

### 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: April 2023 – September 2023

Sr No.	Condition	Comp	oliance					
1	The Company shall strictly adhere to all the provisions of CRZ notification of 1991 and subsequent amendments.	Noted and compliance ensured.						
2	The company shall strictly adhere to the conditions stipulated by the Gujarat Pollution Control Board in their Consent order.	acts. same	blied. company complies Stipulation made in e is certified by the ors appointed by GF	CCA by G e external	PCB are l	peing comp	olied and the	
3	The company shall discharge the treated effluent meeting the norms prescribed by GPCB	The o GPCE in <b>Ta</b> l The n time t	mplied.a discharged effluent is meeting with standards stipulated by CB and values of various parameters of treated effluent is givenFable1a maximum values during the report period confirms that at no e the emission went beyond the stipulated standards.mmary is given below:					
		Sr No	Parameter	GPCB norms		for the peri )23 – Septe	iod ember 2023	
					Min.	Max.	Avg.	
		1	рН	5.5 to 9.0	6.9	7.2	7.0	
		2	Temperature °C	40	30.4	31.6	31.0	
		3	Colour in (pt. co. scale) units		30.0	45.0	36.7	
		4	Suspended solids mg/l	100	41.0	61.0	51.0	
		5	Oil and Grease mg/l	10	2.8	5.4	4.1	
		6	Phenolic Compounds mg/l	5	0.6	0.9	0.8	
		7	Cyanides mg/l	0.2	ND	ND	ND	
		8	Fluorides mg/l	2	0.7	1.2	0.9	
		9	Sulphides mg/l	2	0.4	0.8	0.5	

	10	Ammonical	50	6.0	9.4	7.6
		Nitrogen mg/l				
	11	Arsenic mg/l	0.2	ND	ND	ND
	12	Total	2	0.1	0.1	0.1
		Chromium mg/l				
	13	Hexavelent	1	ND	ND	ND
		Chromium mg/l				
	14	Copper mg/l	3	0.2	0.4	0.3
	15	Lead mg/l	2	ND	ND	ND
	16	Mercury mg/l	0.01	ND	ND	ND
	17	Nickel mg/l	5	0.2	0.3	0.2
	18	Zinc mg/l	15	0.5	0.9	0.7
	19	Cadmium mg/l	2	ND	ND	ND
	20	Phosphate mg/l	5	1.6	2.4	2.0
	21	BOD (3 days at	100	47.2	74.0	56.1
		27°C) mg/l				
	22	COD mg/l	250	206.0	232.0	218.7
	23	Insecticide/Pest	Absent	ND	ND	ND
		icide				
	24	Sodium	26	4.5	7.4	5.4
		Absorption				
		Ratio				
	25	Manganese	2	0.1	0.2	0.1
		mg/l				
	26	Tin mg/l	0.1	ND	ND	ND
	27	Bio Assay Test	90%	100%	100%	100%
			survival	survival	survival	survival
			of fish	of fish		of fish
			after 96		after 96	
			hrs. in 100%	hrs. in 100%	hrs. in 100%	hrs. in 100%
			effluent	effluent	effluent	effluent
			Cinacin	cinacit	Cinacin	cinacit
	The t	reated effluent qua	lity at the E	ETP discha	rge point is	s regularly
		ı monitored by th	•			
	GPCE					-
		river water quality				
	being			0		
		ratories Pvt. Ltd-				
		hologies Pvt. Ltd, k				
		dited have also dor 3 also monitor the t		•	• •	
		: by GPCB is attache				

	The company shall keep records of the quality of effluents being discharge during the tides as per the recommendations of N.I.O.	<b>Complied</b> . We are keeping the records of quality effluents being discharged during the tides as per the recommendations of N.I.O.
4	The company shall submit the quarterly progress report of compliance of conditions.	<b>Complied</b> . 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.	<b>Complied</b> . 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 Sitaram Naranji Patel Institute of Technology and Research Centre, Surat for year 2022-23 is submitted to GPCB office vide dated June 27, 2023.
8	The company shall obtain the necessary permissions from different Government department/agencies under different laws/Acts.	<b>Complied</b> . 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

eter	Results								
	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	Norms Mg/l		
	7.15	6.98	6.92	7.12	6.93	6.89	5.5 to 9.0		
rature °C	30.6	31.2	31.6	31.4	30.4	30.8	40 °C		
(pt. co. scale)in	30	35	40	30	45	40			
ded solids mg/l	42	57	51	41	61	54	100		
Grease mg/l	5.4	4.6	3.9	2.8	3.4	4.2	10		
c Compounds	0.72	0.89	0.73	0.62	0.82	0.76	5		
es mg/l	ND	ND	ND	ND	ND	ND	0.2		
es mg/l	0.75	0.94	1.02	1.24	0.99	0.74	2		
es mg/l	0.6	0.42	0.36	0.4	0.8	0.4	2		
nical Nitrogen mg/l	9.4	5.97	8.14	7.23	6.85	8.24	50		
mg/l	ND	ND	ND	ND	ND	ND	0.2		
hromium mg/l	0.062	0.089	0.093	0.081	0.096	0.13	2		
elent Chromium	ND	ND	ND	ND	ND	ND	1		
mg/l	0.17	0.22	0.25	0.35	0.41	0.32	3		
g/l	ND	ND	ND	ND	ND	ND	2		
/ mg/l	ND	ND	ND	ND	ND	ND	0.01		
ng/l	0.17	0.2	0.19	0.26	0.19	0.21	5		
g/l	0.56	0.67	0.58	0.84	0.91	0.54	15		
ım mg/l	ND	ND	ND	ND	ND	ND	2		
ate mg/l	1.62	1.94	2.06	1.85	2.18	2.41	5		
days at 27°C)	48	74	61	58.3	47.17	48.13	100		
g/l	206	226	224	212	232	212	250		
ide/Pesticide	Absent	Absent	Absent	Absent	Absent	Absent	Absent		
Absorption Ratio	4.45	5.24	7.39	5.01	4.6	5.8	26		
nese mg/l	0.082	0.093	0.11	0.16	0.24	0.13	2		
Ί	ND	ND	ND	ND	ND	ND	0.1		
ay Test	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	90% survival of fish after 96 hrs. in 100% effluent						
		after 96 hrs. in 100% effluent	after 96 after 96 hrs. in hrs. in 100% 100% effluent effluent	after 96after 96after 96hrs. inhrs. inhrs. in100%100%100%	after 96after 96after 96after 96hrs. inhrs. inhrs. inhrs. in100%100%100%100%effluenteffluenteffluent	after 96after 96after 96after 96after 96hrs. inhrs. inhrs. inhrs. inhrs. in100%100%100%100%100%effluenteffluenteffluenteffluent	after 96after 96after 96after 96after 96after 9696 hrs. inhrs. inhrs. inhrs. inhrs. inhrs. inhrs. in100%100%100%100%100%100%effluenteffluenteffluenteffluenteffluenteffluent		

Annexure 1: GPCB results for t	reated effluent water		
ANALYS	IS REPORT FOR Gujarat P	Pollution Control Board	जाशीधन क्रम
A state of the sta	TE WATER SAMPLE	Vapi	AL SHORE HETHER AND
8 B		C5/124, GIDC Vapi,	
Sample ID:396740	- Analysis Completion:18/10/2023	Near Hotel Pritam,	
		Vapi - 396 195	•भारत•
Dyes and Dye	Intermediates / LAB Inward : 62285	Tele:(0260) 2432089	
			TC10419
Accreditation Standards & N	ABL Certificate Details : TC10419 / / Issue: 17/03/2022	! / Validity: 16/03/2024	72
	TEST REPORT		
Test Report No. : 62285		C	Date: 18/10/2023
1. Name of the Customer 2. Address	: Atul Limited - 23158 : 5, 6, 29, 30, 33, 34, 35, 37, 38, 80, 81, 84, 85, 91 Dist. Valsad, Pin: 396020.,-	, etc., AT & P.O.ATUL,	
3. Nature of Sample	: REP-Representative/Grab, (Insp Type : COM	(-On Complaint)	
4. Sample Collected By	: C.C Patel,SO	· · · · · · · · · · · · · · · · · · ·	
5. Quantity of Sample Received	: 5 lit		
6. Code No. of the Sample	: 396740		
7. Date & Time of Collection & Inwarding	: 22/09/2023 , (1135 to 1135) & 25/09/2023		
8. Date of Start & Completion of Analysis	: 25/09/2023 & 18/10/2023		
9. Sampling Point	: ## Final Outlet of the ETP ~-		
10. Flow Details (Remarks)	: Yes		
11. Mode of Disposal	: Into River Par through Pipeline		
12. Ultimate Receiving Body	: Estuary zone of river par		
13. Temperature on Collection	: 33 & 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 :23774.0	000 , Dom :939.000	
16. Parameter	: 11 ,Cap No & Weight :	5	

Sr	Parameter			Range of Testing	Result
1	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2017	1-14 pH value As or	7.07
2	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 – 10000 mg/L	20
3	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	6.72
4	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-2	5.0- 50000 mg/l	238
5	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.34
6	B.O.D (3 Days 27oC)	mg/l	3 - Day BOD test. (IS 3025 (Part 44) 1993 Reaffirme	05–50000 mg/l	43

Laboratory Remarks : Freeze By:279-R.O\_279 Dt.: 18/10/2023

Supretue

R. N. Patel, SSO

#### Note :

1. The results refer only to the tested samples and applicable parameters. Endorsement of products is neither inferred nor implied.

- 2. Samples will be destroyed after 10 days from the date of issue of test report unless otherwise specified.
- 3. 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.
- 4. The Board is not responsible for the authenticity for the samples not collected by the Board's officials.
- 5. 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- 23nd Edition by APHA.
- 8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

20/10/2023 08:43:42



# 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

### Dyes and Dye- Intermediates / LAB Inward : 62285

Sample ID:396740 - Analysis Completion:18/10/2023

#### TEST REPORT

Test Report No. : 62285	Date: 18/10/2023
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: 396020.,-
3. Nature of Sample	: REP-Representative/Grab, (Insp Type : COM-On Complaint)
4. Sample Collected By	: C.C Patel,SO
5. Quantity of Sample Received	: 5 lit
6. Code No. of the Sample	: 396740
7. Date & Time of Collection & Inwarding	: 22/09/2023, (1135 to 1135) & 25/09/2023
8. Date of Start & Completion of Analysis	: 25/09/2023 & 18/10/2023
9. Sampling Point	: ## Final Outlet of the ETP ~-
10. Flow Details (Remarks)	: Yes
11. Mode of Disposal	: Into River Par through Pipeline
12. Ultimate Receiving Body	: Estuary zone of river par
13. Temperature on Collection	: 33 & pH Range on pH Strip :7-8 on pH strip
14. Carboys Nos for	: Barcode & Color & Appearance :Brownish
	: Ind :27956.000 , Dom :938.000 & Ind :23774.000 , Dom :939.000
15. Water Consumption & W.W.G (KLPD)	: 11 ,Cap No & Weight :

Sr	Parameter Unit		Test Method	Range of Testing	Result
1	Temperature	Centigrade	IS: 3025 (Part – 9) – 1984(Reaffirmed 2006)	Ambient oC - 60 oC	33
2	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 23rd edi. 2017	2 - to 99 Hazen & 1-50	70
3	Fixed Dissolved Solids	mg/l	Gravimetric method. (2540 E APHA Standard Method	2 – 200000 mg/L	5600
4	Oil & Grease	mg/l	Liquid – Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	0.8
5	Sulphide	mg/l	APHA (23rd Edi.)4500-s2-Fiodometric Method	1-500.0 mg/l	1.1

Laboratory Remarks : Freeze By:279-R.O\_279 Dt.: 18/10/2023

Sapretu

R. N. Patel, SSO

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- 6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
- 7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water- 23nd Edition by APHA.
- 8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.



### Atul Ltd

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: April 2023 – September 2023

Sr No	Condition	Comp	oliance							
	oecific Conditions :									
i	The gaseous emissions (SO <sub>2</sub> , NOx, and HCl) and particulate matters from various process units should confirm to the	variou CCA. <b>Sumr</b>	gaseous emi us process ur Details are g <b>nary of Proce</b>	nits confirms iven in belov ss Stack res	s to the sto w Table: <b>ults:</b>	andards p	orescribed	l by GPCB		
	standards prescribed by the concerned	Sr No.	Parameter	Standard values as			alues for the period pril 2023 – September 2023			
	authorities from time to time.			per CCA		Min.	Max.	Avg.		
		1	SO <sub>2</sub>	40	mg/Nm <sup>3</sup>	6.8	28.6	19.38		
		2	SO <sub>2</sub> (kg/T)	2	kg/T	0.32	1.8	0.87		
		3	NOx	25	mg/Nm <sup>3</sup>	10.4	24.8	19.05		
		4	HCI	20	mg/Nm <sup>3</sup>	1.95	16.3	6.71		
		5	PM	150	mg/Nm <sup>3</sup>	26.8	57.4	43.95		
		6	PM with Pesticide compound	20	mg/Nm <sup>3</sup>	5.73	16.9	10.70		
		Sumr Sr No.	nary of flue g Parameter	values a		Values for the period April 2023 – September 2023				
				per CCA		Min.	Max	. Avg.		
		1	PM	100	mg/Nm	<sup>3</sup> 41.7	61.4		3	
		2	PM (New Boiler 50 TPH)	50	mg/Nm	3 32.4	44.7	38.13	3	
		3	SO <sub>2</sub>	600	mg/Nm	<sup>3</sup> 278	324	300.6	63	
		4	NOx	600	mg/Nm		338	300.3	31	
		5	NOx (New Boiler)		mg/Nm	283	296	290.2	2	
	At no time, the omission		ls of stack res	sults for the	compliance	e period i	s given in	Table 1.		
	At no time, the emission levels should go beyond the stipulated standards.	accre presc	re also doing dited and Mo ribed limits d	EF approved uring report	d agency. A period.	At no time	e, the emis	sions excee		
		Sumr	nary of stack	results give	n in specifi	c conditio	on no. i as	above.		

ii	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. Ambient air quality monitoring Station should be set up in down wind direction as well as	Complied. No such case Complied. 10 Ambient direction as w in consultatio	air quality i vell as when	monitoring e max. grou	station hav	ve been se ncentratio	n of SPM o	anticipated	
	where max. Ground level concentration of SPM anticipated in	CPCB & MoEl List of our am	F during the bient air mo	ir visit to ou onitoring sto	ur factory.				
	consultation with the		Sr No.	Location		•			
	state pollution control board.		1		<u>GEB substat</u>	IUN			
			3	Opposite West site					
			4	North site					
			5	Near TSDF					
			6	Near main guest house					
			7	At wyeth	colony				
			8		nchayat hall				
			9		n office, Nor	rth site			
			10	Haria wa	iter tank				
iii	Fugitive emission in work zone environment, product, raw material storage areas must be regularly monitored.	Complied. Fugitive emis area is bein approved age that at no ti Parameter w	ig regularly ency. The m me the em	monitored aximum val ission level	d through lues during t l went beye	NABL ac	credited of ance perio	and MoEF od confirms	
		Plant	Area	Parameter	Prescribed Limit Mg/nm3	Milligran period	f VOCs ir n per NM <sup>3</sup> .3 –Septer	for the	
						Min.	Max.	Avg.	
		2,4 D	Reactor	Phenol	19	ND	ND	ND	
			Buffer tank	Chlorine	3	0.80	1.6	1.3	
		Resorcinol	Benzene storage tank area near vent	Benzene	15	0.30	0.8	0.5	
			Near Extractio n/scrubb er unit	Butyl acetate	-	52.2	124.0	94.9	

	Pharma	At	Ammonia	18	6.20	11.6	8.9
	1 Humu	second floor work area	Ammonia	10	0.20	11.0	0.5
		Ammoni a recovery area	Ammonia	18	2.80	6.3	5.1
	Epoxy - I	At vacuum pump 2nd floor	ECH	10	1.70	2.9	2.1
		At vessel POS 1208 G.F	ECH	10	1.70	4.9	3.1
	Shed H	At second floor work area	Nitrobenze ne	5	1.72	2.1	1.9
	Shed N	Ground Floor	SO2	3	1.30	2.7	1.9
The company should install alkali scrubbers for scrubbing of HCl.	Results for th Complied. Alkali scrubb installed dua system for so N, etc.	ers for scrubbing	ubbing of H system i.e. c	Cl have be combination	een installe n of caustic	c and wat	er scrubber
pH of the scrubber tank should be monitored regularly.	Complied. pH of the so operating pro		k is monito	red regula	rly and log	gged. It is	s a regular
Liquid effluent generated from the scrubber should be sent to effluent treatment plant.	<b>Complied</b> . Liquid effluen plant effluen	-	d from the s	scrubber is	being ser	nt to ETP	along with
All the process equipment/reaction vessels should be connected with central exhaust system.	Complied. Central exha operations e scrubbing sy	volving the			-		
Further measures should be taken to reduce the losses of solvents.	<b>Complied</b> . Reactors are have been pr					em. Brea	ther valves
Cooling arrangement should be made for all the solvent storage tanks to minimize evaporation losses.	<b>Complied</b> . Our most of in close loop		-	-		-	

	The company should monitor VOCs from the incinerator and data submitted regularly to SPCB and Ministry of Environment and forests.	We se Author inciner Inciner GPCB	<b>Complied</b> . We send our Hazardous waste to pre co-processing units as per the valid Authorization granted by GPCB and only nonhazardous light   paper waste is incinerated at our Incinerator and hence VOC generation is nullified. However, 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 <b>Table 1</b> .							
iv	The effluent generation should not exceed 1191 m3/day (936 m3/d of process effluent and 255 m3/d of domestic effluent).	of new Accord Augus m <sup>3</sup> /d. The av	ver, since v products ding to sp t 03, 202	s, we requ ecific con 1, Industr	uest to o idition o ial was	consider of EC F N te water ation for	<sup>•</sup> latest lo. J 11 r gene the re	t figures o L011/108 ration sho port perio	<b>iven in</b> /2015-1 all not e	nsion& addition same. A-II-(I) dated xceed 20,514 99 m³/day only
			stewater		May	Jun		July	Augus	
			ration m <sup>3</sup>		2023	202	<b>23</b> 2336	2023	<b>2023</b> 80236	2023
		Mont	h wise	308409	29016	9 292	2330	291387	50230	9 307663
		Per day 10280			9360	974	15	9400	9754	10255
		ge W	astewate neration astewate neration r	r	Stipu value 2052			es for the 2023 – 5 Ma 102	Septemb x. /	oer 2023 Avg. 0799
	The effluent should be segregated at source of generation.		ntrated ef			ated and	chem	icals are l	being re	trieved through
	The Concentrated effluent stream should be incinerated and non- concentrated effluent after tertiary treatment	recovery process/distillation. <b>Complied</b> . Among the referred expansion project, only one stream from 2, 4 D i concentrated. We have installed distillation plant where the stream is distilled and product so obtained are sold. After recovery of product, lean effluent is sen to ETP where it is treated without any difficulty. Hence no incineration i required.						ream is distilled effluent is sent		
	should be discharged into the CETP.	require	ed.							incineration is
	into the CETP. The treated effluent should be discharged into estuary zone of river Par through 4.0 km long HDPE pipe line only after	Compl The di contro given i	<b>ied</b> . scharged I board li n <b>Table 3</b>	mits and	values	of vari	ous po	arameter	lated by s of tree	state pollution ated effluent is
	into the CETP. The treated effluent should be discharged into estuary zone of river Par through 4.0 km long	Compl The di contro given i The m	<b>ied</b> . scharged I board li n <b>Table 3</b> aximum v	mits and values dur beyond th	values ring the	of vari	nce pe nce pe andarc	arameters eriod conf ds. Summ <b>Values fo</b>	lated by s of trea irms tho ary is gi r <b>the pe</b>	state pollution ated effluent is at at no time the ven below:

1	рН	5.5 to 9.0	6.9	7.2	7.0
	'				
2	Temperature °C	40	30.4	31.6	31.0
3	Colour in (pt. co. scale) units		30.0	45.0	36.7
4	Suspended solids mg/l	100	41.0	61.0	51.0
5	Oil and Grease mg/l	10	2.8	5.4	4.1
6	Phenolic Compounds mg/l	5	0.6	0.9	0.8
7	Cyanides mg/l	0.2	ND	ND	ND
8	Fluorides mg/l	2	0.7	1.2	0.9
9	Sulphides mg/l	2	0.4	0.8	0.5
10	Ammonical Nitrogen mg/l	50	6.0	9.4	7.6
11	Arsenic mg/l	0.2	ND	ND	ND
12	Total Chromium mg/l	2	0.1	0.1	0.1
13	Hexavelent Chromium mg/l	1	ND	ND	ND
14	Copper mg/l	3	0.2	0.4	0.3
15	Lead mg/l	2	ND	ND	ND
16	Mercury mg/l	0.01	ND	ND	ND
17	Nickel mg/l	5	0.2	0.3	0.2
18	Zinc mg/l	15	0.5	0.9	0.7
19	Cadmium mg/l	2	ND	ND	ND
20	Phosphate mg/l	5	1.6	2.4	2.0
21	BOD (3 days at 27°C) mg/l	100	47.2	74.0	56.1
22	COD mg/l	250	206.0	232.0	218.7
23	Insecticide/Pesticide	Absent	ND	ND	ND
24	Sodium Absorption Ratio	26	4.5	7.4	5.4
25	Manganese mg/l	2	0.1	0.2	0.1
26	Tin mg/l	0.1	ND	ND	ND
27	Bio Assay Test	90% survival of fish after 96 hrs. in 100% effluent %	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent

	The domestic waste water should be disposed off through septic tank / soak pit system.	<b>Complied</b> . Domestic was further treatme Detail of Dome	ent.	0				in to ETP for
		Domestic Wastewater generation m <sup>3</sup>	April 2023	May 2023	June 2022	July 2023	August 2023	September 2023
		Month wise	9607	9530	9592	9450	9796	9598
		Per day	320	307	320	305	316	320
		The maximum	Wastew		Values	for the pe	eriod	
		generation	n		April 2 Min.	023 – Sep Max.	tember 20 Avg	
		Domestic generation		vater	305	320	315	
	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.	We have set u	h a seba	n utë onime	nsn pond (	using treat	lea eniuer	it at our ETP.
	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	Complied. The effluent qu the Environme GPCB also mo Monitoring res The river wate GPCB. Agenci agency, Envisio –both NABET o	ntal audi onitor th ults of Gl er quality es like l on Enviro	tors appoin e treated PCB is atto at the dis NIO, Polluc	nted by GP effluent qu iched as <b>Ar</b> charge poir con Labora gies Pvt. Lto	CB. ality at re <b>mexure 1.</b> nt is regula tories Pvt I, Kadam e	egular inte arly being t. Ltd- Ma environme	monitored by EF approved nt consultants
vi	As reflected in the EIA/EMP report, the solid waste and ETP sludge should be incinerated and incinerator ash should be disposed off in the landfill facility within the plant premises.	Complied. ETP waste is d taken permissi approved by G co-processing	ion from GPCB thr	MoEF vide ough our (	e letter date CCA. We al	ed May 6, so send o	2004 and ur incinerc	same is also

Vii	The ground water quality in and around the unit and the hazardous waste storage site should be regularly monitored and the data recorded to ensure that there is no contamination of the groundwater.	Complied. Ground water quality is being checked regularly for in and around the unit and the hazardous waste storage site. Groundwater analysis study is done by MoEF approved agency Pollucon Pvt. Ltd for the last year and no contamination is observed.
	efficiency of the incinerator should be assessed by an agency like CPCB and a report submitted to the Ministry.	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 April 4, 2017.
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 Januaryuary, 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.	Complied. Occupational health surveillance of the workers is being done on regular basis and record maintained as per the factory act.

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.	<b>Complied</b> . 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. Company has harvest 3.26 Lakh KL rain water during 2023
xi	The project authorities may undertake a survey to assess the impact of gaseous emissions/pollutants on the health including respiratory and digestive system of the population within and vicinity of the plant and report submitted to the State Government and to this Ministry within six months.	Complied. The survey was carried out to assess the impact of emission/pollutants on the health including respiratory & digestive systems of population within & vicinity of the plant. So far no major illness have been identified. Report submitted vide our letter ref. Atul/MoEF/Reg/4 dated August 16, 2004.
xii	The Company should developed a green belt in a 25% of the plant area as per the CPCB guidelines.	Complied. Company has already developed more than 36 % of greenbelt in Atul complex Total Industrial Plot area: 1126078.27 sq.mt Green belt area: 409030.00 sq.mt (approx. 36% of total plot area) We planted approximately 39760 trees of difference species in report period at different location and photograph attached below.

xiii	As per the policy decision taken vide this Ministry's circular no. J- 21011/8/98- IA II (I) dated 14th May 2002 and 23rd June, 2003, the company shall earmark a separate fund i.e. 1% of the total cost of the project (Rs. 25 Crores) for eco-development measures including community welfare measures in the project area.	<b>Complied.</b> 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 wide 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.
	The amount shall be deposited within three months in a separate account to be maintained by GPCB.	<b>Complied</b> . 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.
	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.	<b>Complied</b> . 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.
Å	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 Sitaram Naranji Patel Institute of Technology and Research Centre, Surat for year 2022-23 was submitted vide our letter dated June 27, 2023.
ii	At no time, the emissions should not go beyond standards.	<b>Complied.</b> We are also doing offline monitoring at regular interval (Monthly) through NABL accredited and MoEF approved agency. 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.		<b>blied</b> . Ich incident happened dui	ring complianc	e period.		
iii	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.		<b>blied</b> . stic hood, silencer and acc opriate high noise area like				e provided at
	The ambient noise levels should confirm to the standards prescribed under EPA Rules, 1989, viz. 75 (daytime) and 70bBA(night time)	are gi The n noise belov	imbient noise level in factoriven in <b>Table 4 and 5</b> . Inaximum values during the emission level went beyo	e compliance p and the stipula	period conf	firms that c	at no time the
		Sr No.	Location	Permissible Limits, dBA		for the peri 123 – Septe	iod ember 2023
				75	Min.	Max.	
		1	66KVA substation	75	67.1	70.3	<b>Avg.</b> 68.5
		2	Opposite shed D	75	60.4	63.3	61.6
		3	ETP West site	75	64.5	66.4	65.5
		4	ETP North site	75	58.8	60.9	59.7
		5	Near TSDF	75	63.8	66.9	65.3
		6	Near Main Office North site	75	65.7	69.7	67.4
			e level monitoring data (Ni	-			
		Sr	Location	Permissible		or the perio	od mber 2023
		No.		Limits, dBA	Min.	Max.	Avg.
1		1	66KVA substation	70	52.4	59.3	56.1
		L 1		1			
		2	Opposite shed D	70	50.1	52.5	51.7
			Opposite shed D ETP West site	70 70	50.1 56.9	52.5 58.9	

		5	Near TSDF	70	51.4	54.3	52.7	
		6	Near Main Office North site	70	53.8	60.7	57.8	
iv	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	<b>Recurr</b> i with al upkeep	ed. easures are already imp ing cost: A separate buc I the legal requirement s o of pollution control sys period is given in below	lget is being tipulated by tems and fa	allocated events of allocated e	8 & MoEF o	apart from	
	Environment and Forest as well as the State Government along with	Sr No			Recurring Co For the repo April 2023 –	rt period		
	the implementation schedule for all the conditions stipulated	1 2	Air Pollution Control Liquid Pollution Cont	rol	1571			
	herein. The funds so provided shall not be diverted for any other	3	Environmental Monit Management		21			
	diverted for any other	4	Solid waste Disposal		62			
	purposes.	5 6	Occupational health Green belt		25 15			
		Total	Greenbeit	1694				
	the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management & Handling) Rules, 2003.	and dia Other V have version storage are bei authori every y Latest Techno	mpany complies with the sposal of hazardous we Wastes (Management a alid authorization under e and disposal of hazar ng complied. This has be zed agency and nomi- rear. Environmental audit bology and Research Cen- rer dated June 27, 2023.	astes in ac nd Transbor our current dous waste been certifie nated by G report by S tre, Surat fo	cordance wit undary Mover CCA No. AWF Stipulation r d by our Envi PCB; through Sitaram Narc	h the Ha nent) Rule 1-105110 nade in C ronmenta n Environi anji Patel	zardous and es, 2016. We for handling, CA by GPCB I auditors, an mental audit	
	Authorization from the GPCB must be obtained for collections /treatment/ storage/ disposal of hazardous waste.	We have valid authorization under our current CCA No. Amendmen 121400 for handling, storage and disposal of hazardous waste.						
vi	The stipulated conditions will be monitored by the Regional office of this Ministry at Bhopal/ GPCB.	Noted.						
	A six monthly compliance report and the monitored data should be submitted to them regularly.	to the l	<b>ed</b> . nthly compliance report Regional office of MoEF h mail and hard copy w	&CC at inte	egrated region	al office, (	Gandhinagar	

vii	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at website of the Ministry of Environment and Forest at http://www.envfor.ni.in.	<b>Complied</b> . We informed the public through advertisement and by sending our EC to local Panchayat, Zila parishad, District Industrial Centre for further actions at their end.
	This shall be advertised within seven days from the date of issue of the clearance letter at least in two local newspaper that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Ministry's Regional office at Bhopal.	Complied. Advertisement was published as directed and copy of the same was submitted to Ministry.
3.0	The ministry or any competent authority may stipulate any further condition(s) on receiving reports from the project authorities. The above conditions will be monitored by the Regional Office of this Ministry located at Bhopal.	Noted.
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	Noted.
	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.	

	Datails of Rue stad	k		Apr-23	May-23	Jun-23	jul-23	Aug-23	Sep-23
and the second second	1		Permissible	An and a state of the state of the				Obtained	Obtained
Sr. No.	Stack Details	Parameter	Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Value	Value
		PM	100 mg/Nm <sup>2</sup>		57,4		47.8	52.8	
1	FBC boiler E1	502	600 mg/Nm*	NotRunning	284	Not Running	298	311	Not Runnis
		NOx	600 mg/Nm		272		304	32.4	
	COCK STATE	PM	100 mg/Nm <sup>3</sup>	46.8	50.4	53.6	1 200200000	45.6	49.6
2	FBC boiler E2	SC. NOx	600 mg/Nm	296	278	298 288	NotRunning	30.4 30.8	312
		FM	600 mg/Nm <sup>2</sup>	284	283	47.1	443	806	58.6
з	FBC boile: E3	SC2	100 mg/Nm <sup>2</sup> 600 mg/Nm <sup>2</sup>	28/	Not Running	284	312	Not Running	32.4
		NOx	600 mg/Nm <sup>3</sup>	279		290	308	3 <u>51</u> 8	338
		FM	100 mg/Nm <sup>a</sup>		01.4				
4	FBC boiler W1	SC <sub>2</sub>	600 mg/Nm*	Not Running	301	Not Running	NotRunning	Not Running	Not Funni
		NOx	600 mg/Nm <sup>3</sup>		204	1			
		PM	50 mg/Nm <sup>2</sup>	32.4	42.1	40.1	36.1	33.4	44.7
5	Baller (50 TPH 2 Nos) (New bollers) W2,W3	SO,	600 mg/Nm <sup>2</sup>	296	292	298	310	32.2	308
		NUx	300 mg/Nm	284 ND	283 ND	293 ND	288	298 ND	291 ND
		Mercury PN	0.03 mg/Nm <sup>2</sup>	37.2	46.2	33.4	ND 491	40.4	47.2
6	Hot OI Unit	50.	100 mg/sm 100 ppm	00	7.4	68	7.4	58	7.3
	(Resorcinol Plant)	NOx	50 ppm	201	21.3	24.0	296	34.2	27.4
		FM	150 mg/Nm <sup>3</sup>	53.8	57.4	44.9	563	50.1	5.62
7	Hot Oil Plant shed-B	SC2	100 ppm	86	10.8	14.8	106	12.6	9.8
		NOx	50 ppm	219	31.6	36.2	302	32.4	32.6
	Oil burner Shed B	FM	150 mg/Nm <sup>2</sup>		and the second	30252 25			
8	(Stand By)	SC2	100 ppm	Not Running	Not Running	Not Running	NotRunning	Not Running	Not Funni
	(	NOx	50 ppm						
325	Thermic fluid heater of DCO/DAP Plant	PM	150 mg/Nm <sup>3</sup>	29.4	41.7	33.4	268	34.8	44.9
9	A REAL PROPERTY OF A REAL PROPER	50,	100 ppm	40	7.2	6.2	4.9	62	7.7
		NOx	50 ppm	23.2	21.5	18,1	154	19.3	24.3
10	D.G. set 1500 KVA (Stand By) (Sampling done	PM	150 mg/Nm <sup>3</sup>	49.6 6.4	49.6 6.4	39.7 59	448	44,2	41.3
10	during trici run)	50,	100 ppm	32.8	0.4 37.8	34.2	7.2	78	6.0
		NUX	50 ppm	446	43.2	34.2	196	24.3	25.5 48.7
11	DG set 1010 KVA (Standby)(Sompling done	FM SC2	150 mg/Nm <sup>3</sup> 100 ppm	5.28	5.9	5.66	561 6.46	96	7.2
	during trial run)	NOx	50 ppm	39.4	27.8	37.2	216	23.8	30.8
		INCA	DO DEN	33.4	27.5	State.	210	2.3.6	3900
	Details of Process sto	ick						1	
10000		102 102	Fernissible	-			- Instant uppers	Obtained	Obtained
Sr. No.	Stack Details	Parameter	Units	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Value	Value
tul East Si	ite								
1	Furnace (Phosgene Plant)	FM	150 mg/Nm <sup>®</sup>	14.4	14.B	11.0	116	10.8	18.3
2	Reactor (Phosgene plant - New)	CO		ND	ND	ND	ND	ND	ND
~	Reducer (Prosgere plante new)	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
austic Chi	lorine Plant	10000000000	1.400 81000				0.000	1.000.21.0	0.000
з	Dechlorination Plant	Cl	9 mg/Nm <sup>3</sup>	4.98	496	6.4	5.1	43	2.18
	D'OUTRE THE DET FRAME	HCI	20 mg/Nm <sup>5</sup>	5.01	509	6.58	5.24	4.42	2.24
4	Common stack of HCI Sig Lunit 182	Cla	9 mg/Nm <sup>®</sup>	0.1	472	5.62	4.9	3.84	1.9
25430	and the production of sector products the	HCI	20 mg/Nm*	6.27	485	5.78	5,03	3,94	1.95
ulfuric Aci	id (East Site)	122	121122						
5	Sulfuric Acid Plant	SO <u>,</u>	2 lg/T	0.52	6.7	0.84	0.72	0.6.4	0.72
N 497	1742 (11) and of 25 (2000)	Acid Mist	50 mg/Nm <sup>5</sup>	135	15.4	17.2	12.4	10.8	13.8
6	ChlorcSullonic Acid plant reactor	Cly	9 mg/Nm <sup>*</sup>	4.94	511	4.12	3.6	2.96	4.26
CB Plant		на	20 mg/Nm <sup>®</sup>	5.07	525	4.23	3,7	3.04	4.38
		SO	40	2005 MIL 0	VILAD DIE S	and a loss of the second		Lucy and Lucy	
7	Foul Gas Scrubber	NOx	40 mg/Nm <sup>3</sup> 25 mg/Nm <sup>3</sup>	Not in use	Not in use	Not in use	Not in use	Notin use	Not in us
cinerator	1	Turny	Two mg/nm-	1					
. Sector Mildl	1	FM	150 mg/Nm <sup>2</sup>	57.3	50.2	41.7	583	49.2	37.2
8	Incinerator	SO2	40 mg/Nm <sup>3</sup>	10.2	10.3	12.9	10.4	43.2	11.5
		NOx	25 mg/Nm <sup>2</sup>	248	16.9	13.2	182	19.7	23.8
il Plant					-				
9	Foul Gas Scrubber	SC2	40 mg/Nm <sup>5</sup>	21.4	21.9	28.6	232	19.6	26.4
	I SAN SEED OF GERMA	NOx	25 mg/Nm <sup>3</sup>	16.8	23.4	19.4	212	23.4	20.9
BD Plant	1								
10	Sproy Dryer	FM	150 mg/Nm <sup>®</sup>	Not in use	Notinuse	Not in use	Not in use	Notin use	Not in us
11	Scrubber S-902	Phosgene	0.1 ppm	ND	ND	ND	Not Running	ND	ND
12	Scrubber S-801/802	HO	20 mg/Nm <sup>3</sup>	78	14.5	12.8	158	13.2	10.2
esorcinal	Plent	NOx	25 mg/Nm <sup>a</sup>	10.4	19.8	20.9	162	16.2	17.8
13	Spray Dryer (Resorcina) Planti	PM	150 mg/Nm <sup>3</sup>	23.6	44.9	57.2	60.2	47.1	41.9
14	Scrubber vent (Resorcino) Flont)	SO,	40 mg/Nm <sup>5</sup>	216	23.2	27.4	187	23.4	28.2
-4-D Plant			Lessing Value	21.0	a.J.C.		141	4.5.64	20.2
		Cl	9 mg/Nm*	0.2	5.2	4.9	0.16	49	6,1
15	Common Scrubber; 2,4D Plant	HCI	20 mg/hm <sup>x</sup>	6.37	534	5.01	6.33	5.04	6.27
		Phanol		ND	ND	ND	ND	ND	ND
	Dryer-1 (601)	PM with Pesticide compound	20 mgʻNn <sup>3</sup>	9.82	Not Punning	12.48	101	8.66	16.9
16		-							
16	Diyer-2 (701)	PM with Pesticide compound	20 mgʻhin <sup>3</sup>	6.27	12.4	9.52	7.6	1673	18.41

MPSL Plant		1	9	-					
19	Phosgene Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	Not Running	ND	ND	Not Bunning
20	Central Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	Not Renning	ND	ND	Not Running
ICO plont		1							5.426
21	Central scrubber at Nico Plant	Acetonitrile,	0.1 ppm 0.1 ppm	NotRunning	ND	ND	ND	ND	Not Runnin
ater Plant									
22	Scrubber at Esterplant for Glyphosate	Formaldehyde	10 mg/Nm <sup>2</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	NotRunnin
Other		6	0.000	-					
23	MCFA	Cly HCI SCy	9 mg/NM <sup>4</sup> 20 mg/NM <sup>4</sup> 40 mg/NM <sup>4</sup>	Not Flurning	Not Punning	Net Running	Not Flunning	Nat Ranning	Not Flumming
24	Fipronil	sa. Ha	40 mg/NM 20 mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Runnin
25	Imidaclepsid	NH <mark>s</mark>	175 mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Runnin
26	Pyrcthroids	SQ. HCI	40 mg/Nm <sup>5</sup> 20 mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Runnin
27	Stack at Amine Plant Central Scrubber MCPA Plant	NH3	175 mg/Nm	93.4	108	94.2	110	138	95
28		на	20 mg/Nm <sup>2</sup>	Not Running 4.96	Not Running 6.8	Not Bunning 7.1	Not Running 8.2	Net Running 11.4	Not Funnin 8.3
29	MPP plant scrubber	Phosgene	20 mg/Nm <sup>2</sup> 0.1 ppm	ND	ND	ND	ND ND	ND	ND
30	Flavors & Fragrances Plant	HC	20 mg/Nm <sup>a</sup>	NotRunning	Not Running	Not Running	NotHunning	Not Running	Not Funnin
8.02	restricted and the second s	H₂S	-						
31	Sulfur Black Plant	NHa	175 mg/Nm <sup>3</sup>	NotRunning	Not Running	Net Running	Not Running	Not Running	Not Funnin
32	Sulfur Dyes plant	H <sub>2</sub> 5		ND 653	ND 45.2	ND 35.2	ND 508	ND 60.4	ND 82.4
Atul West 9	Ste	NH3	175 mg/Nm <sup>3</sup>	05.3	45.2	35.2	DOR	00.4	82.4
217533	Server a concernent i	CL.	9 mg/NM <sup>3</sup>		4.6	Not Burning	No.	38	
33	Shed A05/03/44	на	20 mg/NM	Same S	473	- Not Running	NotRunning	39	Not Funnin
34	Shed B2/12/24 Reaction Vessel	Cl2	9 mg/Nm*	49	5.8	53	6.1	56	6.13
124	a an	HCI	20 mg/ Nm <sup>2</sup>	5.04	537	5.45	8.4	5.75	6.3
25	Shed B1802/24 Fan	so,	40 mg/NM	254	25.2	214	271	23.8	263
35	Shed B18(02/24 Fdn	СЬ НСІ	9 mg/NM <sup>3</sup>	6.6 6.78	6.4	5.9 0.00	5.1	47	7.5
		Cl <sub>2</sub>	20 mg/NM <sup>e</sup> 9 mg/Nm <sup>e</sup>	5.4	6.1	4.9	3.94	42	5.1
36	Shed C5/20/15 Chloringtor	HCI	20 mg/Nm <sup>5</sup>	5.5	627	5.37	4.05	4.31	5.24
37	Shed D Nim Spimy driver No.45	PM	150mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Running	NotFunning	Not Running	Not Funnin
38	Shed D Niro Spray dryer No.50	PM	150 mg/Nm <sup>3</sup>	Not Running	Not Running	Not Running	NotRunning	Net Running	Not Funnin
39	Shed E 7/12/49 Spray Dryer	PM	150 mg/Nm <sup>3</sup>	Not Running	Not Running	Not Running	512	49.3	Not Runnin
40	Shed F FQ/1/15 Reaction Vessel	CL, HCI	9 mg/Nm² 20 mg/Nm²	Not Running Not Running	Not Running Not Bunning	Not Running Not Running	NotRunning	Not Running	Not Runnin
41	Shed G 10/8/1 (receivar)	Cl <u>s</u> HCI	9 mg/Nm <sup>2</sup> 20 mg/Nm <sup>2</sup>	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Punnin
		CL	9 mg/Nm <sup>3</sup>	51	8.5	64	19		10
42	Shed H 11/6/17 chlornator	нсі	20 mg/Nm <sup>3</sup>	13.6	8.8	10.4	131	Not Running	16.3
43	Shed K K-13/3/4 final of sulfuric ocid plant	50,	2 kg/l	0.64	055	18	1.6	134	0.32
2009		Acid Mist	50 mg/Nm <sup>6</sup>	18.3	18.5	39.87	30.2	20.8	14.5
44	Shed j15/09/25	HBr	30 mg/Nm <sup>3</sup>	162	ND 10.6	ND 13.8	ND 156	ND 18.8	ND 21.7
		so,	40 mg/Nm <sup>2</sup> 40 mg/Nm <sup>2</sup>		23.8	19.4	246	18.8	21.7
45	Shed j12/01/42	C L	9 mg/Nm <sup>®</sup>	+++	4.6	39	4.8	412	0.1
	2 (2 ( ) ( * 2 ( ) ( ) ( ) ( ) ( )	На	20 mg/Nm*		473	3.1	4.93	4.23	6.27
		SO2	40 mg/Nm <sup>8</sup>	2 <del>211</del> 0	15.9	20.5		19.7	
46	Shed J12/03/36	на	20 mg/Nm <sup>5</sup>		2.8	46	Not Running	ND	Not Funnin
		HBr	30 mg/Nm <sup>3</sup>		ND	ND		ND	
47	Shed N Scrubber Fon N26/08/24	CL	9 mg/Nm <sup>*</sup>	4.32	7.1 7.3	49 54	3.4	45	5.8
48	Shed N Scrubber Fan N20/02/41	HG SO2	20 mg/Nm <sup>6</sup> 40 mg/Nm <sup>6</sup>	12.4	24.9	20.6	3.49	7.1 21.4	5.96 22.4
		PM	150 mg/Nm <sup>3</sup>	1					
49	N-FDH Plant Catalytic Incinerator	SO.	40 mg/Nm <sup>5</sup>	NotRunning	Not Running	Not Running	NotHunning	Not Running	Not Funnin
49	N-PDH Fidit Coudyus incidendia	NOx	25 mgʻNm <sup>a</sup>	NOCEAURING	1900 Hunning	Not nonining	Notrialing	Not Addining	INDEPENDING
50	P HIN Plant	Formaldehyde Phosgene	10 mgʻNm <sup>*</sup> 0.1 ppm	ND	ND	ND	ND	ND	ND
51	DDS Plant (Pharma Plant)	NH <sub>a</sub>	175 Mg/Nm <sup>3</sup>	32	32	446	28.4	34.8	55.2
52	SPIC II Plant (DCDPS)	SQ.		12.4	14.2	17.1	208	23.6	30.2
53	SPIC I Plant	NH3	175 mg/Nm <sup>®</sup>	132	120	96.2	80.4	71.8	68.2
54	SPICIV Plant	NHs	175 mg/Nh/*	84	64	55.4	60.4	7.02	79.4
11.50		so	1 TT 1 TT 1	18.4	14.2	12.2	122	14.2	19.1
55	PHIN-II Plant	на	20 mg/NM <sup>4</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Flunnin
56	MCPA-Chlorination Scrubber	Ha CL	20 mg/NM <sup>9</sup> 9 mg/Nm <sup>3</sup>	Not Running Not Running	Not Running Not Running	Not Running Not Running	Not Running Not Running	Net Running Net Running	Not Funnin Not Runnin
	MCPA-SFD	PM	20 mg/Nm <sup>5</sup>	NetRunning	Not Running	Not Running	NotFunning	Not Running	Not Funnin
57		10.00	20 mg/NM <sup>2</sup>	NotRunning	Not Running	Not Running	NotRunning	Net Running	Not Funnin
22242	Gluphastte Cammon Cructic Scalaba		LEWILLIAM WY	not constant	THUR IS UNDER THE PARTY OF THE	NAL BUILDING	Construction D	Machanona	
58	Glyphosate-Common Caustic Scrubber	HC		1 1002020-101104-001	GIND COLOR DAY AND A			TANKS THE REPORT OF	
10000	Glyphosate -Common Caustic Scrubber Glyphosate -SFD	FM	20 mg/Nm <sup>5</sup>	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Punnin
58				Not Flurming Not Detected 125	Not Running Not Detected 112	Not Running Not Detected 104	Not Fluring Not Detected 125	Not Detected 138	Not Punnin Not Detecte 148
58 59	Glyphosate -SFD	PM H <sub>a</sub> s	20 mg/Nm <sup>5</sup> 25 mg/Nm3	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detecte

