: We have obtained NOC and CCA from GPCB. Company has funded the project internally and hence not submitted the
	start of the project.	NI a La L
9	The Ministry may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory.	Noted.
10	The Ministry reserves the	Noted and will be complied.
	right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	
11	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.	
12	The above conditions will be	Noted.
	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 Transboundry movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

Table 1: Quality of treated effluent

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

Table 2 : Stack Results

Stack	Stack Stack Parameter Permissible Results in Milligram per NM ³								
attached to	Height m		limit	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20
MPP1	5.00	HCI	20	15.7	13.92	7.71	7.81	12.3	7.4
		Cl ₂	9	7.2	8.2	7.5	7.6	7.8	7.3

Table 3 : Ambient Air Monitoring details

Station	Parameter	Limit microgm/NM³		Nov 19	Dec 19	Jan 20	Feb 20	Mar 20
Behind MPP I Plant	RSPM (PM2.5)	60	52	58	56	58	49.6	47.3
	PM10	100	90	85	98	99	88	83
	SO ₂	80	18.2	13.7	10.6	21.7	19.9	12.6
	NOx	80	16.7	19.6	13.8	30.2	26.8	18.2
Opposite R & D lab	RSPM (PM2.5)	60	57	56	48	52	54.6	38.21
	PM10	100	98	93	90	90	96	76
	SO ₂	80	14.2	10.4	14.8	18.2	15.9	11.03
	NOx	80	20.6	15.3	16.9	20.8	21.6	14.7
	PM 2.5	60	21.3	19.6	32.2	29.6	33.7	36.8
	PM10	100	43.5	38.4	45.3	40.4	44.2	52.3
	SO2	80	9.8	10.4	9.4	10.4	11.2	10.8
66 KV	NOx	80	16.4	17.5	16.2	13.5	13.2	15.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCI	200	ND	85 98 99 88 13.7 10.6 21.7 19.9 19.6 13.8 30.2 26.8 56 48 52 54.6 93 90 96 10.4 14.8 18.2 15.9 15.3 16.9 20.8 21.6 19.6 32.2 29.6 33.7 38.4 45.3 40.4 44.2 10.4 9.4 10.4 11.2 17.5 16.2 13.5 13.2	ND	ND		
	PM 2.5	60	21.3	28	32	38	32	36
	PM10	100	43.5	35	39	35	39	42
Opposite	SO2	80	9.8	7.9	9.6	8.4	9.6	8.2
Shed D	NOx	80	16.4	8.3	9.3	9.2	9.3	10.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
	PM 2.5	60	24	24	27	45	36	38
	PM10	100	39	39	42	39	42	45
Nicos NA/colorio ETD	SO2	80	8.7	8.7	8.4	14.7	8.4	8.7
Near West site ETP	NOx	80	9.4	9.4	8.4	15.4	8.4	11.4
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
No are North CTD	PM 2.5	60	27	27	29	40	40	44
Near North ETP	PM10	100	40	40	44	40	42	44

	SO2	80	8.3	8.3	9.6	12.8	9.6	10.8
	NOx	80	8.6	8.6	8.2	14.2	8.2	12.8
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
	PM 2.5	60	26	26	28	42	43	46
	PM10	100	46	46	46	42	40	43
TCDF	SO2	80	7.4	7.4	8.2	10.6	8.2	9.8
TSDF	NOx	80	8.1	8.1	7.6	11.5	7.6	13.6
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
	PM 2.5	60	15	15	15	28	19	24
	PM10	100	25	25	22	45	42	44
	SO2	80	4.5	4.5	4.3	8.4	7.8	6.3
Main Guest House	NOx	80	5.2	5.2	6.2	9.4	8.2	7.8
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
	PM 2.5	60	10	10	17	25	20	22
	PM10	100	26	26	24	42	39	37
	SO2	80	4.1	4.1	5.4	7.2	6.7	7.6
Wyeth Colony	NOx	80	4.6	4.6	5.3	8.2	7.4	8.6
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
	PM 2.5	60	12	12	22	30	28	29
	PM10	100	29	29	32	49	48	45
Gram panchayat	SO2	80	6.2	6.2	6.3	8.6	7.8	8.2
hall	NOx	80	5.7	5.7	7.2	9.4	8.2	7.3
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
	PM 2.5	60	19	19	24	35	30	26

	PM10	100	35	35	38	52	48	49
	SO2	80	7.2	7.2	6.8	9.2	8.4	7.3
Main office, North	NOx	80	7.3	7.3	8.1	10.6	9.6	8.3
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
	PM 2.5	60	18.3	18.3	17.8	28.2	37.8	30.8
	PM10	100	24.4	24.4	32.7	42.2	42.7	45.2
l lavia water taul	SO2	80	9.5	9.5	8.8	11.2	8.8	8.8
Haria water tank	NOx	80	15.8	15.8	14.5	14.3	11.5	10.2
	Ammonia	850	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND

Table 4: VOC results

Location Parameter Permissible Results of VOCs in Milligram per NM3									
		limit	Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	
Ground Floor	Phosgene	0.4	ND	ND	ND	ND	ND	ND	
MPP2	Chlorine	3.0	2.2	1.8	2.4	1.8	1.5	1.7	
Ground Floor MPP1	Toluene	375	308	365	342	310	365	335	

Table 5 : Noise level monitoring data (Day Time)

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

Table 6 : Noise level monitoring data (Night Time)

Sr. No.	Location	Noise Le	Noise Level, Dba							
		Oct 19	Nov 19	Dec 19	Jan 20	Feb 20	Mar 20	70		
1	Near Main guest house	50.2	52.2	50.6	50.6	51.6	52.2	70		
2	Near TSDF	55.7	58.7	54.2	54.2	53.2	54.4	70		
3	At Wyeth Colony	44.7	43.7	46.1	46.1	51.1	50.3	70		
4	Gram Panchayat Hall	57.3	54.8	58.4	58.4	53.4	54.3	70		

5	Near Main Office North site	57.3	54.8	54.2	54.2	56.8	56.2	70
6	ETP North site	58.6	55.3	53.6	53.6	53.2	54.4	70
7	Opposite shed D	60.2	57.3	62.7	60.7	59.2	58.3	70
8	ETP West site	57.8	59.8	60.8	57.8	54.7	55.1	70
9	Water tank Haria road	52.3	55.8	50.3	52.3	54.7	53.2	70
10	Near 66KVA substation	57.2	53.8	63.2	57.2	56.4	55.1	70