62	Cammon Sarubber Mesotriene,Sucrotrione,Triazole based fungicide	на	20 mg/Nm3	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Punning
63	Heribicides (2-4-D & related products)-SFD	PM	20 mg/Nm3	NatBunning	Not Bunning	Not Running	Not Buoning	Net Running	Not Funning
22	Herbicides (2-4-D & related products)-Common	на	20 mg/Nm3			1000		1000000	0.000
64	Coustic Scrubber	Cl <sub>2</sub>	9.0 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Funning
		NH <sub>3</sub>	175 mg/Nm3						
65	Glycine	HCI	20 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
66	Pyrcessu Furone, Disppyri bac Sodium, Quizziefos, Chlorantrarili prole: Common Caratha	Phosgere	0.1 ppm	NotRunning	Not Running	Not Running	Not Running	Net Running	Not Running
	Scrubber	на	20 mg/Nm3						
67	Azozystrobin;Thiamthoxam - Common scrubber	NOX	25 mg/Vm3	NotRunning	Not Running	Not Running	Not Hunning	Not Running	Not Funning
69	Metribuzine,Diafentiurone: Common Scrubber	soz	40 mg/Nm3	NotRunning	Not Running	Not Running	NotFlunning	Nat Running	Not Punning
69	PF Racin	на	20 mg/Nm3	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Punning
70	Alter & Respective of security (	HG	20 mg/Nm 3	A last The second second	India Phanataine	Mark Discontinue	A loss Plan solution	Not Running	Not Punning
70	Alkyl ketene dimer	SC2	40 mg/Nm3	Not Running	Not Running	Not Running	Not Running	Not Running	NOT Parining
71	Coustic-HCISynthesis unit	HCI	20 mg/Nm3	6.27	485	5.78	Not Running	ing Not Running	Not Running
11	Couse-recoveries one	CL.	9.0 mg/Nm3	61	472	5.62	Normannig	NOT HEREIT	
	Coustic-Hypounit	HG	20 mg/Nm3	5.01	509	6,58	Notfluring	Not Running	Not Funning
72		Cl2	9.0 mg/Nm3	4.88	496	6.4		Contraction (1994)	
73	m-Aminophen-Hot Oil generator	SC2	40 mg/Nm3	NotBunning	Not Running	Not Running	NotBunning	Net Running	Not Running
222		NOx	25 mg,Nm3	20030307200001	1.08855.08557.0535	. 0577/0E0133550,	1022701240464	Transfer to the second	1222201010200000
74	m-Amino phenol-process	50,	40 mg/Nm3	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Running
75	Mana chioro benzen e	на	20 mg/Nm3	Not Running	Not Running	Not Running	NotFlunning	Not Running	Not Flunning
76	Propionyl chloride	HC	20 mg/Nm3	NotRunning	Not Running	Not Running	NotHunning	Not Running	Not Funning
0.982		so <sub>2</sub>	40 mg/Nm3	207082300007055	2000/00/2011 0:00	10.55000000000		100.000.000.000	10.000.000
77	Resonand-Hot Oil generator	so,	40 mg/Nm3	NotRunning	7.4	6B 24.6	Not Running	Not Running	Not Running
A DATE		NOx	25 mg/Nm3		21.3	24.6		Construction Construction	Contract of the second s
78	Resorcinol-Process	SCz	40 mg/Nm3	Not Running	Not Running	Not Running	Not Bunning	Net Running	Not Punning
226	A WE STOLEN IN THE REAL OF	на	20 mg/Alm3	00002	11/12/2011 D	202	1012 8	1.1.1.1	100.002.001
79	Trichlaro acetyl chloride	50,	40 mg/Nm3	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Running
80	Thionylichloride	50,	40 mg/Nm3	NotFlunning	Not Running	Not Running	NotFlunting	Net Running	Not Funning
81	Ammania system (at Sulfone)	NH	175 mg/Nm3	NotBunning	Not Running	Not Running	Not Running	Net Running	Not Funning
82	Scrubber Blower Discharge (at PHINIII	Phosgere.	0.1 ppm	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Funning
83	Scrubber Blower Discharge (at PHININ)	Fhosgene	0.1 ppm	NotRunning	Not Running	Not Running	Not Running	Nat Running	Not Funning
84	New phosgeno plant. Furnoce	PM	150 mg/Nm3	14.4	14.8	11.6	Not Running	Not Running	Not Funning
85	New-Phosgene plant-Reactor	Phosgere	0.1 ppm	NotRunning	Not Running	Not Running	Not Running	Nat Running	Not Running
86	Epoxyplant	Taluene/ECH	÷	NotRunning	Not Running	Not Running	No1Bunning	Not Running	Not Punning
87	Harder Planc	на	20 mg/Nm3	Not Running	Not Bunning	Not Running	Not Running	Nat Running	Not Running

## Table 2: Fugitive Emission Monitoring details

Plant	Area	Parameter	Prescribed Limit	Results	of VOCs i	in Milligran	n per NM <sup>3</sup>		
			Mg/Nm3	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023
2,4 D	Reactor	Phenol	19	ND	ND	ND	ND	ND	ND
	Buffer tank	Chlorine	3.0	1.64	1.44	1.3	1.5	0.82	0.87
Resorcinol	Benzene storage tank area near vent	Benzene	15	0.28	0.41	0.52	0.44	0.3	0.8
	Near Extraction/scr ubber unit	Butyl acetate	-	124	104	116	102	52.2	71.4
Pharma	At second floor work area	Ammonia	18	7.9	9.44	11.6	10.4	6.2	7.9
	Ammonia recovery area	Ammonia	18	6.1	4.7	6.2	2.8	4.2	6.3
Epoxy - I	At vacuum pump 2nd floor	ECH	10	1.94	1.98	2.45	1.76	2.9	1.7
	At vessel POS 1208 G.F	ECH	10	2.16	1.7	3.1	2.8	3.9	4.9
Shed H	At second floor work area	Nitrobenz ene	5	2.1	1.86	1.72	1.82	ND	2.06
Shed N	Ground Floor	SO2	3	2.65	1.3	1.25	1.7	1.9	2.35

# Table 3: Quality of treated effluent

Sr	Parameter	Results						GPCB
No.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	Limits
1	рН	7.15	6.98	6.92	7.12	6.93	6.89	5.5 to 9.0
2	Temperature °C	30.6	31.2	31.6	31.4	30.4	30.8	40 °C
3	Colour (pt. co. scale)in units	30	35	40	30	45	40	
4	Suspended solids mg/l	42	57	51	41	61	54	100
5	Oil and Grease mg/l	5.4	4.6	3.9	2.8	3.4	4.2	10
6	Phenolic Compounds mg/l	0.72	0.89	0.73	0.62	0.82	0.76	5
7	Cyanides mg/l	ND	ND	ND	ND	ND	ND	0.2
8	Fluorides mg/l	0.75	0.94	1.02	1.24	0.99	0.74	2
9	Sulphides mg/l	0.6	0.42	0.36	0.4	0.8	0.4	2
10	Ammonical Nitrogen mg/l	9.4	5.97	8.14	7.23	6.85	8.24	50
11	Arsenic mg/l	ND	ND	ND	ND	ND	ND	0.2
12	Total Chromium mg/l	0.062	0.089	0.093	0.081	0.096	0.13	2
13	Hexavelent Chromium mg/l	ND	ND	ND	ND	ND	ND	1
14	Copper mg/l	0.17	0.22	0.25	0.35	0.41	0.32	3
15	Lead mg/l	ND	ND	ND	ND	ND	ND	2
16	Mercury mg/l	ND	ND	ND	ND	ND	ND	0.01
17	Nickel mg/l	0.17	0.2	0.19	0.26	0.19	0.21	5
18	Zinc mg/l	0.56	0.67	0.58	0.84	0.91	0.54	15
19	Cadmium mg/l	ND	ND	ND	ND	ND	ND	2
20	Phosphate mg/l	1.62	1.94	2.06	1.85	2.18	2.41	5
21	BOD (3 days at 27°C) mg/l	48	74	61	58.3	47.17	48.13	100
22	COD mg/l	206	226	224	212	232	212	250
23	Insecticide/Pesticide	Absent	Absent	Absent	Absent	Absent	Absent	Absent
24	Sodium Absorption Ratio	4.45	5.24	7.39	5.01	4.6	5.8	26
25	Manganese mg/l	0.082	0.093	0.11	0.16	0.24	0.13	2
26	Tin mg/l	ND	ND	ND	ND	ND	ND	0.1
27	Bio Assay Test	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	90% survival of fish after 96 hrs. in 100% effluent				

## Table 4: Noise level monitoring data (Day Time)

Sr	Location	Noise Le		Permissible				
No.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	Limits, dBA
1	66KVA substation	67.2	68.2	67.1	68.9	69.2	70.3	75
2	Opposite shed D	63.3	62.2	61.1	60.4	61.3	61.3	75
3	West site ETP	64.5	66.3	65.5	66.4	65.4	64.9	75
4	North site ETP	60.9	59.1	60.3	59.7	58.8	59.1	75
5	Near TSDF	65.9	66.9	65.2	64.3	63.8	65.4	75
6	Near main office North site	66.3	69.7	68.4	65.7	66.3	68.1	75

## Table 5: Noise level monitoring data (Night Time)

Sr	Location	Noise Level, dBA							
No.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	e Limits, dBA	
1	66KVA substation	59.2	58.4	59.3	53.6	52.4	53.4	70	
2	Opposite shed D	52.4	52.1	52.5	51.6	50.1	51.3	70	
3	West site ETP	56.9	58.8	57.5	58.9	57.1	57.3	70	
4	North site ETP	60.4	61.3	60.3	59.7	55.6	59.7	70	
5	Near TSDF	52.6	51.4	52.3	51.7	54.3	53.9	70	
6	Near main office North site	56.9	58.8	57.3	53.8	59.2	60.7	70	

#### Annexure 1: GPCB results for treated effluent water ANALYSIS REPORT FOR Gujarat Pollution Control Board WATER / WASTE WATER SAMPLE Vapi C5/124, GIDC Vapi, Near Hotel Pritam, Sample ID:396740 - Analysis Completion:18/10/2023 Vapi - 396 195 Dyes and Dye- Intermediates / LAB Inward : 62285 Tele:(0260) 2432089 TC10419 Accreditation Standards & NABL Certificate Details : TC10419 / - / Issue: 17/03/2022 / Validity: 16/03/2024 TEST REPORT Test Report No. : 62285 Date: 18/10/2023 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: 396020 ...-3. Nature of Sample : REP-Representative/Grab, (Insp Type : COM-On Complaint) 4. Sample Collected By : C.C Patel,SO 5. Quantity of Sample Received : 5 lit 6. Code No. of the Sample : 396740 7. Date & Time of Collection & Inwarding : 22/09/2023, (1135 to 1135) & 25/09/2023 8. Date of Start & Completion of Analysis : 25/09/2023 & 18/10/2023 9. Sampling Point : ## Final Outlet of the ETP ~--10. Flow Details (Remarks) : Yes : Into River Par through Pipeline 11. Mode of Disposal 12. Ultimate Receiving Body : Estuary zone of river par 13. Temperature on Collection : 33 & 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

16. Parameter

: 11 ,Cap No & Weight :

Sr	Parameter	Unit	Test Method	Range of Testing	Result
1	pH	pH Units	4500 H+ B APHA Standard Methods 23rd edi.2017	1-14 pH value As or	7.07
2	Suspended Solids	mg/l	Gravimetric method. (2540 D APHA Standard Method	2 - 10000 mg/L	20
3	Ammonical Nitrogen	mg/l	1).Titrimetric method (4500 NH3 B & C APHA Standa	1 - 2000 mg/l.	6.72
4	Chemical Oxygen Demand	mg/l	APHA (23rd Edition)- 5220 B Open Reflux Method-20	5.0- 50000 mg/l	238
5	Phenolic Compounds	mg/l	4 Amino Antipyrene method without Chloroform Extra	0.1 – 50 mg/l	0.34
6	B.O.D (3 Days 27oC)	mg/l	3 - Day BOD test. (IS 3025 (Part 44) 1993 Reaffirmed	05-50000 mg/l	43

Laboratory Remarks : Freeze By 279-R.O\_279 Dt.: 18/10/2023

Sagnetue

R. N. Patel, SSO

Note :

- 1. 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.
- 4 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.
- 6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
- 7. Physicochemical and microbiological parameters, Std.Methods for Water and Waste Water-23nd Edition by APHA
- 8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

20/10/2023 08:43:42



ANALYSIS REPORT FOR WATER / WASTE WATER SAMPLE

Sample ID:396740 - Analysis Completion:18/10/2023

Dyes and Dye- Intermediates / LAB Inward : 62285

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

#### TEST REPORT

Date: 18/10/2023 Test Report No. : 62285 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: 396020.,-3. Nature of Sample : REP-Representative/Grab, (Insp Type : COM-On Complaint) 4. Sample Collected By : C.C Patel,SO 5. Quantity of Sample Received : 5 lit 6. Code No. of the Sample : 396740 7. Date & Time of Collection & Inwarding : 22/09/2023, (1135 to 1135) & 25/09/2023 8. Date of Start & Completion of Analysis : 25/09/2023 & 18/10/2023 9. Sampling Point : ## Final Outlet of the ETP ~-: Yes 10. Flow Details (Remarks) 11. Mode of Disposal : Into River Par through Pipeline 12. Ultimate Receiving Body : Estuary zone of river par 13. Temperature on Collection : 33 & pH Range on pH Strip :7-8 on pH strip : Barcode & Color & Appearance :Brownish 14. Carboys Nos for : Ind :27956.000 , Dom :938.000 & Ind :23774.000 , Dom :939.000 : 11 ,Cap No & Weight :

15. Water Consumption & W.W.G (KLPD)

Sr	Parameter	Unit	Test Method	Range of Testing	Result	
1	Temperature	Centigrade	IS: 3025 (Part - 9) - 1984(Reaffirmed 2006)	Ambient oC - 60 oC	33	
2	Colour	Pt.Co.Sc.	2120 B APHA Standard Methods 23rd edi. 2017	2 - to 99 Hazen & 1-50	70	
3	Fixed Dissolved Solids	mg/l	Gravimetric method. (2540 E APHA Standard Method	2 – 200000 mg/L	5600	
4	Oil & Grease	mg/l	Liquid - Liquid Partition Gravimetric method. (5520 B	01 – 1000 mg/l	0.8	
5	Sulphide	mg/l	APHA (23rd Edi.)4500-s2-Fiodometric Method	1-500.0 mg/l	1.1	

Laboratory Remarks : Freeze By:279-R.O\_279 Dt.: 18/10/2023

Supritue

R. N. Patel, SSO

Note

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- 6. Permissible Limits: as per Schedule VI of EPA Rules, 1986 as ammended by Second and Third ammendment 1993 for Effluents
- 7. Physicochemical and microbiological parameters, Std. Methods for Water and Waste Water- 23nd Edition by APHA.
- 8. Bioassay test (for toxicity) -IS:6582:Part-2:2001; Reaffirmed 2007.

20/10/2023 08:43:42



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: April 2023 – September 2023

Sr No	Condition	Compliance							
A. S	pecific Conditions								
i	Industrial Waste water generation shall not exceed 17,283 m³/d.	products. we r According to s 03, 2021, Indu The average w	equest to pecific con strial was	consider late ndition of EC te water ger	est fi F N nera	<b>igures g</b> lo. J 110 tion sha the repc	iven in sar 11/108/20 Ill not exce	ne. 15-IA-II-(I ed 20,514 5 9799 m³/	addition of new ) dated August · m³/d. ⁄day only which
		is well within t			· .	•			Contouchou
		Wastewater generation m <sup>3</sup>	April 2023	May 2023	Jur 20		July 2023	August 2023	September 2023
		Month wise	308409	290169		2336	291387	302369	307663
		Per day	10280	9360	9	745	9400	9754	10255
			0	d the	e stipula Values April	ted value. for the per 2023 – Se	Summary iod ptember 2	at no time the is given below: 023	
						Min.	Max.	Avg.	
		Wastewat generation		20514		9360	10280	9799	
			,	1	1		1	1	

23 m <sup>3</sup> /d High COD effluent shall be incinerated.	Complied. Since we have another EC granted in 2021 for expansion& addition of new products, we request to consider latest figures given in same. According to No. 6 of EC F No. J 11011/108/2015 - IA - II - (I) dated August 03, 2021. "High TSD effluent of 443 KLD will be taken to MEE, 99 KLD of high COD w/w will be incinerated in incinerator. Low COD, low TDS effluent is 27143 KLD; out of which 19379 KLD will be treated in ETP and 7764 KLD will further passed through RO after treatment followed by MEE " Accordingly the High TDS and High COD waste water quantity are now 443 KLD and 99 KLD respectively.									
	being tak	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.								
	incinerati etc. are to	nigh COD streams are on. Streams containing taken for the recovery of t <b>rater stream remaining</b> of	Ammonia, Met the same and r	hanol, Coppe eused. Hence	r, Solvents, Phenolics, , there is <b>no High COD</b>					
97 m <sup>3</sup> /d High TDS	Complied	l.								
effluent shall be evaporated through MEE.	KLD high	d above, <b>the High TDS e</b> TDS waste water was e en in below table:			-					
		Bre	eak up of efflue	nt Kl/Day						
	Sr No.	Month	High TDS/COD	Low TDS/COD	Total Effluent generation					
	1	April - 2023	141	10139	10280					
	2	May -2023	135	9225	9360					
	3	June - 2023	156	9589	9745					
	4	July - 2023	93	9307	9400					
	5	August - 2023	149	9605	9754					
	6	September - 2023	148	10107	10255					
Total quantity of17283 m³/d shallbetreated atcompany's owneffluent treatmentplant.Final Discharge ofTreated effluent isbeing dischargeinto river parthrough 4 km lineconstructed by M/s	Accordin 03, 2021 The aver- treatmen Complied Final disc	<b>g to specific condition of</b> , <b>Industrial waste water</b> age <b>9799 m³/day</b> waste t plant during the report	generation sha water was tree ing period whic with standards	<b>Ill not exceed</b> ated in the co th is well with s stipulated by	20,514 m³/d. mpany's own effluent in the limit.					

ammonia recovery before mixing with normal effluent	by str in I	SecoverAprilMayJuneJulyAugustSep							water from the g recycled back
stream.		ecover mmonia	April 2023	May 2023	June 2023	July 202		August 2023	September 2023
	(N	ИT)	219.1	439.4	277	28	30	330.7	348
Phenol will be recovered from	Co	mplied.							
phenol containing effluent.	col	lumn has	phenol is recovered from effluent per one MT of 2,4 D production. A dis n has been installed for phenol recovery. Resin tower are installed to ol. Data is given in below table:						
			April 2023	May 2023	June 2023	July 2023		August 2023	September 2023
	С	)CP rude listilled	1306.44	588.24	4 1472.88	3 136	2.3	1429.56	1124.85
		,4DCP ecovered	1146.76	516	1292	119	5	1254	983.66
		,6DCP ecovered	84.0	38.18	95.60	88.4	.3	92.79	72.002
	С	)CP/ Residue	75.64	34.06	85.27	78.8	7	82.77	69.18
The treated effluent shall			effluent is i	meeting					
confirm the discharge norms.	giv Th em	ven in Tal e maxim nission w Sr Pa	charge norn <b>ble 1</b> . um values (	ns and v during th	alues of va e compliand ated standc Limit	rious pa ce perioc irds. Sun <b>Values</b>	ramet d conf nmary <b>s for th</b>	ers of tre- irms that is given b	
confirm the	giv Th em	ven in <b>Ta</b> l e maxim nission w	charge norn ble 1. um values o ent beyond t	ns and v during th	alues of va ne compliand ated standc	rious pa ce perioo Irds. Sun Values April	ramet d conf nmary <b>s for th</b> 2023	ers of tre irms that is given b e period – Septem	ated effluent i at no time the elow: 
confirm the	giv Th em	ven in Tal e maxim nission w Sr Pa	charge norn ole 1. um values o ent beyond t rameter	ns and v during th	alues of va e compliand ated standc Limit	rious pa ce perioc irds. Sun <b>Values</b>	ramet d conf nmary <b>s for th</b>	ers of tre- irms that is given b e period - Septem ax.	ated effluent i at no time the elow:
confirm the	giv Th em	ven in Tal e maxim nission w Sr Pa No. 1 pH 2 Te	charge norn ole 1. um values o ent beyond t rameter	ns and v during th the stipul	alues of va e compliand ated standc Limit Mg/I	rious pa ce perioc irds. Sun Values April Min. 6.9 30.4	ramet d conf nmary s for th 2023 Ma 7.2 31	ers of tre- irms that is given b ne period - Septem ax. 2 .6	ated effluent i at no time th elow: her 2023 Avg. 7.0 31.0
confirm the	giv Th em	ven in Tal e maxim nission w Sr Pa No. 1 pH 2 Te 3 Ca	charge norn ole 1. um values o ent beyond t rameter	ns and v during th the stipul	ralues of va ated stando Limit Mg/I 5.5 to 9.0	rious pa ce perioo irds. Sum Values April Min. 6.9	ramet d conf mary <b>5 for th</b> <b>2023</b> <b>Ma</b> 7.2 31 45	ers of tree irms that is given b e period - Septem 2	ated effluent i at no time the elow: ber 2023 Avg. 7.0 31.0 36.7
confirm the	giv Th em	ven in Tal e maxim hission w Sr Pa No. 1 p⊢ 2 Te 3 Cc sco	charge norn ole 1. um values o ent beyond t rameter I mperature lour in (pt. co ale) units spended sol	ns and v during th the stipul	alues of va e compliand ated standc Limit Mg/I 5.5 to 9.0 40	rious pa ce perioc irds. Sun Values April Min. 6.9 30.4	ramet d conf nmary s for th 2023 Ma 7.2 31	ers of tree irms that is given b e period - Septem 2	ated effluent i at no time th elow: her 2023 Avg. 7.0 31.0
confirm the	giv Th em	ven in Tal e maxim nission w Sr Pa No. 1 p⊢ 2 Te 3 Ca sa 4 Su mag 5 Oil	charge norm ole 1. um values of ent beyond t rameter I mperature lour in (pt. co ale) units spended sol g/l and Grease	ns and v during th the stipul <u>°C</u> o. lids e mg/l	ralues of va ne compliand ated standc Limit Mg/I 5.5 to 9.0 40  100 10	rious pa ce perioo irds. Sun Values April Min. 6.9 30.4 30.0 41.0 2.8	ramet d conf nmary <b>5 for th</b> <b>2023</b> <b>Mo</b> 7.2 31 45 61 5.4	ers of tre- irms that is given b ne period - Septem ax. / 2 .6 .0 .0 .0 .0	ated effluent i at no time th elow: ber 2023 Avg. 7.0 31.0 36.7 51.0 4.1
confirm the	giv Th em	ven in Tal e maxim hission w Sr Pa No. 1 pH 2 Te 3 Cc 3 Cc 4 Su 4 Su 5 Oil 6 Ph	charge norm ole 1. um values of ent beyond to rameter I mperature lour in (pt. co ale) units spended sol g/I and Grease enolic Comp g/I	ns and v during th the stipul <u>°C</u> o. lids e mg/l pounds	ralues of va ne compliand ated stando Limit Mg/I 5.5 to 9.0 40  100 10 5	rious pa ce perioo irds. Sun Values April Min. 6.9 30.4 30.0 41.0 2.8 0.6	ramet d conf nmary <b>5 for th</b> <b>2023</b> <b>Ma</b> 7.2 31 45 61 5.4 0.9	ers of tree irms that is given b e period - Septem 2	ated effluent i at no time th below: ber 2023 Avg. 7.0 31.0 36.7 51.0 4.1 0.8
confirm the	giv Th em	ven in Tal e maxim hission w Sr Pa No. 1 pH 2 Te 3 Ca 5 Ca 5 Oil 6 Ph mg 7 Cy	charge norm ole 1. um values of ent beyond to rameter I mperature lour in (pt. co ale) units spended sol g/I and Grease enolic Comp g/I anides mg	ns and v during th the stipul <u>°C</u> o. lids e mg/l pounds	alues of va e compliant ated standc Limit Mg/I 5.5 to 9.0 40  100 10 5 0.2	rious pa ce perioo irds. Sun Values April Min. 6.9 30.4 30.0 41.0 2.8 0.6 ND	ramet d conf nmary <b>5 for th</b> <b>2023</b> <b>M</b> ( 7.2 31 45 61 5.4 0.9 0.9 0.9	ers of tre- irms that is given b e period - Septem ax. / 2 .6 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	ated effluent i at no time the below: ber 2023 Avg. 7.0 31.0 36.7 51.0 4.1 0.8
confirm the	giv Th em	ven in Tal e maxim hission w Sr Pa No. 1 p⊢ 2 Te 3 Cc 4 Su ma 5 Oil 6 Ph ma 7 Cy 8 Flu	charge norm ole 1. um values of ent beyond to rameter I mperature lour in (pt. co ale) units spended sol g/I and Grease enolic Comp g/I	ns and v during th the stipul °C o. lids e mg/l pounds	ralues of va ne compliand ated standc Limit Mg/I 5.5 to 9.0 40  100 10 5	rious pa ce perioo irds. Sun Values April Min. 6.9 30.4 30.0 41.0 2.8 0.6	ramet d conf nmary <b>5 for th</b> <b>2023</b> <b>Ma</b> 7.2 31 45 61 5.4 0.9	ers of tree irms that is given b ne period - Septem 2	ated effluent i at no time th below: ber 2023 Avg. 7.0 31.0 36.7 51.0 4.1 0.8

	11	Arsen	ic mg/l		0.2	ND	ND	ND
	12	Total	Chromiu	m mg/l	2	0.1	0.1	0.1
	13		velent nium mg/	/I	1	ND	ND	ND
	14		er mg/l		3	0.2	0.4	0.3
	15	Lead	-		2	ND	ND	ND
	16	Mercu	iry mg/l		0.01	ND	ND	ND
	17	Nicke	l mg/l		5	0.2	0.3	0.2
	18	Zinc n	ng/l		15	0.5	0.9	0.7
	19	Cadm	nium mg/l		2	ND	ND	ND
	20	Phosp	bhate mg	g/l	5	1.6	2.4	2.0
	21	BOD mg/l	(3 days a	ıt 27°C)	100	47.2	74.0	56.1
	22	CODI	mg/l		250	206.0	232.0	218.7
	23	Insect	icide/Pes	sticide	Absent	ND	ND	ND
	24		m Absorj		26	4.5	7.4	5.4
	25		anese m	g/l	2	0.1	0.2	0.1
	26	Tin m		<u>J</u> .	0.1	ND	ND	ND
	27		ssay Test	t	90%	100%	100%	100%
					survival of fish after 96 hrs. in	survival of fish after	survival of fish after 96	survival of fish after 96 hrs. in 100%
					100% effluent %	96 hrs. in 100%	hrs. in 100% effluent	effluent
						effluent	emuent	
The domestic effluent shall be disposed off through septic tank / soak pit.	Domes treatme	tic was ent.			septic tank ration is give	effluent	equently in	to ETP for furth
effluent shall be disposed off through septic tank	Domes treatme Detail c	tic was ent. If Dome stic ewater			·	effluent	equently in	to ETP for furth September 2023
effluent shall be disposed off through septic tank	Domes treatme Detail o Dome Waste genero	tic was ent. If Dome stic ewater ation	estic efflu April	ient gene May	ration is give	effluent and subse en in below	equently in table:	September
effluent shall be disposed off through septic tank	Domes treatme Detail c Dome Waste genere m <sup>3</sup>	tic was ent. of Dome stic ewater ation wise	estic efflu April 2023	May 2023	June 2023	effluent and subse en in below July 2023	equently in table: August 2023	2023
effluent shall be disposed off through septic tank	Domes treatme Detail of <b>Dome</b> Waste genero m <sup>3</sup> Month Per do	tic was ent. of Dome stic ewater ation wise	April 2023 9607 320	May 2023 9530 307	June 2023 9592	effluent and subse en in below July 2023 9450 305	equently in v table: August 2023 9796 316	September 2023 9598
effluent shall be disposed off through septic tank	Domest treatme Detail of <b>Dome</b> Waste genero m <sup>3</sup> Month Per do	tic was ent. of Dome stic ewater ation wise y ximum stic Wa	April 2023 9607 320	May 2023 9530 307 m and av	June 2023 9592 320 erage values Values for April 2023	effluent and subse en in below July 2023 9450 305 s are given the period 3 – Septem	equently in table: August 2023 9796 316 below: below: ber 2023	September 2023 9598
effluent shall be disposed off through septic tank	Domest treatme Detail of Dome Waste genera m <sup>3</sup> Month Per do The mo	tic was ent. of Dome stic ewater ation wise y ximum stic Wa	estic efflu April 2023 9607 320 , minimur	May 2023 9530 307 m and av	ration is give June 2023 9592 320 rerage values	effluent and subse en in below <b>July</b> 2023 9450 305 s are given the period	equently in 7 table: August 2023 9796 316 below:	September 2023 9598

	-	
ii	The process emissions (SO <sub>2</sub> , NH <sub>3</sub> , Cl <sub>2</sub> , and HCl, shall be scrubbed with Scrubbers.	<b>Complied</b> . All the SO <sub>2</sub> , NH <sub>3</sub> , Cl <sub>2</sub> , 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) <sup>0.3</sup> 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.
	The gaseous emission from the DG sets shall be dispersed through stack of adequate height as per CPCB standards.	Complied. The gaseous emission from the DG sets is being dispersed through stack of adequate height as per CPCB standards given below: The minimum height of stack is provided using the following formula (ref. CPCB): $H = h+0.2x\sqrt{KVA}$ H = Total height of stack in meter h = Height of the building in meters where the generator set is installed KVA = Total generator capacity of the set in KVA
		However, DG sets are being used only during emergency startups.
	Acoustic enclosures shall be provided to the DG set to control the noise pollution.	<b>Complied</b> . All DG sets are having inbuilt acoustic enclosures to control the noise pollution and meeting the prescribed norms.
iii	The company shall upload the status of compliance of stipulated environmental clearance conditions including results of monitored data on its web site.	<b>Complied</b> . The status of compliance of stipulated environmental clearance conditions including results of monitored data is posted on our web site www.atul.co.in
	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.	<b>Complied.</b> 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.

## Complied.

The criteria pollutant levels SPM. namely; RSPM, SO2, NOx 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.

The critical pollutants parameters namely; SPM, RSPM, SO<sub>2</sub>, NOx are monitored regularly on monthly basis and displayed at board at the company entrance.

(ambient levels as 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:

Sr No.	Parameter	Standard values as	Unit	Values for the period April 2023 – September 2023		er 2023
		per CCA		Min.	Max.	Avg.
1	SO2	40	mg/Nm³	6.8	28.6	19.38
2	SO2 (kg/T)	2	kg/T	0.32	1.8	0.87
3	NOx	25	mg/Nm <sup>3</sup>	10.4	24.8	19.05
4	HCI	20	mg/Nm <sup>3</sup>	1.95	16.3	6.71
5	PM	150	mg/Nm <sup>3</sup>	26.8	57.4	43.95
6	PM with Pesticide compound	20	mg/Nm <sup>3</sup>	5.73	16.9	10.70

Summary of flue gas stack results:

Sr No.	Parameter	Standard values as	Unit	Values for the period April 2023 – September 2023			
		per CCA		Min.	Max.	Avg.	
1	PM	100	mg/Nm <sup>3</sup>	41.7	61.4	49.88	
2	PM (New Boiler 50 TPH)	50	mg/Nm <sup>3</sup>	32.4	44.7	38.13	
3	SO2	600	mg/Nm <sup>3</sup>	278	324	300.63	
4	NOx	600	mg/Nm <sup>3</sup>	272	338	300.31	
5	NOx (New Boiler)	300	mg/Nm <sup>3</sup>	283	296	290.2	

Summary of Ambient Air Quality results:

Station	Parameter	Limit micro -	Values for the period April 2023 – September 2023		2023
		gm/NM <sup>3</sup>	Min.	Max.	Avg.
66 KV	PM2.5	60	22.0	50.0	33.3
	PM10	100	48.0	82.0	59.5
	SO <sub>2</sub>	80	13.3	24.4	18.7
	NO <sub>2</sub>	80	18.2	30.7	26.3
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND

Opposite	PM2.5	60	31.9	51.7	35.7
Shed D	PM10	100	52.3	89.6	62.1
	SO <sub>2</sub>	80	16.7	24.6	20.4
	NO <sub>2</sub>	80	22.2	30.5	28.6
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
West site ETP	PM2.5	60	28.0	35.0	31.2
West site Eff	PM10	100	43.0	50.0	46.7
	SO <sub>2</sub>	80	20.5	29.6	24.4
	NO <sub>2</sub>	80	23.2	31.4	26.2
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
North site ETP	PM2.5	60	29.0	35.0	32.5
North site Eff	PM10	100	36.0	49.0	44.2
	SO <sub>2</sub>	80	16.7	21.3	18.6
	NO <sub>2</sub>	80	24.7	21.3	26.3
	Ammonia	400	24.7 ND	27.8 ND	26.3 ND
	HCI	200	ND	ND	ND
TSDF	PM2.5	60	25.0	32.0	28.5
	PM10	100	49.0	52.0 61.0	28.5 54.0
	SO <sub>2</sub>	80	20.3	24.0	22.3
	NO <sub>2</sub>	80	20.3	33.4	30.8
	Ammonia	400	29.4 ND	33.4 ND	30.8 ND
	HCI	200	ND	ND	ND
Main Guest	PM2.5	200 60	ND 24.2		
House	PM2.5 PM10	60 100	40.3	33.4 54.3	29.4 50.8
		100 80			
	SO <sub>2</sub>	80 80	15.1	26.9	19.2
	NO <sub>2</sub>	400	16.3 ND	27.8 ND	23.1 ND
	Ammonia				
10/2 cotto Colore	HCI	200	ND	ND	ND
Wyeth Colony	PM2.5	60	26.0	32.0	29.7
	PM10	100	50.0	60.0	55.7
	SO <sub>2</sub>	80	14.8	21.6	16.9
	NO <sub>2</sub>	80	24.6	40.2	34.3
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
Gram	PM2.5	60	23.8	31.2	27.1
panchayat	PM10	100	36.7	56.1	51.1
hall	SO <sub>2</sub>	80	14.2	29.4	20.0
	NO <sub>2</sub>	80	16.9	28.7	23.4
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
Main office,	PM2.5	60	19.7	31.7	26.1
North site	PM10	100	46.2	56.9	51.6
	SO <sub>2</sub>	80	14.3	25.4	18.9
	NO <sub>2</sub>	80	21.2	29.8	24.4
	Ammonia	400	ND	ND	ND

						_	1	
	HCI		200	ND	N		ND	
Haria water	PM2.5		50	29.4		1.3	35.1	
tank	PM10		.00	52.6	84	4.6	60.0	
	SO <sub>2</sub>	8	30	17.1	30	0.2	20.9	
	NO <sub>2</sub>	8	30	20.3	29	9.8	26.4	
	Ammon	ia 2	-00	ND	N	D	ND	
	HCI	2	200	ND	N	D	ND	
Summary of V	1	Daramata	r Prescril		luce of '			
Fidit	Area	Paramete	Limit Mg/nm	Mi 3 pe	lligram   riod	es of VOCs in ram per NM <sup>3</sup> for the d 2023 – September 2023		
				Mi	n.	Max.	Avg.	
2,4 D	Reactor	Phenol	19	NE		ND	ND	
	Buffer tank	Chlorine	3	0.8	30	1.6	1.3	
Resorcinol	Benzene storage tank area near vent	Benzene	15	0.3	30	0.8	0.5	
	Near Extraction /scrubber unit	Butyl acetate	-	52	.2	124.0	94.9	
Pharma	At second floor work area	Ammonia	18	6.2	20	11.6	8.9	
	Ammonia recovery area	Ammonia	18	2.8	30	6.3	5.1	
Epoxy - I	At vacuum pump 2nd floor	ECH	10	1.7	70	2.9	2.1	
	At vessel POS 1208 G.F	ECH	10	1.7	70	4.9	3.1	
Shed H		Nitrobenz ne	e 5	1.7	72	2.1	1.9	
Shed N	Ground Floor	SO2	3	1.3	30	2.7	1.9	

	The company shall obtain Authorization for Collection; Storage and Disposal of Hazardous waste under the hazardous waste management (Handling and trans boundary movement rule - 2008) for management of hazardous waste and prior permission from GPCB shall be obtained for disposal of solid waste in the TSDF.	Complied. 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. Amendment AH - 121400 for handling, storage and disposal of hazardous waste.
	The concerned company shall undertake measures for the firefighting facility in case of emergency.	<ul> <li>Compiled.</li> <li>A well designed Fire hydrant system is adequate and as per standards.</li> <li>Fire hydrant Network details: <ul> <li>Four full - fledged fire hydrant system in the company Water Storage Capacity - 50 million Liters</li> <li>Total length of hydrant line – 15 km</li> <li>Fire Fighting Equipment <ul> <li>DCP : 1350</li> <li>CO2: 776</li> </ul> </li> <li>Four fire Tenders</li> <li>One fire tender having 1800 Lit water capacity</li> <li>Second multipurpose fire tenders having 5000 Lit water &amp;500Foam</li> <li>Third Multipurpose tender having facility of DCP - 500 Kg, Foam – 500 lit and Water – 4500 Lit.</li> </ul> </li> <li>SCBA sets – 35nos.</li> <li>Emergency alarm system – 532 nos. points spread across the company.</li> <li>Fire station manned round the clock with Siren and Annunciation System.</li> <li>Regular Testing on every Monday.</li> <li>Subset detectors in the office and labs.</li> <li>Auto water deluging system at critical reactors.</li> <li>Auto water sprinkler system at tank farms.</li> </ul>
vi	The project authorities shall strictly comply with the rules and guidelines under manufacturing, storage and import of hazardous chemicals rule 1989 as amended	Complied. We are complying with all the requirement of MSIHC rule 1989 as amended in October, 1994 and January, 2000 and having proper storage and handling system, Onsite emergency plan, Licenses, reporting, etc. The company complies with all stipulated norms of act made in CCA by GPCB are being complied. Latest Environmental audit report by Sitaram Naranji Patel Institute of Technology and Research Centre, Surat for year 2022-23 was submitted vide our letter dated

	in Octoberober, 1994 and January, 2000.	June 27, 2023.
	All Transportation	Complied.
	of Hazardous chemicals shall be	Transportation of Hazardous chemicals are being done as per the MVA rule 1989. TREM (Transport Emergency) card and MSDS of chemicals are provided to
	as per the MVA, 1989.	transporter.
vii	The company shall undertake waste minimization measures : Metering and control of quantities of active ingredients to minimize waste.	<b>Complied</b> . 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.	<b>Complied</b> . Sodium sulfate, sodium thio sulphate, brine, MEE salt, sodium hypochlorite, copper hydroxide, spent acid, etc. are few by - products from the process which are being sold for using the same either as raw material or as substitute to raw materials. Also, fly ash and gypsum are being used as raw material for brick manufacturing. Sodium hypochlorite, sodium hydro sulfide, etc. are being used as raw material in other processes.
	Use of automated filling to minimize spillage.	<b>Complied</b> . 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.	<b>Complied</b> . Chemicals and solvents are handled in close handling system through pipe lines only.
	Venting equipment through vapor recovery system.	<b>Complied</b> . 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. Genoscorb technology for solvent vapor recovery is also installed and working perfectly.
	Use of high	Complied.
	pressure hoses for equipment cleaning to reduce wastewater generation.	Many equipment like reactors, spray dryers, condenser wherever necessary are being cleaned with high pressure sprayer / jet to reduce waste water generation.
viii	Fugitive emissions	Complied.
	in the work zone environment,	Fugitive emissions in the work zone environment and raw material storage area is being regularly monitored through NABL accredited and MoEF approved agency.
	product, raw material storage	Data for the reporting period is given in <b>Table 4</b> . Besides this online monitors in work area for parameters like Chlorine, HCl and Phosgene are also installed.
	area shall be regularly monitored. The	The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards.
·	•	

	emission shall	
		Summany is alwon in specific condition iii
		Summary is given in specific condition iii.
	limits imposed by I.	
ix	The project	
	authority shall	All the VOCs/solvent recovery systems are attached with chilled brine solution in
	provide chilled	secondary condenser for condensation of VOCs.
	brine solution in	
	secondary	
	condenser for	
	condensation of	
	the VOCs.	
	The project	Complied.
	authority shall	On an average solvent recovery is 96%.
	ensure that solvent	
	recovery shall not	
	be less than 95%	
	The VOC	Complied.
	monitoring shall be	We are monitoring VOC as well as other chemicals in work area as per Factories Act
	carried in the	and records are being maintained in Form No. 37.
	solvent storage	
	area and data	VOC monitoring in solvent storage area is being done and data are submitted
	submitted to the	through EC compliance report.
	Ministry.	
	winnstry.	Data for the report period is given in <b>Table 4.</b>
x	Solvent	Complied.
	management shall	All the reactors handling solvent are connected/attached with chilled brine
	be as follows:	condenser for solvent recovery.
	Reactor shall be	
	connected to	
	chilled brine	
	condenser system.	
	Reactor and	Complied.
	solvent handling	All the reactors and pumps handling solvent are equipped with mechanical seals to
	pump shall have	prevent leakages.
	mechanical seals to	prevent leakages.
	prevent leakages.	
	The condensers	Complied.
	shall be provided	The condensers provided are properly designed with respect to HTA and Residence
	with sufficient HTA	time to achieve more than 95 % recovery. As mentioned above, average 96 %
	and residence time	solvent recovery is being achieved.
	so as to achieve	
	more than 95%	
	recovery.	
	Solvents shall be	Complied.
	stored in a	Solvents are stored in tank farms in separate tanks with proper earthing, flame
	separate space	arresters, lightening arresters, fencing, Fire hydrant system, Fire extinguishers, flame
	specified with all	proof equipment, etc. safety measures.
	safety measures.	
	surety meusures.	

	Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. Entire plant shall be flame proof.	Complied. Double earthing is provided and regular checking and testing of the same is being done and recorded. 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.	<b>Complied</b> . Breather valves have been provided to all the solvent storage tanks to minimize the loses.
xi	Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc.	<b>Complied</b> . Hazardous chemicals are being stored in tanks, drums and carboys considering the storage quantity and chemical stored.
	Company shall develop an area of 33% green belt and selection of plant species shall be as per the guideline of CPCB.	Complied. Company has already developed more than 36 % of greenbelt in Atul complex Total Industrial Plot area: <b>1126078.27 sq.mt</b> Green belt area: <b>409030.00 sq.mt</b> (approx. 36% of total plot area) We planted approximately <b>39760</b> trees of difference species in report period at different location and photograph attached below.
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	Complied. 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.
	use the same water for the various activities of the project to conserve fresh 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.

		Company has harvest 3.26 Lakh KL rain water during 2023
xiii	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Complied. Occupational health surveillance of the workers is being done on regular basis and record maintained as per the factory act.
B. G	eneral Conditions:	
i	The project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board.	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 Sitaram Naranji Patel Institute of Technology and Research Centre, Surat for year 2022-23 was submitted vide our letter dated June 27, 2023.
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	Complied. Any expansion will be done only after getting EC.

	if any.	
iii	At no time, the emissions shall exceed the prescribed limits.	<b>Complied</b> . We are also doing offline monitoring at regular interval (Monthly) through NABL accredited and MoEF approved agency. At no time, the emissions exceeded the prescribed limits during report period. <b>Summary of stack results given in specific condition no. iii.</b>
	In the event of failure of any pollution control system adopted by the units, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Complied. No such case happened during compliance period. Whenever such incident of failure of pollution control system happened, we will stop the operation and rectify the problem and then only restart.
iv	The Gaseous emission (NOx, HCl, SO2 and SPM) and Particulate matter along with RSPM levels from various process units shall conform to the standards prescribed by the concerned authorities from time to time.	<b>Complied</b> . The gaseous emissions (SO <sub>2</sub> , NOx, and HCI) 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 <b>Table 2</b> .
	At no time, the emission levels shall go beyond the stipulated standards.	Complied. We will ensure that at no time emission will go beyond the standards. The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards. Summary of stack results given in specific condition no. ii.
	In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restricted until the control measures are rectified to achieve the desired efficiency. Stack monitoring for SO <sub>2</sub> , NOx and SPM shall	<b>Complied</b> . No such case happened during compliance period. Stack monitoring for SO <sub>2</sub> , NOx and SPM has been carried out and details given in <b>Table 2</b> . Whenever such incident of failure of pollution control system happened, we will stop the operation and rectify the problem and then only restart.

	be carried.				
v	The Location of	Complied.			
	ambient air quality	The Location of ambient air quality monitoring stations had been decided in			
	monitoring stations	consultation with GPCB so that at least one station is installed in the up wind and			
	shall be decided in	downwind direction as well as where maximum ground level concentration are			
	consultation with	anticipated. The same had been shown to authority like SPCB, CPCB & MoEF during			
	state pollution	their visit to our factory.			
	control Board and it				
	shall be ensured	List of our ambient air monitoring station is given below:			
	that at least one	No. Location			
	station is installed	1 66 KVA GEB substation			
	in the up wind and	2 Opposite shed D			
	downwind	3 West site ETP			
	direction as well as	4 North site ETP			
	where maximum	5 Near TSDF			
	ground level	6 Near main guest house			
	concentration are	7 At wyeth colony			
	anticipated.	8 Gram panchayat hall			
		9 Near main office, North site			
		10 Haria water tank			
		Details of ambient air quality results is given in <b>Table 3</b> .			
vi	Dedicated	Complied.			
	Scrubbers and	Dedicated scrubbers with stacks of appropriate height (as per the central pollution			
	stacks of	control board guideline) have been provided to control the emission from various			
	appropriate height	vents. Details of stack results along with its height data is given in <b>Table 2</b> .			
	as per the central				
	pollution control				
	board guideline				
	shall be provided to				
	control the				
emission from					
	various vents.				
	The scrubber water	Complied.			
	shall be sent to ETP	The scrubber water is being sent to ETP for further treatment.			
	for further				
	treatment or sell to				
	actual end users.				
vii	The overall noise	Complied.			
	level in and around	In built acoustic enclosure, silencer and insulation are provided on all source of noise			
	the plant area shall	generation to keep over all noise level within the stipulated standards like turbine,			
	be kept well within	DG set, etc.			
	the standard by				
	providing noise				
	control measures				
	including acoustic hoods silencers.				
	hoods silencers, enclosures etc. on				
	all source of noise				
	generation.				

	The ambient noise	Comr	blied					
	level shall confirm	•	<b>Complied</b> . The ambient noise level confirm to the standard prescribed under EPA. The same is being regularly monitored and its details are given in <b>Table 5 and 6</b> .					
	to the standards							
	prescribed under	•	naximum values during the		0			
	Environment(	emiss	ion level went beyond the	stipulated sto	andards. Su	ummary is	given below:	
	Protection) Act -	Noise level monitoring data (Day Time):						
	1986 Rules,1989 viz 75 dBA (day time) and 70 dBA	Sr No	Location	Permissible Limits, dBA		for the pe 023 – Sep	eriod otember 2023	
	(night time)			75	Min.	Max.	Avg.	
		1	66KVA substation	75	67.1	70.3	68.5	
		2	Opposite shed D	75	60.4	63.3	61.6	
		3	ETP West site	75	64.5	66.4	65.5	
		4	ETP North site	75	58.8	60.9	59.7	
		5	Near TSDF	75	63.8	66.9	65.3	
		6	Near Main Office North	75	65.7	69.7	67.4	
			site					
			Noise level monitoring data (Night Time):					
		Sr	Location	Permissible		or the perio		
		No.		Limits, dBA	April 202 Min.		mber 2023	
		1		70		Max.	Avg.	
		1	66KVA substation	70	52.4	59.3	56.1	
		2	Opposite shed D	70	50.1	52.5	51.7	
		3	ETP West site	70	56.9	58.9	57.8	
		4	ETP North site	70	55.6	61.3	59.5	
		5	Near TSDF	70	51.4	54.3	52.7	
		6	Near Main Office North site	70	53.8	60.7	57.8	
viii	Training shall be	Comp			1			
	imparted to all employees on		bany is imparting training t ar intervals on safety a		•			
	employees on safety and health	0	utions and hazards are a		•		<b>,</b>	
	aspects of	-	priate places in the plants	-	maneatee	a anough	display bounds at	
	chemicals	appro						
	handling.							
	Pre - employment	Comp	blied.					
	and routine	Pre-n	nedical checkup and routir	ne medical ch	eckup for tl	he employ	vees is being done	
	periodical medical	on re	gular basis.					
	examination for all							
	employees shall be	Sumr	nary of medical checkup a	iven in specifi	c condition	no, xiii		
	undertaken on	Summary of medical checkup given in specific condition no. xiii.						
1	regular basis.							

ix x	Usage of PPE's by employee/ workers shall be ensured. The project	Complied. Company have PPE policy in place and is strictly followed. Company is providing adequate PPEs to all the employees. Complied.
	proponent shall also comply with all the environmental protection measures and safeguards proposed in project report submitted to the ministry. All the	Company has complied with all the environmental protection measures and safeguards proposed in the report apart from the recommendations made their in. Since ToR didn't suggest for EIA or public hearing, no such recommendations
	recommendation made in respect of environmental management and risk mitigation measures relating to the project shall be implemented.	mentioned. However, recommendations made in respect of adequacy report for the referred project are compiled 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	A Separate environmental management cell equipped with full flagged laboratory facility shall be set up to carry out the environmental management and monitoring function.	Compan fledged I functions research remedia Compan pH mete oven, m sampling consulta	<b>Complied</b> . 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. 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,				
xiv	The project authorities shall earmark adequate funds to implement the conditions stipulated by the Ministry of	Complie EMP me Recurrin the lega pollution	MLVSS and MLSS. <b>Complied</b> . EMP measures are implemented by 2010. <b>Recurring cost:</b> 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.				
	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.	Sr No. 1 2 3 4 5 6 Total	ParameterAir Pollution ControlLiquid Pollution ControlEnvironmental Monitoring and ManagementSolid waste DisposalOccupational healthGreen belt	Recurring Cost (Rs. In lacs) For the report period April 2023 – September 20231571216225151694			
XV	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/repres entation, if any, were received while processing the proposal.	distribut	ubmission to the Panchayat, Zilc	a parishad, District Industrial Centre was same was submitted to Ministry vide our 2017.			

		Complied
	The clearance	Complied.
	letter shall also be	Available at company's website at www.atul.co.in
	put on the web site	
	of the company by	
	the proponent.	
xvi	The	Complied.
	implementation of	SPCB and MoEF is monitoring through their regular visits.
	the project vis - à -	
	vis environmental	
	action plan shall be	
	monitored by	
	Ministry's Regional	
	office at Bhopal /	
	SPCB / CPCB.	
xvii	The Project	Complied.
	Proponent shall	We informed the public through advertisement and by sending our EC to local
	inform the public	Panchayat, Zila parishad, District Industrial Centre for further actions at their end.
	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.	
	<u>ni.in</u> .	
	This shall be	Complied.
	advertised within	Advertisement was published as directed and copy of the same was submitted to
	seven days from	Ministry vide our letter dated November 14, 2009.
	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	

xvii i	the Ministry, the date of financial closures and final approval of the project by the concerned authorities and the	Final approval: We have obtained NOC and CCA from GPCB.
	date of start of the project.	
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 -	Noted.
	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 amendments	
	and rules.	

# Table1: Quality of treated effluent

Sr No.	Parameter	Results	GPCB Limits					
INO.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	Mg/l
1	рН	7.15	6.98	6.92	7.12	6.93	6.89	5.5 to 9.0
2	Temperature °C	30.6	31.2	31.6	31.4	30.4	30.8	40 °C
3	Colour (pt. co. scale)in units	30	35	40	30	45	40	
4	Suspended solids mg/l	42	57	51	41	61	54	100
5	Oil and Grease mg/l	5.4	4.6	3.9	2.8	3.4	4.2	10
6	Phenolic Compounds mg/l	0.72	0.89	0.73	0.62	0.82	0.76	5
7	Cyanides mg/l	ND	ND	ND	ND	ND	ND	0.2
8	Fluorides mg/l	0.75	0.94	1.02	1.24	0.99	0.74	2
9	Sulphides mg/l	0.6	0.42	0.36	0.4	0.8	0.4	2
10	Ammonical Nitrogen mg/l	9.4	5.97	8.14	7.23	6.85	8.24	50
11	Arsenic mg/l	ND	ND	ND	ND	ND	ND	0.2
12	Total Chromium mg/l	0.062	0.089	0.093	0.081	0.096	0.13	2
13	Hexavelent Chromium mg/l	ND	ND	ND	ND	ND	ND	1
14	Copper mg/l	0.17	0.22	0.25	0.35	0.41	0.32	3
15	Lead mg/l	ND	ND	ND	ND	ND	ND	2
16	Mercury mg/l	ND	ND	ND	ND	ND	ND	0.01
17	Nickel mg/l	0.17	0.2	0.19	0.26	0.19	0.21	5
18	Zinc mg/l	0.56	0.67	0.58	0.84	0.91	0.54	15
19	Cadmium mg/l	ND	ND	ND	ND	ND	ND	2
20	Phosphate mg/l	1.62	1.94	2.06	1.85	2.18	2.41	5
21	BOD (3 days at 27°C) mg/l	48	74	61	58.3	47.17	48.13	100
22	COD mg/l	206	226	224	212	232	212	250
23	Insecticide/Pesticide	Absent	Absent	Absent	Absent	Absent	Absent	Absent
24	Sodium Absorption Ratio	4.45	5.24	7.39	5.01	4.6	5.8	26
25	Manganese mg/l	0.082	0.093	0.11	0.16	0.24	0.13	2
26	Tin mg/l	ND	ND	ND	ND	ND	ND	0.1
27	Bio Assay Test	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	90% survival of fish after 96 hrs. in 100% effluent

Table: 2 Stack Results

is. inData Data in the second of		Details of Rue stat	i)		Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
3. a)Data baseData baseData baseData baseData baseDescriptionDescr		The second secon		Permissible				-	Obtained	Obtained
Part and the section of the	Sr. No.	Stack Details	Parameter		Obtained Value	Cibicatined Value	Obtained Value	Obtained Value		Vdue
Image: state in the	40		PM		- 107475535419757		- estimation	47.8	52.8	2000-0100
μ         μ	1	FBC bollerE1			NotRunning	8,02.97	Not Flurining	10.040		Not Runn
2         Relation         200         200         200         200         200         200         200           3         Percoarray         No.         200 <th< td=""><td></td><td></td><td></td><td></td><td>100</td><td></td><td></td><td>NDE</td><td></td><td></td></th<>					100			NDE		
Notice         Display         204         201         201         200         200           3         Price Color E2         Not color E2         Signaph         244         Price Color E2	3	EDG halles FO					100 CT	Net Dural en		49.6
Part Control         Part Part Part Part Part Part Part Part	*	PBC DOIOTE2						Not Running		312
Ale bases         Pick b			10000000			203		443	300	58.6
Nome         Nome <t< td=""><td>3</td><td>FBC bollerE3</td><td></td><td></td><td></td><td>Not Running</td><td></td><td></td><td>Not Running</td><td>324</td></t<>	3	FBC bollerE3				Not Running			Not Running	324
Alt         Model (a) (a) (b) (b) (b) (b) (b) (b) (b) (b) (b) (b					279	1 8	290			338
Index         Oracle of parts         Oracle of parts <thoracle of="" parts<="" th="">         Oracle of parts</thoracle>	-	Second and a			1	61.4	1.000 000 000	1	10000 DE 1	
Part Prior 2 point p	4	FBC boiler W1			NotBunning		Not Funning	Not Running	Not Running	Not Runn
Bate of DTN 2.Pang Near based of Y2.VG No.         Solit of DTN 2.Pang Near based of Y2.VG No.         Solit of DTN 2.Pang Near based of Y2.VG No.         Solit of DTN 2.Pang Near based of Y2.VG No.         Solit of DTN 2.Pang Near based of Y2.VG No.         Solit of DTN 2.Pang Near based of Y2.VG NO.         Solit of TDN 2.Pang Near based of Y2.VG NO.         Solit of Y2.				600 mg/Nm <sup>3</sup>						
Ball of Diff 12 Load Name based (VXV)         Non- Mark of Diff 13 Load Name based (VXV)         Non- Mark of Diff 13 Load Name based (VXV)         Non- Name based (VXVV)         Non- Name based (VXVV)         Non- Name based (VXVVV)         Non- Name based (VXVVVV)         Non- Name based (VXVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV				50 mg/Nm <sup>3</sup>						44.7
No.         Sol organ         Sol	Б	Boiler (50 TPH 2 Nos) (New boilers) W2,W3			1.1					308
M         IO organ         372         99.2         93.2         99.1         90.4           Models Pure         100 organ         93         7.6         6.8         7.4         5.8         7.4         5.8         7.4         5.8         7.4         5.8         7.3         2.66         7.3         2.66         7.3         2.66         7.3         2.61         7.3         2.66         7.3         2.61         7.3         2.66         7.3         2.61         7.3         7.61         7.3         7.61         7.61         7.61         7.61         7.61         7.61         7.61         7.61         7.61         7.61         7.61         7.61         7.61         7.61         7.61         7.61										291
General Procession Price Price Procession Price							10,250	1.100		ND 47.2
Production Partin         Name         Name <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>47.2</td>										47.2
μet (i Pert Meriel)         μet (i So region)         55.8         15.4         4.64         56.3         15.4         4.64         56.3         15.4         15.6	.9	(Resorcinal Plant)								27.4
7         He(1) Port work B)         SD, No.         10 pm B         10 pm B										5.62
No.e         Display         21.0         31.6         31.6         30.2         30.2         30.2           G         Observation         Display         Nationary and antice of control of antice of contro	7	Hot Oil Plant shed-B								0.9
θ (blame/Sweif)         PA (blame/Sweif)         PA (blame/Sweif)<		content to distribute to the	NOx							32.6
9         Exact Byl         Solar Byl         Note         Stat Burning         Net Running         Net Running </td <td></td> <td>Oil humar Shad B</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		Oil humar Shad B								
Industry         No.c.         Socie	8		SO,	100 ppm	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Runn
β         Promic fluid heater of OCODAP Part Sign 200 germ 4.4         120 mphm         26.4         47.7         27.4         27.4         28.4         34.3           10         Dest 2000 V/A (bland by Garuping on auring und au)         No.4         20 germ 4.4         4.4         4.2         4.3         4.3         4.4		formed my)	NOx	50 ppm					8	
9         52, 10 ppm         40, 20 mm         72, 20 mm         62, 3 mm         72, 3 3 mm <t< td=""><td>192</td><td>Thermic fluid heater of DCODAP Plant</td><td></td><td>150 mg/Nm<sup>5</sup></td><td></td><td>67.00</td><td></td><td></td><td></td><td>44.9</td></t<>	192	Thermic fluid heater of DCODAP Plant		150 mg/Nm <sup>5</sup>		67.00				44.9
Disk         Disk <th< td=""><td>9</td><td>and a second second</td><td></td><td></td><td></td><td></td><td></td><td>and the second second</td><td></td><td>7.7</td></th<>	9	and a second						and the second		7.7
10         Disk 200 (V/A (Starphy Gamping and Large (Starphy Gamping a										24.3
M         Data         Da	10	D.G. set 1500 KVA (Stand By) (Sampling done				1000000				41,3
Disk 2010 KVA Standby/Gamping dam         PM         10 mg/hm         446         412         388         961         993           Ling trigt and an         M         100 mg/hm         5.8         59         56.6         6.46         66           Kow         90 pen         36.4         27.8         27.2         21.6         21.3           Total Set Set         District Set Set         0         0         27.8         27.2         21.6         21.3           St. Ab         Stack Details         Permetter         Permetter         Obtained Value         Obtained Value </td <td>10</td> <td>during trial run)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.9</td>	10	during trial run)								0.9
11         DS ME 2010 X-10 (soft pin) dott pin) dott pin (soft pin) dott pin) dott pin (soft pin) dott pin (soft pin) dott pin (soft										25.6
jump (mol un)         joint         Borgen         30.4         27.8         27.7         21.6         21.3           Decisis of Process statul.         Colspan="4">Colspan="4">Colspan=40000         Colspan=40000         Colspan=400000         Colspan=40000	113									7.2
Database         Details of Processes processes         Parameter         Parameter         Ottamed Volue         Octamed Volue         Octa		during trial run)					10109.00			30.8
Struk         Stuck Details         Parameter         Parameter         Obtained Value										
Sr. No.         Journal Pathetics         Journal Pathetics         Journal Pathetics         Vehical Pathetics           1         Funce (Procent Pari)         PM         120 mphm         444         14.8         110         110         100           2         Render Phongene Pari)         PM         120 mphm         444         14.8         110         ND         ND           3         Decision Paris         CO         -         ND		Datails of Process sto	ick						-	
Sr. Mo.         protection	0.000	lan and a state of the state of	and the second s	Permissible	700000000000000000000000000000000000000	College and the second second	and a second second second		Chippined	Cibitaine
1         Funce (Progene Paria)         Phi         100 month         344         1148         110         116         108           2         Reactor (Prosgene Paria)         Prosgene         O and         ND         ND         ND         ND         ND         ND         ND         ND           3         Bestice (Prosgene plant - New)         Cp         9 mgAnt         4.88         4.96         6.4         1.10         1.00         ND           3         Decisionation Paria         Cp         9 mgAnt         4.88         4.96         6.4         1.1         4.33           4         Common stacked HC (Sign unt 182         Cp         9 mgAnt         6.11         4.72         5.62         4.03         3.84           4Marc Acid Genet Stat         Cp         9 mgAnt         6.13         4.72         0.64         4.22         0.64           6         Common stacked HC (Sign unt 182         Sol         2 bits         1.72         1.84         1.42         3.6         2.32         0.64           6         Consolitic Acit Ploti Isource         Sol         2 bits         1.72         1.24         1.05         1.05         1.05         1.05         1.05         1.05         1.05	Sr. No.	Stuck Details	Parameter		Obtained Value	Obtained Value	Obtained Value	Obtained Value	Comparison and the second s	Vdue
2         Redict (*houghe plant - Naw)         CO          NO         ND         ND         ND         ND         ND           sublic Chlorine Flant         Cr         9 mg/Art         4.88         4.96         6.4         9.1         4.3           3         Declosition Parti         Cr         9 mg/Art         6.01         2.00         0.209         0.28         5.24         4.42           4         Common stack of PCI Sign and 1.82         Cr         0 mg/Art         6.11         4.47         5.62         4.04         3.84           4         Common stack of PCI Sign and 1.82         Cr         0 mg/Art         6.11         4.72         5.62         4.04         3.84           4         Common stack of PCI Sign and 1.82         S.92         2.97         0.54         3.11         4.12         1.00         3.93           4         Common stack of PCI Sign and 1.82         S.92         2.97         0.54         3.97         3.93         3.93           5         Sulfair, Acid Plant         S.9         A.01         2.00 mg/Mr         3.97         3.93         4.92         3.94         3.94         3.94         3.94         3.94         3.94         3.94         3.94	tul East Si							1		26111-
2         Deck of Principal (ratio New)         Prosgere         0 Jacon         ND         ND <td>1</td> <td>Fumace (Phosgene Piant)</td> <td></td> <td>150 mg/Nm<sup>®</sup></td> <td></td> <td></td> <td></td> <td>11.6</td> <td>10.8</td> <td>18.3</td>	1	Fumace (Phosgene Piant)		150 mg/Nm <sup>®</sup>				11.6	10.8	18.3
Induction Priori         ND         ND         ND         ND         ND         ND         ND         ND           3         Dedicolisation Parit         Gr.         9 majNm         4.88         4.96         6.4         5.1         4.3           4         Common stack of H21 Sign unit 182         Cu         0 majNm         6.1         4.27         5.67         4.0         384           4         Common stack of H21 Sign unit 182         Cu         0 majNm         6.1         4.27         5.67         4.0         384           uluke Acid (Exet Site)          Stafiak Acid Plant         SC         2.1 g/T         0.52         0.7         0.64         0.72         0.64           6         Chrosolitonic Acid plant modor         Cy         9 majNm         4.34         5.11         4.12         3.6         2.90           7         Ford Ges Smither         Ch         9 majNm         4.34         5.11         4.12         3.6         2.90           7         Ford Ges Smither         Ch         2.0 mg/Nm         5.07         0.21         4.23         3.7         3.04           7         Ford Ges Smither         Ch         0 mg/Nm         5.23         0.27	2	Reactor (Phosoene plant- New)	CO		ND	ND	ND	ND	ND	ND
3         Dectroinstant on Part         Cp         9 mark m         4.48         4.49         6.4         5.1         4.3           4         Common stack of HCI Sign unt 182         CL         0 mark m         5.01         5.07         6.28         5.24         4.42           4         Common stack of HCI Sign unt 182         CL         0 mark m         6.27         4.83         5.78         5.03         2.04           4         Common stack of HCI Sign unt 182         CS         2 ligr         6.77         4.83         5.78         5.03         2.04           5         Suffair Acid Plant         CS         2 ligr         0.52         0.77         0.84         0.72         0.64           6         CharoSulfank Acid plant method         Cs         9 mark m         4.34         5.11         4.12         3.0         2.30           7         Fail Gets Strubber         Sch AD mark m         5.07         3.23         4.23         3.7         3.04           7         Fail Gets Strubber         MC         120 mark m         5.72         5.02         4.17         5.8         3.02           8         Insinvata         MC         20 mark m         5.72         5.02         4.17	10.	A COMPANY AND A COMPANY AND A COMPANY	Phosgene	0.1 ppm	ND	ND	ND	ND	ND	ND
3         Definition Path         HCl         20mpMm <sup>2</sup> 5.01         5.02         6.38         5.24         4.42           4         Common strack HCl Sign unt 182         HCl         20 mg/hm <sup>2</sup> 6.1         472         5.62         4.9         334           4         Common strack of HCl Sign unt 182         EQ         9 mg/hm <sup>2</sup> 6.17         485         5.78         5.02         3.94           5         Suffair Acid Part         Soffair Acid Part         Soffair Acid Part         Soffair Acid Part         Acid Mat         Domg/hm <sup>2</sup> 6.52         0.7         0.58         0.72         0.65           6         Othors/Illonic Acid Part         Soffair Acid Part	austic Chk	orine Plant	-	1						
4         Common stack of HCI Sign unit 182         CL         9 mg/hm         6.17         4.72         5.62         4.60         38.4           ulluic Add ffeet Site)	з	Dechloringtion Plant					2000			2.18
2         Common starscell (LS) gir unit 182         HC         20 mg/lim <sup>2</sup> 6.27         435         5.78         5.09         2.04           B         Suffair Acid Plant         SO         2 lg/T         0.52         0.7         0.84         0.72         10.84           B         Suffair Acid Plant         SO         2 lg/T         0.52         0.7         0.84         0.72         10.84           C         Suffair Acid Plant         SO         2 lg/T         0.52         0.7         0.84         0.72         10.84           C         Suffair Acid Plant         SO         2 lg/T         0.52         0.7         0.84         0.72         10.4           CB Plant         C         So         40 mg/lim <sup>2</sup> Ass         5.07         3.25         4.23         3.0           CB Plant         SO         40 mg/lim <sup>2</sup> Ast in use         Not i	- 67	2661143800.419411040.00								2.24
Bit Mark         Diright         <	4	Common stack of HCI Sign unit 182								1.0
5         Sulfaric Acid Plant         So.         2 lg/T         0.52         0.7         0.84         0.72         0.64           6         CharoSulfonic Acid plant mediar         Co.         9 mg/Nm         1.15         1.5.4         1.7.2         1.2.4         1.0.8           6         CharoSulfonic Acid plant mediar         Co.         9 mg/Nm         4.3.4         5.07         3.2.5         4.2.3         3.7         3.0.4           CB Plant         Co.         2.5.         4.0.8         1.1         4.12         3.6         2.3.7         3.0.4           7         Fail Gate Scrubbar         So.         2.5         4.0.8         Net in use         Net in use <td>14</td> <td>4 (5+ 53-)</td> <td>на</td> <td>20 mg/Nm*</td> <td>6:22</td> <td>1185</td> <td>0.78</td> <td>5.03</td> <td>3.94</td> <td>1.95</td>	14	4 (5+ 53-)	на	20 mg/Nm*	6:22	1185	0.78	5.03	3.94	1.95
b         Summer Add Mant         Acid Mist         Dormphin         135         154         172         124         108           C         CharoSultonic Acid plant reador         Cig         9 mgNm         444         311         412         3.6         296           CB Plant         C         Composition reador         Cig         9 mgNm         444         311         412         3.6         296           CB Plant         C         Composition reador         Composition reador         Not muse	ununc Ace	a (East Site)	Ico	12 4 17	0.00	0.7	0.04	0.70	054	0.72
6         ChardSullank Add plant reador         Cy         9 mgAh7         4.34         5.11         4.12         3.6         2.90           CB Pant         5.07         3.25         4.23         3.7         31.01           7         Fox Gas Scrubber         SC1         40 mgAh7         5.07         3.25         4.23         3.7         31.01           7         Fox Gas Scrubber         SC1         40 mgAh7         5.07         3.25         4.23         3.7         31.01           7         Fox Gas Scrubber         SC2         40 mgAh7         5.07         30.2         4.23         3.7         31.01           8         Insineutor         PM         100 mgNm7         57.3         59.2         41.7         58.3         49.2           8         Insineutor         PM         100 mgNm7         57.3         59.2         41.7         58.3         49.2           9         Fox Gas Sorubber         SC3         40 mgAh7         21.4         21.8         28.6         31.2         19.5           10         Sorubory         PM         100 mgNm7         21.4         21.8         18.8         13.2           11         Scrubory         PM         10	Б	Sulfuric Acid Plant								13.8
ClientSulfant Add plant result or CB Plant         For any Mark         5.07         3.25         4.23         3.7         30.4           7         For Gas Scrubber         SQ_4         40 mg/hm²         Net in use	26								111114	
CB Plant         Sci.         Add mg/Mm <sup>2</sup> Met in use         Not in use </td <td>6</td> <td>ChloroSulfonic Acid piant reactor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4.26</td>	6	ChloroSulfonic Acid piant reactor								4.26
7         Fox 6st Scrubbar         SCA Not.         40 mg/km         Net in use         Net in use <td>CB Plant</td> <td></td> <td>1.0</td> <td>and midestine</td> <td>2.50</td> <td>46.0</td> <td>4.23</td> <td>3.7</td> <td>3.04</td> <td>4.38</td>	CB Plant		1.0	and midestine	2.50	46.0	4.23	3.7	3.04	4.38
Professional and the second product of the	227		Iso.	40 ma/bim <sup>5</sup>	1025010000	W States and States	100000000000	235910.05	and the second second	- Approximate
$ \begin{array}{ c c c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c c } \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	7	Foul Gos Scrubber			Not in use	Not in use	Not in use	Not in use	Not in use	Not in u
β         120 mg/km²         57.3         30.2         41.7         58.3         49.2           8         Interestor         50.4         40 mg/km²         102         10.3         12.8         10.4         8.1           IPfort         20.4         40 mg/km²         102         10.3         12.8         10.4         8.1           IPfort         20.4         21.8         10.9         13.2         18.2         19.7           9         Fold 6as Sorubber         50.4         40 mg/km²         24.8         16.9         13.2         18.2         19.7           10         Spray Dayer         PM         120 mg/km²         0.8         23.4         19.4         12.0         23.4           11         Scrubber S-90.2         PM         120 mg/km²         Not in use	cinerator			Test contents						
		172	PM	150 mg/Nm <sup>3</sup>	57.3	50.2	41.7	58.3	49.2	37.2
$ \begin{tabular}{ c c c c c c } \hline  c c c c c c c c c c c c c c c c c c $	8	Incinerator		40 mg/Nm			-			11.5
9         Four Gas Soubber         SCA         40 mgNm         21.4         21.8         28.6         23.2         19.6           8D Plont         MCix         25 mgNm <sup>2</sup> 168         23.4         19.4         21.4         23.4           100         Spray Dyst         Pvi         150 mgNm <sup>2</sup> 168         23.4         19.4         21.2         23.4           10         Spray Dyst         Pvi         Pvi         150 mgNm <sup>2</sup> Not in use         Not in use <td></td> <td></td> <td></td> <td>25 mg/Nm<sup>4</sup></td> <td>248</td> <td>16.9</td> <td>13.2</td> <td>18.2</td> <td>19.7</td> <td>23.8</td>				25 mg/Nm <sup>4</sup>	248	16.9	13.2	18.2	19.7	23.8
9         Fox Gas So ubber         Dright         Dright <thdright< th="">         Dright         <thdris< td=""><td>Plant</td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td></thdris<></thdright<>	Plant			1						
Incommon (NC)x         25 mg/hm <sup>2</sup> 264         194         21.2         23.4           10         Sprace         Sprace         France         Not         N	9	Foul Gos Scrubber								26.4
10         Spray Dryer         PM         150 mg/hm²         Not in use         Not         Not         Not			NOx	25 mg/Nm²	36.8	23.4	19.4	21.2	23.4	20.8
11         Scrubber S-902         Prosgene         0.1 ppm         ND         ND         ND         ND         ND         ND         ND           12         Scrubber S-902         HG         20 mphm         75         14.6         128         158         132           12         Scrubber S-801.8602         HG         20 mphm         75         14.6         128         158         132           accricht Plant         -		Sorra Davar	105.4	100	blot in com	Noticente	Not to your	New years	hiptime	Diret m
HCI         20mpNm <sup>2</sup> 78         14.6         128         138         13.2           ascredind Point         Cox         25 mgNm <sup>2</sup> 10.4         19.8         20.9         16.2         16.2           13         Spray Dayar (Basarcinal Plant)         PAL         150 mgNm <sup>2</sup> 22.6         44.8         57.2         50.2         47.1           14         Scrubber vori (Basarcinal Plant)         PAL         150 mgNm <sup>2</sup> 22.6         44.8         57.2         50.2         47.1           4-D Point         Soc         40 mgNm <sup>2</sup> 21.6         23.2         27.4         18.7         23.4           4-D Point         Co         9 mg/Nm <sup>2</sup> 6.2         5.2         4.9         6.16         49           15         Common Scrubber, 2.4D Plant         HC         20 mg/Nm <sup>2</sup> 6.37         53.4         5.01         6.33         5.04           16         Dryer-1 (60.1)         PM with Peskide compound         20 mg/Nm <sup>2</sup> 9.82         Net Fourning         12.48         10.1         8.66           17         Dryer-2 (70.1)         PM with Peskide compound         20 mg/Nm <sup>2</sup> 5.72         12.4         9.52         7.6         16.73										Not in u
12         Shilled Sel0(40)2         NDx         25 mg/hbr         10.4         19.8         20.0         16.2         16.2           searched Part         -										10.2
Sprets Dayser (Resencincial Plant)         PM         150 mg/Nm <sup>2</sup> 22.6         44.8         57.2         60.2         47.1           14         Sprets/box wort (Resencincial Plant)         PM         150 mg/Nm <sup>2</sup> 22.6         44.8         57.2         60.2         47.1           14         Sprets/box wort (Resencincial Plant)         SO_         40 mg/Nm <sup>2</sup> 216         23.2         27.4         18.7         22.4           4-D Prant	12	Scrubber 5-801/802								17.8
13         Spray Days (Rescription Plant)         PM         150 mg/hm²         226         44.8         57.2         60.2         47.1           14         Scrubber vont (Rescription Plant)         SO,         4 0 mg/hm²         216         23.2         27.4         18.7         21.4           4D Dratt	escrainal F	Piant						1		
14         Schubbar verri (Razercinic) Planti         SD         40 mg/hm         216         23.2         27.4         18.7         23.4           4-0 Protection         -         <			PM:	150 mg/Nm <sup>3</sup>	236	44.8	57.2	60.2	47.1	41.9
4-D Prate         Common Sorubler; 2:4D Plant         City         9 mg/NT         6.2         5.2         4.9         6.16         4.9           15         Cemmon Sorubler; 2:4D Plant         HCl         20 mg/NT         6.37         534         501         6.33         304           16         Dryer-1 (501)         PM with Peskide compound         20 mg/NT         9.82         Not Funning         12.48         10.1         8.06           17         Dryer-2 (701)         PM with Peskide compound         20 mg/NT         6.27         12.4         9.52         7.6         1673           18         Dryer-3 (24 D scium signitic         PM with Peskide compound         20 mg/NT         5.72         103         7.64         6.6         19278	14	Scrubbet vent (Resorcinol Plant)						1100000		28.2
15         Cerninion Sorubber; 2,4D Plant         HCI         20 mg/Nm <sup>2</sup> 6.37         534         501         6.33         504           16         Dryer-1 (601)         PM with Peskikke compound         20 mg/Nm <sup>2</sup> 9.82         Not Running         12.48         10.1         8.06           17         Dryer-2 (701)         PM with Peskikke compound         20 mg/Nm <sup>2</sup> 6.27         12.4         9.52         7.6         36.73           18         Dryer-3 (24 D scium slamti)         PM with Peskikke compound         20 mg/Nm <sup>2</sup> 5.72         103         7.64         6.6         19278					activity in the second s					
15         Cernimoni Sorubber; 2,4D Planti         HCl         20 mg/Nm²         6.37         534         501         6.33         504           16         Dryer-1 (601)         PM with Pesticide compound         20 mg/Nm²         9.82         Not Running         12.48         10.1         8.95           17         Dryer-2 (701)         PM with Pesticide compound         20 mg/Nm²         6.27         12.4         9.52         7.6         16.73           18         Dryer-3 (24 D sedium slamti         PM with Pesticide compound         20 mg/Nm²         5.72         103         7.64         6.6         19278			Cl2	9 mg/Nm <sup>2</sup>						6.1
Phenol         ND         ND <th< td=""><td>15</td><td>Common Scrubber; 2,4D Plant</td><td>HCI</td><td></td><td>0.37</td><td></td><td></td><td>6.33</td><td>5.04</td><td>6.27</td></th<>	15	Common Scrubber; 2,4D Plant	HCI		0.37			6.33	5.04	6.27
16         Dyer-1 (601)         PM with Peskide compound         20 mg/sm <sup>4</sup> 9.82         Net Running         12.48         10.1         8.66           17         Dyer-2 (701)         PM with Peskide compound         20 mg/sm <sup>4</sup> 6.27         12.4         9.52         7.6         16.73           18         Deer-3 (2.4 D sedum short)         PM with Peskide pm combust         20 mg/sm <sup>4</sup> 5.72         103         7.64         6.6         1928			Phenol	-	ND	ND	ND	ND	ND	ND
10         Dyser 2 (701)         Compound         20 mg/hm         302         Mck numming         11.49         101         809           17         Dyser 2 (701)         M with Pexicide compound         20 mg/hm <sup>4</sup> 6.27         12.4         9.52         7.6         36.73           18         Descr 3 (2.4 D socium alonti         M with Pexicide M with Pexicide 20 mg/hm <sup>4</sup> 5.72         103         7.64         6.6         1928		12 /5122020		1001	0.03588	158125 15	1.500.000	101.050	622629	2000
17         Drym-2 (701)         PM with Practicide compound         20 mg/Nm <sup>2</sup> 6.27         12.4         9.52         7.6         3673           18         Drym-3 (2.4 D packum shmt)         PM with Practicide (20 mg/Nm <sup>2</sup> )         5.72         103         7.64         6.6         1978	16	Diyer-1 (601)		20 mg/Nm <sup>6</sup>	9.82	Not Flanning	12.48	10.1	8.65	16.9
17         Dyer-2 //Vil         20 mg/km         6.27         12.4         9.52         7.6         20/3           18         Dyer-3/2.4 Disclam slamti         PM with Pesticide 20 mg/km         20 mg/km         5.72         103         7.64         6.6         1978										
Image: Instant instant         PM with Pesticide 20 cm/bit/3         5.72         103         7.64         6.6         19.78	17	Driver-7 (201)		20 mail ind	6.27	12.4	9.52	76	1673	18.41
	*/		compound	2.0 migram				- 27.U	-30/3	10.41
compound 20 mightin and 20 mightin						<ul> <li>Children (1997)</li> </ul>	10000	1100000	G1222243-127	10.12

MPSL Plant		1	9						
19	Phosgene Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	Not Running	ND	ND	Not Bunning
20	Central Scrubber at MPSL	Phosgene	0.1 ppm	ND	ND	Not Renning	ND	ND	Not Running
ICO plont		1							5.426
21	Central scrubber at Nico Plant	Acetonitrile,	0.1 ppm 0.1 ppm	NotRunning	ND	ND	ND	ND	Not Runnin
ater Plant									
22	Scrubber at Esterplant for Glyphosate	Formaldehyde	10 mg/Nm <sup>2</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	NotRunnin
Other		6	0.000	-					
23	MCFA	Cly HCI SCy	9 mg/NM <sup>4</sup> 20 mg/NM <sup>4</sup> 40 mg/NM <sup>4</sup>	Not Flurning	Not Punning	Net Running	Not Flunning	Nat Ranning	Not Flumming
24	Fipronil	sa. Ha	40 mg/NM 20 mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Runnin
25	Imidaclepsid	NH <mark>s</mark>	175 mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Runnin
26	Pyrcthroids	SQ. HCI	40 mg/Nm <sup>5</sup> 20 mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Runnin
27	Stack at Amine Plant Central Scrubber MCPA Plant	NH3	175 mg/Nm	93.4	108	94.2	110	138	95
28		на	20 mg/Nm <sup>2</sup>	Not Running 4.96	Not Running 6.8	Not Bunning 7.1	Not Running 8.2	Net Running 11.4	Not Funnin 8.3
29	MPP plant scrubber	Phosgene	20 mg/Nm <sup>2</sup> 0.1 ppm	ND	ND	ND	ND ND	ND	ND
30	Flavors & Fragrances Plant	HC	20 mg/Nm <sup>a</sup>	NotRunning	Not Running	Not Running	NotHunning	Not Running	Not Funnin
8.02	restricted and the second s	H₂S	-						
31	Sulfur Black Plant	NHa	175 mg/Nm <sup>3</sup>	NotRunning	Not Running	Net Running	Not Running	Not Running	Not Funnin
32	Sulfur Dyes plant	H <sub>2</sub> 5		ND 653	ND 45.2	ND 35.2	ND 508	ND 60.4	ND 82.4
Atul West 9	Ste	NH3	175 mg/Nm <sup>3</sup>	05.3	45.2	35.2	DOR	00.4	82.4
217533	Server a concernent i	CL.	9 mg/NM <sup>3</sup>		4.6	Not Burning	No.	38	
33	Shed A05/03/44	на	20 mg/NM	Same S	473	- Not Running	NotRunning	39	Not Funnin
34	Shed B2/12/24 Reaction Vessel	Cl2	9 mg/Nm*	49	5.8	53	6.1	56	6.13
124	a an	HCI	20 mg/ Nm <sup>2</sup>	5.04	537	5.45	8.4	5.75	6.3
25	Shed B1802/24 Fan	so,	40 mg/NM	254	25.2	214	271	23.8	263
35	Shed B18(02/24 Fdn	СЬ НСІ	9 mg/NM <sup>3</sup>	6.6 6.78	6.4	5.9 0.00	5.1	47	7.5
		Cl <sub>2</sub>	20 mg/NM <sup>e</sup> 9 mg/Nm <sup>e</sup>	5.4	6.1	4.9	3.94	42	5.1
36	Shed C5/20/15 Chloringtor	HCI	20 mg/Nm <sup>5</sup>	5.5	627	5.37	4.05	42	5.24
37	Shed D Nim Spimy driver No.45	PM	150mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Running	NotFunning	Not Running	Not Funnin
38	Shed D Niro Spray dryer No.50	PM	150 mg/Nm <sup>3</sup>	Not Running	Not Running	Not Running	NotRunning	Net Running	Not Funnin
39	Shed E 7/12/49 Spray Dryer	PM	150 mg/Nm <sup>3</sup>	Not Running	Not Running	Not Running	512	49.3	Not Runnin
40	Shed F FQ/1/15 Reaction Vessel	CL, HCI	9 mg/Nm² 20 mg/Nm²	Not Running Not Running	Not Running Not Bunning	Not Running Not Running	NotRunning	Not Running	Not Runnin
41	Shed G 10/8/1 (receivar)	Cl <u>s</u> HCI	9 mg/Nm <sup>2</sup> 20 mg/Nm <sup>2</sup>	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Punnin
		CL	9 mg/Nm <sup>3</sup>	51	8.5	64	19		10
42	Shed H 11/6/17 chlornator	нсі	20 mg/Nm <sup>3</sup>	13.6	8.8	10.4	131	Not Running	16.3
43	Shed K K-13/3/4 final of sulfuric ocid plant	50,	2 kg/l	0.64	055	18	1.6	134	0.32
2009		Acid Mist	50 mg/Nm <sup>6</sup>	18.3	18.5	39.87	30.2	20.8	14.5
44	Shed j15/09/25	HBr	30 mg/Nm <sup>3</sup>	162	ND 10.6	ND 13.8	ND 156	ND 18.8	ND 21.7
		so,	40 mg/Nm <sup>2</sup> 40 mg/Nm <sup>2</sup>		23.8	19.4	246	18.8	21.7
45	Shed j12/01/42	C L	9 mg/Nm <sup>®</sup>	+++	4.6	39	4.8	412	0.1
	2 (2 ( ) ( * 2 ( ) ( ) ( ) ( ) ( )	На	20 mg/Nm*		473	3.1	4.93	4.23	6.27
		SO2	40 mg/Nm <sup>8</sup>	2 <del>211</del> 0	15.9	20.5		19.7	
46	Shed J12/03/36	на	20 mg/Nm <sup>5</sup>		2.8	46	Not Running	ND	Not Funnin
		HBr	30 mg/Nm <sup>3</sup>		ND	ND		ND	
47	Shed N Scrubber Fon N26/08/24	CL	9 mg/Nm <sup>*</sup>	4.32	7.1 7.3	49 54	3.4	45	5.8
48	Shed N Scrubber Fan N20/02/41	HG SO2	20 mg/Nm <sup>5</sup> 40 mg/Nm <sup>5</sup>	12.4	24.9	20.6	3.49	7.1 21.4	5.96 22.4
		PM	150 mg/Nm <sup>3</sup>	1					
49	N-FDH Plant Catalytic Incinerator	SO.	40 mg/Nm <sup>5</sup>	NotRunning	Not Running	Not Running	NotHunning	Not Running	Not Funnin
49	N-PDH Fidit Coudyus incidendia	NOx	25 mgʻNm <sup>a</sup>	NOCEAURING	1900 Hunning	Not nonining	Notraining	Not Addining	INDEPENDING
50	P HIN Plant	Formaldehyde Phosgene	10 mgʻNm <sup>*</sup> 0.1 ppm	ND	ND	ND	ND	ND	ND
51	DDS Plant (Pharma Plant)	NH <sub>a</sub>	175 Mg/Nm <sup>3</sup>	32	32	446	28.4	34.8	55.2
52	SPIC II Plant (DCDPS)	SQ.		12.4	14.2	17.1	208	23.6	30.2
53	SPIC I Plant	NH3	175 mg/Nm <sup>®</sup>	132	120	96.2	80.4	71.8	68.2
54	SPICIV Plant	NHs	175 mg/Nh/*	84	64	55.4	60.4	7.02	79.4
11.50		so,	1 TT 1 TT 1	18.4	14.2	12.2	122	14.2	19.1
55	PHIN-II Plant	на	20 mg/NM <sup>4</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Flunnin
56	MCPA-Chlorination Scrubber	Ha CL	20 mg/NM <sup>9</sup> 9 mg/Nm <sup>3</sup>	Not Running Not Running	Not Running Not Running	Not Running Not Running	Not Running Not Running	Net Running Net Running	Not Funnin Not Runnin
	MCPA-SFD	PM	20 mg/Nm <sup>5</sup>	NetRunning	Not Running	Not Running	NotFunning	Not Running	Not Funnin
57		10.00	20 mg/NM <sup>2</sup>	NotRunning	Not Running	Not Running	NotRunning	Net Running	Not Funnin
22242	Gluphastte Cammon Cructic Scalaba		LEWILLIAM WY	not constant	THUR IS UNDER THE PARTY OF THE	NAL BUILDING	Construction D	Machanona	
58	Glyphosate-Common Caustic Scrubber	HC		1 1002020-101104-001	GIND COLOR DAY AND A			TANKS THE REPORT OF	
10000	Glyphosate -Common Caustic Scrubber Glyphosate -SFD	FM	20 mg/Nm <sup>5</sup>	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Punnin
58				Not Flurming Not Detected 125	Not Running Not Detected 112	Not Running Not Detected 104	Not Fluring Not Detected 125	Not Detected 138	Not Punnin Not Detecte 148
58 59	Glyphosate -SFD	PM H <sub>a</sub> s	20 mg/Nm <sup>5</sup> 25 mg/Nm3	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detecte

52	Cammon Sarubber Mesotrione,Sucrotrione,Triazole based fungicide	на	20 mg/Nm3	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Punning
63	Heribicides (2-4-D & selated products)-SFD	PM	20 mg/Mm3	NetBunning	Not Running	Net Running	NotEurning	Net Running	Not Running
28	Herbicides (2-4-D) & related products)-Common	на	20 mg/Nm3			0.25		100000	0.000
64	Coustic Scrubber	Cl <sub>2</sub>	9.0 mg/Nm3	Not Running	Not Running	Not Running	NotRunning	Not Running	Not Furning
		NH <sub>3</sub>	175 mg/Nm3						
65	Glycine	на	20 mg/Vm3	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
66	Pyrazosu Furone, Bispayri bac Sodium, Quizalatap, Chlorantraniliprole: Common	Phosgere	0.1 ppm	NotRunning	Not Running	Not Running	Not Running	Net Running	Not Running
	Scrubber	на	20 mg/Nm3	1					
67	Azozystrobin;Thiamthoxam - Common scrubber	NOX	25 mg/Nm 3	NotRunning	Not Running	Not Running	Not Running	Nat Running	Not Funning
59	Metribuzina.Diafentiurone: Cammon Scrubber	soz	40 mg/Nm3	NotRunning	Not Running	Not Running	NotFlunning	Not Running	Not Punning
69	PF.Recin	на	20 mg/Nm3	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Punning
70	Alte d Scene on all model	HG	20 mg/Nm 3	A la C Philippe Comp	billing Phone sterior	Mark Photoschum	A loss Pictor where	And Discolutor	Not Punning
70	Alloy' ketene dimer	50,	40 mg/Nm3	NotRanning	Not Running	Not Running	Not Bunning	Not Running	Not Palarising
71	Coustic-HCISynthesis unit	HCI	20 mg/Nm3	6.27	485	5.78	NotRuoning	Not Running	Not Running
	Codister a cray transition of the	СĻ	9.0 mg/Nm3	61	472	5.62	normaning	Not Hutting	restricting
	Causte-Hypounit	HCI	20 mg/Nm3	5.01	209	0,58	Notflunning	Not Running	Not Funning
72	councer oppoint.	Cl2	9.0 mg/Nm3	4,88	495	6.4	normanning	nace manning	restriction
73	m-Aminophen-Hot Oil generator	SO2	40 mg/Nm3	NotBunning	Not Running	Not Running	Not Running	Not Running	Not Running
322	and the second	NOx	25 mg,Nm3	20036202-004001	108809088010935		1000 Manadaras	0.0000000000000000000000000000000000000	328040 C 54000
74	m-Amino phenol-process	SC <sub>2</sub>	40 mg/Nm3	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Running
75	Mana chloro benzene	на	20 mg/Nm3	Not Flunning	Not Running	Not Running	NotFlunning	Not Running	Not Flumning
76	Propionvi chionde	HCI	20 mg/Nm3	NotRunning	Not Running	Not Running	NotHunning	Net Running	Not Funning
105		SC,	40 mg/Nm3	100000000000	100000000000000000000000000000000000000			Terre I version a	1.11.11.11.11.1
77	Resonand-Hot Oil generator	so <sub>2</sub>	40 mg/Nm3	NotRunning	7.4	6.8	Not Running	Not Running	Not Running
1016		NOx	25 mg/Nm3	1000000000000	21.3	24.E	000000000	2010/02/02/02/07	
78	Resorcind-Process	SCz	40 mg/Nm3	Not Running	Not Running	Not Running	Not Hunning	Not Running	Not Running
79	Trichlaro acetyl chloride	HCI SO <sub>4</sub>	20 mg/Nm3 40 mg/Nm3	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Running
80	Thionyl chloride	50,	40 mg/Nm3	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Funning
81	Ammania system (at Sulfone)	NH.	175 mg/Nm3	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Punning
82	Scrubber Blower Discharge (at PHINI)	Phosgere.	0.1 ppm	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Punning
83	Scrubber Blower Discharge (at PHININ)	Fhosgene	0.1 ppm	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Funning
84	New phosgeno plant. Furnoce	PM	150 mg/Nm3	14.4	14.8	11.6	NotRunning	Not Running	Not Punning
85	New-Phosgene plant-Reactor	Phosgene	0.1 ppm	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Punning
86	Epoxypiant	Taluene/ECH	÷	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Punning
87	Harder Plant	на	20 mg/Nm3	NotRunning	Not Running	Not Running	Not Running	Nat Running	Not Running

# Table 3: Ambient Air Monitoring details

Station	Parameter	Limit micro gm/NM³	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023
66 KV	PM 2.5	60	50	49	26	22	26	27
	PM10	100	59	82	50	48	58	60
	SO <sub>2</sub>	80	24.4	18.4	13.3	15.7	19.7	20.7
	NO <sub>2</sub>	80	30.7	22.9	18.2	26.5	29.1	30.4
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Opposite	PM 2.5	60	32.4	51.7	32.6	32.9	32.8	31.9
Shed D	PM10	100	52.3	89.6	55.5	53.6	60.8	60.8
	SO <sub>2</sub>	80	23.9	24.6	16.7	20.7	19.3	16.9
	NO <sub>2</sub>	80	30.5	30.5	22.2	29.7	28.9	29.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
West site ETP	PM 2.5	60	30	39	29	29	30	32
	PM10	100	52	78	43	55	60	51
	SO <sub>2</sub>	80	26.9	20.3	11.5	16.8	14.9	16.9
	NO <sub>2</sub>	80	32.6	25.4	16.3	21.6	23.7	26.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
North ETP	HCI	200	ND	ND	ND	ND	ND	ND
	PM 2.5	60	32	45	27	25	24	26
	PM10	100	49	80	46	43	46	47
	SO <sub>2</sub>	80	18.9	23.4	14.2	12.4	15.7	16.8
	NO <sub>2</sub>	80	25.5	27.9	19.1	27.1	26.4	25.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	НСІ	200	ND	ND	ND	ND	ND	ND
TSDF	PM 2.5	60	29	43	24	27	28	29
	PM10	100	56	79	53	51	49	50
	SO <sub>2</sub>	80	19.3	17.6	12.3	16.4	13.4	12.9
	NO <sub>2</sub>	80	26.1	22.2	17.3	23.6	28.9	30.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	НСІ	200	ND	ND	ND	ND	ND	ND
Main Guest House	PM 2.5	60	36.9	50.8	32.5	32.9	33.4	32.9
	PM10	100	58.3	88.6	53.3	55.4	60.4	59.7
	SO <sub>2</sub>	80	30.4	24.6	15.5	16.4	19.3	20.7
	NO <sub>2</sub>	80	25.3	29.8	19.3	26.7	27.1	22.6
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Wyeth Colony	PM 2.5	60	28	44	22	30	32	30
, ,	PM10	100	41	72	48	54	56	54
	SO <sub>2</sub>	80	23.4	21.6	12.9	17.7	16.7	17.6
	NO <sub>2</sub>	80	28.8	26.9	18	20.1	22.3	29.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Gram panchayat	PM 2.5	60	48.7	32.6	31.9	34.6	30.6	48.7
hall	PM10	100	88.6	52.3	53.7	62.3	61.8	88.6
	SO <sub>2</sub>	80	23.7	15.6	17.3	20.7	19.3	23.7

	NO <sub>2</sub>	80	29.4	22.3	26.8	29.8	29.6	29.4
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Main office, North	PM 2.5	60	60.2	29.3	29.6	30.7	31.9	60.2
site	PM10	100	88.1	55.3	58.7	55.9	50.3	88.1
	SO <sub>2</sub>	80	23.6	15.3	19.9	18.8	20.7	23.6
	NO <sub>2</sub>	80	27.8	18.6	26.8	29.8	29.7	27.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Haria water tank	PM 2.5	60	51.3	29.4	30.6	35.6	30.8	51.3
	PM10	100	84.6	52.6	55.9	57.1	52.9	84.6
	SO <sub>2</sub>	80	23.6	17.1	17.8	18.1	18.3	23.6
	NO <sub>2</sub>	80	29.8	20.3	24.1	29.8	27.9	29.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND

## Table 4: Fugitive Emission Monitoring details

Plant	Area	Parameter	Prescribed Limit	Results	of VOCs i	n Milligram	n per NM <sup>3</sup>		
			Mg/Nm3	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023
2,4 D	Reactor	Phenol	19	ND	ND	ND	ND	ND	ND
	Buffer tank	Chlorine	3.0	1.64	1.44	1.3	1.5	0.82	0.87
Resorcinol	Benzene storage tank area near vent	Benzene	15	0.28	0.41	0.52	0.44	0.3	0.8
	Near Extraction/scr ubber unit	Butyl acetate	-	124	104	116	102	52.2	71.4
Pharma	At second floor work area	Ammonia	18	7.9	9.44	11.6	10.4	6.2	7.9
	Ammonia recovery area	Ammonia	18	6.1	4.7	6.2	2.8	4.2	6.3
Epoxy - I	At vacuum pump 2nd floor	ECH	10	1.94	1.98	2.45	1.76	2.9	1.7
	At vessel POS 1208 G.F	ECH	10	2.16	1.7	3.1	2.8	3.9	4.9
Shed H	At second floor work area	Nitrobenz ene	5	2.1	1.86	1.72	1.82	ND	2.06
Shed N	Ground Floor	SO2	3	2.65	1.3	1.25	1.7	1.9	2.35

# Table 5: Noise level monitoring data (Day Time)

Sr	Location	Noise Lev	Permissible					
No.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	Limits, dBA
1	66KVA substation	67.2	68.2	67.1	68.9	69.2	70.3	75
2	Opposite shed D	63.3	62.2	61.1	60.4	61.3	61.3	75
3	West site ETP	64.5	66.3	65.5	66.4	65.4	64.9	75
4	North site ETP	60.9	59.1	60.3	59.7	58.8	59.1	75
5	Near TSDF	65.9	66.9	65.2	64.3	63.8	65.4	75
6	Near main office North site	66.3	69.7	68.4	65.7	66.3	68.1	75

# Table 6: Noise level monitoring data (Night Time)

Sr	Location	Noise Le	Permissibl					
No.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	e Limits, dBA
1	66KVA substation	59.2	58.4	59.3	53.6	52.4	53.4	70
2	Opposite shed D	52.4	52.1	52.5	51.6	50.1	51.3	70
3	West site ETP	56.9	58.8	57.5	58.9	57.1	57.3	70
4	North site ETP	60.4	61.3	60.3	59.7	55.6	59.7	70
5	Near TSDF	52.6	51.4	52.3	51.7	54.3	53.9	70
6	Near main office North site	56.9	58.8	57.3	53.8	59.2	60.7	70

#### Table7: CSR Activities

Sr. No.	Name of Project	Budget in Rs.	Actual expense in Rs.
1	Enhancement of educational practices in Kalyani Shala	50,00,000	27.29.746
2	Improvement of teaching methodology for primary school children - Adhyapika project	90,00,000	61,53,561
3	Support to tribal children in Atul Vidyamandir	15,00,000	8,26,996
4	Support to develop a school in a tribal area	1,00,000	1,42,671
5	Provision of scholarships to needy and meritorious students	5,00,000	2,20,779
6	Provision of education kits to children	8,00,000	9,45,476
7	Conservation of manuscripts	30,00,000	15,00,000
8	Promote learning and life skills among children through art therapy	1,00,000	-
9	Contribution towards publication of books on Indian culture   Ecology   Philosophy	4,00,000	-
10	Support to develop a school in West Bengal	2,00,000	-
NEW Project	Enhancement of educational practices in Valsad College- Nootan Kelvani Mandal		5,51,000
NEW Project	Other Education project		31,154
NEW Project	Mobile Science Lab Project		11.21.575
	Total education budget (a)	2,06,00,000	1,42,22,958
11	Skills training to youth as apprentices	90,00,000	48,78,585
12	Empowerment of women   youth through various vocational training courses	25,00,000	7,12,180

Develop five Industrial Training Institute	100000	
Develop live industrial framing institute	10,00,000	-
Develop micro-entrepreneurs to provide sustainable livelihood	15,00,000	2,96,155
Create livelihood opportunities for tribal families by providing cows -Godaan project	55,00,000	20,35,393
Empower women through self-help groups- Atul Uttara project	35,00,000	10,59,475
Project -Adhikar Haqdarshak	*	-
Migrant Worker Project	÷	2
Total empowerment budget (b)	2,30,00,000	89,81,788
Enhancement of rural health through health camps	40,00,000	17,86,043
Support to Atul Healthcare Centre	1,00,00,000	69,47,727
Promote health and wellbeing of adolescent girls and women – Sampoorna project	27,00,000	17,34,988
Nourish first 1000 days of child through training pregnant -lactating mothers and stakeholders	16,00,000	3,89,740
Upgradation of sports infrastructure and equipment	40,00,000	+
Donation for health-Kasturba Rahat Mandal		10,00,000
Total health budget (c)	2,23,00,000	1,18,58,498
Provision of medical treatment to needy patients	20,00,000	8,29,396
Provide assistance to children with special needs - Ojas	1,00,000	5.32.467
Flood Relief Ankleshwar		45,000
	sustainable livelihood Create livelihood opportunities for tribal families by providing cows -Godaan project Empower women through self-help groups- Atul Uttara project Project -Adhikar Haqdarshak Migrant Worker Project Total empowerment budget (b) Enhancement of rural health through health camps Support to Atul Healthcare Centre girls and women – Sampoorna project Nourish first 1000 days of child through training pregnant -lactating mothers and stakeholders Upgradation of sports infrastructure and equipment Donation for health-Kasturba Rahat Mandal Total health budget (c) Provision of medical treatment to needy patients Provide assistance to children with special needs - Ojas	Levelop micro-entrepreneurs to provide sustainable livelihood15,00,000Create livelihood opportunities for tribal families by providing cows - Godaan project55,00,000Empower women through self-help groups- Atul Uttara project35,00,000Project - Adhikar Haqdarshak-Migrant Worker Project-Total empowerment budget (b)2,30,00,000Enhancement of rural health through health amps40,00,000Support to Atul Healthcare Centre1,00,000,000Promote health and wellbeing of adolescent girls and women – Sampoorna project27,00,000Nourish first 1000 days of child through training pregnant -lactating mothers and stakeholders40,00,000Upgradation of sports infrastructure and equipment40,00,000Donation for health-Kasturba Rohat Mandal2,23,00,000Provision of medical treatment to needy patients20,00,000Provide assistance to children with special needs - Ojas1,00,000

	Total relief budget (d)	21,00,000	14,06,863
24	Develop community infrastructure in Atul village	3,40,00,000	25,50,189
25	Development of community infrastructure in Atul village – post office and police station	60,00,000	77,76,682
26	Infrastructure development in Atul and surrounding villages	30,00,000	21,11,101
27	Construction of toilet blocks in Kalyani Shala	60,00,000	-
28	Develop Ulhas cricket ground	40,00,000	-
NEW Project	Improvement In School and Anganwadi		86,460
	Total infrastructure budget (e)	5,30,00,000	1,25,31,016
29	Establishment of solid waste management system in Atul village- Ujjwal Atul project	25,00,000	26,15,724
30	Initiate waste management project in 42 village	35,00,000	-
31	Set up plastic waste management unit /Rag pickers Livelihood Project	15,00,000	1,91,079
32	Initiate natural resource management project to conserve soil and water	50,00,000	20,75,457
33	Conservation of energy through Solar	50,00,000	7,59,563
34	Set up nature-based wastewater recycling systems	50,00,000	19,18,794
35	Conservation of water through various interventions	20,00,000	7,25,243
36	Enhance green cover- Tree Plantation project	30,00,000	13,09,274
37	Protection of animals	10,00,000	-

itiate biogas project	30,00,000	-
otal conservation budget (f)	3,15,00,000	95,95,570
et (a+b+c+d+e+f)	15,25,00,000	5,85,96,693
	itiate biogas project otal conservation budget (f) et (a+b+c+d+e+f)	otal conservation budget (f) 3,15,00,000



# 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: April 2023 – September 2023

Sr No.	Condition			Compliance	e Status						
A. Co	onditions :										
A.1 S	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.	Complied. 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. 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) NABL accredited and MoEF approved agency. The maximum value (SPM, SO <sub>2</sub> & NO <sub>x</sub> ) during the report period confirms that at no time the emission level went beyond the stipulated standards. Parameter wise summary is given below:									
		Parameter	Standard values as	Unit	Values	for the pe	riod eptember 2023				
			per CCA		Min.	Max.	Avg.				
		PM	100	mg/Nm³	41.7	61.4	49.88				
		PM (New Boiler)	50	mg/Nm <sup>3</sup>	32.4	44.7	38.13				
		SO <sub>2</sub>	600	mg/Nm <sup>3</sup>	278	324	300.63				
		NOx         600         mg/Nm³         272         338         300.31									
		NOx (New Boiler)	NOx         300         mg/Nm³         283         296         290.2								
		,	results for t	he report p	eriod is o	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 through NABL approved third party.

The maximum value (PM2.5, PM10,  $SO_2$ ,  $NO_2$ , Ammonia, and HCI) 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 -	Values for the period April 2023 – September 20		
		gm/NM <sup>3</sup>	Min.	Max.	Avg.
66 KV	PM2.5	60	22.0	50.0	33.3
	PM10	100	48.0	82.0	59.5
	SO <sub>2</sub>	80	13.3	24.4	18.7
	NO2	80	18.2	30.7	26.3
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
Opposite	PM2.5	60	31.9	51.7	35.7
Shed D	PM10	100	52.3	89.6	62.1
	SO <sub>2</sub>	80	16.7	24.6	20.4
	NO2	80	22.2	30.5	28.6
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
Near	PM2.5	60	29.0	39.0	31.5
West Site	PM10	100	43.0	78.0	56.5
ETP	SO <sub>2</sub>	80	11.5	26.9	17.9
	NO2	80	16.3	32.6	24.4
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
Near	PM2.5	60	24.0	45.0	29.8
North ETP	PM10	100	43.0	80.0	51.8
	SO <sub>2</sub>	80	12.4	23.4	16.9
	NO2	80	19.1	27.9	25.3
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
TSDF	PM2.5	60	24.0	43.0	30.0

	PM10 SO <sub>2</sub>	100 80	49.0	79.0	
	302	N N N	12.3	19.3	56.3 15.3
	NO2	80	17.3	30.7	24.8
	Ammonia	400	ND	ND	24.8 ND
	HCI	200	ND	ND	ND
Main	PM2.5	60	32.5	50.8	36.6
Guest	PM10	100	53.3	88.6	62.6
House	SO <sub>2</sub>	80	15.5	30.4	21.2
	NO2	80	19.3	29.8	25.1
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
Wyeth	PM2.5	60	22.0	44.0	31.0
Colony	PM10	100	41.0	72.0	54.2
	SO <sub>2</sub>	80	12.9	23.4	18.3
	NO2	80	18.0	29.7	24.3
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
Gram	PM2.5	60	30.6	48.7	35.8
Panchaya	PM10	100	52.3	88.6	63.0
t Hall	SO <sub>2</sub>	80	15.6	26.4	20.5
	NO2	80	22.3	32.6	28.4
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
Main	PM2.5	60	29.3	60.2	35.9
Office	PM10	100	50.3	88.1	60.8
North Site	SO <sub>2</sub>	80	15.3	23.6	20.3
	NO2	80	18.6	32.6	27.6
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND
Haria	PM2.5	60	29.4	51.3	35.1
Water	PM10	100	52.6	84.6	60.0
Tank	SO <sub>2</sub>	80	17.1	30.2	20.9
	NO2	80	20.3	29.8	26.4
	Ammonia	400	ND	ND	ND
	HCI	200	ND	ND	ND

2.	All measures shall be taken to prevent soil and ground water contamination	Complied. Kindly note that we are not extracting ground water as a source of water for the referred project. 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. We are regularly monitoring ground water and soil quality through NABL accredited and MoEF approved agency to access the impacts on soil and ground water quality. The study shows that there is no soil and ground water contamination found.						
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.	Grou		ater and soil quality is e unit through NABL acc				
<b>A.Z.</b> 4.	The fresh water requirement for the proposed expansion		<b>plied.</b> avera	ge water consumption	for the report pe	riod is <b>1233 KL/dav</b>		
	shall not exceed 2095 KL/day and it shall be met through the	only	which	n is well within the perm reak up is given in below	nissible limit of <b>20</b>			
	existing water supply system from River par.		Sr No.	Month April - 2023	Quantity (KL/Month) 45139	Avg. Quantity. (KL/Day) 1505		
			2	May -2023	40256	1299		
			3	June - 2023	41916	1397		
			4	July - 2023	32845	1060		
			5	August - 2023	31086	1003		
			6	September - 2023	33980	1133		
		the v	vater	num value during the re consumption went beyo nt is met through the ex	ond the stipulated	d value. Fresh water		

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.Image: transformed by the second secon					
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.	Waste KL/Day the repo limit of after giv Entire q storage make	water generation is during report period. ort period is <b>102 KL/do</b> <b>270 KL/Day</b> and entire ving neutralization & F quantity of waste wate yard to attend coal si	The average was ay only which is w waste water qua O treatment. er is being utilized moldering, dust s floor cleaning	brescribed limit of <b>270</b> stewater generation for ell within the prescribed antity is utilized / reused d in ash quenching, coal uppression, fire hydrant and no waste water below table.		
		Sr No.	Month	Waste Water Generation (KL/Month)	Avg. Waste Water Generation   Reused Quantity (KL/Day)		
		1	April - 2023	1723	57		
		2	May -2023	1124	36		
		3	June - 2023	3676	123		
		4	July - 2023	4768	154		
1		5         August - 2023         4001         129					
		5	7 lugust 2020		120		

7.	There shall be no discharge of industrial effluent from the proposed project in any case.	Complied. 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. Please refer table of waste water generation (KLD) in point no.6. Hence, Our CPP unit is achieved ZLD. No Discharge of industrial effluent from the project in any case.					
8.	Domestic waste water generation shall not exceed 1 KL/day Which shall be disposed of into soak system.	during The av <b>0.57 K</b>	stic water report per rerage wa <b>L/day</b> only	riod. stewater generation for	ding the prescribed limit o the report period is e limit. Domestic waste v		
			Sr No.	Month	Domestic Waste Water Generation (KL/Day)		
			1	April - 2023	0.44		
			2	May -2023	0.51		
			3	June - 2023	0.62		
			4	July - 2023	0.72		
			5	August - 2023	0.59		
			6	September - 2023	0.55		
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.	reuse s Photoc	etic Flow M system of graph of w Water m e reusing o attend co ning plant	eter @Inlet line W treated waste water in bal smoldering, dust suppose & floor cleaning. Hence	5	prage ke up, <b>D. No</b>	

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.	<b>Complied.</b> 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.					
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.	<ul> <li>Complied.</li> <li>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.</li> <li>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</li> </ul>					
A.3 A	Air:						
12.	Existing two coal fired steam boilers shall be replaced with two AFBC Boilers having capacity 50 TPH each.		d steam boilers are repl quate APC facility (4 fi	aced with higher efficiency AFE eld ESP).	3C		
13.	Fuel (Indian coal/and or Imported coal and or Lignite) to the tune of 16725 MT/M shall be used for proposed boilers.	Complied.The average fuel consumption (coal   lignite) for the report period is12937.5 MT/M only which is well within the limit. Detail break up isgiven in below table:Fuel consumption MTNo.Fuel consumption MT1April - 2023162592May - 2023127993June - 2023123044July - 2023153846September - 202314820					
				liance period confirm that at no nd the stipulated value.	С		

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 proposition 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	Complied. 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. 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.					
	in - built continuous monitoring for radio activity and heavy metals in coal/lignite and Fly ash (Including bottom ash) shall be put in place.	and heav Even thou	y metal in coal   lignite a ugh we have still continue	nywhere in ed our searc	nitoring for radio activity India as well as abroad. In for agencies supplying ne as soon as we get the		
16.	Height of flue gas stacks attached to boilers shall be minimum 74.58 meters.	•			sion is dispersed through ard as given below:		
		Stack No.	Stack attached to	Stack Height In meter	APCM		
		1	Boiler (50 TPH x 2Nos.)	106	ESP with 4 field		
			s: Stack Height H=14(Q) <sup>C</sup> the stack is 106 meters, v		ually higher than norms.		
17.	A flue gas stack of 74.58m height shall be provided with online monitoring system to proposed steam boiler.	<b>Complied.</b> Height of the stack is 106 meters attached to Boiler (50 TPH $\times$ 2 Nos.). We have installed online monitoring system to boiler for SPM, SO <sub>2</sub> and NOx and the same is connected to CPCB server.					
	Mercury gas emission from stacks shall also be monitored on periodic basis.	agency. For Mercu		lease refer s	•		

18.	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. The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms.	•
	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.	Complied. We have designed and integrated in Plant DCS in such a way that in event of ESP in working not efficiently or something found fault or operation issue due to which flue gas emission go beyond the specified standard prescribed in the Environment (protection) Rules 1986 as amended from time to time than in such cases / occurrence we will intimate to board & authority to stop the operation plant or decrease the load of power plant. We will not restart or increase the load until the control measures are rectified to achieve the 100 percent efficiency. Flue gas 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. For stack emission data please refer specific condition No.1
19.	Third party monitoring of the functioning of ESP along with efficiency shall be carried out once in a year through a	<b>Complied.</b> We are regularly monitoring the functioning of ESP along with efficiency once in a year through NABL accredited and MoEF approved agency.
	reputed institute / organization.	The monitoring has been carried out by GPCB approved (schedule - II) M/s. Pollucon Laboratories Pvt.Ltd, Surat NABL approved. ESP efficacy found satisfactory (i.e. 99.9% efficiency).
20.	Lime stone injection	Complied.

	technology shall be adopted to control SO <sub>2</sub> and it shall be ensured that SO <sub>2</sub> levels in the ambient air do not exceed the prescribed standards.	Air quali standard For Amb	We already have lime injection system to control SO <sub>2</sub> emission. <b>Ambient</b> <b>Air quality analysis report shows that</b> SO <sub>2</sub> levels is below the prescribed standards during the report period. For <b>Ambient Air quality</b> data please refer specific condition No.1				
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.	<b>Complied.</b> 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.					
22.	Diesel to the tune of 300 Lit/hr shall be used as a fuel in stand –by D. G. Set (1500 KVA)	Complie Diesel co		ion during report period is Month April - 2023 May -2023 June - 2023 July - 2023 August - 2023 September - 2023	s given in below table: Diesel Consumption (KL/Month) 8.29 4.53 0.02 0.05 2.68 10		
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. Acoustic enclosure be provided to DG set to mitigate the noise pollution.	set (101 Complie We hav	te stack f 0 KVA) a d. e provide	is per CPCB standards.	(1500 KVA) and 10mt of both DG sets to mitigate		

24.	Online monitoring system shall be installed to monitor the SOx, NOx and SPM in the flue gas stack.	Complied. Online monitoring and connected to			s already been made
		6/15/23, 9:55 AM		about:blank	
		EnviroConnect		Historical Data	LOGO
		Plant Name: ATUL LTD-VALSA Plant Address: ATUL LTD, VALSA Plant Address: ATUL LTD, VALSA Plant Address: ATUL LTD, VALSA Station Name: WEST STIF POV From Date: 301-05-2023 00:00:00 To Date: 301-05-2023 00:00:00 To Date: 301-05-2023 00:00 for plant address of the statistical statist	07 May 10 May Dott (mg/hm3)-Y3 ta, C - Calibration mode, M - Ma	13 Mey         16 Mey         19 Mey         22           13 Mey         16 Mey         19 Mey         22           NOx (mg/km3) ·1         50x (mg/km3) ·21         31           aintenance mode, S - Data under scrutiny, sed         NOx         mg/km3           0.000 - 1000.00         63.00         66.06           0.43.14         66.06         66.06           0.43.1         71.19         61.38           0.125.12         66.06         66.06           0.63.8         91.94         67.63           0.91.94         66.06         68.38           0.60.01         83.25         85.25           0.725         64.06         67.25           0.406         94.63         94.63           0.725         64.06         94.63           0.000         0.000         0.000	
	An arrangement shall also be done for reflecting the online monitoring result on the company's server, which can be assessable by the constructed.	We have arrange		ecting the online mo be accessible by the	nitoring result on 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 96 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:					<sup>e</sup> each, total eneration of nese silos so	
		Fly Ash	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023
		Generation (MT)	4336	3077	3141	2424	3681	950
		Disposal (MT)	4336	3077	3141	2424	3681	950
		Photograph	n of Close	ed silos for	Fly ash / I	Bottom as	sh:	

26.	Handling of the fly ash shall be through a closed pneumatic system.	Complied.         We are handling of fly ash through a closed pneumatic system which is shown below:         Image: Shown below: Shown below:         Image: Shown below: Sh
27.	Ash shall be handled only in dry state.	<b>Complied.</b> We are handling ash only in dry state. Sold to cement and brick manufacturer.
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.	Complied. We are strictly complying fly ash notification under EPA and we are doing 100 % utilization of fly ash to be generated from the unit. For Fly ash / bottom ash generation and disposal data please refer condition No. 25.
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.	<ul> <li>Complied.</li> <li>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.</li> <li>Measures adopted to control fugitive emission: <ul> <li>All process pumps shall be provided trays to collect probable leakage.</li> <li>More weight age on selection of MoC of piping shall be given to avoid leakage/spillage.</li> <li>Overflow system with return line to day tank/storage tank from batch tank will be provided to collect fly ash. Covered conveyer belt system is available to collect fly ash. Covered conveyer belt system is available for transfer of coal. Water sprinkle system is available to collect fly ash. Covered conveyer belt system is provided for decontamination and effective cleaning of drums.</li> <li>All transfer points are fully enclosed.</li> <li>All roads are RCC &amp; paved on which movement of raw materials or products are take place.</li> <li>Maintenance of air pollution control equipment are to be done regularly.</li> <li>All the workers are working with proper PPE's. i.e. boiler suit,</li> </ul> </li> </ul>

	<ul> <li>dust mask, safety goggles, face shield, safety shoes etc.</li> <li>Adequate green belt is developed around the plant to arrest the fugitive emissions.</li> </ul>
All handing & transport of coal & Lignite shall be exercised through covered coal conveyors only.	Complied. All handing & transport of coal & Lignite is done through covered coal conveyors only.
Enclosure shall be provided at	Noted and Complied.
coal / lignite loading and uploading operations.	Enclosure is provided at coal   Lignite loading and uploading operations.
Water shall be sprinkled on coal / Lignite stock piles periodically to retain some moisture in top layer and also while compacting to reduce the fugitive emission.	<b>Complied.</b> 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.
	Image: constrained of the second of the se
All transfer enclosed.	Noted and Complied. We have on road coal conveying system through covered coal trucks and in plant coal transferring system through closed conveying system. All transfer points are 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.
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.	<b>Complied</b> . We have provided adequate dust extraction system (Dust collector) at crusher house is provided While dust suppression system (water sprinkler system) the coal/ lignite unloading areas to abate dust nuisance.
Accumulated coal dust / fly ash on the ground and surfaces shall be removed / swept regularly and water the area after sweeping.	<b>Complied</b> . We have adopt practice for coal dust   fly ash is being cleaned regular basis as per schedule that we have set. We are also ensuring that coal dust and fine particles are being loaded to coal handling plant after spraying water on it.

Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.	<b>Complied</b> . Paver blocks have been provided in the ESP and some internal area of power plant. Concrete Road have been built in the surrounding area of Power Plant to reduce fugitive emissions during vehicle movement.
	Concrete road at Captive Power Plant
Air borne dust shall be controlled with water sprinkles at suitable locations in the plant. Coal / Lignite shall be transported through covered trucks only whereas fly ash shall be transported through closed trucks only.	Complied. 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.

A green belt shall be developed all around the plant boundary and also the roads to mitigate fugitive & transport dust emission.	Complied. Company has already developed more than 36 % of greenbelt in Atul complex Total Industrial Plot area: 1126078.27 sq.mt Green belt area: 409030.00 sq.mt (approx. 36% of total plot area) We planted approximately 39760 trees of difference species in report period at different location and photograph attached below.
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.	<b>Complied.</b> We are regularly monitoring ground level concentration of $PM_{2.5}$ , $PM_{10}$ , $NO_2$ , and $SO_2$ in ambient air of impact zone and its records are maintained as per schedule.
Ambient air quality levels shall not exceed the standards stipulated by GPCB.	<b>Complied</b> . 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.
	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.
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.	<b>Complied</b> . No such case found till date. We have designed and integrated in-plant DCS. In event of ESP is not working efficiently or operation issue, due to which flue gas emission goes beyond the specified standard prescribed in the Environment (protection) Rules 1986 as amended from time to time, then in such cases   occurrence we will intimate to board & authority and stop the operation plant or decrease the load of power plant. We will not restart or increase the load until the control measures are rectified to achieve the 100 percent efficiency.
A.4 SOLID/ HAZARDOUS WASTE:	

31.	The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance from time to time.	<b>Complied</b> There is only one Hazardous waste from the project i.e. Used oil. The The same was given to GPCB authorized vendors only in line with the regulation.
	Authorization from the GPCB shall be obtained for collection /treatment /storage disposal of hazardous waste	<b>Complied</b> . We have CCA Amendment No. AH – 121400, dated November 15, 2022.
32.	Hazardous waste sludge shall be packed stored in separate designated hazardous waste storage facility with impervious bottom and leachate collection facility, before its disposal.	<b>Complied</b> There is only one Hazardous waste from the project i.e. Used oil. It is stored in drum. The same was given to GPCB authorized vendors only in line with the regulation.
33.	The used oil shall be sold to only to the registered recyclers / refiners.	<b>Complied.</b> Used oil is being sold to GPCB authorized vendor.
34.	The discarded containers / barrels /bags/ liners shall be sold only to the registered recycler.	<b>Complied</b> . No bags / liners are being utilized for Power Plant.
35.	For storage of fly ash closed silos of adequate capacity shall be provided.	<b>Complied</b> . We have three closed 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 96 TPD.
	No ash pond shall be construed in the project.	<b>Complied</b> . No ash pond is construed in the project.
36.	The fly ash shall be supplied to the manufacturers of fly ash based products such as cement, concrete blocks, bricks, panels, etc.	<b>Complied</b> . Fly ash is being given to cement and bricks manufacturers and also being used for our own bricks manufacturing unit.

	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.	ensuring th the unit.	at that i	s 100 % i	utilizatior	n of fly asl	n to be ge	and we are nerated from own in below
		Fly Ash	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023
		Generation (MT)	4336	3077	3141	2424	3681	950
		Disposal (MT)	4336	3077	3141	2424	3681	950
		We have de	one agre	ement wi	th Ambuj	a Cement	t for supply	v of dry ash.
37.	All possible efforts shall be made for co - processing of the Hazardous waste prior to disposal into TSDF/CHWIF.	<b>Complied</b> There is only one Hazardous waste from the project i.e. Used oil. It is stored in drum. The same was given to GPCB authorized vendors only in line with the regulation.						
A.5 S	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.	Complied. We are complying all the provisions of Factories act, all the rules and regulation led by MSIHC, 1989.						
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	possible. Li	gnite is vater spi	not being	g stored	for not n	nore than	site as far as 3 - 4 Days. e for the fuel
40.	All the risk mitigation measures, general & specific recommendations mentioned in risk Assessments Report shall be implemented.		-		-			nmendations

41.	A well designed fire hydrants system shall be installed as per the prevailing standards	Complied. A well designed tender hydrant system is adequate and as per standards. Fire hydrant Network details:
		Single Hydrant point: 192Nos. Double hydrant point: 07 Nos. Fixed monitor: 11Nos. Hose boxes: 30 Nos. Central hose station: 10 Nos. Hose pipe: 15 mts. 250 Nos. Branch pipes (jet type): 50 Nos. Foam making branch pipe: 03 Nos. Foam compound: 200 liter Foam generator with high expansion foam: 2 Nos.
42.	Personal protective Equipment shall be provided to worker and its usage shall be ensured and supervised.	<b>Complied</b> . 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.
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	<b>Complied.</b> First aid box are kept in each plant and at strategic locations whereas antidotes are kept in the medical Centre.
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.	<b>Complied</b> . 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; Various types of tests being performed are as below;
		<ul> <li>A. Pre - employment check - up:</li> <li>1. Vision</li> <li>2. Colour blindness</li> <li>3. CBC</li> <li>4. Urine</li> <li>5. Height</li> <li>6. Weight</li> <li>7. B/P</li> <li>8. Pulse</li> <li>9. Habit</li> <li>10. Personal History</li> <li>11. Family History</li> <li>12. Identification Mark</li> </ul> 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.
- **D** Pulmonary Function Test Apparatus.
- **D** 02Administration.
- 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.	<b>Complied</b> . Flame proof fittings are provided.
46.	power plant. Adequate firefighting facilities shall be provided at the proposed power plant	<ul> <li>Firefighting facilities are adequate.</li> <li>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: <ul> <li>Four full - fledged fire hydrant system in the company</li> <li>Water Storage Capacity - 50 million Liters</li> <li>Total hydrant post/ monitors –780</li> <li>Total length of hydrant line – 15km</li> <li>Fire Fighting Equipment</li> </ul> </li> </ul>
		<ul> <li>DCP 1350 <ul> <li>CO2 776</li> <li>Foam 05Trolly</li> </ul> </li> <li>Fire Tenders <ul> <li>One fire tender having 1800 Lit water capacity</li> <li>Second multipurpose fire tenders having 5000 Lit water &amp; 500 Foam</li> <li>Third Multipurpose tender having facility of DCP - 500 Kg, Foam- 500 lit and Water - 4500Lit.</li> </ul> </li> <li>SCBA sets - 35nos.</li> <li>Emergency alarm system - 532 nos. points spread across the company.</li> <li>Fire station manned round the clock with Siren and Annunciation System.</li> <li>Regular Testing on every Monday.</li> </ul>
		<ul> <li>Smoke detectors in the office and labs.</li> <li>Auto water deluging system at critical reactors.</li> <li>Auto water sprinkler system at tank farms Onsite mock drill and firefighting Training.</li> </ul>
47.	Proper ventilation shall be provide in the work area.	<b>Complied.</b> Proper ventilation provided in work area.
48.	All transporting routes within the factory premise shall have paved roads to minimize splashes and spillages.	<b>Complied</b> . The roads inside factory are either of cement concrete or Bitumen concrete.

49.	The project management shall prepare a details Disaster management plan (DMP) for the project as the guidelines from Directors of Industrial safety and Health.	<b>Complied.</b> 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.
A.6 N	NOISE:	
50.	To minimize the noise pollution the following noise control measures shall be implemented.	<b>Complied.</b> We are regularly implemented noise control measures to minimize the noise pollution.
	Selection of any new plant equipment shall be made with specifications of low levels.	<b>Complied.</b> All steam vents have attached with silencers. Low noise level is considered as one of the prime specifications while selecting new machines in power plant. For example, replacement of reciprocating type noisy air compressors by low noise emitting screw air compressors.
	Manufacturer / supplier of major noise generating machines / equipment like air compressor. Feeder pumps, turbine generators, etc. shall be instructed to make required design modifications wherever possible regulatory norms with respect to noise generation for individual units.	<b>Complied.</b> We are always acknowledge or take care when purchasing of major noise generating machines / equipment like air compressor, feeder pumps, turbine generators, etc., strictly instructed or emphasized to supplier to give less noise generating equipment's as much as possible to regulatory norms with respect to noise generation for individual units.
	Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.	<b>Complied.</b> We have routine and preventive maintenance schedule of machinery / equipment and vehicles to be undertaken to reduce the noise impact.
	Noise suppression measures such as enclosures, buffers and / or protective measures shall be provided.	<b>Complied</b> . Acoustic enclosures are provided on DG sets. Silencers have been provided on main steam vent valves of Boilers.
	Employees shall be provided with ear protection measures like earplugs or earmuffs.	We have provided ear protection measures like earplugs or ear muffs to all employees on regular basis.
	Proper oiling lubrication and preventive maintenance shall be carried out of the machinery and equipment to reduce noise generation.	<b>Complied.</b> Proper oiling lubrication and preventive maintenance is carried out of the machinery and equipment to reduce noise generation.

	Construction equipment	Noted & Complied.
	generating minimum noise vibration shall be chosen.	We always use minimum noise vibration generation construction equipment.
	Ear plugs and / muffs shall be made compulsory for the construction workers working near the noise generating activities / machines / equipment.	<b>Complied.</b> 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.
	Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate.	Noted & Complied. We are permitted those vehicles and construction equipment with internal combustion engines with proper silencer and spark arrestor.
	Construction equipment meeting the norms specified by EP Act, 1986 shall only be used.	Noted & Complied. We are only using construction equipment meeting the norms specified by EP Act, 1986.
	Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.	Noted & Complied. 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.
	Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment.	Noted &Complied. We are using mufflers on all motorized equipment to reduce noise levels.
51.	The overall noise level in and around the plant area shall be kept well within the prescribed standard by providing noise control measures including acoustic insulation, hoods, silencers, enclosures, vibration, dampers etc. on all sources of noise generation.	Complied. The overall noise level in and around the plant area to be kept well within the prescribed standard by providing noise control measures including acoustic insulation, hoods, silencers, enclosures, vibration, dampers etc. on all sources of noise generation provided.
	The ambient noise levels shall confirm to the standards prescribed under the Environment (protection) Act and Rules. Workplace noise levels for workers shall be as per the factories Act and Rules.	Complied. The ambient and workplace noise level confirms to the standard prescribed under EPA. The same is being regularly monitored. The maximum values during the compliance period confirms that at no time the noise emission level went beyond the stipulated standards. Noise monitoring data of report period is attached as Annexure III. Summary is given below:

		Sr No.	Location	Permissibl Limits	le Values for the period April 2023 – September 2023			
					Min.	Max.	Avg.	
		1	66KVA substation	75	67.1	70.3	68.5	
		2	Opposite shed D	75	60.4	63.3	61.6	
		3	ETP West site	75	64.5	66.4	65.5	
		4	ETP North site	75	58.8	60.9	59.7	
		5	Near TSDF	75	63.8	66.9	65.3	
		6	Near Main Office North site	75	65.7	69.7	67.4	
		Sr No.	Location	Permissible Limit	April 20 2023			
		1	66KVA substation	70	<b>Min.</b> 52.4	Max. 59.3	<b>Avg.</b> 56.1	
		2	Opposite shed D	70	52.4 50.1	52.5	51.7	
		2	ETP West site	70	56.9	58.9	57.8	
		-	ETP North site		55.6	61.3	59.5	
		4		70				
		5	Near TSDF Near Main Office North	70	51.4 53.8	54.3 60.7	52.7 57.8	
		6	site	70	55.0	00.7	57.0	
A.7 (	GREEN BELT AND OTHER PLANT	ΓΑΤΙΟ	N:					
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	Gree ever raw with plan road Tota	plied. In belt is developed an y year. Green belt is c plantation with minimu thick foliage in the per tation is done all arou ls to mitigate fugitive & Il Industrial area: 11260 Il Green belt area: 409 strial plot area)	omprised c um height c iphery of th ind the pla transport c 078.27 sq.n	of at lea of native ne factor nt bour dust emi nt	st minim e trees is ry premis ndary and ission.	um 3 to 4 5 to 6 Mt es. Prope d also the	

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.	•
B.OT	HER 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	<b>Complied.</b> No such case during the repot period. However, if such case happens we ensure to close down the unit.
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.	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
56.	All the recommendation of CREP guidelines as may be applicable from time to time shall be following vigorously.	<b>Complied</b> . Company is following strictly recommendations mentioned in CREP guidelines and compliance status is given as <b>Annexure IV</b> .

57.	A separate environment management cell with qualified staff shall be set up for implementation of stipulated environmental safeguards	Complied. Implementation of stipulated environmental safeguards were ensured by the Company's SHE department.
58.	The project authorities must strictly adhere to stipulations made by the Gujarat Pollution Control Board (GPCB), state government and statutory authority.	We are strictly adhere to stipulations made by the Gujarat Pollution Control Board (GPCB), state government and
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.	<b>Complied.</b> 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.
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 Movements) Rules 2016 and the public liability	Noted.

	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.	All the recommendations suggested in the EMP report and Risk assessments study report as well as proposed by us have been implemented.					
63.	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.	EMP measures for the project of details submitted vide our lette December 19, 2019. Further, a separate budget is comply with all the legal require & MoEF apart from upkeep o	are implemented and investment r Atul/SHE/EC Compliance/06 dated being allocated every year to ement stipulated by SPCB, CPCB f pollution control systems and de for EMS compliance during the able: Recurring Cost (Rs. In lacs) For the report period April 2023 – September 2023 1571 21				
		5 Occupational health 6 Green belt	25 15				
		Total	1694				

64.	The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and May also be seen at website of SEIAA / SEAC/ GPCB.	Complied. We have informed the public that the project has been accorded environmental 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.
	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.	<b>Complied.</b> We have given advertisement dated 29.05.2016 in local newspapers that are widely circulated in the region, one of which is given in the Gujarati language and the other in English.
	A copy each of the same shall be forwarded to the concerned Regional office of the Ministry.	<b>Complied.</b> A copy each of the same forwarded to the concerned Regional office of the ministry vide our letter dated January 27, 2017.
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.	<b>Complied.</b> 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.
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.	Complied. We regularly submit the half - yearly compliance report. The implementation of the project along with environmental actions plans are monitored by the authority time to time. We are regularly submitting half yearly compliance reports to the authority & same is being updated on website.
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.	Noted.

68.	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	Complied.
69.	The SEIAA may revoke or suspend the clearance. If implementation of any of the above conditions is not found satisfactory.	Noted
70.	The company in a time bound manner shall implement these conditions. The SEIAA reserves the stipulate additional conditions, if the same is found Necessary.	Noted.
71.	The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	<b>Complied.</b> 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.

				Apr-23	May-23	Jun-23	jul-23	Aug-23	Sep-23
Details of Flue stock								-	
5r. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
		PM	100 mg/Nm <sup>2</sup>		57.4		47,8	52.8	
1	FBC briler E1	SO1	600 mg/Nm <sup>3</sup>	Not Running	284	Not Running	298	311	Not Runnin
		NOX	600 mg/Nm <sup>2</sup>		272		304	324	
		PM	100 mg/Nm <sup>3</sup>	46.8	50.4	53.6		45.6	49.6
2	FBC boiler E2	SO1	600 mg/Nm <sup>3</sup>	296	278	298	Nat Running	304	312
		NDX	600 mg/Nm <sup>2</sup>	284	283	2.88		308	332
	CONTRACTOR AND A CONTRACTOR	PM	100 mg/Nm <sup>3</sup>	41.7		47.1	44,3	102013	58.6
3	FBC boller E3	SO2	600 mg/Nm <sup>3</sup>	284	Not Running	284	312	Not Running	324
		NOX	600 mg/Nm <sup>2</sup>	279		290	308		338
		PM	100 mg/Nm <sup>3</sup>		61.4				
4	FBC boller W1	SO <sub>2</sub>	600 mg/Nm <sup>3</sup>	Not Bunning	301	Not Running	ning Not Running	Not Running	Not Runnin
		NOX	600 mg/Nm <sup>2</sup>		294				
	Boiler (50 TPH 2 Nos) (New bailers) W2 W3	PM	50 mg/Nm <sup>3</sup>	32.4	42.1	40.1	36:1	33.4	44.7
5		502	600 mg/Nm <sup>3</sup>	296	292	298	310	322	308
5		NDx	300 mg/Nm <sup>2</sup>	284	283	293	2.88	296	291
		Mercury	0.03 mg/Nm <sup>3</sup>	ND	ND	ND	ND	ND	ND
	Hot Oil Int	PM	150 mg/Nm <sup>2</sup>	37.2	46.2	33.4	49.1	40.4	47.2
6	(Resorcing) Plant)	50)	100 ppril	9.9	7.4	68	7.4	5.8	7.3
	(nesarana riant)	NDx	50 ppm	201	21.3	24.6	29.6	34.2	27.4
		PM	150 mg/Nm <sup>3</sup>	53.8	57.4	44.9	56.3	50.1	5.62
7	Hot Gil Plant shed-B	SOI	100 ppm	8.6	10.8	14.8	10.6	12.6	9.8
		NDX	50 ppm	21.9	31.0	36.2	30.2	32.4	326
	Oil burner Shed B	PM	150 mg/Nm <sup>3</sup>						
8	(Stand By)	502	100 ppm	Not Running	Not Running	Not Running	Not Running	Not Running	Not Running
	(stored by)	NDx	50 ppm						
	Thermic fluid heater of DCO/DAP Plant	РИ	150 mg/Nm <sup>3</sup>	29.4	41.7	33.4	26.8	34.8	44.9
9	The second s	502	100 ppm	4.6	7.2	6.2	49	6.Z	7.7
		NDx	50 ppm	23.2	21.6	18.1	15.4	10.3	24.3
	DG set 1500 KVA (Stand By) (Sampling done	PM	150 mg/Nm <sup>2</sup>	49.6	49.6	39.7	44.8	44.2	413
10	during trial run)	501	100 ppm	6.4	5.4	5.9	7.2	7.8	5.9
		NDX	50 ppm	32.8	32.8	34.2	19.6	24.3	256
	DG set 1010 KVA (Standby) (Sampling done	PM	150 mg/Nm <sup>3</sup>	44.6	43.2	33.9	56.1	39.8	48.7
11	during trial run)	S02	100 ppm	5.28	5.9	5.66	6.46	9.6	7.2
	anual warmut	NDX	50 ppm	39.4	27.8	37.2	23.6	23.8	30.8

### Annexure II: Ambient Air monitoring Results

Station	Parameter	Limit micro gm/NM <sup>3</sup>	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023
66 KV	PM 2.5	60	50	49	26	22	26	27
	PM10	100	59	82	50	48	58	60
	SO <sub>2</sub>	80	24.4	18.4	13.3	15.7	19.7	20.7
	NO <sub>2</sub>	80	30.7	22.9	18.2	26.5	29.1	30.4
	Ammonia	400	ND	ND	ND	ND	ND	ND
	НСІ	200	ND	ND	ND	ND	ND	ND
Opposite	PM 2.5	60	32.4	51.7	32.6	32.9	32.8	31.9
Shed D	PM10	100	52.3	89.6	55.5	53.6	60.8	60.8
	SO <sub>2</sub>	80	23.9	24.6	16.7	20.7	19.3	16.9
	NO <sub>2</sub>	80	30.5	30.5	22.2	29.7	28.9	29.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	НСІ	200	ND	ND	ND	ND	ND	ND
West site ETP	PM 2.5	60	30	39	29	29	30	32
	PM10	100	52	78	43	55	60	51
	SO <sub>2</sub>	80	26.9	20.3	11.5	16.8	14.9	16.9
	NO <sub>2</sub>	80	32.6	25.4	16.3	21.6	23.7	26.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
North ETP	PM 2.5	60	32	45	27	25	24	26
	PM10	100	49	80	46	43	46	47
	SO <sub>2</sub>	80	18.9	23.4	14.2	12.4	15.7	16.8
	NO <sub>2</sub>	80	25.5	27.9	19.1	27.1	26.4	25.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
TSDF	PM 2.5	60	29	43	24	27	28	29
	PM10	100	56	79	53	51	49	50
	SO <sub>2</sub>	80	19.3	17.6	12.3	16.4	13.4	12.9
	NO <sub>2</sub>	80	26.1	22.2	17.3	23.6	28.9	30.7
	Ammonia		ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Main Guest House	PM 2.5	60	36.9	50.8	32.5	32.9	33.4	32.9
	PM10	100	58.3	88.6	53.3	55.4	60.4	59.7
	SO <sub>2</sub>	80	30.4	24.6	15.5	16.4	19.3	20.7
	NO <sub>2</sub>	80	25.3	29.8	19.3	26.7	27.1	22.6
	Ammonia	400	23.3 ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Wyeth Colony	PM 2.5	60	28	44	22	30	32	30
Colory	PM10	100	41	72	48	54	56	54
	SO <sub>2</sub>	80	41 23.4	21.6	12.9	17.7	16.7	17.6
	NO <sub>2</sub>	80	28.8	26.9	12.5	20.1	22.3	29.7
	Ammonia	400	20.0 ND	20.9 ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Gram panchayat	PM 2.5	60	48.7	32.6	31.9	34.6	30.6	48.7
hall	PM10	100	40.7 88.6	52.0	53.7	62.3	61.8	48.7 88.6
	SO <sub>2</sub>	80	88.0 23.7	15.6	17.3	20.7	19.3	23.7
	NO <sub>2</sub>	80	23.7 29.4	22.3	26.8	20.7	29.6	29.4
	Ammonia	400	ND	ND	ND	ND	ND	ND

	HCI	200	ND	ND	ND	ND	ND	ND
Main office, North	PM 2.5	60	60.2	29.3	29.6	30.7	31.9	60.2
site	PM10	100	88.1	55.3	58.7	55.9	50.3	88.1
	SO <sub>2</sub>	80	23.6	15.3	19.9	18.8	20.7	23.6
	NO <sub>2</sub>	80	27.8	18.6	26.8	29.8	29.7	27.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Haria water tank	PM 2.5	60	51.3	29.4	30.6	35.6	30.8	51.3
	PM10	100	84.6	52.6	55.9	57.1	52.9	84.6
	SO <sub>2</sub>	80	23.6	17.1	17.8	18.1	18.3	23.6
	NO <sub>2</sub>	80	29.8	20.3	24.1	29.8	27.9	29.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND

#### Annexure III: Noise Data

## Noise level monitoring data (Day Time):

Sr	Location	Noise Lev	Permissible					
No.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	Limits, dBA
1	66KVA substation	67.2	68.2	67.1	68.9	69.2	70.3	75
2	Opposite shed D	63.3	62.2	61.1	60.4	61.3	61.3	75
3	West site ETP	64.5	66.3	65.5	66.4	65.4	64.9	75
4	North site ETP	60.9	59.1	60.3	59.7	58.8	59.1	75
5	Near TSDF	65.9	66.9	65.2	64.3	63.8	65.4	75
6	Near main office North site	66.3	69.7	68.4	65.7	66.3	68.1	75

## Noise level monitoring data (Night Time):

Sr	Location	Noise Le	Permissible					
No.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	Limits, dBA
1	66KVA substation	59.2	58.4	59.3	53.6	52.4	53.4	70
2	Opposite shed D	52.4	52.1	52.5	51.6	50.1	51.3	70
3	West site ETP	56.9	58.8	57.5	58.9	57.1	57.3	70
4	North site ETP	60.4	61.3	60.3	59.7	55.6	59.7	70
5	Near TSDF	52.6	51.4	52.3	51.7	54.3	53.9	70
6	Near main office North site	56.9	58.8	57.3	53.8	59.2	60.7	70

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
	Development of SO2 & NOx emission standards.	NA	Action by CPCB
4	Development standards for of guide mercury lines / & other	NA	Action by CPCB
	Review of stack height requirement	NA	Action by CPCB
	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.
5	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.
	Use of abandoned coal mines for Ash disposal	NA	Not Applicable
6	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	Complied	-

	adopt any of systems mentioned in 13(1)		
	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. Amendment AH no. 15 November 2022 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.

Sr. No.	Name of Project	Budget in Rs.	Actual expense in Rs.
1	Enhancement of educational practices in Kalyani Shala	50,00,000	27,29,746
2	Improvement of teaching methodology for primary school children - Adhyapika project	90,00,000	61,53,561
3	Support to tribal children in Atul Vidyamandir	15,00,000	8,26,996
4	Support to develop a school in a tribal area	1,00,000	1,42,671
5	Provision of scholarships to needy and meritorious students	5,00,000	2,20,779
6	Provision of education kits to children	8,00,000	9,45,476
7	Conservation of manuscripts	30,00,000	15,00,000
8	Promote learning and life skills among children through art therapy	1,00,000	
9	Contribution towards publication of books on Indian culture   Ecology   Philosophy	4,00,000	-
10	Support to develop a school in West Bengal	2,00,000	
NEW Project	Enhancement of educational practices in Valsad College- Nootan Kelvani Mandal		5,51,000
NEW Project	Other Education project		31,154
NEW Project	Mobile Science Lab Project		11,21,575
	Total education budget (a)	2,06,00,000	1,42,22,958
11	Skills training to youth as apprentices	90,00,000	48.78.585
12	Empowerment of women   youth through various vocational training courses	25,00,000	7,12,180

13	Develop five Industrial Training Institute	10,00,000	-
14	Develop micro-entrepreneurs to provide sustainable livelihood	15,00,000	2,96,155
15	Create livelihood opportunities for tribal	55,00,000	20,35,393
	families by providing cows -Godaan project		
16	Empower women through self-help groups- Atul Uttara project	35,00,000	10,59,475
NEW Project	Project - Adhikar Haqdarshak		14) 14)
NEW Project	Migrant Worker Project	2.0	-
	Total empowerment budget (b)	2,30,00,000	89,81,788
17	Enhancement of rural health through health camps	40,00,000	17,86.043
18	Support to Atul Healthcare Centre	1,00,00,000	69,47,727
19	Promote health and wellbeing of adolescent girls and women – Sampoorna project	27,00,000	17,34,988
20	Nourish first 1000 days of child through training pregnant -lactating mothers and stakeholders	16,00,000	3,89,740
21	Upgradation of sports infrastructure and equipment	40,00,000	
NEW Project	Donation for health-Kasturba Rahat Mandal		10,00,000
	Total health budget (c)	2,23,00,000	1,18,58,498
22	Provision of medical treatment to needy patients	20,00,000	8,29,396
23	Provide assistance to children with special needs - Ojas	1,00,000	5,32,467
NEW Project	Flood Relief Ankleshwar		45,000

	Total relief budget (d)	21,00,000	14,06,863
24	Develop community infrastructure in Atul village	3,40,00,000	25,50,189
25	Development of community infrastructure in Atul village – post office and police station	60,00,000	77,76,682
26	Infrastructure development in Atul and surrounding villages	30,00,000	21,11,101
27	Construction of toilet blocks in Kalyani Shala	60,00,000	-
28	Develop Ulhas cricket ground	40,00,000	-
NEW Project	Improvement In School and Anganwadi		86,460
	Total infrastructure budget (e)	5,30,00,000	1,25,31,016
29	Establishment of solid waste management system in Atul village- Ujjwal Atul project	25,00,000	26,15,724
30	Initiate waste management project in 42 village	35,00,000	-
31	Set up plastic waste management unit /Rag pickers Livelihood Project	15,00,000	1,91,079
32	Initiate natural resource management project to conserve soil and water	50,00,000	20,75,457
33	Conservation of energy through Solar	50,00,000	7,59,563
34	Set up nature-based wastewater recycling systems	50,00,000	19,18,794
35	Conservation of water through various interventions	20,00,000	7,25,243
36	Enhance green cover- Tree Plantation project	30,00,000	13,09,274
37	Protection of animals	10,00,000	-

30,00,000	-
3,15,00,000	95,95,570
15,25,00,000	5,85,96,693
75.00,000	-
16,00,00,000	5,85,96,693
_	3,15,00,000 15,25,00,000 75,00,000

# atul

#### 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: April 2023 – September 2023

Sr No.	Condition	Compliance						
Term o	and Conditions:							
ii. The treated effluent of 3335 cum/day shall be recycled/reused to meet the requirement of different		The tr	eated	effluent recycled i period.	in sy	/stem is <b>Av</b>	g. 247 KL/Day (	during
	industrial operations, and the remaining treated		Sr M No.	Ionth	Tot Rec	al cycle	Avg. KL/Day	]
	effluent of 20514 cum/day shall be discharge to	1	1 A	pril - 2023	596	57	199	
	estuary of Par River		2 N	1ay -2023	564	18	182	-
	through the existing pipeline.	3	3 Ju	une - 2023	889	99	297	-
		4	4 յւ	ıly - 2023	776	55	250	-
		Į Ę	5 A	ugust - 2023	887	75	286	-
		6	6 S	eptember - 2023	809	99	270	-
		discha achiev	arged t ving no	about <b>Avg 9799</b> o estuary of Par riv orms stipulated, v o stipulated conditi	ver t whic	hrough the e	existing pipeline	e after
			Sr No	. Month	E	Effluent Disc Estuary of Po Kl/day	charged to ar River Avg	
			1	April - 2023	-	10280		
			2	May -2023		9360		
			3	June - 2023		9745		
			4	July - 2023		9400		
			5	August - 2023		9754		
			6	September - 202	23	10255		
		throug	gh NA	charged treated w BL accredited and nsuring the compl	d Mo	oEF approve		

of tre GPCI The t disch efflue The r no t Sum	t from the above, v eated effluent as p B and CPCB serve created effluent is r arge norms and v ent is given in <b>Ann</b> maximum values c ime the emission mary is given belov	er CPCB o r. meeting al alues of vo <b>exure 1</b> . during the n went b w:	guidelines II the state arious parc complianc eyond th	and also c pollution c ameters of e period c e stipulat	connected with control board's treated onfirms that at ed standards.
Sr No	Parameter	Limit Mg/l		for the per	tember 2023
		IVIG/I	Min.	Max.	Avg.
1	рН	5.5 to 9.0	6.9	7.2	7.0
2	Temperature °C	40 oC	30.4	31.6	31.0
3	Colour in (pt. co. scale) units		30.0	45.0	36.7
4	Suspended solids mg/l	100	41.0	61.0	51.0
5	Oil and Grease mg/l	10	2.8	5.4	4.1
6	Phenolic Compounds mg/l	5	0.6	0.9	0.8
7	Cyanides mg/l	0.2	ND	ND	ND
8	Fluorides mg/l	2	0.7	1.2	0.9
9	Sulphides mg/l	2	0.4	0.8	0.5
10	Ammonical Nitrogen mg/l	50	6.0	9.4	7.6
11	Arsenic mg/l	0.2	ND	ND	ND
12	Total Chromium mg/l	2	0.1	0.1	0.1
13	Hexavelent Chromium mg/l	1	ND	ND	ND
14	Copper mg/l	3	0.2	0.4	0.3
15	Lead mg/l	2	ND	ND	ND
16	Mercury mg/l	0.01	ND	ND	ND
17	Nickel mg/l	5	0.2	0.3	0.2

Page **2** of **86** 

		18	Zinc mg/l	15	0.5	0.9	0.7
		19	Cadmium mg/l	2	ND	ND	ND
		20	Phosphate mg/l	5	1.6	2.4	2.0
		21	BOD (3 days at 27°C) mg/l	100	47.2	74.0	56.1
		22	COD mg/l	250	206.0	232.0	218.7
		23	Insecticide/Pest icide	Absent	ND	ND	ND
		24	Sodium Absorption Ratio	26	4.5	7.4	5.4
		25	Manganese mg/l	2	0.1	0.2	0.1
		26	Tin mg/l	0.1	ND	ND	ND
		27	Bio Assay Test	90% survival of fish after 96 hrs. in 100% effluent %	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent
iii	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.	We ł othe recei CTO GPC	plied. nave obtained neck r waste by obtainin ving EC. amendment has b B/CCA-VSD-313(2 2 (CTO amendmen	ng Amendn been grante 20)/ID: 2315	nent in Exis d by GPCE 58/688215	sting CTO 3 Vide Lett , Dated No	after er No. ovember 15,

iv	National Emission	Noted & Cor	nplied.		Noted & Complied.			
	Standards for organic		We have been following the National Emission Standards since					
	chemicals Manufacturing	0 0	he location of			•		
	Industry issued by the		had been decided in consultation with GPCB so that at least one					
	Ministry vide G.S.R. 608(E)		station is installed in the up wind and downwind direction as well as					
	Dated 21 July, 2010 and	where maximum ground level concentration are anticipated. This						
	Amended from time to time shall be followed.	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						
	shull be followed.	factory. In total we had selected 10 locations, and monitored						
		successfully. Results are attached herewith.					orneored	
		We are also	o doing offline	monitoring	n at regula	r interval (N	(Ionthly)	
		We are also doing offline monitoring at regular interval (Monthly) through NABL accredited and MoEF approved agency.				viorieny		
			s reports were		•			
		analysis rep	ort of monitorin	g report is	attached ir	n Annexure	2	
			ım values durin					
			emission level			pulated sto	andards.	
		Parameter v	vise summary is	s given bel	ow:			
		Summary of	Ambient Air Qu	uality resu	lts:			
		Station	Parameter	Limit		r the period		
				-			0000	
				micro -	April 202:	3 – Septeml	per 2023	
				micro - gm/NM <sup>3</sup>	April 2023 Min.	A – Septemi Max.	oer 2023 Avg.	
		66 KV	PM2.5		•	-		
		66 KV	PM2.5 PM10	gm/NM <sup>3</sup>	Min.	Max.	Avg.	
		66 KV		<b>gm/NM<sup>3</sup></b> 60	Min. 22.0	<b>Max.</b> 50.0	<b>Avg.</b> 33.3	
		66 KV	PM10	<b>gm/NM<sup>3</sup></b> 60 100	Min. 22.0 48.0	Max. 50.0 82.0	Avg. 33.3 59.5	
		66 KV	PM10 SO <sub>2</sub>	<b>gm/NM<sup>3</sup></b> 60 100 80	Min.           22.0           48.0           13.3	Max. 50.0 82.0 24.4	Avg. 33.3 59.5 18.7	
		66 KV	PM10 SO <sub>2</sub> NO <sub>2</sub>	gm/NM <sup>3</sup> 60 100 80 80	Min.       22.0       48.0       13.3       18.2	Max.           50.0           82.0           24.4           30.7	Avg. 33.3 59.5 18.7 26.3	
		Opposite	PM10 SO <sub>2</sub> NO <sub>2</sub> Ammonia	<b>gm/NM<sup>3</sup></b> 60 100 80 80 400	Min.       22.0       48.0       13.3       18.2       ND	Max. 50.0 82.0 24.4 30.7 ND	Avg. 33.3 59.5 18.7 26.3 ND	
			PM10 SO <sub>2</sub> NO <sub>2</sub> Ammonia HCI	gm/NM <sup>3</sup> 60 100 80 80 400 200	Min.         22.0         48.0         13.3         18.2         ND         ND	Max. 50.0 82.0 24.4 30.7 ND ND	Avg. 33.3 59.5 18.7 26.3 ND ND 35.7 62.1	
		Opposite	PM10 SO <sub>2</sub> NO <sub>2</sub> Ammonia HCI PM2.5	gm/NM <sup>3</sup> 60 100 80 80 400 200 60	Min.         22.0         48.0         13.3         18.2         ND         31.9	Max. 50.0 82.0 24.4 30.7 ND ND 51.7	Avg. 33.3 59.5 18.7 26.3 ND ND 35.7	
		Opposite	PM10 SO <sub>2</sub> NO <sub>2</sub> Ammonia HCI PM2.5 PM10	gm/NM <sup>3</sup> 60 100 80 80 400 200 60 100	Min.         22.0         48.0         13.3         18.2         ND         31.9         52.3	Max. 50.0 82.0 24.4 30.7 ND ND 51.7 89.6	Avg. 33.3 59.5 18.7 26.3 ND ND 35.7 62.1	
		Opposite	PM10 SO <sub>2</sub> NO <sub>2</sub> Ammonia HCI PM2.5 PM10 SO <sub>2</sub>	gm/NM <sup>3</sup> 60 100 80 80 400 200 60 100 80	Min.         22.0         48.0         13.3         18.2         ND         31.9         52.3         16.7	Max. 50.0 82.0 24.4 30.7 ND ND 51.7 89.6 24.6	Avg. 33.3 59.5 18.7 26.3 ND ND 35.7 62.1 20.4	
		Opposite	PM10 SO <sub>2</sub> NO <sub>2</sub> Ammonia HCI PM2.5 PM10 SO <sub>2</sub> NO <sub>2</sub>	gm/NM <sup>3</sup> 60 100 80 80 400 200 60 100 80 80	Min.         22.0         48.0         13.3         18.2         ND         31.9         52.3         16.7         22.2	Max.         50.0         82.0         24.4         30.7         ND         51.7         89.6         24.6         30.5	Avg. 33.3 59.5 18.7 26.3 ND ND 35.7 62.1 20.4 28.6	
		Opposite	PM10 SO <sub>2</sub> NO <sub>2</sub> Ammonia HCI PM2.5 PM10 SO <sub>2</sub> NO <sub>2</sub> Ammonia	gm/NM <sup>3</sup> 60 100 80 80 400 200 60 100 80 80 400	Min.         22.0         48.0         13.3         18.2         ND         31.9         52.3         16.7         22.2         ND	Max. 50.0 82.0 24.4 30.7 ND 51.7 89.6 24.6 30.5 ND	Avg. 33.3 59.5 18.7 26.3 ND ND 35.7 62.1 20.4 28.6 ND	
		Opposite Shed D	$\begin{array}{c} PM10\\ SO_2\\ NO_2\\ Ammonia\\ HCI\\ PM2.5\\ PM10\\ SO_2\\ NO_2\\ Ammonia\\ HCI\\ PM2.5\\ PM10\\ \end{array}$	gm/NM <sup>3</sup> 60 100 80 80 400 200 60 100 80 80 80 400 200 60 100	Min.         22.0         48.0         13.3         18.2         ND         31.9         52.3         16.7         22.2         ND         ND	Max. 50.0 82.0 24.4 30.7 ND ND 51.7 89.6 24.6 30.5 ND ND	Avg. 33.3 59.5 18.7 26.3 ND ND 35.7 62.1 20.4 28.6 ND ND	
		Opposite Shed D West site	$\begin{array}{c} PM10\\ SO_2\\ NO_2\\ Ammonia\\ HCI\\ PM2.5\\ PM10\\ SO_2\\ NO_2\\ Ammonia\\ HCI\\ PM2.5\\ PM10\\ SO_2\\ SO_2\\ \end{array}$	gm/NM <sup>3</sup> 60 100 80 80 400 200 60 100 80 400 200 60 100 80 80	Min.         22.0         48.0         13.3         18.2         ND         31.9         52.3         16.7         22.2         ND         ND         29.0	Max.         50.0         82.0         24.4         30.7         ND         51.7         89.6         24.6         30.5         ND         39.0         78.0         26.9	Avg. 33.3 59.5 18.7 26.3 ND 35.7 62.1 20.4 28.6 ND ND 31.5 56.5 17.9	
		Opposite Shed D West site	$\begin{array}{c} PM10\\ SO_2\\ NO_2\\ Ammonia\\ HCI\\ PM2.5\\ PM10\\ SO_2\\ NO_2\\ Ammonia\\ HCI\\ PM2.5\\ PM10\\ SO_2\\ PM10\\ SO_2\\ NO_2\\ NO_2\\ \end{array}$	gm/NM <sup>3</sup> 60 100 80 80 400 200 60 100 80 80 400 200 60 100 80 80 80 80	Min.         22.0         48.0         13.3         18.2         ND         31.9         52.3         16.7         22.2         ND         ND         48.0         48.0         13.3         18.2         ND         31.9         52.3         16.7         22.2         ND         ND         43.0	Max.         50.0         82.0         24.4         30.7         ND         51.7         89.6         24.6         30.5         ND         30.5         ND         39.0         78.0         26.9         32.6	Avg. 33.3 59.5 18.7 26.3 ND ND 35.7 62.1 20.4 28.6 ND ND 31.5 56.5 17.9 24.4	
		Opposite Shed D West site	$\begin{array}{c} PM10\\ SO_2\\ NO_2\\ Ammonia\\ HCI\\ PM2.5\\ PM10\\ SO_2\\ NO_2\\ Ammonia\\ HCI\\ PM2.5\\ PM10\\ SO_2\\ SO_2\\ \end{array}$	gm/NM <sup>3</sup> 60 100 80 80 400 200 60 100 80 400 200 60 100 80 80	Min.22.048.013.318.2ND31.952.316.722.2NDND29.043.011.5	Max.         50.0         82.0         24.4         30.7         ND         51.7         89.6         24.6         30.5         ND         39.0         78.0         26.9	Avg. 33.3 59.5 18.7 26.3 ND 35.7 62.1 20.4 28.6 ND ND 31.5 56.5 17.9	
		Opposite Shed D West site	$\begin{array}{c} PM10\\ SO_2\\ NO_2\\ Ammonia\\ HCI\\ PM2.5\\ PM10\\ SO_2\\ NO_2\\ Ammonia\\ HCI\\ PM2.5\\ PM10\\ SO_2\\ PM10\\ SO_2\\ NO_2\\ NO_2\\ \end{array}$	gm/NM <sup>3</sup> 60 100 80 80 400 200 60 100 80 80 400 200 60 100 80 80 80 80	Min.         22.0         48.0         13.3         18.2         ND         31.9         52.3         16.7         22.2         ND         ND         16.7         22.2         ND         11.5         16.3	Max.         50.0         82.0         24.4         30.7         ND         51.7         89.6         24.6         30.5         ND         30.5         ND         39.0         78.0         26.9         32.6	Avg. 33.3 59.5 18.7 26.3 ND ND 35.7 62.1 20.4 28.6 ND ND 31.5 56.5 17.9 24.4	

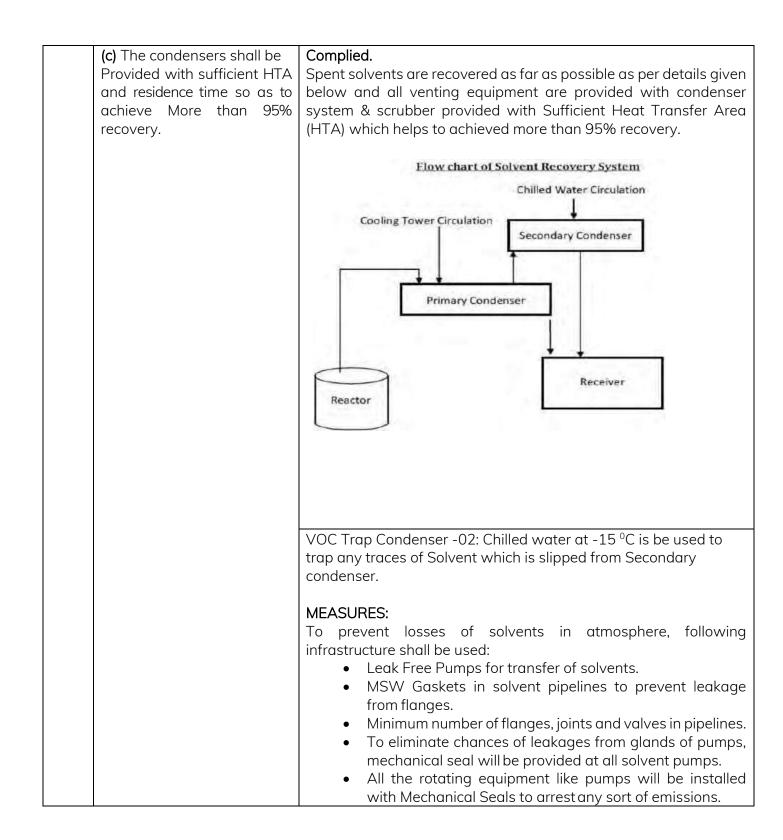
Page **4** of **86** 

North site	PM10	36.0	43.0	80.0	51.8
ETP	SO <sub>2</sub>	16.7	12.4	23.4	16.9
	NO <sub>2</sub>	24.7	19.1	27.9	25.3
	Ammonia	ND	ND	ND	ND
	HCI	ND	ND	ND	ND
TSDF	PM2.5	25.0	24.0	43.0	30.0
	PM10	49.0	49.0	79.0	56.3
	SO <sub>2</sub>	20.3	12.3	19.3	15.3
	NO <sub>2</sub>	29.4	17.3	30.7	24.8
	Ammonia	ND	ND	ND	ND
	HCI	ND	ND	ND	ND
Main Guest	PM2.5	24.2	32.5	50.8	36.6
House	PM10	40.3	53.3	88.6	62.6
	SO <sub>2</sub>	15.1	15.5	30.4	21.2
	NO <sub>2</sub>	16.3	19.3	29.8	25.1
	Ammonia	ND	ND	ND	ND
	HCI	ND	ND	ND	ND
Wyeth	PM2.5	26.0	22.0	44.0	31.0
Colony	PM10	50.0	41.0	72.0	54.2
	SO <sub>2</sub>	14.8	12.9	23.4	18.3
	NO <sub>2</sub>	24.6	18.0	29.7	24.3
	Ammonia	ND	ND	ND	ND
	HCI	ND	ND	ND	ND
Gram	PM2.5	23.8	30.6	48.7	35.8
panchayat	PM10	36.7	52.3	88.6	63.0
hall	SO <sub>2</sub>	14.2	15.6	26.4	20.5
	NO <sub>2</sub>	16.9	22.3	32.6	28.4
	Ammonia	ND	ND	ND	ND
	HCI	ND	ND	ND	ND
Main office	PM2.5	19.7	29.3	60.2	35.9
North site	PM10	46.2	50.3	88.1	60.8
	SO <sub>2</sub>	14.3	15.3	23.6	20.3
	NO <sub>2</sub>	21.2	18.6	32.6	27.6
	Ammonia	ND	ND	ND	ND
	HCI	ND	ND	ND	ND
Haria wate	r PM2.5	18.4	29.4	51.3	35.1
tank	PM10	45.3	52.6	84.6	60.0
	SO <sub>2</sub>	13.4	17.1	30.2	20.9
	NO <sub>2</sub>	20.3	20.3	29.8	26.4
	Ammonia	ND	ND	ND	ND
	HCI	ND	ND	ND	ND

Page **5** of **86** 

<b>v</b> To control source and the	Complied.
fugitive emissions, suitable	For controlling source & fugitive emissions in the work zone
pollution control devices	environment and raw material storage area is being regularly
shall be installed to meet	monitored through NABL accredited and MoEF approved agency.
the prescribed norms and/	Numbers of gas detectors are provided in work area for close
or the NAAQS.	monitoring. We have installed various APCM, special hood, suction
	pipe for gases emission, appropriate scrubbers and has stack height
The gaseous emissions	as per stipulated condition & CPCB guidelines. Elephant trunk with
shall be dispersed through	flexible hoods are also provided at potential leak points, sampling
stack of adequate height	points, man holes, charging points and connected with scrubbers.
as per CPCB/SPCB	
Guidelines.	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.
	57.
	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.
	We are also doing offline monitoring at regular interval (Monthly)
	through NABL accredited and MoEF approved agency. 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 is
	attached as <b>Annexure 3</b> .
	Page <b>6</b> of <b>86</b>

vi	Solvent management shall be	e carried out as follows:
	(a) Reactor shall be	Complied.
	connected to chilled brine	Condensers with chilling systems are provided at point of Solvent
	condenser system.	recovery to minimized vapour loss as shown below:-
		Condenser at Solvent recovery
	(b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.	<b>Complied.</b> We have provided seals at all Reactors and pump's in order to prevent leakage as shown below:-
		Seal at Stirrer Pump Seal



(d) Solvents shall be stored in a separate space specified with all safety measures.	<b>Complied.</b> 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.
	Image: state of the state of
	Details For Solvent Storage is as per Annexure 4.
(e) Proper earthling shall be provided in all the electrical equipment wherever solvent handling is done.	Complied. Earthing pit is provided in all electrical equipment wherever solvent handling is done as below:-
(f) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.	<b>Complied.</b> 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. Details for solvent storage is given in above point vi (d).
(g) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.	<b>Complied.</b> 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.
	Details for VOC mitigation is given in above point vi <b>©</b> .

Page **9** of **86** 

vii	Total fresh water requirement shall not exceed 21950 cum/day, proposed to be met from Par River. Prior permission in this regards	<b>Complied</b> . The average fresh water consumption for the report period is Avg. <b>10651 KL/day</b> only, which is well within the limit. Detail break up is given in below table:					
	shall be obtained from the concerned regulatory	Sr No.	Month	Quantity (KL/Month)	Avg Qua	ntity(KL/Day)	
	authority.	1	April - 2023	335227	111	74	
		2	May -2023	315401	101	74	
		3	June - 2023	317757	105	92	
		4	July - 2023	316725	102	17	
		5	August - 2023	328662	106	02	
		6	September - 2023	334416	111	47	
VIII	Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD.	system Compli Industr High subject house norms.	ial/trade effluent is be FDS COD & Low TE ed to MEE and ATFD. effluent treatment plo It's not exceeding the	eing segrega DS COD. Hig Low TDS CC ant and discl en prescribe	ted as sh gh COD  DD strean harged a d limit of	nown below into TDS stream is n is treated in in- is per stipulated EC & CCA. The	
	Low TDS effluent stream	average wastewater generation for the report period is as under					
	shall Be treated in ETP/RO					effluent Kl/Day	
	to meet the prescribed standards.	Sr No.	Month	High TDS   COD	Low TDS   COD	Total Effluent generation	
		1	April - 2023	141	10139	10280	
		2	May -2023	135	9225	9360	
		3	June - 2023	156	9589	9745	
		4	July - 2023	93	9307	9400	
		5	August - 2023	149	9605	9754	
		6	September - 2023	148	10107	10255	
			aximum values during ie the wastewater ge				

Page **10** of **86** 

		value.
		<b>Prescribed Standards</b> : The final discharged treated waste water quality is also monitored at regular interval (Monthly) through NABL accredited and MoEF approved agency for ensuring the compliance. 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.
ix	Process effluent/any	Details for monitoring results is given in condition <b>ii</b> .
ix	Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from	<b>Complied</b> . Process effluent/any wastewater are being discharged to estuary of Par river through the existing pipeline and are not mixed with storm water line.
	the premises shall be collected and discharged through a separate conveyance system.	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.
		Capacity of Pond: (1 Nos. x 12000 KL) & (1 Nos. x 2000 KL)
		Company has harvest 3.26 Lakh KL rain water during 2023
x	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.	<b>Complied.</b> Storage details of Hazardous materials along with control measure are as per <b>Annexure 5</b> .
xi	Process organic residue and spent carbon, if any, shall be	Complied.
	Sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	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.
l	1	Dago 11 of 96

xii	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act, 1989.	Complied. We are complying all the rules and regulation led by MSIHC, 1989 and follow recommendations of Motor Vehicle Act, 1989 for transportation.			
xiii	Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided.	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. 96 TPD. We dispatch the fly ash daily from these silos so we have not prepare ash pond.			
xiv		waste minimization measures as below:-			
	(a) Metering and control of quantities of active ingredients to minimize waste.	Complied. Metering of water is done. Meter is provided at the inlet of the collection tank and reuse system of waste water and records are being maintained. Photograph of water meter shown below:			

	<ul> <li>(b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.</li> <li>(c) Use of automated filling to minimize spillage.</li> <li>(d) Use of Close Feed system into batch reactors.</li> <li>(e) Venting equipment the processes</li> </ul>	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. Filling/transfer system is being provided to minimized the spillage i.e. Chain conveyor system provided. "Close feed system" is available to our plant At all venting equipment condenser recovery system & scrubbers
	through vapour recovery system.	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.
XV	The green beltof 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.	Complied. Company has already developed more than 36 % of greenbelt in Atul complex Total Industrial Plot area: 1126078.27 sq.mt Green belt area: 409030.00 sq.mt (approx. 36% of total plot area) We planted approximately 39760 trees of difference species in report period at different location and photograph attached below.
xvi	All the commitments made regarding issues raised during the public hearing/ consultation meeting shall be satisfactorily implemented.	<ul> <li>Complied.</li> <li>Please refer below full compliance with this condition as under;</li> <li>1. Local employment is going on and is above 80 % at present.</li> <li>2. Coal handling guidelines are fully complied.</li> </ul>

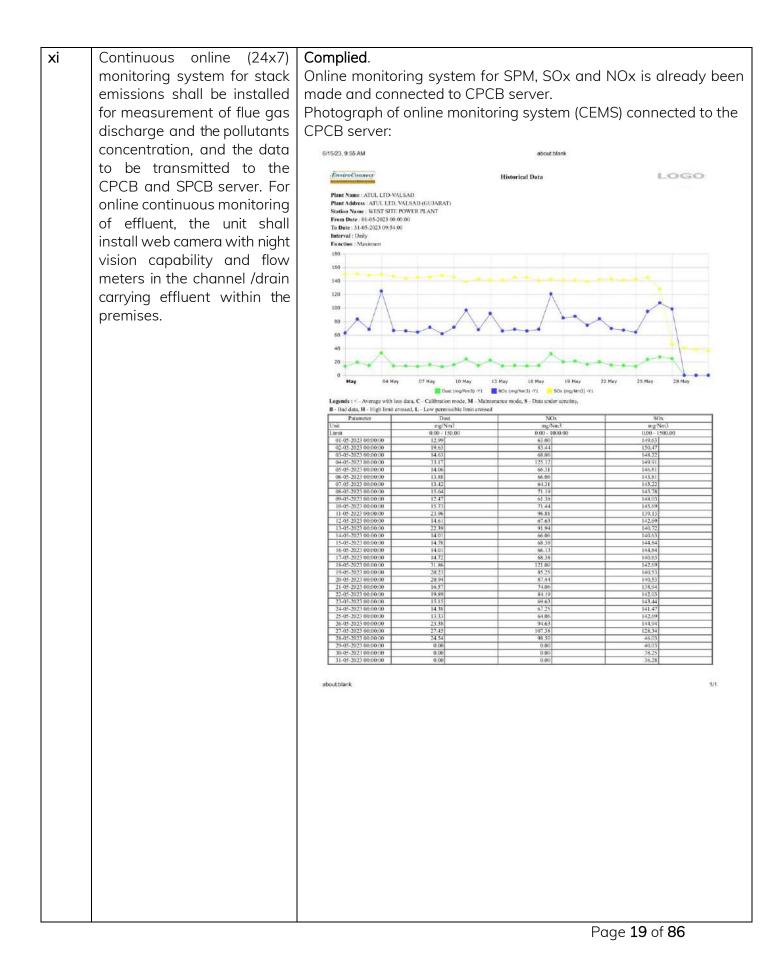
xvii	As committed, funds allocation for the Corporate Environment Responsibility (CER) shall be 2% of the total project cost. Item- wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	Complied. Details of CER   CSR is given in Annexure 6.				
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.	Stack details:SrStack DetailsParameter Ht mtrPermissible LimitsAPCDFuel1DG Set 1010KVA (StandBy)H: 10 SO2PM150 mg/Nm3 Adequate SO2Adequate So2Diesel2DG Set 1500KVA (Stand By)H: 11 SO2PM150 mg/Nm3 Adequate SO2Adequate EnclosureDiesel2DG Set 1500KVA (Stand By)H: 11 NOxPM150 mg/Nm3 Adequate SO2Adequate EnclosureDiesel				
		Enclosure         Photograph of Stack & Stack Attached to D.G Sets:         Image: Constraint of the state of the sta				

xix	The unit shall make the	Complied.					
	arrangement for Protection	A well designed Fire hydrant system is adequate and as per					
	of possible fire hazards	standards.					
	during manufacturing						
	process in material handling.	Fire hydrant Network details:					
	Fire-fighting system shall be	Four full-fledged fire hydrant system in the company Water					
	as per the norms.	Storage Capacity - 50 million Liters					
		<ul> <li>Total length of hydrant line – 15 km</li> <li>Fire Fighting Equipment</li> </ul>					
		• Fire Fighting Equipment					
		<ul> <li>○ DCP1350 ○ CO2 776 Foam : 05Trolly</li> </ul>					
		• Fire Tenders					
		<ul> <li>One fire tender having 1800 Lit water capacity</li> <li>Second multipurpose fire tenders having 5000 Lit water &amp;500Foam</li> <li>Third Multipurpose tender having facility of</li> </ul>					
		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.					
		<ul> <li>Auto water deluging system at critical reactors.</li> </ul>					
		Auto water sprinkler system at tank farms.					

		<image/>
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.         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
<ul> <li>Our occupational health centre &amp; Pathology Lab is equipped with necessary facilities under supervision of factory medical officer with trained three EHS persons.</li> <li>Medical Facilities: <ul> <li>First Aid boxes in all plants</li> <li>Central Ambulance Room in the middle of the factory</li> <li>Two Ambulance Vans. Out of which one is equipped with ICU facilities.</li> <li>Medical Center</li> <li>Three full time AFIH certified doctors.</li> </ul> </li> </ul>
Equipped with 3Beds
<ul> <li>Full equipped Pathological lab with advanced diagnostic equipment</li> <li>ECG Equipment</li> </ul>
Cardiac monitor
Defibrillator
Finger pulse Oxy meter
Pulmonary Function Test Apparatus
O2Administration
Antidotes with routine Important and Vital lifesaving Drugs
<ul> <li>Tie-up with Kasturba Hospital, Valsad, and Pardi Hospital, Pardi, respectively 7 kms and 3 kms away from Atul.</li> </ul>
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.				
<b>Remark:</b> All employ found medically fit to work, no contiguous diseases were observed.				



B. Ger	neral 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 Sitaram Naranji Patel Institute of Technology and Research Centre, Surat for year 2022-23 was submitted vide our letter dated June 27, 2023.
	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.	<b>Complied.</b> 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.	<ul> <li>Complied.</li> <li>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 &amp; MoEF during their visit to our factory.</li> <li>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.</li> </ul>
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	The overall noise levels in and	Complied.
		Page <b>20</b> of <b>86</b>

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)	pres regu The at no stan	ambient and workp cribed under EPA. T lar interval for ensu maximum values du time the emission l dards. Parameter w <b>e level monitoring d</b> Location	he same is b ring the com uring the con level went b rise summar ata (Day Tin Permissibl e Limits,	peing reg pliance. npliance eyond th y is giver ne) Values f April 202	period ca period ca e stipulat n below: or the per 23 – Sept	onitored at onfirm that ced riod ember 2023
Act, 1986 Rules, 1989 viz. 75				Min.	Max.	Avg.
dBA (day time) and 70 dBA	1	66KVA substation	75	67.1	70.3	68.5
(night time).	2	Opposite shed D	75	60.4	63.3	61.6
	3	ETP West site	75	64.5	66.4	65.5
	4	ETP North site	75	58.8	60.9	59.7
	5	Near TSDF	75	63.8	66.9	65.3
	6	Near Main Office North site	75	65.7	69.7	67.4
	Noise level monitoring data (Night Time):					
	Sr No.					
	INO.		Limits, ud	Min.	Max.	Avg.
	1	66KVA substation	70	52.4	59.3	56.1
	2	Opposite shed D	70	50.1	52.5	51.7
	3	ETP West site	70	56.9	58.9	57.8
	4	ETP North site	70	55.6	61.3	59.5
	5	Near TSDF	70	51.4	54.3	52.7
	6	Near Main Office North site	70	53.8	60.7	57.8

vi	The company shall	· · · · · · · · · · · · · · · · · · ·
	harvest rainwater from the roof tops of the Buildings and	Rooftop rain water from Coal sheds and New TG building is collected in well-constructed pond and used as make up water for
	Storm water Drains to	cooling tower.
	Recharge the ground water	5
	and to utilize the same for	
	process requirements.	water drains to collect and harvest rain water in monsoon season after giving necessary pre-treatment to remove suspended matter
		as we have pumped these rain water to clarifloculator units to
		remove suspended matter. We are creating facility/ capacity to
		cater our consumption with rain harvested water with zero river drawls of water during the rainy days.
		Besides this, there are three check dams and pumping facility to
		harvest rain water. We also construct temporary sand bag dam on top of dam towards the end of monsoon to store additional free
		flowing rain water in river Par. In addition to above, surface runoff
		water and roof top water is used to recharge bore wells.
		Total No. of Pond: 2 Nos.
		Capacity of Pond:(1 Nos. x 12000 KL) & (1 Nos. x 2000 KL)
		Company has harvest 3.26 Lakh KL rain water during 2023
		Photograph of rain water harvesting structure (Pond) as shown below:
		and the second sec
		AND A REAL PROPERTY A REAL PROPERTY AND A REAL
		Water Harvesting Project Water Harvesting
		at Colony Project near Coconut
		Circle

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

Page **23** of **86** 

Viii	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	<b>Complied</b> . Compliance to all environmental protection measures and safeguards proposed in the project report submitted to ministry is compiled as mention in <b>Annexure 8</b>
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 6.
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	Complied.
	Management Cell equipped	Company is having separate Environmental Management Cell
	with full-fledged laboratory	equipped with full-fledged laboratory facility to carry out the
	facilities shall be set up to	environment management and monitoring functions. Apart from
	carry out the Environmental	this, one Environment Research Lab is also established for research
	management and	work for the study of various aspects related to environment and
	monitoring functions.	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
		accredited and MoEF approved agency.
		Organogram of SHE Department
		Chairman & Managing Director
		Whole Time Director
		President – Utility & Senices
		VP - Corporate SHE VP - Legal Assurance SHE VP - DOH
		Manager Safety <u>Env</u> Doctors
		Manager ETP EverOfficient Manager Diversional Mate Nurses Lab Tech.
		Chemista Frantian
		Nyonar

xii	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	comply with all the legal require	get is being allocated every year to ement stipulated by SPCB, CPCB & lution control systems and facilities. t period is given in below table.
	the State Government along with the implementation schedule	Sr No. Parameter	Recurring Cost (Rs. In lacs) For the report period April 2023 – September 2023
	for all the conditions stipulated herein. The funds so earmarked for	2 Liquid Pollution Control Environmental 3 Monitoring and	21
	environment management/ pollution control measures shall not be diverted for any	Monitoring dildManagement4Solid waste Disposal5Occupational health	62 25
	other purpose.	6 Green belt Total	15 1694
xiii	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat Zilla Parishad/Municipal corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	environmental clearance by the	that the project has been accorded e EAC, MoEF&CC Delhi and that the re available with the GPCB and also CB.

xiv	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.	<b>Complied.</b> We regularly submit the half-yearly compliance report & same is being updated on website. Six monthly compliance report and the monitored data are regularly submitted to the Regional office of MoEF&CC at integrated regional office, Gandhinagar through mail and hard copy with copy marked to GPCB regularly.
XV	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.	<b>Complied.</b> The Env. Statement (Form-V) for each financial year ending 31 <sup>st</sup> March 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 2022-23 is attached as <b>Annexure 7</b>

xvi	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://moef.nic.in This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Complied. We have 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.
xvii	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.	<b>Complied.</b> 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.

# Annexure 1: Quality of Treated Effluent

Sr No.	Parameter	Results						GPCB Limits
INO.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	_ Mg/l
1	рН	7.15	6.98	6.92	7.12	6.93	6.89	5.5 to 9.0
2	Temperature °C	30.6	31.2	31.6	31.4	30.4	30.8	40
3	Colour (pt. co. scale)in units	30	35	40	30	45	40	
4	Suspended solids mg/l	42	57	51	41	61	54	100
5	Oil and Grease mg/l	5.4	4.6	3.9	2.8	3.4	4.2	10
6	Phenolic Compounds mg/l	0.72	0.89	0.73	0.62	0.82	0.76	5
7	Cyanides mg/l	ND	ND	ND	ND	ND	ND	0.2
8	Fluorides mg/l	0.75	0.94	1.02	1.24	0.99	0.74	2
9	Sulphides mg/l	0.6	0.42	0.36	0.4	0.8	0.4	2
10	Ammonical Nitrogen mg/l	9.4	5.97	8.14	7.23	6.85	8.24	50
11	Arsenic mg/l	ND	ND	ND	ND	ND	ND	0.2
12	Total Chromium mg/l	0.062	0.089	0.093	0.081	0.096	0.13	2
13	Hexavelent Chromium mg/l	ND	ND	ND	ND	ND	ND	1
14	Copper mg/l	0.17	0.22	0.25	0.35	0.41	0.32	3
15	Lead mg/l	ND	ND	ND	ND	ND	ND	2
16	Mercury mg/l	ND	ND	ND	ND	ND	ND	0.01
17	Nickel mg/l	0.17	0.2	0.19	0.26	0.19	0.21	5
18	Zinc mg/l	0.56	0.67	0.58	0.84	0.91	0.54	15
19	Cadmium mg/l	ND	ND	ND	ND	ND	ND	2
20	Phosphate mg/l	1.62	1.94	2.06	1.85	2.18	2.41	5
21	BOD (3 days at 27°C) mg/l	48	74	61	58.3	47.17	48.13	100
22	COD mg/l	206	226	224	212	232	212	250
23	Insecticide/Pesticide	Absent	Absent	Absent	Absent	Absent	Absent	Absent
24	Sodium Absorption Ratio	4.45	5.24	7.39	5.01	4.6	5.8	26
25	Manganese mg/l	0.082	0.093	0.11	0.16	0.24	0.13	2
26	Tin mg/l	ND	ND	ND	ND	ND	ND	0.1

27	Bio Assay Test	100%	100%	100%	100%	100%	100%	90% survival
		survival	survival	survival	survival	survival	survival of	of fish after
		of fish	of fish	of fish	of fish	of fish	fish after 96	96 hrs. in
		after 96	after 96	after 96	after	after	hrs. in 100%	100%
		hrs. in	hrs. in	hrs. in	96 hrs.	96 hrs.	effluent	effluent
		100%	100%	100%	in	in		0
		effluent	effluent	effluent	100%	100%		
					effluent	effluent		
		Note: ND	is Not Det	ected.				

# Annexure 2: Ambient Air Quality Monitoring Results

Station	Parameter	Limit micro gm/NM <sup>3</sup>	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023
66 KV	PM 2.5	60	50	49	26	22	26	27
	PM10	100	59	82	50	48	58	60
	SO <sub>2</sub>	80	24.4	18.4	13.3	15.7	19.7	20.7
	NO <sub>2</sub>	80	30.7	22.9	18.2	26.5	29.1	30.4
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Opposite Shed D	PM 2.5	60	32.4	51.7	32.6	32.9	32.8	31.9
	PM10	100	52.3	89.6	55.5	53.6	60.8	60.8
	SO <sub>2</sub>	80	23.9	24.6	16.7	20.7	19.3	16.9
	NO <sub>2</sub>	80	30.5	30.5	22.2	29.7	28.9	29.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
West site ETP	PM 2.5	60	30	39	29	29	30	32
	PM10	100	52	78	43	55	60	51
	SO <sub>2</sub>	80	26.9	20.3	11.5	16.8	14.9	16.9
	NO <sub>2</sub>	80	32.6	25.4	16.3	21.6	23.7	26.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
North ETP	PM 2.5	60	32	45	27	25	24	26
	PM10	100	49	80	46	43	46	47
	SO <sub>2</sub>	80	18.9	23.4	14.2	12.4	15.7	16.8
	NO <sub>2</sub>	80	25.5	27.9	19.1	27.1	26.4	25.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
TSDF	PM 2.5	60	29	43	24	27	28	29
	PM10	100	56	79	53	51	49	50
	SO <sub>2</sub>	80	19.3	17.6	12.3	16.4	13.4	12.9
	NO <sub>2</sub>	80	26.1	22.2	17.3	23.6	28.9	30.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Main Guest House	PM 2.5	60	36.9	50.8	32.5	32.9	33.4	32.9

Page **30** of **86** 

	PM10	100	58.3	88.6	53.3	55.4	60.4	59.7
	SO <sub>2</sub>	80	30.4	24.6	15.5	16.4	19.3	20.7
	NO <sub>2</sub>	80	25.3	29.8	19.3	26.7	27.1	22.6
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Wyeth Colony	PM 2.5	60	28	44	22	30	32	30
	PM10	100	41	72	48	54	56	54
	SO <sub>2</sub>	80	23.4	21.6	12.9	17.7	16.7	17.6
	NO <sub>2</sub>	80	28.8	26.9	18	20.1	22.3	29.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Gram panchayat	PM 2.5	60	48.7	32.6	31.9	34.6	30.6	48.7
hall	PM10	100	88.6	52.3	53.7	62.3	61.8	88.6
	SO <sub>2</sub>	80	23.7	15.6	17.3	20.7	19.3	23.7
	NO <sub>2</sub>	80	29.4	22.3	26.8	29.8	29.6	29.4
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Main office, North	PM 2.5	60	60.2	29.3	29.6	30.7	31.9	60.2
site	PM10	100	88.1	55.3	58.7	55.9	50.3	88.1
	SO <sub>2</sub>	80	23.6	15.3	19.9	18.8	20.7	23.6
	NO <sub>2</sub>	80	27.8	18.6	26.8	29.8	29.7	27.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Haria water tank	PM 2.5	60	51.3	29.4	30.6	35.6	30.8	51.3
	PM10	100	84.6	52.6	55.9	57.1	52.9	84.6
	SO <sub>2</sub>	80	23.6	17.1	17.8	18.1	18.3	23.6
	NO <sub>2</sub>	80	29.8	20.3	24.1	29.8	27.9	29.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND

Annexure 3: Stack Details

	1010-10-year-to-year			Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
	Details of Flue stad	(	1						-
Sr. No.	Stack Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
		PM	100 ma/Nm <sup>2</sup>		57.4		47.9	52.8	
1	FBC bolerE1	so,	600 mg/Nm <sup>2</sup>	Not Hunning	284	Not Bunning	298	311	Not Running
		NOx	600 mg/Nm <sup>2</sup>	46.8	272	53.6	304	324	
2	FBC boilor E2	PM	100 markin	296	50.4 278	208	NotBunning	45.6 304	49.6
-	PBC D0i01 E2	SO2 NOx	600 mg/Nm <sup>3</sup> 600 mg/Nm <sup>3</sup>	296	283	298	NOCESSARING.	304	332
		PM	100 marthm <sup>2</sup>	417		47.1	44.3	200	58.6
3	FBC boller E3	so <sub>z</sub>	600 mg/Nm <sup>2</sup>	284	Not Running	284	312	Not Running	324
		NOx	600 mg/Nm <sup>3</sup>	279		290	308		338
12		PM	100 mg/Nm <sup>2</sup>	10000	61.4	10002 12 1	100020 II T	200207	Sec. 6
4	FBC boilor W1	SO <sub>2</sub>	600 mg/Nm <sup>2</sup>	Not Running	301 294	Not Running	NotFunning	Not Hunning	Not Running
	-	PM	600 mgAhn <sup>2</sup> 50 mgAhn <sup>2</sup>	32.4	421	40.1	36,1	33.4	447
12		so,	600 mg/Nm <sup>2</sup>	296	292	298	310	32.2	309
5	Boller (50 TPH 2 Nos) (New bollers) W2.W3	NOx	300 mg/Nm <sup>2</sup>	284	283	293	288	29-6	291
		Mercury	0.03 mg/Nm <sup>5</sup>	ND	ND	ND	ND	ND	ND
	Hat Gil Unit	PM	150 ma/Nm	37.2	46.2	33.4	49.1	40.4	47.2
6	(Besoncinol Piont)	50.	100 ppm	99	7.4	6.B 24.6	7.4	58	7.3
2.000.000000000		NO x PM	50 ppm	53.8	57.4	24.5	29.5 56.3	34.2 50.1	27.4 5.62
7 Hot C	Hot Oil Rant ched-B	SC.	150 mg/Nm <sup>3</sup> 100 ppm	86	10.9	14.9	10.6	12.6	9.8
		NOx	50 ppm	21.9	31.6	36.2	30.2	32.4	32.6
10	Oil burner Shed B	PM	150 mg/Nm <sup>2</sup>			STREET, SHE AVE	800000.00000	- association and	
8	(Stand By)	sc,	100 ppm	Not Running	Not Running	Not Punning	NotFlunning	Not Hunning	Not Running
		NOx	50 ppm	2014	61.7	22.4	200	- 24.0	1110
9	Thermic fluid heater of DCO/DAP Plant	PM SO2	150 mg/Nm² 100 ppm	29.4	72	33.4	268	34.8	44.0
17		NDx	50 ppm	23.2	21.6	18.1	15.4	19.3	24.3
	DiG set 1500 KVA (Stand By) (Sampling done	PM	150 mg/t-im <sup>2</sup>	49.6	49.0	39.7	668	00.2	61.3
10	during trial run)	SOg	100 ppm	64	6.d	5.9	7.2	7.8	6.9
		NDx	50 ppm	32.8	32.8	34.2	198	24.3	25.6
11	DG set 1010 KVA (Standby)(Sampling done	PM	150 mg/km <sup>x</sup>	44.6 5.28	43.2	33.8	56.1	39.8 940	48.7
**	during trial run)	NOx	100 ppm 50 ppm	39.4	27.8	37.2	210	23.8	30.8
		INOX	CA2000		203	2.75	2.30	22.0	3900
	Details of Process sto	ck							
Sr. No.	Stock Details	Parameter	Permissible	Obtoined Volue	Obtoined Volue	Obtained Value	Obtoined Value	Obtained	Obtained
		Formere	Limits	COMPLET VOICE	optomed volge	Commen agins	Counces volue	Value	Volue
tul East S	Fumace (Phasaeoe Plant)	PM	400	14.4	14.8	11.6	115	10.8	18.3
		CO	150 mg/hlm <sup>#</sup>	ND	ND	ND	ND	ND	ND
2	Reactor (Phasgene plant- New)	Phospene	0.1 ppm	ND	ND	ND	ND	ND	ND
austic Ch	lorine Plant	1 magene	0.1 14/0			100		NG.	110
3	Dechicripation Plant	Ci,	9 mg/Nm²	4.88	496	6.4	5.1	43	2.18
10	Desire indian (Plant	HCI	20 mg/film <sup>*</sup>	5.01	5.09	6.58	5.24	447	7.24
4	Common stack of HCI Signiunit 182	Cb	9 mg/Nm <sup>2</sup>	61	472	5.62	4.9	3.84	1.9
	kt (East Site)	HCI	20 mg/Nm	0.27	485	578	5.03	394	1.95
		150	7.10/7	0.52	0.7	084	5.72	064	0.77
5	Sulfuric Acid Plant	SC,	2 kg/T						13.8
		Acid Mist		12.6	15.4			10.8	
		Acid Mist	50 mg/Nm² 9 mg/Nm²	13.5 6.90	15.4 511	17.2	12.4 3.6	10.8 296	4.26
6	ChloroSuffonic Acid plant reactor	Acid Mist Cl <u>s</u> HCI	9 mg/kim²						
6		CL. HQ	9 mg/kim² 20 mg/Nm²	4.94	511	0.12	3.6	296	4.26
6		CL HCI SO	9 mg/sim <sup>2</sup> 20 mg/Nm <sup>2</sup> 40 mg/Nm <sup>2</sup>	4.94	511	0.12	3.6	296	4.26
6 CB Plant 7	ChloroSulfonic Acid plant reactor	CL. HQ	9 mg/kim² 20 mg/Nm²	6.94 5.07	511 525	4.1.2 4.2.3	3.6 3.7	296 304	4.26 4.38
6 CB Plant 7	ChloroSulfonic Acid plant reactor	HCI SQ NOx	9 mg/km² 20 mg/Nm² 40 mg/Nm² 25 ma/Nm²	6.94 5.07	511 525	A 12 A 23 Not in use	3.6 3.7 Not in use	296 304 Notinuse	4.26 4.38 Not in use
6 CB Plant	ChloroSulfonic Acid plant reactor	Ra HCI SO <sub>2</sub> NOx	9 mg/km² 20 mg/km² 40 mg/km² 25 mg/km² 150 mg/km²	8.94 5.07 Not in use	511 525 Not in use	4.1.2 4.2.3	3.6 3.7 Not in use 58.3	296 304	4.26 4.38
6 CB Plant 7 ncinerator 8	C NoroSulfonic: Acid plant reactor	HCI SQ NOx	9 mg/km² 20 mg/km² 40 mg/km² 25 mg/km² 150 mg/km² 40 mg/km²	2.94 5.07 Not in use 57.3	511 525 Not in upe 50.2	4.12 4.23 Not in use 41.7	3.6 3.7 Not in use	296 304 Notinuse 49.2	4.26 4.38 Not in use 37.2
6 CB Plant 7 cinerator 8	C NoroSulfonic: Acid plant reactor	HCI HCI MOX PM SOL NOX	9 mg/km² 20 mg/Nm² 40 mg/Nm² 25 mg/Nm² 40 mg/Nm² 25 mg/Nm²	6.94 5.07 Not in use 57.3 10.2 24.8	511 525 Not in use 502 103 16.9	4.12 4.23 Not in use 41.7 1.2.8 1.3.2	3.6 3.7 Net in use 58.3 10.4 18.2	296 304 Notinuse 40.2 81 10.7	4.26 4.38 Net in use 37.2 11.6 23.8
6 CB Plant 7 cinerator 8	C NoroSulfonic: Acid plant reactor	EL HCI SQ_ NOX PM SQ_ NOX SQ_ SQ_	9 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 25 mg/km <sup>2</sup> 150 mg/km <sup>2</sup> 40 mg/km <sup>2</sup> 25 mg/km <sup>2</sup> 40 mg/km <sup>2</sup>	6.94 5.07 Not in use 57.3 10.2 24.9 21.4	511 525 Not in use 502 103 16.0 218	1.12 1.23 Not in use 1.17 1.2.8 13.2 28.6	3.6 3.7 Not in use 58.3 10.4 18.2 23.2	296 304 Notinuse 40.2 81 10.7 30.6	4.26 4.38 Not in use 37.2 116 23.8 26.4
6 CB Plant 7 cinerator 8 I Plant 9	C NoroGullonia Acid plant reactor Foul Gas Soubber Incinentar	HCI HCI MOX PM SOL NOX	9 mg/km² 20 mg/Nm² 40 mg/Nm² 25 mg/Nm² 40 mg/Nm² 25 mg/Nm²	6.94 5.07 Not in use 57.3 10.2 24.8	511 525 Not in use 502 103 16.9	4.12 4.23 Not in use 41.7 1.2.8 1.3.2	3.6 3.7 Net in use 58.3 10.4 18.2	296 304 Notinuse 40.2 81 10.7	4.26 4.38 Net in use 37.2 11.6 23.8
6 CB Plant 7 cinerator 8 I Plant 9 ED Plant	ChloroGulfonic Acid plant reactor Foul Gas Sorubber Incrimentor Foul Gas Sorubber	CL HCI SQ MOx PM SQ NOx SQ NOx	0 mg/km 20 mg/km 40 mg/km 25 mg/km 40 mg/km 25 mg/km 25 mg/km 40 mg/km 25 mg/km	6.94 5.07 Not in use 52.3 10.2 24.8 21.4 16.8	511 525 Not in use 502 10.3 16.0 21.8 23.4	4.12 4.23 Not in use 41.7 12.8 13.2 28.6 19.4	3.6 3.7 Nat in use 58.3 10.4 18.2 23.2 21.2	296 304 Notinuse 40.2 81 30.7 30.6 22.4	4.26 4.38 Net in use 37.2 116 23.9 26.4 20.8
6 CB Plant 7 cinerator 8 IPlant 9	C NoroGullonia Acid plant reactor Foul Gas Soubber Incinentar	EL HCI SQ_ NOX PM SQ_ NOX SQ_ SQ_	9 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 25 mg/km <sup>2</sup> 150 mg/km <sup>2</sup> 40 mg/km <sup>2</sup> 25 mg/km <sup>2</sup> 40 mg/km <sup>2</sup>	6.94 5.07 Not in use 52.3 10.2 24.9 21.4 16.8 Not in use ND	5.11 5.25 Not in use. 50.2 10.3 16.0 21.8 21.8 23.4 Not in use. ND	1.12 1.23 Not in use 1.17 1.2.8 13.2 28.6	3.6 3.7 Not in use 58.3 10.4 18.2 23.2	296 304 Notinuse 40.2 81 10.7 30.6	4.26 4.38 Not in use 37.2 116 23.8 26.4
6 CB Plant 7 cinarator 8 I Plant 9 ED Plant 10 11	C NoroSURonic Acid plant reactor Foul Gas Sorubber Incinentar Foul Gas Sorubber Spray Dyner Sorubber 5992	CL         HCI           HCI         SQ           SQ         NOX           PM         SQ           SQ         NOX           NOX         NOX           PM         SQ           NOX         NOX           PM         HCI	0 mg/km 20 mg/km 40 mg/km 25 mg/km 40 mg/km 40 mg/km 40 mg/km 40 mg/km 150 mg/km 150 mg/km 0.1 ppm 25 mg/km	6.94 5.07 Not in use 52.3 10.7 24.9 21.4 36.8 Not in use NO 2.5	511 525 Not in use 502 103 16.9 218 234 Not in use Not in use No 485	A.12 A.23 Not in use A1.7 12.8 28.6 19.4 Not in use ND 12.8	3.6 3.7 Not in use 58.3 10.4 28.2 23.2 21.2 Not in use Not in use 15.9	296 204 Notinuse 40.2 81 20.7 20.6 23.4 Notinuse ND 10.2	4.26 4.38 Net in use 37.2 31.6 23.8 26.4 20.8 Not in use ND 10.2
6 CB Plant 7 cinerator 8 I Plant 9 ED Plant 10 11 12	C MoreSulfonic Acid plant reactor Foul Gas Sorubber Increantor Foul Gas Sorubber Sproy Dyper Scrubber 5902 Scrubber 5901802	C	0 mg/km 20 mg/km 40 mg/km 25 mg/km 40 mg/km 40 mg/km 25 mg/km 40 mg/km 150 mg/km 150 mg/km 150 mg/km	6.94 5.07 Not in use 52.3 10.2 24.9 21.4 16.8 Not in use ND	5.11 5.25 Not in use. 50.2 10.3 16.0 21.8 21.8 23.4 Not in use. ND	A.12 A.23 Not in use A1.7 12.4 13.2 28.6 19.4 Not in use ND	3.6 3.7 Not in use 56.3 10.4 18.2 23.2 21.2 Not in use Not Flumming	296 304 Notinuse 40.2 81 30.7 10.6 23.4 Notinuse NO	4.26 4.38 Net in use 37.2 116 23.8 26.4 20.8 Not in use ND
6 CB Plant 7 cinarator 8 I Plant 9 ED Plant 10 11 12 esorcinal	C NoroGullionic Acid plant reactor Foul Gas Sorubber Incrimentor Foul Gas Sorubber Spipoy Dayer Scrubber 5 902 Scrubber 5 801802 Pant	HCI HCI SQ_ NOx PM SQ_ NOx NOx SQ_ NOx NOx PM Prageme HCI NOx	0 mg/km 20 mg/km 40 mg/km 25 mg/km 25 mg/km 25 mg/km 40 mg/km 25 mg/km 150 mg/km 150 mg/km 25 mg/km 25 mg/km 25 mg/km 25 mg/km 25 mg/km	6.98 5.07 52.3 10.2 24.9 21.4 16.4 NZ in use ND 2.9 10.4	511 525 Not in use 802 103 103 103 218 284 284 Not in use ND 145 145	4.12 4.23 Not in use 41.7 12.8 13.2 28.6 10.4 Not in use Not in use Not in use 20.9	36 37 Not in use 583 104 282 212 212 212 Not in use Not Firming 150 162	296 304 Notin use 40.2 81 30.7 30.6 22.4 Notinuse ND 13.2 36.2	4.26 4.39 Net in use 37.2 11.6 23.8 26.4 20.8 Not in use ND 10.2 17.8
6 CB Plant 7 scinarator 8 I Plant 9 ED Plant 10 11 12 esorcinol 13	CNoroSURon:: Acid plant reactor Foul Gas Sorubber Incinentar Foul Gas Sorubber Spray: Dyner Sorubber 5902 Scrubber 5902 Scrubber 5902 Ront Bony Dyner (Response) Plant)	С, HCI SO2 NOX PM SO2 NOX SO2 NOX PM Phosene HO NOX PM	0 mg/km 20 mg/km 40 mg/km 40 mg/km 25 mg/km 150 mg/km 40 mg/km 25 mg/km 40 mg/km 150 mg/km 150 mg/km 20 mg/km 150 mg/km 150 mg/km	6.98. 5.07 52.3 10.2 24.9 21.4 16.8 NZ: in use ND 7.0 10.4 22.6	5.11 5.25 Not in use 10.2 10.3 16.0 21.8 23.4 Not in use ND 14.6 10.3 44.8	A.12 A.23 Not in use A1.7 1.2.8 1.3.2 28.6 1.9.4 Not in use ND 1.2.8 20.9 57.2	36 37 Not in use 583 104 182 232 232 232 232 232 232 232 232 232 2	296 304 Notinuse 49.2 81 20.7 Tu.6 22.4 Notinuse NO 13.2 16.2 47.1	4.26 4.38 Net in use 37.2 31.6 23.8 26.4 20.8 Not in use ND ND 17.8 41.9
6 CB Plant 7 scinarator 8 I Plant 9 ED Plant 10 11 12 esorcinol 13 14	C MicroGullenic Acid plant reactor Foul Gas Scrubber foul Gas Scrubber foul Gas Scrubber Spray Dyse Scrubber 5 902 Scrubber 5 902 Scrubber 5 801802 Fout Gast Scrubber 10 Spray Dyser (Resonce) Plant Spray Dyser (Resonce) Plant	HCI HCI SQ_ NOx PM SQ_ NOx NOx SQ_ NOx NOx PM Prageme HCI NOx	0 mg/km 20 mg/km 40 mg/km 25 mg/km 25 mg/km 25 mg/km 40 mg/km 25 mg/km 150 mg/km 150 mg/km 25 mg/km 25 mg/km 25 mg/km 25 mg/km 25 mg/km	6.98 5.07 52.3 10.2 24.9 21.4 16.4 NZ in use ND 2.9 10.4	511 525 Not in use 802 103 103 103 218 284 284 Not in use ND 145 145	4.12 4.23 Not in use 41.7 12.8 13.2 28.6 10.4 Not in use Not in use Not in use 20.9	36 37 Natin use 583 104 282 212 212 212 Natin use Natin use Natin use 158 162	296 304 Notin use 40.2 81 30.7 30.6 22.4 Notinuse ND 13.2 36.2	4.26 4.39 Net in use 37.2 11.6 23.8 26.4 20.8 Not in use ND 10.2 17.8
6 CB Plant 7 scinarator 8 I Plant 9 ED Plant 10 11 12 esorcinol 13 14	C MicroGullenic Acid plant reactor Foul Gas Scrubber foul Gas Scrubber foul Gas Scrubber Spray Dyse Scrubber 5 902 Scrubber 5 902 Scrubber 5 801802 Fout Gast Scrubber 10 Spray Dyser (Resonce) Plant Spray Dyser (Resonce) Plant	С., HCI SO <sub>2</sub> SO <sub>2</sub> NOx PM SO <sub>3</sub> NOx SO <sub>3</sub> NOx PM Phosetee HO NOx PM Phosetee PO NOx	0 mg/km 20 mg/km 20 mg/km 40 mg/km 25 mg/km 25 mg/km 25 mg/km 25 mg/km 25 mg/km 150 mg/km 150 mg/km 25 mg/km 150 mg/km 25 mg/km 150 mg/km 25	6.98. 5.07 52.3 10.2 24.9 21.4 16.8 NZ: in use ND 7.0 10.4 22.6	5.11 5.25 Not in use 10.2 10.3 16.0 21.8 23.4 Not in use ND 14.6 10.3 44.8	A.12 A.23 Not in use A1.7 1.2.8 1.3.2 28.6 1.9.4 Not in use ND 1.2.8 20.9 57.2	36 37 Not in use 583 104 182 232 232 232 232 232 232 232 232 232 2	296 304 Notinuse 49.2 81 20.7 Tu.6 22.4 Notinuse NO 13.2 16.2 47.1	4.26 4.38 Net in use 37.2 31.6 23.8 26.4 20.8 Not in use ND ND 17.8 41.9
6 CB Plant 7 acinarator 8 Il Plant 9 ED Plant 10 11 12 esorcinol 13	C MicroGullenic Acid plant reactor Foul Gas Scrubber foul Gas Scrubber foul Gas Scrubber Spray Dyse Scrubber 5 902 Scrubber 5 902 Scrubber 5 801802 Fout Gast Scrubber 10 Spray Dyser (Resonce) Plant Spray Dyser (Resonce) Plant	С., HCI SG, MOX PM SG, NOX SG, NOX NOX NOX NOX NOX NOX PM SG, C, C,	2 mgAnt 20 mgAnt 20 mgAnt 25 mgAn 40 mgAnt 40 mgAnt 40 mgAnt 25 mgAnt 20 mgAnt 20 mgAnt 29 mgAnt 9 mgAnt	6.98. 5.07 52.3 10.7 24.9 24.9 21.4 16.8 NZ in use ND 7.9 10.4 10.4 21.6 21.6	511 525 Not in use 502 10.3 36.0 21.8 22.4 Not in use ND 14.6 12.9 20.9 24.0 20.9 24.0 20.9 5.1 5.1	4.12 4.23 Not in use 41.7 12.8 13.2 28.6 19.4 Not in use ND 12.8 20.9 57.2 27.4	36 37 Net in use 563 104 182 212 212 Net in use Net in use Net in use 159 162 162 602 187	206 204 Notinuce 40.2 81 20.7 10.6 22.4 Notinuce NO 12.2 16.2 47.1 22.4	. 4.26 4.39 Not in use 37.2 31.6 23.9 26.6 20.9 Not in use ND 302 37.8 37.8 37.8 30.2 37.8 37.8 37.8 37.8 37.8 37.8 37.8 37.8
6 CB Plant 7 scinarator 8 I Plant 9 ED Plant 9 ED Plant 10 11 12 esorcinol 13 14 -4-D Plan	C MoroGullonic Acid plant reactor Foul Gas Scrubber foul Gas Scrubber foul Gas Scrubber George 5002 Scrubber 5002 Scrubber 5002 Fount Sproy Dayor (Resonnel Plant) Sproy Dayor (Resonnel Plant) Scrubber voim (Resonnel Plant)	С., HCI SO <sub>2</sub> SO <sub>2</sub> NOx PM SO <sub>3</sub> NOx SO <sub>3</sub> NOx PM Phosetee HO NOx PM Phosetee PO NOx	0 mg/km 20 mg/km 20 mg/km 40 mg/km 25 mg/km 25 mg/km 25 mg/km 25 mg/km 25 mg/km 150 mg/km 150 mg/km 25 mg/km 150 mg/km 25 mg/km 150 mg/km 25	6.98 6.07 52.3 10.2 24.8 21.4 16.8 16.8 NZ in Use NZ in Use NZ in Use 10.4 21.6 21.6 21.6 21.6 21.6 21.6	5.11 5.25 Not in use 50.2 10.3 36.9 21.8 23.4 Not in use ND 14.6 10.9 24.3 24.4 14.6 10.9 52	4.12 4.23 Not in use 41.7 1.2.8 1.2.2 28.6 1.9.4 Not in use ND 1.2.0 20.9 57.2 2.7.4 4.5	3.6 3.7 Net in use 58.3 10.4 18.2 73.2 23.2 23.2 23.2 23.2 23.2 23.2 23	296 204 Notinuse 40.2 81 30.7 Notinuse ND 13.2 15.2 15.2 15.2 47.1 22.4 49	. 4.26 4.39 Net in use 37.2 31.6 33.9 26.6 20.0 20.0 Not in use ND 30.2 37 2 37 2 4.19 28.2 5.1
6 CB Plant 7 ncinarator 8 Il Plant 9 ED Plant 10 11 12 esorcinal 13 14 -4-D Plan 15	C MoroSulfonic Acid plant reactor Foul Gas Scrubber Incinentor Foul Gas Scrubber Foul Gas Scrubber Foul Gas Scrubber Scrubber 5 952 Scrubber	Сц. HG SQ, SQ, SQ, SQ, NOX PM SQ, NOX SQ, NOX PM SQ, PM	9 mgNm <sup>2</sup> 20 mgNm <sup>2</sup>	6.98. 5.07 52.3 10.2 24.9 24.9 24.9 10.4 10.4 10.4 10.4 21.6 10.4 21.6	5.11 5.25 Not in use 5.12 10.3 16.0 21.8 22.4 Not in use ND 4.45 20.9 4.25 20.9 5.2 5.2 5.14 ND	4.12 4.23 Not in use 4.1.7 1.2.8 1.2.7 2.8.6 1.0.4 Not in use ND 2.0.9 5.7.2 2.7.4 4.9 5.01 ND	36 37 Net in use 583 304 212 212 212 Not in use Not in use Not in use 159 162 602 187 6.15 6.13 ND	296 204 Notinuse 40.2 81 20.7 20.7 20.7 20.7 20.7 20.7 20.6 22.4 Notinuse NO 47.1 22.4 49 504 NO	4.26 4.39 Not in use 37.2 31.6 26.6 20.9 Not in use NO 37.8 37.8 37.8 37.8 37.8 37.8 37.8 37.8
6 CB Plant 7 scinarator 8 I Plant 9 ED Plant 9 ED Plant 10 11 12 esorcinol 13 14 -4-D Plan	C MoroGullonic Acid plant reactor Foul Gas Scrubber foul Gas Scrubber foul Gas Scrubber George 5002 Scrubber 5002 Scrubber 5002 Fount Sproy Dayor (Resonnel Plant) Sproy Dayor (Resonnel Plant) Scrubber voim (Resonnel Plant)	C, HCI SQ, NOX SQ, NOX SQ, NOX SQ, NOX PM SQ, NOX PM SQ, SQ, SQ, SQ, SQ, SQ, SQ, SQ, SQ, SQ,	2 mgAnt 20 mgAnt 20 mgAnt 25 mgAn 40 mgAnt 25 mgAnt 20 mgAnt 20 mgAnt 29 mgAnt 9 mgAnt	6.98 6.07 Not in use 52.3 10.2 24.9 21.4 16.4 Not in use ND 70 10.4 21.6 10.4 21.6	511 525 Not in use 502 10.3 36.0 21.8 22.4 Not in use ND 14.6 12.9 20.9 24.0 20.9 24.0 20.9 5.1 5.1	a.12 a.23 Not in use a1.7 12.8 13.2 28.6 13.4 Not in use ND 20.9 57.2 27.4 5501	36 37 Net in use 583 304 232 232 232 232 232 232 232 232 232 23	295 204 Notinuxe 40.2 81 30.7 10.6 23.4 10.6 23.4 10.6 23.4 10.2 13.2 16.2 47.1 23.4 23.4 23.4 25.4	. 4.26 4.39 Not h use 37.2 11.6 23.8 36.6 20.8 Not h use ND 30.2 37.8 Not h use ND 30.2 37.9 41.9 28.2 6.1 6.27
6 CB Plant 7 cinorator 8 I Plant 9 ED Plant 10 11 12 esorcinol 13 14 -4-D Plan 15	C MoroSulfonic Acid plant reactor Foul Gas Scrubber Incinentor Foul Gas Scrubber Foul Gas Scrubber Foul Gas Scrubber Scrubber 5 952 Scrubber	С., HCI SQ, MOX PM SQ, NOX SQ, NOX SQ, NOX NOX NOX NOX PM Mox PM PM SQ, C, HCI PM C, NOX PM PM SQ, NOX NOX SQ, NOX SQ, NOX NOX NOX NOX NOX NOX NOX NOX	9 mgNm <sup>2</sup> 20 mgNm <sup>2</sup>	6.98. 5.07 52.3 10.2 24.9 24.9 24.9 16.4 Not in use ND 70 10.4 21.6 21.	5.11 5.25 Not in use 5.12 10.3 16.0 21.8 22.4 Not in use ND 4.45 20.9 4.25 20.9 5.2 5.2 5.14 ND	4.12 4.23 Not in use 4.1.7 1.2.8 1.2.7 2.8.6 1.0.4 Not in use ND 2.0.9 5.7.2 2.7.4 4.9 5.01 ND	36 37 Net in use 583 304 212 212 212 Not in use Not in use Not in use 159 162 602 187 6.15 6.13 8.33 ND	296 204 Notinuse 40.2 81 20.7 20.7 20.7 20.7 20.7 20.7 20.6 22.4 Notinuse NO 47.1 22.4 49 504 NO	4.26 4.39 Not in use 37.2 31.6 26.6 20.9 Not in use NO 37.8 37.8 37.8 37.8 37.8 37.8 37.8 37.8
6 CB Plant 7 cinorator 8 Plant 9 9 ED Plant 10 11 11 12 esercinol 13 14 4-D Plan 15 16	C MoroGullonic Acid plant reactor Foul Gas Scrubber Incrinentor Foul Gas Scrubber Gould Gas Scrubber Gould Gas Scrubber Scrubber 5902 Scrubber 5902 Scrubber 5902 Scrubber 5902 Scrubber 5902 Scrubber 5902 Scrubber 5901802 Plant Sprup Oper Resonal Plantt Scrubber 201 Plant Common Scrubber: 2.4D Plant Diger-1.1001)	С., HCI SO2, SO3, SO3, PM SO3, NOX SO3, NOX SO3, NOX RM SO3, NOX RM SO3, RM SO3, RM SO3, RM SO3, RM SO3, RM SO3, RM RM SO3, RM SO3, RM RM SO3, RM RM SO3, RM RM SO3, RM RM RM SO3, RM RM RM RM RM RM RM RM RM RM	9 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 40 mg/km <sup>2</sup> 40 mg/km <sup>2</sup> 40 mg/km <sup>2</sup> 40 mg/km <sup>2</sup> 25 mg/km <sup>2</sup> 25 mg/km <sup>2</sup> 26 mg/km <sup>2</sup> 26 mg/km <sup>2</sup> 26 mg/km <sup>2</sup> 26 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 20 mg/km <sup>2</sup>	6.98 6.97 Not in use 52.3 10.7 2.4.8 2.1.4 16.8 ND 7.0 10.4 2.1.6 2.1.6 4.0 2.1.6 5.2 10.7 10.4 2.1.6 5.2 6.2 6.3.7 ND 9.82	5.11 5.25 Not in use. 5.17 10.3 18.9 21.8 23.4 Not in use ND 14.6 19.9 24.9 24.9 24.9 24.9 24.9 24.9 24.9 2	a.12 a.24 Not in use a1.7 12.4 28.6 13.4 Not nuse Not nuse 57.2 20.9 57.2 27.4 4.5 501 ND 20.9	36 37 Net in use 563 304 182 212 212 212 212 212 212 189 160 662 187 662 187 662 187 6.15 6.33 ND	296 304 Notinuse 40.2 81 30.7 30.7 30.6 22.4 Notinuse NO 12.2 36.2 22.4 47.1 22.4 45 504 NO 0 866	4.26 4.39 Not huse 37.2 116 208 208 Not huse ND 202 208 ND 202 208 208 208 208 208 208 208 208 202 208 202 202
6 B Plant 7 cinerator 8 Plant 9 ED Plant 10 11 12 esorcinol 13 14 4-D Plan 15	C MoroSulfonic Acid plant reactor Foul Gas Scrubber Incinentor Foul Gas Scrubber Foul Gas Scrubber Foul Gas Scrubber Scrubber 5 952 Scrubber	С., HCI SQ, MOX PM SQ, NOX SQ, NOX SQ, NOX NOX NOX NOX PM Mox PM PM SQ, C, HCI PM C, NOX PM PM SQ, NOX NOX SQ, NOX NOX SQ, NOX NOX NOX NOX NOX NOX NOX NOX	9 mgNm <sup>2</sup> 20 mgNm <sup>2</sup>	6.98. 5.07 52.3 10.2 24.9 24.9 24.9 16.4 Not in use ND 70 10.4 21.6 21.	5.11 5.25 Not in use 5.12 10.3 16.0 21.8 22.4 Not in use ND 4.45 20.9 4.25 20.9 5.2 5.2 5.14 ND	4.12 4.23 Not in use 4.1.7 1.2.8 1.2.7 2.8.6 1.0.4 Not in use ND 2.0.9 5.7.2 2.7.4 4.9 5.01 ND	36 37 Net in use 583 304 212 212 212 Not in use Not in use Not in use 159 162 602 187 6.15 6.13 8.33 ND	296 204 Notinuse 40.2 81 20.7 20.7 20.7 20.7 20.7 20.7 20.6 22.4 Notinuse NO 47.1 22.4 49 504 NO	4.26 4.39 Not in use 37.2 31.6 26.6 20.9 Not in use NO 37.8 37.8 37.8 37.8 37.8 37.8 37.8 37.8
6 CB Plant 7 cinorator 8 Plant 9 9 ED Plant 10 11 11 12 esercinol 13 14 4-D Plan 15 16	C MoroGullonic Acid plant reactor Foul Gas Scrubber Incrinentor Foul Gas Scrubber Gould Gas Scrubber Gould Gas Scrubber Scrubber 5902 Scrubber 5902 Scrubber 5902 Scrubber 5902 Scrubber 5902 Scrubber 5902 Scrubber 5901802 Plant Sprup Oper Resonal Plantt Scrubber 201 Plant Common Scrubber: 2.4D Plant Diger-1.1001)	С., HCI SO2, SO3, SO3, PM SO3, NOX SO3, NOX SO3, NOX RM SO3, NOX RM SO3, RM SO3, RM SO3, RM SO3, RM SO3, RM SO3, RM RM SO3, RM SO3, RM RM SO3, RM RM SO3, RM RM SO3, RM RM RM SO3, RM RM RM RM RM RM RM RM RM RM	9 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 40 mg/km <sup>2</sup> 40 mg/km <sup>2</sup> 40 mg/km <sup>2</sup> 40 mg/km <sup>2</sup> 25 mg/km <sup>2</sup> 25 mg/km <sup>2</sup> 26 mg/km <sup>2</sup> 26 mg/km <sup>2</sup> 26 mg/km <sup>2</sup> 26 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 20 mg/km <sup>2</sup> 20 mg/km <sup>2</sup>	6.98 6.97 Not in use 52.3 10.7 2.4.8 2.1.4 16.8 ND 7.0 10.4 2.1.6 2.1.6 4.0 2.1.6 5.2 10.7 10.4 2.1.6 5.2 6.2 6.3.7 ND 9.82	5.11 5.25 Not in use. 5.17 10.3 18.9 21.8 23.4 Not in use ND 14.6 19.9 24.9 24.9 24.9 24.9 24.9 24.9 24.9 2	a.12 a.24 Not in use a1.7 12.4 28.6 13.4 Not nuse Not nuse 57.2 20.9 57.2 27.4 4.5 501 ND 20.9	36 37 Net in use 563 304 182 212 212 212 212 212 212 189 160 662 187 662 187 662 187 6.15 6.33 ND	296 304 Notinuse 40.2 81 30.7 30.7 30.6 22.4 Notinuse NO 12.2 36.2 22.4 47.1 22.4 45 504 NO 0 866	4.26 4.39 Not huse 37.2 116 208 208 Not huse ND 202 208 ND 202 208 208 208 208 208 208 208 208 202 208 202 202

Phosgene Scrubber at VPSL Central Scrubber at MPSL	Phosgene	100 C						
Central Scrubber at MPSL		0.1 ppm	ND	ND	Not Running	ND	ND	Not Runnit
T	Phosgene	0.1 ppm	ND	ND	Not Running	ND	ND	Not Runnit
Central scrubber at Nico Plant	Acetonitrile.	0.1 ppm 0.1 ppm	NotRunning	ND		ND	ND	 Not Bunn
	- C.	C.L. Maria						1 Text 7 database
Scrubber at Ester plant for Glyphesata	Formaldehyde	10 mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	NotRunn
МСРА	с, НС 50,	9 mg/NM <sup>®</sup> 20 mg/NM <sup>®</sup> 40 mg/NM <sup>®</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Runni
Figronii	so. Ha	40 mg/NM <sup>*</sup> 20 mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Running	Net Running	Not Running	Not Runn
Imidiatioprid	NH5	175 mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Running	Not Running	Not Running	Not Runni
Pyrothroids	SO2 HCI	40 mg/Nm <sup>3</sup>	NotRunning	Not Running	Not Bunning	Not Running	Not Running	Not Runni
Stock at Amine Plant			93.4	109	94.2	310	138	95
Central Scrubber MOPA Plant	на		NotRunning	Not Running	Not Bunning	NotFunning	Not Running	Not Runn
MPP pignt scrubber		20 mg/Nm <sup>3</sup>	4.96	6.8	7.1	8.2	11.4	8.3
No. 11 W. M. Brander and S.		C 1 ppm						ND.
	HQ H <sub>2</sub> s	20 mg/Nm*	NetRunning	Not Running	Not Running	NotFlunning	Not Running	Not Burn
Sulfur Block Plant	NI-is	175 mg/Am²	NotRunning	Not Bunning	Not Running	NotFunning	Not Running	Not Runn
Sulfur Dyes plant		-		102200	10.1970		1.000	MD
ite	MH.	175 mg/Nm*	653	45.2	352	50.8	60.4	87.4
Shed A05/03/44	Cl <sub>2</sub>	9 mg/NMP		4,6	Not Running	NotEurning	38	Not Runn
Shed B2/12/24 Reaction Vessel	C.							6.13
								6.3 26.3
Shed B180704 Em		Au mgraid 0 mm/AAF						7.1
			6.78	6.58	6.06	9.4	12.5	7.3
		9 mg/Nm <sup>2</sup>	5.4	6.1	4.9	3.94	42	5.1
	HCI	20 mg/Nm <sup>3</sup>	55	6.27	5.37	4.05	431	5.24
		150mg/Nm <sup>2</sup>				Not Furining	Not Running	Not Runn
								Not Runn
Shed E 7/12/49 Spray Dryer						51.2	49.3	Not Runn
Shed F F6/1/15 Reaction Vessel	Cl <sub>2</sub> HCI	9 mg/Nm <sup>2</sup> 20 mg/Nm <sup>2</sup>	Not Running Not Running	Not Running Not Running	Not Running Not Running	NotEurning	Not Running	Not Burn
Shed G 10/8/1 (receiver)	cl <u>v</u> HCI	0 mg/Nm² 20 maiNm²	NatRunning	Not Running	Not Running	NotFunning	Not Running	Not Runn
Shed H 11/6/17 chladamer		9 mg/Nm	51	8.5	6.4	4.9	Not Running	4.9
(36501) 11(01) (3600-1361	HCI	20 mg/Nm <sup>2</sup>	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	8.8	10.4	111		16.3
Shed K.K-13/3/4 final of sulfuric acid plant		2 kg/T			and the second se			0.32
			18.3	10000				14.5 ND
Shed [1:5/09/25			167					23.7
-		AC modelm <sup>3</sup>		23.8	19.4	246		22.6
Shed  12/01/42		P mc/Nm*	+++	4.6	3.9	4.8	412	6.1
	HCI			4.73	3.1	4.93	423	6.27
	so,	40 mg/Nm <sup>3</sup>		16.9	20.5		19.7	
Shed [12/03/36		20 mg/Nm²				NotHunning	ND	Not Runn
Shed N Schubber Fan N20/08/24								58
Shad N Scrubbar Em V/00/03/01								5.96
and the second s			+ 30	M.B.C	2010	128	21.9	22.4
				11.1.1				
N-FDH Plant Catalytic incinerator		25 mg/Nm	NetRunning	Not Running	Not Burning	NotBunning	Not Running	Not Burn
	Formalidehyde							
	Phosgene	0.1 ppm	ND .	ND	ND	NB	ND	ND
		175 Mg/Nm <sup>5</sup>			44.6			55.2
	SO							30,2
	M-L				50.0×2			68.2
SPIC N Plant	SO,		18.4	14.2	12.2	12.2	14.2	18.1
PHN-II Plant	HC	20 mg/NM <sup>2</sup>	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Runn
-	на	20 mg/NN <sup>8</sup>	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Burn
LIND CHARTER AND A CONTRACT	Cl <sub>2</sub>	9 mg/Nm²	NotRunning	Not Running	Not Running	NotFunning	Not Running	Not Runn
MEPA-Chilorination Scrubber				18 5 5	100 million 100	0.13 5	122 12 12	
MCPA-SFD	РМ	20 mg/Nm²	NotRunning	Not Running	Not Running	NotFunning	Not Running	Not Bune
		20 mg/Nm <sup>a</sup> 20 mg/NM <sup>®</sup>	Not Running Not Running	Not Running	Not Running Not Running	Not Running Not Running	Not Running Not Running	
MCPA-SFD	РМ		1.595.52.000.004			0.00100000000	1000 000000 V.1.1 <b>2</b> .	Not Bunn Not Bunn Not Bunn
MCPA-SED Glyphoside-Common Caustic Scrubber	PM HC PM H <sub>2</sub> S	20 mg/NN <sup>4</sup> 20 mg/Nm <sup>3</sup> 25 mg/Nm 3	NotRunning NotRunning Not Detected	Not Running Not Running Not Detected	Not Running Not Running Not Detected	Not Running Not Running Not Detected	Not Running Not Running Not Detected	Not Runn Not Runn Not Deter
MCPA-SED Gyphoette-Cammen Crustic Scrubber Gyphoette-SED Sulpher Ellack (NEW) Plant	РМ HCI PM	20 mg/NM <sup>8</sup> 20 mg/Nm <sup>9</sup>	NotRunning NotRunning	Not Running Nat Running	Not Running Not Running	Not Furning Not Furning	Not Running Not Running	Not Bunn
	Figranii           Instacloped           Pyschnoids           Stock et Awine Plant           Central Soubler MDPA Plant           MPP plant torubber           Flazors & Fragrances Plant           Sufur Block Plant           Sted E2/12/24 Peacton Vessel           Shed D Nic Spicy dyser Nel 35           Shed D Nic Spicy dyser Nel 35           Shed D Nic Spicy dyser Nel 35           Shed I 10/012 Flootinnics           Shed I 11/012 chlorinnics           Shed I 11/012 chlorinnics           Shed I 12/02/42           Shed I 12/02/42           Shed I 12/02/42           Shed I 12/02/42           Shed N Scuttber Fon N20/08/24           Shed N Scuttber Fon N20/08/24           Shed N Scuttber Fon N20/08/24	MCPA HC MCPA HC MCPA HC MCPA Firmi F	MCPA         HCl         20 mg/NM           Figranii         SO.         40 mg/NM           Figranii         SO.         40 mg/NM           Inichnicipnii         M-         125 mg/Nm           Pyrathecids         SO.         40 mg/Nm           Stock at Amine Plant         N-         125 mg/Nm           Stock at Amine Plant         HCl         20 mg/Nm           MPP plantscrubbar         Photopase         0.1 ppm           Flavors & Engrances Plant         HCl         20 mg/Nm           Suffar Bick Plant         M-S         -           Sted E2/22/24 Pign         C         9 mg/Nm           Sted B2/22/24 Pign         C         9 mg/Nm           Sted C5/22/25 Choininatar         HCl         <	MCPA         HC         20 ma/M         Net Running           Fir onli         SO         40 ma/M         Net Running           Fir onli         SO         40 ma/M         Net Running           Initicitizandi         M-         175 ma/M         Net Running           Initicitizandi         SO         40 ma/M         Net Running           Practhenials         SO         40 ma/M         Net Running           Stock at Amine Plant         N-         175 ma/M         9.3.4           Central Southber MDPA Fleat         HCI         20 ma/M         Net Running           MP plantscrubber         HCI         20 ma/M         Net Running           Sufar Bics fingences Plant         HCI         20 ma/M         Net Running           Sufar Dyes plant         M-S         -         ND         ND           Sted E0/20/24 Plant         HCI         20 ma/M         Net Running         ND           Sted E0/20/24 Plant         HCI         20 ma/M         Net Running         ND           Sted E0/20/24 Plant         HCI         20 ma/M         -         ND           Sted E0/20/25 Chlorinotar         CL         9 ma/M         E5         ND           Sted E0/10/26 Chlorinotar	MCEA         HD         20.mgAA         NetRunning         MetRunning           Fiz call         55.         40.mgAA         NetRunning         NetRunning           Fiz call         55.         40.mgAA         NetRunning         NetRunning           Initiancipurel         14-1         175.mgAva         NetRunning         NetRunning           Prochosids         50.         40.mgAva         NetRunning         NetRunning           Stack of Anine Plant         N-1         175.mgAva         92.4         309           Stack of Anine Plant         N-1         175.mgAva         92.4         309           Carmin Scrubber MCPA Rent         HCI         20.mgAva         Hot Running         NetRunning         NetRunning           Sufur Bock Plant         HCI         20.mgAva         NetRunning         Not Running           Sufur Bock Plant         HCI         20.mgAva         Not Running         Not Running           Sufur Bock Plant         HCI         20.mgAva         Not Running         Not Running           Sufur Bock Plant         HCI         20.mgAva         Not Running         Not Running           Sufur Bock Plant         HCI         20.mgAva         Not Running           Sufur Bock Plant         <	MCPA         HC         Zörngkke All orgkke So.         Net Running         <	MCFA         HCI         ZangAAP         NetHanng         NetRanng         NetRanng         NetRanng         NetRanng           Firzeai         50.         40 mgAA         NetRanng         NetRanng         NetRanng         NetRanng         NetRanng           Indiscipprif         M-4         20 mgAn <sup>2</sup> NetRanng         NetRanng         NetRanng         NetRanng         NetRanng           Sock at Avine Plant         M-4         20 mgAn <sup>2</sup> NetRanng         NetRanng <t< td=""><td>MEPA         HE         Rest         Net Haming         <th< td=""></th<></td></t<>	MEPA         HE         Rest         Net Haming         Net Haming <th< td=""></th<>

62	Common Scrubber Mesotrione Sucramone Triczole based fungicide	на	20 mg/Nm3	NotRunning	Not Hunning	Not Running	NotHunning	Not Running	Nat Runnin
63	Heribicides (2-4-D & related products)-SFD	PM	20 mg/Nm3	NotRunning	Not Running	Net Bunning	NotFlunning	Not Running	Not Plumine
64	Herbicides (2-4-D & related products)-Common	HCI	20 mg/Nm3	NotHunning	Not Bunning	Not Running	NotEunning	Not Running	Not Running
04	Caustic Scrubber	Ch.	9.0 mg/Nm 3	Not Hunning	NOT HURRING	Not Running	NotHunning	Not surrang	NOC HUMMIN
65	Glyana	NHa	175 mg/Nm3	NotRunning	Not Funning	Not Running	NotRunning	Not Running	Not Running
00	Gyone	HCI	20 mg/Nm3	essered and	soc naming	nechanning	rectraining	not nutring	COL POINTING
66	Pyrozosu furone Bisppyriboc Sodium, Quadiafap, Chlorantraniliproia, Common Scrubber	Phosgene	0.1 ppm	NotRunning	Not Funning	Not Running	NotRunning	Not Running	Not Running
	Schube	HCI	20 mg/Nm3	1					
67	Azozystrabin,Thiamitroxam - Common scrubber	NOx	25 mg/Nm3	NotEurning	Not Flunning	Not Bunning	NotEunning	Not Running	Not Burning
68	Matribuzi ne,Di afantiurone: Com mon Scrubber	so	40 mg/Nm2	NotRunning	Not Running	Not Running	NetRunning	Not Running	Not Running
69	PF Rettin	на	20 mg/Nm3	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Runnin
70	Alkyl tatena dimer	HCI SO <sub>2</sub>	20 mg/Nm3 40 mg/Nm3	NotRunning	Not Eurning	Not Running	NotRunning	Not Running	Not Running
71	Coustic-HCISynthesis unit	Ha Cij	20 mg/Vm3 9.0 mg/Vm3	6.27	485	5.78	NotHunning	Not Running	Nat Bunnin
	- Protection and the set	HCI	20 mg/Nm3	5.01	509	6.58	An economicant	1.0000000000000000000000000000000000000	
72	Caustic-Hyptrunit	Ciz	9.0 mg/Nm 3	4,98	4.95	6.4	NotHunning	Not Running	Not Running
12.2	and the second	so	40 mg/bim3	THE REPORT OF TH	20022300000	121012000000	020020200000000000000000000000000000000	102202200000000000000000000000000000000	020020000
73	m-Aminaphen-Hat Oil generator	NOx	25 mg/Nm3	NotRunning	Not Funning.	Net Running	NotRunning	Not Running	Not Running
74	m-Amino phenoi-process	so,	20 mg/Nm3	NotRunning	Not Running	Not Burning	NatRunning	Not Running	Not Running
75	Mono chioro benzene	на	20 mg/titm3	NotRunning	Not Hunning	Not Running	NotRunning	Not Running	Not Runnin
76	Propionyl chloride	HCI 50 <b>,</b>	20 mg/Nm3 40 mg/Nm3	NotBunning	Not Running	Nat Running	NotRunning	Not Running	Not Flumming
77	P	SO,	40 mg/Nm3	N. LET	7.4	6.8	1002 0 0000	11.17	1
10	Resorcinel-Hot Oil generator	NOx	25 mg/Nm3	NotRunning	23.3	24.0	NotRunning	Not Running	Not Running
78	Resorcinal-Process	SOz	40 mg/Nm3	NotRenning	Not Flumning	Not Running	NotEunning	Not Bunning	Not Running
70	Trichlara acetyl chloride	на 50,	20 mg/Nm2 40 mg/Nm3	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Running
BD	Thionyl chloride	so,	40 mg/Nm3	NotRunning	Not Bunning	Not Bunning	NotRunning	Not Running	Not Running
81	Ammonia system (at Sulfone)	NH	175 mg/Nm3.	Not Hunning	Not Funning	Not Burning	NotHunning	Not Running	Not Running
82	Scrubber Blower Discharge (ot PHIN III)	Phasgene	0.1 ppm	NotFlumning	Net Banning	Not Running	NetRunning	Not Running	Not Furning
83	Scrubber Bower Discharge (at PHINIM	Photgene	G.1 ppm	NotRunning	Not Running	Not Running	NotRunning	Not Running	Not Running
84	New phoseene plant Furnace	PM	150 mg/Nm3	14.4	14.8	33.6	NetRunning	Not Running	Not Fluming
85	New-Phosgene diont-Reactor	Phosgene	0.1 ppm	NotHunning	Not Hunning	Net Running	NotBunning	Not Running	Not Running
86	Epoxy plant	Toluene/ECH		NotRunning	Not Running	Net Bunning	NotRunning	Not Burning	Not Flumin
				1	and the second second second	AND DOM: NOT	and a later of the	1.000	

# Annexure 4: Details of Solvent Storage

Sr No.	Name of Hazardous	Quantity		Place of its Storage	State &	Type of Hazard	Control Measures Provided
INO.	Substance	Max. qty. can be stored	Qty. stored		Operating Pressure & Temp.	Hazara	Flovided
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 <sup>3</sup>	50 m <sup>3</sup>	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 <sup>3</sup>	30 m <sup>3</sup>	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 &Chemi cal 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	МСВ	105 MT	100 KI	Shed C	Atmo. Press and temp.	Fire &Chemi cal spillage	Underground tank, prohibited are, FLP, foam trolley etc.

# Annexure 5: 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 <sup>3</sup>	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 <sup>3</sup>	Prohibited for men & vehicle movement, Isolated storage, FLP , Flam arrester, PG & PT, Fire hydrant, 7 Fire extinguisher etc.
9	Chloro Sulphonic Acid	SS 316	Above ground	4	30	Respirators, Dry Sand, Dyke wall, spare tank
10	Sulfuric acid	MS	Above ground	4	800	Emergency tank, Dyke wall, LT, DCS controlling, Level alarm etc.
11	Liq. SO₃	MS	Above ground	3	40 MT	Emergency tank, LT & LI, DCS controlling, Level alarm etc.
12	HCI	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.

Page **38** of **86** 

# Annexure 6<mark>: CER| CSR Activities</mark>

#### Activity

Sr. No.	Name of Project	Budget in Rs.	Actual expense in Rs.
1	Enhancement of educational practices in Kalyani Shala	50,00,000	27,29,746
2	Improvement of teaching methodology for primary school children - Adhyapika project	90,00,000	61,53,561
3	Support to tribal children in Atul Vidyamandir	15,00,000	8,26,996
4	Support to develop a school in a tribal area	1,00,000	1,42,671
5	Provision of scholarships to needy and meritorious students	5,00,000	2,20,779
6	Provision of education kits to children	8,00,000	9,45,476
7	Conservation of manuscripts	30,00,000	15,00,000
8	Promote learning and life skills among children through art therapy	1,00,000	-
9	Contribution towards publication of books on Indian culture   Ecology   Philosophy	4,00,000	-
10	Support to develop a school in West Bengal	2,00,000	-
NEW Project	Enhancement of educational practices in Valsad College- Nootan Kelvani Mandal		5,51,000
NEW Project	Other Education project		31,154
NEW Project	Mobile Science Lab Project		11,21,575
	Total education budget (a)	2,06,00,000	1,42,22,958
11	Skills training to youth as apprentices	90,00,000	48,78,585
12	Empowerment of women   youth through various vocational training courses	25,00,000	7,12,180

## Activity

4.72		10.00.000	
13	Develop five Industrial Training Institute	10,00,000	-
14	Develop micro-entrepreneurs to provide sustainable livelihood	15,00,000	2,96,155
15	Create livelihood opportunities for tribal families by providing cows -Godaan project	55,00,000	20,35,393
16	Empower women through self-help groups- Atul Uttara project	35,00,000	10,59,475
NEW Project	Project - Adhikar Haqdarshak	-	
NEW Project	Migrant Worker Project	-	-
	Total empowerment budget (b)	2,30,00,000	89,81,788
17	Enhancement of rural health through health camps	40,00,000	17,86,043
18	Support to Atul Healthcare Centre	1,00,00,000	69,47,727
19	Promote health and wellbeing of adolescent girls and women – Sampoorna project	27,00,000	17,34,988
20	Nourish first 1000 days of child through training pregnant -lactating mothers and stakeholders	16,00,000	3,89,740
21	Upgradation of sports infrastructure and equipment	40,00,000	-
NEW Project	Donation for health-Kasturba Rahat Mandal		10,00,000
	Total health budget (c)	2,23,00,000	1,18,58,498
22	Provision of medical treatment to needy patients	20,00,000	8,29,396
23	Provide assistance to children with special needs - Ojas	1,00,000	5,32,467
NEW Project	Flood Relief Ankleshwar		45,000

## Activity

	⊤otal relief budget (d)	21,00,000	14,06,863
24	Develop community infrastructure in Atul village	3,40,00,000	25,50,189
25	Development of community infrastructure in Atul village – post office and police station	60,00,000	77,76,682
26	Infrastructure development in Atul and surrounding villages	30,00,000	21,11,101
27	Construction of toilet blocks in Kalyani Shala	60,00,000	-
28	Develop Ulhas cricket ground	40,00,000	-
NEW Project	Improvement In School and Anganwadi		86,460
	Total infrastructure budget (e)	5,30,00,000	1,25,31,016
29	Establishment of solid waste management system in Atul village- Ujjwal Atul project	25,00,000	26,15,724
30	Initiate waste management project in 42 village	35,00,000	-
31	Set up plastic waste management unit /Rag pickers Livelihood Project	15,00,000	1,91,079
32	Initiate natural resource management project to conserve soil and water	50,00,000	20,75,457
33	Conservation of energy through Solar	50,00,000	7,59,563
34	Set up nature-based wastewater recycling systems	50,00,000	19,18,794
35	Conservation of water through various interventions	20,00,000	7,25,243
36	Enhance green cover- Tree Plantation project	30,00,000	13.09,274
37	Protection of animals	10,00,000	-

Page **41** of **86** 

## Activity

38	Initiate biogas project	30,00,000	
	Total conservation budget (f)	3,15,00,000	95,95,570
Total t	budget (a+b+c+d+e+f)	15,25,00,000	5,85,96,693

#### Annexure 7: Form V (Environmental Statement)



#### Atul Ltd

Utilities and Services Unit Atul 396 020, Gujarat, India services@atul.co.in | www.atul.co.in (+91 2632) 230000

Atul|GPCB|Form V September 22, 2023

To, Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector 10 – A GANDHINAGAR - 382 010

Subject: Submission of Form V

Dear Sir,

We are enclosing herewith duly filled form - V for the financial year ending March 31, 2023.

Kindly receive the same.

Thanking you.

Yours faithfully,

For Atul Ltd,

H 94 2 Hriday Desai (Vice President- EHS Assurance)

C.C. Regional officer, GPCB, Vapi (Dist: Valsad)

> Registered office: Atul House, G I Patel Marg, Ahmedabad 380 014, Gujarat, India CIN: L99999GJ1975PLC002859

> > albhui Gre

Page 43 of 86



ID: 23158

Page **44** of **86** 

# [Form V]

# (See Rule 14)

Environmental Statement for the financial year ending the 31st March 2023

## Part - A

(i) Name and address of the owner/occupier of the industry operation or process. Mr. B. N. Mohanan Occupier, Atul Limited, Atul – 396 020, Dist.: Valsad

(ii) Industry category Primary (STC code) Secondary (STC code) Large scale Chemical Manufacturing Industry

(iii) Production Capacity – Please refer Annexure - 1

(iv) Year of establishment : 1952

(v) Date of last environmental Statement submitted: September 20, 2022

#### Part - B

### Water and Raw Material Consumption

(1) Water consumption m³/day

Process	:	7663	kl/day
Cooling	:	1887	kl/day
Domestic	:	380	kl/day

Sr. No.	Name of products	Process water consumption per unit of product output			
		During the previous financial year (1)	During the current financial year (2)		
1. C	rop Protection	16.35 kl/mt	15.39 kl/mt		
2. B	ulk Intermediate	1.38 kl/mt	1.31 kl/mt		
3. C	olours	87.84 kl/mt	81.31 kl/mt		
4. Ph	arma & Polymer	5.27 kl/mt	4.16 kl/mt		

Page 1 of 33

Page 45 of 86

(2) Raw material consumption

*Name	of	Name	of	Consumption of raw material per unit of output	
raw materials		products		During the previous financial year	During the current financial year

#### Please refer Annexure - 2

\* Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

#### Part - C

## Pollution discharged to environment/unit of output

(Parameter as specified in the consent issued)

Pollutants	Quantit pollutar dischar (mass/c	nts ged	Concentratic pollutants in d (mass/volum	lischarges	Percentage prescribed st reasons		variation ds with	from
(a)Water (b)Air	COD SO2 NOx HCI	: 17.55 : 16.96	kg/day (224 n Mg/Nm <sup>3</sup> Mg/Nm <sup>3</sup> Mg/Nm <sup>3</sup>	ng/lit) (Process S	Stack)	NIL		
	CI2 NH3 Phosger SO2	: 5.41 M : 80.67 ne : Not D : 0.66 K	Mg/Nm <sup>3</sup> etected					
(c)Air	PM SO2 NOx	: 315.25	Mg/Nm <sup>3</sup> 5 Mg/Nm <sup>3</sup> 8 Mg/Nm <sup>3</sup>	(Flue gas :	stack )			

Page 2 of 33

Page **47** of **86** 

#### Part - D

#### Hazardous Wastes

(as specified under Hazardous Wastes (Management & Handling) Rules, 1989)

Hazardous Wastes	Total Quantity (kg)		
	During the previous financial year	During the current Financial year	
From process	73671645	55393165	
From pollution control facilites (ETP sludge and Salt from MEE)	29847720	67684765	
Total	103519365	123077930	

# Part - E

#### Solid Waste

Solid Wastes	Total Quantity (kg)			
	During the previous financial year	During the current financial year		
(a)From process (Fly Ash)	79867000	41266787		
(b)From pollution control facility				
(c) (1) Quantity recycled or re-utilised within the unit	Nil	Nil		
(2) Sold	79867000	41266787		
(3) Disposed				

#### Part – F

Please specify the characterisation (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes. Please Refer Annexure - 3

#### Part – G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

Please Refer Annexure - 4

## Part – H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution. Please Refer Annexure - 5

Page 3 of 33

Page 48 of 86

## Part – I

Any other particulars for improving the quality of the environment.

- Upgradation of Central effluent treatment plant (CETP) with few additions and alteration. We have built up new collection chamber as we have now made all the incoming effluent lines from production plants to CETP above ground. We are replacing our lamella facility by primary clarifier and also we are adding some equipments/facilities as standby | additional measures for betterment of treatment.
- Unit has Introduced fanton reactor (100 KL), High Efficiency Air Dissolved air Flotation (HEAF) unit (1200 KL), Anoxic Tank (1100 KL), Membrane Bio reactor (1200 KL) At North Site ETP
- 3. Unit has install MEE for High TDS stream from agrochemical manufacturing plant.
- 4. We have upgraded our EMS by installing membrane type filter press followed by paddle dryer at West site

Page 4 of 33

Page **50** of **86** 

Sr. No.	Name of Products	Consented Quanity (MT/M)
A	DYES	
1	Azo dyes	550
2	Sulfur Black	2500.33
3	Sulfur Dyes range	25
4	Naphthol range	75
5	Fast Color Bases	40
6	Disperse dyes	118.5
7	Optical Brighteners	10
8	Reactive Dyes	961.3
9	Vat dyes	105
10	Indigo	500
11	Manganese sulphate	1000
12	40 % Manganese sulphate solution	2500
13	Pigments	200
14	1-Aminoantraquinone	417
15	H-acid	500
16	4-amino-phenyl-4-beta hydroxy ethyl sulphone sulphate ester, Para base ester	834
17	DNCB (Di Nitro ChloroBenzene)	834
в	CHLOR-AKLALI	
18	Caustic soda/potash & sodium sulfide	15100
19	Liquid Chlorine /Hcl	13268
20	Hydrogen	265.29
С	PESTICIDES TECH	
21	Carbamate group of Agrochemicals (Indoxacarb Tech, Propoxur etc.)	110
22	Diuron	420
23	Trichlo Carbon	8.3
24	Cartap Hcl	50
25	Carbendazim	201
26	Phenoxy Herbicides (e. g. 2,4-D & related products)	5670
27	4-chloro-2-methyl phenoxy- acetic acid (MCPA)	5670
28	Pyridine based insecticides & Herbicides chemical e.g. Imidacloprid	125
29	Triazole based Fungicide	102

Annexure : 1: list of Products

Page 5 of 33

Page **51** of **86** 

30	Pyrethroides	10
31	Sulphonyl Urea	70
32	Glyphosate	3000
33	Isoprothiolane	100
34	Fipronil	30
35	Formulations	2200
36	Buprofezin	4
37	Imazethapyr	1.83
38	Kresoxim Methyl	2.08
39	Fenoxaprop	0.83
40	Cyhalofop	0.83
41	Mesotrione	300
42	Sucotrione	300
43	Glycin	1000
44	Pyrazosulfurone	30
45	BisPyribac Sodium	30
46	Azoxystrobin	150
47	Quizalofop	50
48	Thiamethoxam	100
49	Metribuzin	60
50	Diafenthiuron	30
51	Chlorantraniliprole	70
52	5-Chloro 1-Indanone	60
D	BULK DRUG AND PHARMACEUTICALS	
53	Mebendazole	2
54	Tolbutamide	2.5
55	Quiniodochlar	15
D1	Bulk Drugs & Intermediates	194.6
56	Dapsone-API	
57	Valacyclovir HCL	
58	Celecoxib	
59	Desvenlafixine	
60	Mirabegron	
61	Vildagliptin	
62	Venlafaxine Hydrochloride	
63	5-Hydroxy methyl thiazole (5-HMT)	
64	Thiophene-2-carboxaldehyde (2-TC)	
65	1-Chloroacetyl-2-carbonitrile pyrrolidine (CACP)	
66	Dechlofenac sodium / potassium	2.5

Page 6 of 33

Page **53** of **86** 

67	Atenolol	1.7
68	Furosemide	1.3
69	Trimethoprim	0.9
70	Para hydroxy acetophenone	1.7
71	Para hydroxy phenyl acetamide	3
72	Acyclovir	5.2
73	Bathanechol	5.2
D2	Pharma Intermediates & Chemicals	
74	4,4 Diamino diphenyl sulphone	
75	4,4 Dichloro diphenyl sulphone	2094
76	3,3 Diamino diphenyl sulphone	
77	DHDPS & Other sulfones	
E	RESINS	
78	Epoxy Resin	17600
79	Vinyl Ester Resins	37.5
80	Ketone Formaldehyde Resins & Sulphonamide, Formaldehyde Resins	20.8
81	UF/MF/PF/DiCyandiamide Resins	270.9
82	Polyamide resins	161.7
83	Polygrip TPU based	341.67
84	Polygrip rubber based	2000
F	OTHER CHEMICALS	
85	Anthraquinone, Naphthalene, Benzene Intermediates. (Including Beta – Napthol & BON Acid)	740
86	Resorcinol (Meta hydroxy phenol)	1060
87	Carbamite	30
88	Chlorzoxazone & other related products	5
89	4 Ethyl 2,3 – Diorcopiperazino carbonyl Chloride	3.3
90	Imino Dibenzyl 5 carbonyl Chloride	0.8
91	Formaldehyde and base products	15200
92	Sulfuric Acid / Oleum / Chlorosulphonic Acid & Salts	11550
93	Sulpha Drug Intermediate	193.8
94	Acetyl Sulphanilyl Chloride and its derivatives.	1500
95	Acetanilide	500
96	Sulpha Methyl Phenazole Sodium	1.1
97	Pyrazole Base	10.5
98	Sulphanilic acid	25
99	Bis Phenol A	416.7
100	Hexamine	150
101	Epoxy Intermediates	23.8

Page 7 of 33

102	Hardners and auxiliaries	4000
103	Hardener Intermediates	700
104	Bisphenol S & Intermediate Chemicals	16.6
105	Sodium Thio sulphate (dry basis)	2500
106	Sodium Thio sulphate (wet basis)	5300
107	Phosgene	832.827
108	HX-13059	5
109	Alkyl ketene dimer	500
110	Anisole	306
111	PF Resin	200
112	CMC (Carboxy methyl cellulose)	2000
113	HMMM (Hexa Methoxy Methyl Melemine)	40
114	m-Amino phenol	250
115	Mono chloro benzene	2500
116	Propionyl chloride	200
117	Resorcinol derivatives	100
118	RF Resin (Resoform P-18,19,20)	405
119	Trichloro acetyl chloride	200
120	Thio glycolic acid	200
121	Thionyl chloride	1000
122	1,3 Cyclohexanedione	120
F <b>1</b>	Agro, Pharma intermediates, Isocyanats & Carbonat Esters, etc.	
123	Trans-4-MCHI	
124	p-Anisyl chloroformate	]
125	DI-TERT-BUTYL DICARBONATE (Boc. anhydride)	]
126	N, N- Disuccinimidyl Carbonate	]
F1.1	Chloroformate	]
127	1-Chloro ethyl chloroformate (1-CECF)	J
128	4-Nitrophenyl chloroformate (4-NPCF)	]
129	n-Pentyl chloroformate (n-PCF)	
130	Isobutyl chloroformate (IBCF)	2230
131	2 Ethyl Hexyl Cholroformate (2-EHCF)	]
132	Phenyl Chloroformate (PCF)	]
133	Benzyl Chloroformate (BCF)	]
134	Methyl chloroformate (MCF)	J
135	nHexyl chloroformate (n-HCF)	]
F1.2	Carbonates	]
136	Di-tert-butyl dicarbonate (DIBOC)	]
137	Bis (4-Nitrophenyl) Carbonate (Bis-NPC)	

Page 8 of 33

Page **56** of **86** 

138	Diphenyl carbonate (DPC)	
139	Dimethyl carbonate (DMC)	1
140	1,1'-Carbonylldiimidazole (CDI)	1
F1.3	Isocyanates	
141	p-Toluene sulphonyl isocyanate (PTSI) and other Isocyanates	
F1.4	Acid Chlorides	
142	N-Methylpiperazinyl carbamoyl chloride Hydrochloride (NPCCL)	
143	(Chlormethylene)dimethylammonium chloride (VMR)/ Phosgeniminium chloride and other Acid chlorides	
144	N,N-Dimethyl carbamoyl chloride (DMCCI)	1
145	Hexaethyl guanidinium chloride (HEGCI)	
F1.5	Urea	1
146	Tetrabutyl Urea (TBU)	
147	Tetramethyl Urea (TMU)	1
F1.6	Carbodiimide	
148	N,N'-Dicyclohexylcarbodiimide (DCC)	]
149	Sodium sulphite	3261
150	30% HCI	4622.5
151	Sodium hypo chloride solution (10%)	1853.7
152	Potassium chloride	740
153	Sodium Chloride	2418.5
G	Flavors & Fragrances	
G1	Allyl Esters such as	
154	Allyl Caproate	250
155	Allyl cyclohexyl propionate	250
156	Allyl Heptanoate	150
157	Cyclogalbanate	25
G2	Styrene Based derivatives such as	2
158	Phenyl Ethyl Alcohol (PEA)	850
159	PE acetate	250
160	PEME ( Phenyl ethyl methyl ether)	200
161	Pommerol ( Phenyl ethyl isoamyl ether)	100
162	Styrene oxide	500
163	Phenyl ethyl phenyl acetate (PEPA)	100
164	Phenyl acetaldehyde dimethyl Acetal	250
165	Styrallyl acetate	500
G3	Coumarin derivatives such as	-
166	Coumarin	500
167	Dihydro Coumarin	100

Page 9 of 33

G4	Sunscreen prodcuts such as	
168	Avobenzone	83.3
169	Octacrylene	83.3
170	OctylMethoxy Cinnamate	200
G5	Others such as	
171	Peonile	50
172	Mugetanol	25
173	Salicylaldehyde	500
174	Evernyl	200
175	Heliotropin	250
176	Helional	500
177	1,2 Hexane Diol	200
178	Indoflor	50
179	Floral	50
180	Cyclohexyl Salicylate	100
181	Methyl Anthranilate	300
182	Dihydroanethole	50
183	Benzilydine acetone	100
184	Hexenyl -3 -Cis- Benzoate	25
185	Hexenyl Hexenoate, Cis-3	25
186	Citronellyl Oxyacetaldehyde	25
187	Karmaflor	25
188	Anethole	166.7
189	Raspberry Ketone	100
190	P-AninylPropanal	100
н	Co Products:	
191	Phenol	3
Total F	Production including Sodium Thiosulphate (dry basis)	146698.887
Total F	Production including Sodium Thiosulphate (wet basis)	149498.887

Page **10** of **33** 

Page **59** of **86** 

Raw Material	Quantity TPA	
Aniline	59650	
Anhydrous NH3	1494	
Acetic Acid	10331	
Anthranilic acid	74	
AAMX	125	
Acetyl chloride	800	
Acetone	6996	
Allyl Alcohol	4305	
Acetic anhydride	12249	
Anhydrous potassium carbonate	8	
Anhd. AICI3	11784	
Acetyl Chloride	255	
Acetophenone	4980	
Ammonium acetate	200	
Anhydrous Glauber's salt	19	
Acid resin	300	
Aq Disodium Carbonate	300	
Acetonitrile	18000	
acetone cyanohydrine	1008	
Ammonia solution (25%)	3974	
Activted carbon	42	
Acetaldehyde	3840	
Barbituric Acid	277	
Benzoic acid	406	
Bromamine Acid	667	
Bromine liquid	112	
Butylted Hydroxy Toluene	20	
Benzyl Cyanide	450	
Benzophenone	559	
Benzyl chloride	240	
Barium carbonate (100%)	2091	
Butyl acetate-Fresh+Recovered	612	
Benzyl triethyl ammonium chloride	132	
Benzene	5143	

# Annexure : 2 : List of major raw material

Page 11 of 33

Page **60** of **86** 

Benzyle Alcohol	264
Caproic Acid	3420
Calcium carbonate	4140
Calcium hydroxide (Hydrated lime)	131938
Calcium cyanamide	2364
Carbon	19
Caustic (including 25%, lye,Flackes, 48%)	274167
Cyanuric chloride	20
crotonaldehyde	152
Cu Bronz	534
Chlorosulfonic acid	2500
Cinnamic Acid	2700
Cyclohexanol	650
Cis-Anethole	592
Cumene	330
Cycloheaxnone	450
Cyanoacetic acid	395
Cyclohexane	276
Citrenellol	280
Chloroacetaldehyde dimethylacetal	495
Chlorine gas	71116
Cellulose	15240
Citric acid	250
Cyclohexane-1,3-dione	5357
cyclohexane	3600
CS2	360
СРОРМА	1084
Cinconine base	15
Cuprous chloride	11
Chloroform	18782
Chiroacetyl chloride	187
Dimethy succynil succinate (DMSS)	114
Dimethyl malonate	7152
Darco	109
Diethyl ether	120
Di Isopropyl Melonate	888
Dimethyl formate	9444
Dimethoxy methane (Methylal)	1372

Page **12** of **33** 

Page **62** of **86** 

DCDMP HCI	478
Dichloro acetic acid	3499
DEA	8467
Dibutyl amine	936
Dichloromethane	10255
Dimethyl amine	936
Dimethyl Formamide(DMF)	25979
Dimethyl sulphate	6501
Divyol	318
Dimetyl amine	16541
Dinitro diphenyl sulfone	64
DMAP	38
Ethyl acetate	19782
Ethanol	1604
EDTA	2
Ethylene Oxide	1000
Epi Chloro Hydrine (ECH)	99000
Ethylene Dichloride	3670
Ethyl-2-(4-hydroxy phenoxy) -propionate	264
Ethylene Glycol dimethyl ether	420
Fummed silica	213
Fipronil sulfide	396
Formic acid	6080
Ferric Chloride	550
Fumaric acid	2100
Glyoxylic acid 50%	4437
Glacial acetic acid	690
Glaubers salt fresh	1872
Hexene	26105
Hydrgen	1578
Hydrogen Peroxide	26320
Hydrochloric acid	157753
Heptanoic acid	1494
Hydroquinone	1
Hyflosupercell	2716
Hexanoic acid	210
Hyflo	31

Page **13** of **33** 

Page **64** of **86** 

Heptane	19171
Isobutyl alcohol	2467
Iron powder	4320
Isoprenol	463
Iso Valeraldehyde	463
Indene	700
Isoamyl Bromide	900
Iron Fillings	88
Imidazole	269
Isobutanol	5587
Isopropyl alcohol	9427
KOH flakes	2608
m-Urido aniline	16
Monochloro acetic acid	103270
MEG	64
Methyl ethyl ketone	252
Magnusium Oxide	130
Methanol	209304
MDC	6600
Mg	1200
Methyl Salicylate	371
Melamine	79
Methylene Dichloride	62448
M-phenoxy benzaldehyde	60
Mixed xylene	504
Mesitylene	33
MTBE	9112
NaNO2	80
Na (metal)	2309
Naphthol ASIRG	140
Nitric acid	13959
Nitrogen gas	60
NaOCI	5457
NaCl	214045
NaHSO3 (100%)	53
Nitrobenzene	3540
n-Butyl acetate	27
n-Butyl Isocyanate	54

Page 14 of 33

Page **65** of **86** 

N -Methyl Piperazine	314
N,N-Dimethyl ammonium chloride	685
n-hexyl alcohol	7498
Ortho nitro aniline	203
Oleum 65 %	38268
Orthophenylene diamine	1549
para toluidine	143
Phenyl methyl Pyrazolone	117
p - Toluene Sulphonic Acid monohydrate (PTSA)	220
Phenoxy acetic acid	444
Phenyl acetaldehyde	2775
Phenyl acetic acid	810
Phenol	44686
Para formaldehyde	8748
P-Anisaldehyde	1419
Phosphoric acid (85%)	480
P-cresol	2160
Palladium on Barium sulfate	6
Para Flock	7
Para toluene sulfonic acid	59
Para Chloronitro Benzene	84
Para Chloro Aniline	50
Para trifluro methoxy Aniline	459
Phosphorus Pentaoxide	1732
PCF	517
Phosgene	6187
Potassium carbonate	9148
Propene Gas	7632
Propionaldehyde	2886
Pthalamide	3503
Pommerol	1200
p-Toluene sulfonic acid	11
Precoat alfa cellulose	47
Potassium hydroxide	4500
Propionic acid	1968
Potassium hydrosulfide	1440
Poly 80	15

Page **15** of **33** 

Page **67** of **86** 

PMIDA 98%	1836
p-Toluene sulfonamide	3672
Pyridine	30
Resist Salt	107
Resin	1787
Rubber	2344
Raney nickel	1620
Sulphur	15622
Sodium Carbonate	5881
Sodium bicarbonate	7120
Sodium Nitrite	266
Sulphamic acid	50
Soda Ash	3343
Sodium acetate	780
Sodium sulphate	11402
Salicylic Acid	950
Sodium methoxide	3996
Sulfuric acid	139812
Sulphury chloride	6000
Styrene	19592
Silica	288
Sulfur trioxide	8886
Sodium sulfide flakes	77
Succinic acid	277
Sodium hydride	225
Sodium Cyanide	552
Sodium Meta Bisulfide	168
salt Ground	6700
Toluene	161854
Tetrachloro Pthalic Anhydride	211
Tri ethyl Amine	14971
Trimethyl orthoformate	1545
Titanium isoprpoxide	1
Tartaric acid	1
Tetrahydrofuran(THF)	6482
Tetra ethyl benzyl ammonium chloride	44
Tertiary butyl amine	244
Tertiary butyl hydro peroxide	478

Page **16** of **33** 

Thiophene	929
Tosyl urea	252
Tri-n-butyl amine	754
Zeoliite based catalyst	1350
Zinc Bromide	30
Zn Powder	511
1,3-diimino isoindolene	97
1,1-binaphthyl-8,8-dicarboxylic acid	210
1,2-MDOB	3660
2,6-dichloro quinoxaline	232
2,6-dihydroxy benzoic acid	252
1-Methyl-4-Ethoxycarbonyl-5-sulfonamide	276
2-(2,4-Dichlorophenyl)-2-n-butyl oxirane	994
1,2,4-Triazole	328
2-Nitroimino imidazolidin	1036
2-Chloro-5-chloromethyl pyridine	1105
3,4-Dichloro aniline	3900
3 -Chloro propionyl chloride	1280
3-methyl-4-nitroimino-perhydro-1,3,5-oxadiazine	1054
30 % NaSH	901
4,6-dimethoxy-2-sulfomethyl pyrimidine	696
4-(methylsulphonyl)-2-chlorobenzoylchloride	6264
4-(methylsulphonyl)-2-nitrobenzoylchloride	6264
5-amino 6-methyl benzimidazolone	107
5-amino acetoacetyl benzimidazolone	290
4-Methoxyacetophenone	730
4-Tert. Butyl benzoic acid	753
6 Methyl coumarin	1200
4-Heptyn-2-ol	222
4-phenoxy-2,6-diisopropyl phenyl isothiocyanate	330
4-amino-6-tertiary-butyl-3-mercapto-1,2,4-triazinone	758
4-chloro-o-cresol	22236
4-Nitro phenol	7171

Page **17** of **33** 

#### Annexure: 3: Description of Solid Waste at Atul

Description of waste	Physical form	Calorific Value Cal / gms	Biodegradability	Nature / Chemical composition of Waste	Mode of Disposal
Used oil, Kl	Wet cake	*	Biodegradable	Lubricant oil with minor contamination	Collection, Storage, Transportation, sell to registered refiners/recyclers.
Wastes / residues / contaminant cotton rags or other cleaing material	Solid	-	Biodegradable	Lubricant oil with minor contamination	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator.
Sludge & filters contaminated with oil,	Semi solid	-	*	-	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator.
Membranes	Solid			Polyfluoro & Polycarboxylic groups	Collection, Storage Transportation, disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator/co processors/ pre-processors/CHWIF TSDF sites by use of GPS mounted vehicles and XGN Manifest system.
Waste Resin,	Solid	-	Non biodegradable	Polymer	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/CHWIF/TSDF sites by use of GPS mounted vehicles and XGN Manifest system.
Sulfurised Carbon,	Solid	6000	-74 -	Carbon and impurity of product	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ CHWIF/TSDF sites by use of GPS mounted vehicles and XGN manifest system.

Page 18 of 33

Page **70** of **86** 

Activated Carbon,	Solid	6000		Carbon and impurity of product	Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator /coprocessors/ pre-processors/CHWIFTSDF sites by use of GPS mounted vehicles and XGN manifest system.
Brine purification sludge,	Sludge	No Calorific Value	Non biodegradable	Inorganic compounds e.g. CaCo <sub>3</sub> , Mg(OH) <sub>2</sub>	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/C HWI F/TSDF sites by use of GPS mounted vehicles and XGN manifest system.
Sulphur sludge,	Solid	5000	Partially Bio- degradable	Inorganic compounds and Sulphur	Collection, Storage, Transportation, and Disposal at TSDF OR sends to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ preprocessors disposal at common facility.
Hot Gas filter Ash,	Solid	No calorific Value	Non biodegradable	Inorganic Material	Collection, Storage, Transportation, Disposal at own TSDF OR disposal by sending to authorized regenerator/co processors/ pre-processors/CHWI F sites by use of GPS mounted vehicles and XGN manifest system
Bottom Sludge after recovery of Sulphur Sludge,	Solid	5000	Partialy Biodegradable	Inorganic	Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator coprocessors/ pre-processors/CHWI F sites by use of GPS mounted vehicles and XGN manifest system.
Waste Catalyst,	Solid	No calorific Value	Non biodegradable	Inorganic, Not explosive, Non Reactivie	Collection, Storage, Transportation, Disposal at own TSDF OR OR send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page **19** of **33** 

Spent Solvents, Kl/Month	Liquid	-		Solvent	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR selling to actual user by use of GPS mounted vehicles and XGN manifest system.
Various type of Residue	Solid	6500	Partially Bio- degradable	Polymeric aromatic Organics.	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/TS DF/CHWI F sites by use of GPS mounted vehicles and XGN manifest system.
OCBC / OCT distillation residue,	Visc. Liq.	8000	Not Bio- degradable	Polymeric aromatic compound.	Collection, Storage, Transportation, Disposal by incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
waste residue Bulk Intermediate ( meta hydroxy phenol ) (Tar),	Solid	-	-	10-12% Hydroxyl based benzene derivative	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR selling to actual user OR co-processing at cement industry OR disposal by sending to authorized regenerator r/coprocessor/ Pre-processors/ CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Waste residue (from resorcinol plant)	Solid	-	*)	-	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR selling to actual user OR co-processing at cement industry OR disposal by sending to authorized regenerator/co processors/ Pre-processors/ CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Gypsum (From meta hydroxy phenol Plant),	Solid	Not Applicable	Non biodegradable	Inorganic Compound Mostly Calcium Sulphate 75 - 77%, Moisture 23-25%	Collection, Storage, Transportation, Disposal at own TSDF OR selling to actual user OR send to cement industry for co-processing OR disposal by sending to authorized regenerator Coprocessors/ pre-

Page 20 of 33

					processors/CHWIF TSDF sites by use of GPS mounted vehicles and XGN manifest system.
Sodium Sulphite,	Solid	Not Applicable		Inorganic Compound, Mostly Sodium Sulphite 70- 75%, Moisture 25- 30%	Collection, Storage, Transportation, Disposal at own TSDF OR selling to actual user OR send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Waste/Salt Lime Dust	Powder	77.5		Inorganic Compound	Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Waste from Urea Formaldehyde Polymer product,	Solid	3500	Bio-degradable	Organic polymeric compound	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/pre- processors/CHWIF GGEPIL sites by use of GPS mounted vehicles and XGN manifest system.
Sludge containing higheramino compound,	Tar	5200	Bio-degradable	Polymeric organic amines.	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Filter cake of Epoxy resins with resin contamination	Semi Solid	3200	Bio-degradable	Polymeric organic compound	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page 21 of 33

Aluminium Hydroxide,	Solid	No calorífic Value	Non biodegradable	Mostly Al Hydroxide	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Iron sludge,	Solid	No calorific Value	Non biodegradable	Mostly Iron, oxide	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Brass residue,	Solid	No calorific Value	Non biodegradable	Mostly Copper & Iron.	Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Still / Other residue,	Tar	6500	Partially Bio- degradable	Polymeric aromatic Organics.	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Darco / filter aid sludge,	Solid	2500	Partially Bio- degradable	Mainly Carbon.	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Iron Residue,	Wet cake		Non biodegradable	Water, iron	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page 22 of 33

Hyflo sludge,	Wet cake	-		0.87 % Specific gravity, 80% solid, Inorganic & organic content	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
PER crystal residue.	Semi Solid			Specific gravity 1.1557, Organic	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Filter aid sludge for Hg recovery,		-	1. N.	Containing Hg	Collection, Storage, Transportation for recovery of mercury
Aluminium Ash,	Solid	-	Non biodegradable	Water, oxides of Aluminium & Aluminium Metal	Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
N.B.Tar / ODCB Tar	Semi Solid		**	**	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
ONT Tar	Solid / Tary	**			Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page 23 of 33

Copper Hydroxide Wet cake	Solid	Not applicable	Non biodegradable	Copper Hydroxide	Collection, storage, Transportation and sale to authorized industry having permission under rule-9 of Hazardous & other wastes (Management & Transboundary Movement) rule-2016
Dust from Air Filtration System,	Solid	-	*	Residual product particles	Collection, Storage, Transportation for reprocessing and reusing
Spent Acid	Liquid	Not applicable	Non biodegradable	Sulphuric acid	Collection, storage, transportation and sell to authorized industry having permission under rule-9 of Hazardous & other wastes (Management & Transboundary movement) rule-2016 Or sell to: W/s Shree Cement Ltd., located at Village Ras, Jaitaran Dist: Pall & at Bangurnagar, Beawar Dist: Ajmer, Rajasthan.
Spent Organic solvent	Liquid	-		Mainly contains Spent Organic solvent	Collection, storage, Transportation and sale to authorized industry having permission under rule-9 of Hazardous & other wastes (Management & Transboundary Movement) rule-2016
Waste Residue (Phin)	Solid	er.		**	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors /GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
DCDPS waste	Solid	12)	1111		Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR selling to actual user OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/ GEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Waste from Pharma intermediates	Solid				Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to

Page 24 of 33

					authorized regenerator/coprocessors/ pre- processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Spent Carbon catalyst	Solid	**	244)	**	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Spent carbon,	Solid	6000	Biodegradable	Carbon cake contains aq. Methanol Aqueous Carbon Cake	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Date expired, discarded and off- specification product,	Solid	-		u	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Spent Mother liquor, Kl/Month	Liquid		*	Mainly contains Spent Organic solvent	Collection, Storage, Transportation for recovery and reusing
Spent Solvents, Kl/Month	Liquid	14 C	-	Solvent	Collection, Storage, Transportation for recovery
Still / Other residue,	Tar	6500	Partially Bio- degradable	Polymeric aromatic Organics.	Collection, Storage, Transportation, Disposal & Incineration at own Incinerator OR co-processing of cement industry OR disposal by sending t authorized regenerator/coprocessors/ pro- processors/ GEPIL/CHWIF sites by use of GP mounted vehicles and XGN manifest system.
Pyridine based insecticides & herbicides (Darco /	Solid	2500	Partly biodegradable	Mainly carbon	

Page 25 of 33

Filter aid Sludge),					
Sulfonyl Urea (Residue),	Solid	6500	Partly biodegradable	Polymeric Organic	
Triazole based Fungicides (Residue),	Solid	6500	Partly biodegradable	Polymeric Organic	
Pyrethroides	Solid	6500	Partly biodegradable	Polymeric Organic	
Dust (Agro plant)	Solid	-	*	Mixture of Dust, Rust & Spillage chemicals	Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Hyflo.	Semi Solid	No Calorific Value	Non biodegradable	Non flammable, non reactive, partly organic -Inorganic	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Dust from Air Filtration System,	Solid			Residual product particles	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Liners /Bags, NOs	Solid	NA	NA	Without any Chemical contamination after decontamination	Collection, Storage, Transportation, Disposal by reuse or sell afterdecontamination within premises or sending to authorized recyclers by use of GPS mounted vehicles and XGN manifest system.
Drums /HDPE Carboys,	Solid	NA	NA	Without any Chemical	8

Page 26 of 33

				contamination after decontamination	
Chemical containing residue from decontamination and disposal,	solid	(m.)		-	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ TSDF/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Flue gas cleaning residue,	Solid	-		с. 	Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Toxic metal containing residue from used-ion exchange material; in water purification,	Solid	-		201	Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Sludge from ETP, Gypsum from ETP, Chemical Gypsum, sludge from waste water treatment	Semi solid	No Calorific Value	Partly biodegradable	Mostly gypsum	Collection, storage, Transportation, disposal at OWN TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
MEA distillation residue,	Visc. Liq.	9500	Partly biodegradable	Polymeric aromatic compound	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to outhorized regenerator/coprocessors/pre- processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page 27 of 33

Spent Catalyst,	Solid				Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Sludge from wet scrubber,	Solid	-		-	Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Incineration ash,	Solid	No Calorific Value	Non biodegradable	Inorganic compounds e.g. Silica, NaCl.	Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Salt from MEE	Solid	Not applicable	Non biodegradable	99% Sodium salt	Collection, storage, Transportation, disposal at OWN TSDF OR selling to actual reuser OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Dilute MnSo4	Liquid		**		Collection, Storage, Transportation, Disposal at M/s Atul Limited, Plot No. 297, GIDC Estate, Ankleshwar, Bharuch- 393002
2,6 Dichloro phenol	Solid			Phenolic compound	Collection, storage, Transportation, disposal by selling to actual reuser OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/pre-processors/ GEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page 28 of 33

2,4,6 Trichloro phenol	Solid		-	Phenolic compound	Collection, storage, Transportation, disposal by selling to actual reuser OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
p-CBSA/Na-Salt	Solid		620	pCBSA	Collection, storage, Transportation, disposal by selling to actual reuser OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/7pre-processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
High TDS / High COD effluent	Liquid		**	5×0	Collection, storage, Transportation, disposal to our own MEE/ Incinerator and/or at common GPCB approved facility
30% HCI	Liquid			Spent acid	Collection, storage, transportation, utilize in own plant for captive consumption or sell to authorized end users by use of GPS mounted vehicles and XGN manifest system.
KCI	Solid		**		Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN Manifest system.
Distillation Residue(Aromatic High Boiler Waste)					Sell to actual results.
CaCl2	Solid	100		200 	Collection, Storage, Transportation, Disposal at own TSDF OR selling to actual user OR Send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/

Page 29 of 33

					pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Sodium Sulphote	Solid		Non biodegradable	**	Collection, Storage, Transportation, Disposal at own TSDF OR selling to actual user OR Send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Tula resin					Collection, storage, Transportation, disposal by selling to actual reuser OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/pre-processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Ammonium Hydroxide (5%) & (25%)	Liqiud		Biodegradable		Collection, storage,reuse in in-house production or sell to actual user
Aq. Methanol	Liqiud	er)	Biodegradable		Collection, Storage, Transportation for recovery Or disposal by selling to actual reuser OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/pre-processors/ GEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Spakler filter Pad, Nos.					Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
ACP tar low boiler				-	Collection, Storage, Transportation for recovery Or disposal by selling to actual reuser OR Incineration at own Incinerator OR

Page 30 of 33

				co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Glycolic acid	solid	14 <del>1</del>	 	Collection, storage, Transportation and sale to actual users and OR disposal as per Hazardous Waste Management Rule 2016

Page **31** of **33** 

Page **83** of **86** 

## Annexure : 4:

## Water Conservation

Following actions were taken for water conservation during recent year.

1. Vacuum Pump Water Recycling – Reduce the consumption of water by recycle of water using vacuum pump.

2. Recovery of cooling water and chilled water from reactor jacket.

Rain water harvesting: In few plants, rain water is being recharged from the terrace and has been used as a makeup of cooling tower during the monsoon season.

We already have two numbers of check dams in natural storm water drains to collect and harvest rain water in Monsoon.

We have 2 ponds with approximate storing capacity of 14000 KL to store surface runoff coming from Parnera hill and in use.

Company has harvest 4.68 lac KL rain water during 2022

## Energy Conservation

Electricity forms one of the important components of energy used at Atul Limited. Major part of electricity used at Atul, is produced in the coal based captive power plant.

#### Energy Conservation Measures:

1. Replaced old motor by energy efficient motor of cooling tower pump.

2. Isolation of HP steam header – Unused HPS steam heard isolated from the main header and reduce the losses.

3. Motion sensors installation for office area light.

4. Replacement of CFL & SVL lamp by LED lamp.

5. Temperature controller installation for cooling tower fans.

6. Optimisation of chilled brine usage and distribution – Used chilled water instead of chilled brine.

7. Steam condensate recovery – Condensate of some equipment given to the condensate recovery tank and used as Autoclave CT make up.

8. Existing agitator replaced with energy efficient agitator.

Page 32 of 33

# Annexure : 5

S.N	Parameter	Recurring Cost per annum (Rs. in lacs) 2022-2023
1	Air Pollution Control	
2	Liquid Pollution Control	4334
3	Environmental Monitoring and Management	51
4	Solid waste Disposal	285
5	Occupational health	35
6	Green belt	25
Total		4730

Details of Investment for Environment Protection for the year 2022-2023

Page **33** of **33** 

Page **85** of **86** 

Annexure 8 : 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, SO2 and NOx, Vehicle logs to be maintained.	Monthly through NABL accredited and MoEF approved agency	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 NABL accredited and MoEF approved 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 accredited and MoEF approved 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 Belt	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

Page **86** of **86** 



# Atul Ltd

# Project: Expansion of dyes , Chlor-Alkali, Pesticide, Bulk Drug & Pharmaceutical, Resins, Flavors & Fragrances, Other Chemicals & Co-Products Manufacturing Unit

EC No. F.NO. J-11011|108|2015-IA-II(I) dated August 03, 2021 Report paried April 2022 to September 2022

Sr.	Condition	Compliance						
No A Spa								
A. Speci	to be discharged shall be within the prescribed limit as per the existing CRZ clearance and any	Complied. The effluent of 20514 KL The average m <sup>3</sup> /day only table:	D as per t wastew	the existin ater gene	g CRZ cl ration fo	earance onl r the report	y. period is	9799 m³/da
	increase in the effluent load or changes in pipeline	Wastewater generation m <sup>3</sup>	April 2023	May 2023	June 2023	July 2023	August 2023	Septembe 2023
	attracts the provisions of the CRZ clearance.	Month wise	308409	290169	29233	6 291387	302369	307663
		Per day	10280	9360	9745	9400	9754	10255
		given below	:					
		Wastewate	:	Stipu	Ilated	Values for t	the period	
			er		llated	Values for April 202 Min.	the period	1
(ii)	No banned pesticides/chemicals shall be manufactured by the project proponent. No banned raw material shall be used in the unit. The project proponent shall adhere to the notifications/guidelin es of the Government in this	Wastewate generation Wastewate	er m <sup>3</sup> /d	Stipu value 2051	lated	Values for April 202 Min. 9360	the period 3 – Septe Max. 10280	<b>1</b> mber 2023 Avg. 9799

environmental protection measures	imple	mented.				
and safeguards proposed in the documents	Sr No.	Potential impact	Action to be followed	Parameters for monitoring	Frequency of monitoring	Status of Compliance
submitted to the Ministry. All the recommendations made in the EIA/EMP in Respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	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	NOx, Vehicle logs	Monthly through NABL accredite d and MoEF approved agency	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 accredite d and MoEF approved 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 accredite d and MoEF approved agency	Discharge effluent is analyzed on daily basis.

		4	Solid/ Hazardou s Waste	Check complianc of HW rules	ce and	antity d quality nitoring	Periodicall y	Details are provided in EC compliance point No.10 of specific conditions
		5	Non routine events and accidenta I release	Plant drawn, considerin likely emergenc s and ste required prevent/lin t conseque es.	anc of t ie ps to mi	ck drills 1 records he same.	Periodic during process activities	Every year 4nos. mock drills carried out in the premise on rotational basis covering all plants.
		6	Green Belts	Vegetatio	elt 50,0	re than 000 es /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
(iv)	The treated effluent of 20514 KLD proposed to discharge to the estuary of Par river through pipeline, shall conform to the standards prescribed under the	contr treat The r	reated efflue ol board's d ed effluent is naximum val emission wer	lischarge n given in <b>Ta</b> ues during t nt beyond <sup>-</sup>	iorms an I <b>ble 1</b> . the com	nd values pliance pe ulated sta	of various	y state pollution parameters of that at no time nmary is given d
	Environment (protection) Act,	No.			Norms		2023 – Septe   Max.	
	1986. The project proponent shall	1	рН		5.5 to 9.0	6.9	7.2	7.0
	explore possibilities for recycling and	2	Temperatur	e °C	40 oC	30.4	31.6	31.0
	reusing of treated water in the unit to	3	Colour in (pt scale) units	. CO.		30.0	45.0	36.7
	reduce the fresh water demand and	4	Suspended mg/l	solids	100	41.0	61.0	51.0
	waste disposal.	5	Oil and Grea	ase mg/l	10	2.8	5.4	4.1

		6	Phenolic	5	0.6	0.9	0.8
			Compounds mg/l				
		7	Cyanides mg/l	0.2	ND	ND	ND
		8	Fluorides mg/l	2	0.7	1.2	0.9
		9	Sulphides mg/l	2	0.4	0.8	0.5
		10	Ammonical Nitrogen mg/l	50	6.0	9.4	7.6
		11	Arsenic mg/l	0.2	ND	ND	ND
		12	Total Chromium mg/l	2	0.1	0.1	0.1
		13	Hexavelent Chromium mg/l	1	ND	ND	ND
		14	Copper mg/l	3	0.2	0.4	0.3
		15	Lead mg/l	2	ND	ND	ND
		16	Mercury mg/l	0.01	ND	ND	ND
		17	Nickel mg/l	5	0.2	0.3	0.2
		18	Zinc mg/l	15	0.5	0.9	0.7
		19	Cadmium mg/l	2	ND	ND	ND
		20	Phosphate mg/l	5	1.6	2.4	2.0
		21	BOD (3 days at 27°C) mg/l	100	47.2	74.0	56.1
		22	COD mg/l	250	206.0	232.0	218.7
		23	Insecticide/Pesticide	Absent	ND	ND	ND
		24	Sodium Absorption Ratio	26	4.5	7.4	5.4
		25	Manganese mg/l	2	0.1	0.2	0.1
		26	Tin mg/l	0.1	ND	ND	ND
		27	Bio Assay Test	90% survival of fish after 96 hrs. in 100% effluent %	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent
(∨)	Continuous online (24x7) monitoring system for stack emission shall be installed for the measurement of flue	Cont insta conc CPC	plied. inuous online (24x7) m alled for the measureme entration as per CPCB B website. Web camerc P is already installed.	ent of flue guidelines	gas discha and also c	rge and the	e pollutants GPCB and

	gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB servers For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.					
(∨i)	The storage of toxic/hazardous raw material shall be	Comp minim	lied. The sto um with respec	-		ardous raw material is bare Ind inventory.
	bare minimum with respect to their quantity and	Sr No.	Name of RM	Nos of tank	Capacity	Control Measures Provided
	inventory. Quantity and day of storage shall be submitted to the Regional Office of Ministry and SPCB along with the	1	65% Oleum	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
	compliance report.	2	Chlorine	4	200	Two standby tank, DCS controlling, Hypo scrubbing, SCBA, Emergency chlorine kit & hood blower etc.
		3	Epichloro- hydrin	6	55 M <sup>3</sup>	Flame arrester earthing, dyke wall with valve which do not allow liquid spill to go to normal drain.
		4	Sulphur Trioxide (Group 2)	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	1	10	High Alarm switch Water sprinkler, Fog Nozzles, Dyke wall

					70	
		06	65% Oleum	2	72	Respirators, Dry Sand, Dyke wall, Spare tank, High alarm
						switch
		7	Caustic	4	530 MT	Dyke wall, LI & LT, DCS controlling etc.
		8	Hydrogen	1	100 nm <sup>3</sup>	Prohibited for men & vehicle movement, Isolated storage, FLP , Flam arrester, PG & PT, Fire hydrant, 7 Fire extinguisher etc.
		9	Chloro Sulphonic Acid	4	30	Respirators, Dry Sand, Dyke wall, spare tank
		10	Sulfuric acid	4	800	Emergency tank, Dyke wall, LT, DCS controlling, Level alarm etc.
		11	Liq. SO₃	3	40 MT	Emergency tank, LT & LI, DCS controlling, Level alarm etc.
		12	HCI	3	200 KL	Dyke wall, LI & LT, DCS controlling etc.
(vii)	Occupational health center for surveillance of the workers health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.	Occup basis Factor all em Variou 1. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10 11 12	done on regula pational health s as per section	surveille -41 C records he by in s being hent ch hess hess tory Y k	ance of the of the facto are mainta -house doct performed on eck-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
<ul> <li>Central Ambulance Room in the middle of the factory</li> <li>Two Ambulance Vans. Out of which one is equipped with ICU facilities.</li> </ul>
Medical Center
Three full time AFIH certified doctors.
Equipped with 3Beds
Full equipped Pathological lab with advanced diagnostic equipment
<ul> <li>ECG Equipment</li> </ul>
<ul> <li>Cardiac monitor</li> </ul>
<ul> <li>Finger pulse Oxy meter</li> </ul>
<ul> <li>Pulmonary Function Test Apparatus</li> </ul>
<ul> <li>O2Administration</li> </ul>
<ul> <li>Antidotes with routine Important and Vital lifesaving Drugs</li> <li>Tie-up with Kasturba Hospital, Valsad, and Pardi Hospital, Pardi,</li> <li>respectively 7 kms and 3 kms away from Atul</li> </ul>
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.

(viii)	Training shall be imparted to all employees on safety and health aspects of chemical handling. Safety and visual reality training shall also be provided to employees.	<ul> <li>Complied.</li> <li>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.</li> <li>All employees and others have a duty to comply with instructions given for workplace health and safety.</li> <li>Employee training which generally include:</li> </ul>
		<ul> <li>First aid training</li> <li>Firefighting training – Use of Fire Hydrant /Extinguisher</li> <li>Handling of Compressed Gas Cylinder</li> <li>Work Permit System, Use of Spill Kit</li> <li>Handling of Solvents</li> <li>Operation of ETP &amp;MEE</li> <li>Handling of Hazardous waste</li> <li>Handling of Biomedical waste</li> <li>Scrap yard management</li> <li>111 – A training as per factory Act</li> <li>General instruction training; e.g. workplace communication processes, incident reporting, lock down, evacuation and medical emergency procedures, mock drill.</li> <li>Job-specific training e.g. safe work procedures for the use of equipment, SOP of manufacturing process &amp; safety and health aspect of chemical handling.</li> <li>Conducted OSHAS &amp; EMS Programme.</li> <li>Hygiene, Stress management &amp; skill development.</li> </ul>
		We have regularly arrange safety training programme for our employees in every month         Photograph of safety training         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for our employees in every month         Image: Safety training programme for every month         Image: Safety training programme for every month<

(ix)	The unit shall make arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling . Fire- fighting system shall be as per the norms.	<ul> <li>Complied.</li> <li>A well designed Fire hydrant system is adequate and as per standards.</li> <li>Fire hydrant Network details: <ul> <li>Four full - fledged fire hydrant system in the company Water Storage Capacity - 50 million Liters</li> <li>Total length of hydrant line – 15 km</li> <li>Fire Fighting Equipment <ul> <li>DCP1350</li> <li>CO2776</li> <li>Foam : 05Trolly</li> </ul> </li> <li>Fire Tenders <ul> <li>One fire tender having 1800 Lit water capacity</li> </ul> </li> </ul></li></ul>
	Action plan proposed shall be implemented in letter and spirit.	<ul> <li>Second multipurpose fire tenders having 5000 Lit water &amp;500Foam</li> <li>Third Multipurpose tender having facility of DCP - 500 Kg, Foam - 500 lit andWater - 4500 Lit.</li> <li>SCBA sets - 35nos.</li> <li>Emergency alarm system - 532 nos. points spread across the company.</li> <li>Fire station manned round the clock with Siren and Annunciation System.</li> <li>Regular Testing on every Monday.</li> <li>Smoke detectors in the office and labs.</li> <li>Auto water deluging system at critical reactors.</li> <li>Auto water sprinkler system at tank farms.</li> </ul>
(x)	Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system.	Complied.         Condensers with chilling systems are provided at point of Solvent recovery to minimized vapour loss as shown below:-         Image: Solvent recovery
	(b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages.	Complied.         We have provided seals at all Reactors and pump's in order to prevent         leakage as shown below:-         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors and pump's in order to prevent         Image: Complied of the provided seals at all Reactors

		Seal at Stirrer Pump Seal
	(c) Solvents shall be stored in a separate space specified with all safety measures	Complied.         We have made separate provision for solvent storage & is installed as per         PESO regulation wherever applicable with all details of Storage area, operating temperature and pressure, types of possible hazards and control measures.         Image: Complex of the second s
	(d) Proper earthing shall be provide in all the electrical equipment wherever solvent handling is done	Complied. Earthing pit is provided in all electrical equipment wherever solvent handling is done as
	(e) Entire plant shall be flame proof. The solvent storage tanks shall be provide with breather valve to prevent losses.	<b>Complied.</b> 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
	(f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.	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.
(×i)	The action plan submitted for controlling the particulates emissions in the factory shall be satisfactorily implemented.	Complied. The action plan submitted for controlling the particulates emissions in the factory is satisfactorily implemented. Details of flue stack results, ambient air monitoring measured in fugitive emission is given in Table 2 and 3 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 Flue Stack results:

Sr No.	Parameter	Standard U values as	Unit		Values for the period April 2023 – September 2023		
		per CCA		Min.	Max.	Avg.	
1	PM	100	mg/Nm <sup>3</sup>	41.7	61.4	49.88	
2	PM (New Boiler 50 TPH)	50	mg/Nm <sup>3</sup>	32.4	44.7	38.13	
3	SO2	600	mg/Nm <sup>3</sup>	278	324	300.63	
4	NOx	600	mg/Nm <sup>3</sup>	272	338	300.31	
5	NOx (New Boiler	300	mg/Nm <sup>3</sup>	283	296	290.2	
Sumr Stat	mary of Ambi	,	ty results: Limit micro -		for the per 123 – Sept		
			gm/NM <sup>3</sup>	2023		<b>A</b>	
				Min.	Max.	Avg.	
66 k		PM2.5	60	22.0	50.0	33.3	
		PM10	100	48.0	82.0	59.5	
		SO <sub>2</sub>	80	13.3	24.4	18.7	
		NO <sub>2</sub>	80	18.2	30.7	26.3	
		Ammonia	400	ND	ND	ND	
		HCI	200	ND	ND	ND	
		PM2.5	60	31.9	51.7	35.7	
She	d D	PM10	100	52.3	89.6	62.1	
		SO <sub>2</sub>	80	16.7	24.6	20.4	
		NO <sub>2</sub>	80	22.2	30.5	28.6	
		Ammonia	400	ND	ND	ND	
		HCI	200	ND	ND	ND	
We		PM2.5	60	28.0	35.0	31.2	
		PM10	100	43.0	50.0	46.7	
		SO <sub>2</sub>	80	20.5	29.6	24.4	
		NO <sub>2</sub>	80	23.2	31.4	26.2	
		Ammonia	400	ND	ND	ND	
		HCI	200	ND	ND	ND	
Nort	th site ETP	PM2.5	60	29.0	35.0	32.5	
	Γ	PM10	100	36.0	49.0	44.2	
	Γ	SO <sub>2</sub>	80	16.7	21.3	18.6	
	F	NO <sub>2</sub>	80	24.7	27.8	26.3	
	F	Ammonia	400	ND	ND	ND	
	F	HCI	200	ND	ND	ND	
TSD	F	PM2.5	60	25.0	32.0	28.5	
		PM10	100	49.0	61.0	54.0	
		1 10120	100	+5.0	01.0	01.0	

			NO <sub>2</sub>	80	29.4	33.4	30.8
							30.8 ND
			Ammonia	400	ND	ND	
			HCI	200	ND	ND	ND
		Main Guest	PM2.5	60	24.2	33.4	29.4
		House	PM10	100	40.3	54.3	50.8
			SO <sub>2</sub>	80	15.1	26.9	19.2
			NO <sub>2</sub>	80	16.3	27.8	23.1
			Ammonia	400	ND	ND	ND
			HCI	200	ND	ND	ND
		Wyeth Colony	PM2.5	60	26.0	32.0	29.7
			PM10	100	50.0	60.0	55.7
			SO <sub>2</sub>	80	14.8	21.6	16.9
			NO <sub>2</sub>	80	24.6	40.2	34.3
			Ammonia	400	ND	ND	ND
			HCI	200	ND	ND	ND
		Gram	PM2.5	60	23.8	31.2	27.1
		panchayat	PM10	100	36.7	56.1	51.1
		hall	SO <sub>2</sub>	80	14.2	29.4	20.0
			NO <sub>2</sub>	80	16.9	28.7	23.4
			Ammonia	400	ND	ND	ND
			НСІ	200	ND	ND	ND
		Main office,	PM2.5	60	19.7	31.7	26.1
		North site	PM10	100	46.2	56.9	51.6
			SO <sub>2</sub>	80	14.3	25.4	18.9
			NO <sub>2</sub>	80	21.2	29.8	24.4
			Ammonia	400	ND	ND	ND
			HCI	200	ND	ND	ND
		Haria water	PM2.5	60	29.4	51.3	35.1
		tank	PM10	100	52.6	84.6	60.0
			SO <sub>2</sub>	80	17.1	30.2	20.9
			NO <sub>2</sub>	80	20.3	29.8	26.4
			Ammonia	400	ND	ND	ND
			HCI	200	ND	ND	ND
				200	ND		ND
(xii)	Volatile organic	Complied.					
	compound	All the VOCs/ Fugitive emission are attached with chilled					solution
	(VOCs)/Fugitive	in secondary cor	ndenser for co	ndensation	of VOCs.		
	emission shall be						
	controlled up to						
	99.99% with effective						
	chillers/modern						
	technology.						
	technology.						

(×iii)	Total fresh water requirement, proposed to be met from Par River shall not exceed 18050 cum/day. Prior	Tł Kl	_/day	ed. rerage water consumptio only, which is well within th p is given in below table: Month		5
	permission in this regard shall be		1	April - 2023	335227	11174
	obtained from the		2	May -2023	315401	10174
	concerned regulatory authority.		3	June - 2023	317757	10592
			4	July - 2023	316725	10217
			5	August - 2023	328662	10602
			6	September - 2023	334416	11147
(xv)	channelized through pipes to the storage tank constructed for harvesting of rain water in the premise and harvested waster shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ Any waste water shall not be allowed to mix with storm water.	Complied.Company has expanded its harvesting pond capacity to 14000 KL capacity pond to harvest rain waterWe are creating facility/ capacity to cater our consumption with rain harvested water with zero river drawls of water during the rainy days. Besides this, there are three check dams and pumping facility to harvest rain water.We also construct temporary sand bag dam on top of dam towards the end of monsoon to store additional free flowing rain water in river Par. In addition to above, surface runoff water and roof top water is used to recharge bore wells. No Process effluent/ Any waste water mix with storm water. Total No. of Pond: 2 Nos. Capacity of Pond: (1 Nos. x 12000 KL) & (1 Nos. x 2000 KL) Company has harvest 3.26 Lakh KL rain water during 2023Water Harvesting Project at ColonyWater Harvesting Project near Coconut				
(x∨)	The company shall undertake waste minimization	А		<b>ed.</b> iquid ingredients are being eters to control on quanti		

	measures as below	ingredients are charged after proper weighment only. All these meters and
	(a) Metering and	weighing machines are calibrated and records are maintained.
	control of quantities	
	of active ingredients	Sodium sulfate, sodium thio sulphate, brine, MEE salt, sodium hypochlorite,
	to minimize waste	copper hydroxide, spent acid, etc. are few by - products from the process
	(b) Reuse of by-	which are being sold for using the same either as raw material or as
	products from the	substitute to raw materials. Also, fly ash and gypsum are being used as
	process as raw	raw material for brick manufacturing. Sodium hypochlorite, sodium hydro
	material or as raw	sulfide, etc. are being used as raw material in other processes.
	material substitutes	
	in other processes.	Automated filling system for our agro products, polymers, resorcinol, and
	(c) Use of	dyes for small and bulk packing is provided to minimize spillage.
	automated filling to	
	minimize spillage.	Chemicals and solvents are handled in close handling system through pipe
	(d) Use of Close	lines only.
	Feed system into	All the reactors are equipped with vents/stacks, which are connected to
	batch reactors.	All the reactors are equipped with vents/stacks, which are connected to
	(e) Venting	either vapor recovery system consisting of condensers, ejector/vacuum
	equipment through	pumps and/or scrubbers. Genoscorb technology for solvent vapor recovery
	vapor recovery	is also installed and working perfectly.
	system	Many equipment like reactors, spray dryers, condenser wherever necessary
	(f) Use of high-	
	pressure hoses for	are being cleaned with high pressure sprayer / jet to reduce waste water
	equipment clearing	generation.
	to reduce waste	
	water generation.	
(xvi)	The greenbelt of at	Complied.
()( ( )	least 5-10 m width	Company has already developed more than 36 % of greenbelt in Atul
	shall be	complex
	developed/strengthe	Total Industrial Plot area: <b>1126078.27 sg.mt</b>
	ned over nearly 33%	•
	of the total project	Green belt area: 409030.00 sq.mt (approx. 36% of total plot area)
	area, mainly along	We planted approximately <b>39760</b> trees of difference species in report
	the plant	period at different location and photograph attached below.
	periphery/adjacent	
	areas. Selection of	
	plant species shall	
	be as per the CPCB	
	guidelines in	
	-	
	consultation with	
	consultation with the State Forest	
	consultation with the State Forest Department Records	
	consultation with the State Forest Department Records of tree canopy shall	
	consultation with the State Forest Department Records of tree canopy shall be monitored	
	consultation with the State Forest Department Records of tree canopy shall be monitored through remote	
	consultation with the State Forest Department Records of tree canopy shall be monitored through remote sensing. Tress have	
	consultation with the State Forest Department Records of tree canopy shall be monitored through remote sensing. Tress have to be planted with	
	consultation with the State Forest Department Records of tree canopy shall be monitored through remote sensing. Tress have to be planted with spacing of 2m x 2m	
	consultation with the State Forest Department Records of tree canopy shall be monitored through remote sensing. Tress have to be planted with	

	accordingly. The	
	Plant species can be selected that will	
	give better carbon	
	sequestration. The action plan	
	proposed in this	
	regard shall be	
	implemented.	
(xvii)	As proposed the	Complied.
	project proponent	
	shall undertake plantation activities	
	(10,000 plant) in the	
	Parnera hill and	
	other areas with the	
	support of State Forest Department	
	Village	
	Administration.	
(x∨iii)	As committed , at	Our conservation plan is under approval and we will implement the same
	least Rs 5 lakhs shall be allocated for	as per the final approval.
	conservation of	
	Schedule   species.	
	The implementation	
	report shall be submitted to the	
	IRO, MoEFCC,	
(xix)	The activities and	Complied.
	the action plan	All the issued raised during public hearing were replied satisfactorily. The
	proposed by the	action plan proposed has been followed in true spirit
	project proponent to address the	
	socioeconomic/publi	
	c concern and issues	
	raised during public	
	hearing in the study area shall be	
	completed as per the	
	schedule presented	
	before the	
	Committee and as described in the EMP	
	report in letter and	
	spirit.	
(xx)	A separate	Complied.
	Environmental	Company is having separate Environmental Management Cell equipped

	Management Cell (having qualified persons with Environmental science/Environment al	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.
	Engineering/speciali zation in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and	Company has developed a separate laboratory equipped with equipment such as pH meter, TD33S 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.
	Monitoring Functions.	
B Gana		f environmental clearance is further subject to compliance of other general
	n as under :	a environmental clearance is further subject to compliance of other general
(i)	No further	Noted.
(')	expansion or	We ensure that there is no further expansion or modifications related to
	modification in the	EC in the plant. For any deviations or alteration in the plant we will opt
	plant, other than	prior permission from MoEF.
	mentioned in the EIA	· · · · · · · · · · · · · · · · · · ·
	Notification, 2006	
	and its	
	amendments, shall	
	be carried out	
	without prior	
	approval of the	
	Ministry of	
	Environment, Forest	
	and Climate	
	Change/SEIAA as	
	applicable. 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/	
	SEIAA, as	
	applicable, to assess	
	the adequacy of	
	conditions imposed	
	and to add	
	additional	

	environmental		
	protection measures		
	required, if any.		
(ii)	The Project	Complied.	
	proponent shall	We are complying with a	ll the requirement of MSIHC rule 1989 as amended
	strictly comply with		January, 2000 and having proper storage and
	the rules and		emergency plan, Licenses, reporting, etc.
	guidelines issued		
	under the	Conditions	Compliance
	Manufacture,		occupier for management of hazardous and other
	Storage and Import	wastes.	
	of Hazardous	(1) For the	Complied.
	Chemicals (MSIHC)	management of	
	Rules, 1989, as amended time to	hazardous and other	We are using advanced technology and
	time, the chemical	wastes, an occupier	processes to minimization of waste generation
	accidents	shall follow the	for prevention, reuse, recycling and safe disposal
	(Emergency Planing,	following steps,	to the authorized actual user TSDF
	Preparedness and	namely:-	/CHWIF facility.
	Response) Rules,	<ul> <li>Prevention;</li> </ul>	
	1996, and	<ul> <li>Minimization;</li> </ul>	
	Hazardous and	<ul><li>Reuse,</li></ul>	
	Other Wastes	<ul> <li>Recycling;</li> </ul>	
	(Management and	<ul> <li>Recovery,</li> </ul>	
	Trans-Boundary	utilization	
	Movement) Rules,	including co-	
	2016 and other rules	processing;	
	notified under	<ul> <li>Safe disposal.</li> </ul>	
	various Acts.		Complied.
		2) The occupier shall be	complied.
		reconscible for	We are ensuring for safe and environmentally
			sound management of hazardous and other
			wastes.
		environmentally	
		sound	
		management of	
		hazardous and	
		other wastes.	Complied
		(3) The hazardous	Complied.
		and other wastes	We have our own captive TSDF and Incinerator
		generated in the	facility.
		establishment of an	
		occupier shall be	
		sent or sold to an	
		authorized actual	
		user or shall be	
		disposed of in an	
		authorized disposal	

facility.	
(4) The hazardous	Noted & Complied.
and other wastes	·
shall be transported	
from an occupier's	
establishment to an	
authorized actual	
authorized disposal	
facility in	
accordance with the	
provisions of these	
rules.	
(5) The occupier	Complied.
who intends to get	
its hazardous and	We are having separate hazardous waste
other wastes treated	storage facility with all safety measures to avoid accident. Also we are adopting safe disposal
and disposed of by	and storage practices.
the operator of a	und storage practices.
treatment, storage	
and disposal facility	
shall give to the	
operator of that	
facility, such specific	
information as may	
be needed for safe	
storage and	
disposal.	
(6) The occupier	Complied
shall take all the	
steps while	
managing	
hazardous and other	
waste to-	
contain	
contaminants and	
prevent accidents	
and limit their	
consequences on	
human beings and	
the environment;	
and Provide persons	
working in the site	
with appropriate	
training, equipment	
and the information	

necessary to ensure	
their safety.	
(6) Grant of	Complied.
authorization for	We are strictly agroping complying & will
managing hazardous	We are strictly agreeing, complying & will
and other wastes.	continue to comply with all the stipulations
	made by GPCB as per latest CC&A Amendment
	no. AH 121400 valid till September 30, 2025.
(7) Power to suspend	Not Applicable.
or cancel an	Not Applicable.
authorization.	
(8) Storage of	Complied.
hazardous and other	complieu.
(9) Utilization of	Complied
(9) Utilization of hazardous and other	Complied.
wastes.	Recovered spent solvent are being reused. Used
	oil & discarded drums are being sent to authorize
	recycler.
(10)Standard	Noted.
Operating Procedure	
or guidelines for actual	
users.	
(11) Import and export	Not Applicable.
(transboundary	
movement) of	
hazardous and other	
wastes.	
(12) Strategy for	Not Applicable.
Import and export of	
hazardous and other	
wastes.	
(13) Procedure for	Not Applicable.
import of hazardous	4- F
and other wastes.	
(14) Procedure for	Not Applicable.
Export of hazardous	
and other wastes from	
India.	
(15) Illegal traffic.	Not Applicable.
(16) Treatment,	Complied.
storage and disposal	
facility for hazardous	We have our own captive TSDF and Incinerator.
and other wastes.	We also send waste to authorized facility as per
	the valid authorization.
(17) Packaging and	Complied.
labelling – Form 8.	•
$\frac{1}{1}$	All hazardous waste transportation is being
	done through appropriate packing and labelling
	as per Form-8.

(18) Transportation of hazardous and other wastes. (18) Transportation of Complied. Waste is being transported through TRI as per Hazardous waste rules.	EM Card
	0010
(19) Manifest system Complied.	
(Movement Document) We are sending waste through online i	manifest
for hazardous and system of GPCB XGN.	
other waste to be used	
within the country only.	
(20) Records and <b>Complied</b> .	
returns. We are maintaining & submitting all rec	ords like
Form-4 & environment statement	
periodically to GPCB.	I UIII-V
(21) Responsibility Noted	
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. (22) Accident <b>Noted</b> .	
reporting. Where an No accidents were reported during repo	rt period
accident occurs at during handling and transportation of he	•
the facility of the or other wastes	
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.	

(23) Liability of occupier facility.	, importer or exporter and operator of a disposal
(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 handling and management of the hazardous and other waste.	Noted.
(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.	Noted.
(24) Appeal (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,	Noted & Complied

		Environment Secretary of the State. (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 cause from filing the appeal in time. (c) Every appeal filed under this rule shall be disposed of within a period of sixty days from the date of its	
(iii)	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	filing. <b>Complied.</b> We are using LED lights.	

(i∨)	The overall noise	Com	olied.						
(10)	levels in and around	In built acoustic enclosure, silencer and insulation are provided on all source of noise generation to keep over all noise level within the stipulated standards like turbine, DG set, etc.							
	the plant area shall								
	be kept well within								
	the standards by								
	providing noise	The c	ambient noise level cor	nfirm to the stan	dard pres	cribed unde	er EPA. The		
	control measures		e is being regularly mo	nitored and its o	details are	e given in <b>T</b>	able 4 and		
	including acoustic hoods, silencers,	5.				<i>c</i> , , , , , , , , , , , , , , , , , , ,	<b>.</b>		
	enclosures etc. On		naximum values during						
	all sources of noise		oise emission level we	ent beyond the	stipulated	standards	. Summary		
	generation. The	is giv	en below:						
	ambient noise levels shall conform to the	Noise	e level monitoring data	ı (Day Time):					
	standards	Sr	Location	Permissible	Values fo	or the perio	d		
	prescribed under the	No		Limits, dBA	April 202	23 – Septer	nber 2023		
	Environment (Protection) Act			75	Min.	Max.	Avg.		
	Rules, 1989 viz. 75	1	66KVA substation	75	67.1	70.3	68.5		
	dBA (day time) and 70 dBA (night time).	2	Opposite shed D	75	60.4	63.3	61.6		
		3	ETP West site	75	64.5	66.4	65.5		
		4	ETP North site	75	58.8	60.9	59.7		
		5	Near TSDF	75	63.8	66.9	65.3		
		6	Near Main Office North site	75	65.7	69.7	67.4		
		Noise	e level monitoring data	ı (Night Time):					
		Sr	Location	Permissible	ble Values for the period				
		No.		Limits, dBA	April 20	23 – Septe	mber 2023		
					Min.	Max.	Avg.		
		1	66KVA substation	70	52.4	59.3	56.1		
		2	Opposite shed D	70	50.1	52.5	51.7		
		3	ETP West site	70	56.9	58.9	57.8		
		4	ETP North site	70	55.6	61.3	59.5		
		5	Near TSDF	70	51.4	54.3	52.7		
	E	6	Near Main Office North site	70	53.8	60.7	57.8		
(∨)	The company shall undertake all relevant measures for improving the socioeconomic conditions of the surrounding area. The activities shall		olied. oany is doing CSR acti fare of nearby localities				•		

(vi)	be undertaken by involving local villages and administration. The company shall undertake Eco- developmental measures including community welfare measures in the project area for the overall improvement of the environment The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement	with all the upkeep of	elegal requirement stipulat pollution control systems c	being allocated every year to comply ed by SPCB, CPCB & MoEF apart from and facilities. Total expenditure for the
	the conditions stipulated by the Ministry of Environment, Forest	Sr No.	od is given in below table. Parameter	Recurring Cost (Rs. In lacs) For the report period April 2023 – September 2023
	and Climate Change as well as the State Government along with the implementation	1 2 3	Air Pollution Control Liquid Pollution Control Environmental Monitoring and	- 1571 21
	schedule for all the conditions stipulated herein. The funds so earmarked for environment	4 5 6 Total	Management Solid waste Disposal Occupational health Green belt	62 25 15 <b>1694</b>
	management / pollution control measures shall not be diverted for any other purpose.			

(vii)	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.	<complex-block></complex-block>
(∨iii) 	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 to the respective Regional Office of MoEF&CC, the respective Zonal	Complied.

	Office of CPCB and	
	SPCB. A copy of	
	Environmental	
	Clearance and six	
	monthly compliance	
	status report shall be	
	posted on the	
	website of the	
(i)	company. The environmental	Complied
(ix)	statement for each	<b>Complied.</b> The Environmental statement (Form-V) for each financial year ending
	financial year ending	31 <sup>st</sup> March is being submitted to State Pollution Control Board (GPCB)
	31 <sup>st</sup> March in Form-V	every year time to time on XGN portal as well as hard copy submission.
	as is mandated shall	Latest Form V for year 2022-23 is attached as <b>Annexure 1</b> .
	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.	
(×)	The project	Complied.
	proponent shall	We have been accorded environmental clearance vide F. No. J-11011   108
	inform the public the project has been	2015-IA-II(I) dated, August 03, 2021 and accordingly we have published the advertisement of receiving EC in leading newspapers of region; 2 nos.
	accorded	in vernacular language (newspaper Gujarat Samachar dated August 07,
	environmental	2021, Newspaper Sandesh dated August 07, 2021) and one in English
	clearance by the	(Times of India dated August 07, 2021). Thus we have published
	ministry and copies	advertisement within stipulated time. The same has been communicated to
	of the clearance	your good office vide our letter dated August 20, 2021
	letter are available	, , , , , , , , , , , , , , , , , , , ,
	with the	
	SPCB/Committee	
	and may also be	
	seen at Website of	
	the Ministry and at	

	https://parivesh.nic.i n/. 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 copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	<page-header><page-header><text><text><text><text><text><text><text><text><text><text><text><text><text><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></text></text></text></text></text></text></text></text></text></text></text></text></text></page-header></page-header>
(xi)	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.	Noted.
(xii)	This Environmental Clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted.

# Table1: Quality of treated effluent

Sr No.	Parameter	Results						GPCB	
INO.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	Limits Mg/l	
1	рН	7.15	6.98	6.92	7.12	6.93	6.89	5.5 to 9.0	
2	Temperature °C	30.6	31.2	31.6	31.4	30.4	30.8	40 °C	
3	Colour (pt. co. scale)in units	30	35	40	30	45	40		
4	Suspended solids mg/l	42	57	51	41	61	54	100	
5	Oil and Grease mg/l	5.4	4.6	3.9	2.8	3.4	4.2	10	
6	Phenolic Compounds mg/l	0.72	0.89	0.73	0.62	0.82	0.76	5	
7	Cyanides mg/l	ND	ND	ND	ND	ND	ND	0.2	
8	Fluorides mg/l	0.75	0.94	1.02	1.24	0.99	0.74	2	
9	Sulphides mg/l	0.6	0.42	0.36	0.4	0.8	0.4	2	
10	Ammonical Nitrogen mg/l	9.4	5.97	8.14	7.23	6.85	8.24	50	
11	Arsenic mg/l	ND	ND	ND	ND	ND	ND	0.2	
12	Total Chromium mg/l	0.062	0.089	0.093	0.081	0.096	0.13	2	
13	Hexavelent Chromium mg/l	ND	ND	ND	ND	ND	ND	1	
14	Copper mg/l	0.17	0.22	0.25	0.35	0.41	0.32	3	
15	Lead mg/l	ND	ND	ND	ND	ND	ND	2	
16	Mercury mg/l	ND	ND	ND	ND	ND	ND	0.01	
17	Nickel mg/l	0.17	0.2	0.19	0.26	0.19	0.21	5	
18	Zinc mg/l	0.56	0.67	0.58	0.84	0.91	0.54	15	
19	Cadmium mg/l	ND	ND	ND	ND	ND	ND	2	
20	Phosphate mg/l	1.62	1.94	2.06	1.85	2.18	2.41	5	
21	BOD (3 days at 27°C) mg/l	48	74	61	58.3	47.17	48.13	100	
22	COD mg/l	206	226	224	212	232	212	250	
23	Insecticide/Pesticide	Absent	Absent	Absent	Absent	Absent	Absent	Absent	
24	Sodium Absorption Ratio	4.45	5.24	7.39	5.01	4.6	5.8	26	
25	Manganese mg/l	0.082	0.093	0.11	0.16	0.24	0.13	2	
26	Tin mg/l	ND	ND	ND	ND	ND	ND	0.1	
27	Bio Assay Test	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	100% survival of fish after 96 hrs. in 100% effluent	90% survival of fish after 96 hrs. in 100% effluent	

Table 2: Details of flue gas stack report

		1.1		Apr-23	May-23	Jun-23	jul-23	Aug-23	Sep-23
	Details of Flue stock			1					
Sr. No.	Stock Details	Parameter	Permissible Limits	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value	Obtained Value
	and the second se	PM.	100 mg/Nm <sup>2</sup>		57.4		47.8	52.8	
1	FEC baller E1	502	600 mg/Nm <sup>2</sup>	Not Running	284	Not Running	298	311	Not Running
		NOx 500 mp/Nm <sup>3</sup>		272		304	324		
		PM	100 mg/Nm*	46.8	50.4	53.6		45.6	49.6
2	FBC boiler E2	502	600 mg/Nm <sup>2</sup>	298	278	298	Not Rutining	304	312
		NOx	600 mo/Nm <sup>2</sup>	284	283	268	de l	308	332
		FM	100 mg/Nm <sup>3</sup>	41.7		47.1	44.3	Not Running	58.6
з	FBC boiler E3	502	600 mg/Nm*	284	Not Running	284	312		32.4
		NOx	500 mo/Nm <sup>3</sup>	379		290	308		338
	FBC boller W1	PM	100 mg/Nm <sup>2</sup>		61.4 301 294				
4		502	600 mg/Nm*	Not Running			Not Running	Not Running	Not Running
		NDx	600 mg/Nm <sup>2</sup>	- UNISTRUMENT S			0.03200143030	07235/23/07252	2-223 02-02
	Bolier (50 TPH 2 Nos) (New obliers) W2, W3	PM	50 mg/Nm <sup>3</sup>	32.4	42.1	40.1	36.1	33.4	44.7
25		502	600 mg/Nm*	296	292	298	310	322	308
5		NOx	300 mpAim <sup>2</sup>	784	283	293	28E	296	291
		Morcury	0.03 mg/Nm <sup>3</sup>	ND	ND	ND	ND	ND	ND
		PM	150 mo/Nm <sup>2</sup>	37.2	46.2	33.4	49.1	40.4	47.2
6	Hat Oil Unit	505	100 ppm	9.9	7.4	68	7.4	5.8	73
	Resorcinal Plants	NON	50 ppm	J01	21.3	216	29.6	34.2	27.4
		PM	150 mp/Nm <sup>2</sup>	53.8	57.4	44.9	56.3	50.1	5.62
7	Hot OII Plant shed-E	50)	100 ppm	8.6	10.8	14.8	10.6	12.6	9.6
	2.1.2453.1.1.1263.500.0003.45.51	NOx	50 ppm	21.9	31.6	36.2	30.2	32.4	32.6
	Oil burner Shed B	PM	150 mg/Nm <sup>2</sup>					· · · · · · · · · · · · · · · · · · ·	
B		502	100 ppm	Not Bunning	Net Running	Not Bunning	Not Running	Not Flunning	Not Running
	[Stand By]	NON	50 ppm						
	The mic fluid heater of DCC/DAP Plant	PM	150 mg/Nm <sup>3</sup>	29.4	41.7	33,4	26.8	34.8	44.9
9	thermic fluid rester of DCU/DAP Front	50)	100 ppm	4.6	7.2	62	4.9	6.2	7.7
		NOX	50 ppm	23.2	21.6	18.1	15.4	19.3	24.3
	DG set 1500 KVA (Stand By) (Sampling done	FIM .	150 mg/Nm <sup>2</sup>	49.0	49.6	39.7	44.8	14.2	41.3
10	during trial runi	502	100 ppnt	6.4	6.4	5.9	72	7.8	6.9
	lanual macanit	NOx	50 ppm	32.8	32.8	34.2	19.6	24.3	25.6
	DG set 1010 KVA (Standby)(Sampling date	FM	150 mg/Nm <sup>7</sup>	44.6	43.2	33.8	56.1	39.8	48.7
11		502	100 ppn	5.28	5.9	5.65	6.46	9.6	73
	during trial run)	NOx	50 opm	39.4	27.8	37.2	21.6	23.8	30.8

Table 3: Ambient Air Monitoring details

Station	Parameter	Limit micro gm/NM <sup>3</sup>	April 2023	May 2023	June 2023	July 2023	August 2023	Septemb er
								2023
66 KV	PM 2.5	60	50	49	26	22	26	27
	PM10	100	59	82	50	48	58	60
	SO <sub>2</sub>	80	24.4	18.4	13.3	15.7	19.7	20.7
	NO <sub>2</sub>	80	30.7	22.9	18.2	26.5	29.1	30.4
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Opposite	PM 2.5	60	32.4	51.7	32.6	32.9	32.8	31.9
Shed D	PM10	100	52.3	89.6	55.5	53.6	60.8	60.8
	SO <sub>2</sub>	80	23.9	24.6	16.7	20.7	19.3	16.9
	NO <sub>2</sub>	80	30.5	30.5	22.2	29.7	28.9	29.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
West site ETP	PM 2.5	60	30	39	29	29	30	32
	PM10	100	52	78	43	55	60	51
	SO <sub>2</sub>	80	26.9	20.3	11.5	16.8	14.9	16.9
	NO <sub>2</sub>	80	32.6	25.4	16.3	21.6	23.7	26.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
North ETP	PM 2.5	60	32	45	27	25	24	26
	PM10	100	49	80	46	43	46	47
	SO <sub>2</sub>	80	18.9	23.4	14.2	12.4	15.7	16.8
	NO <sub>2</sub>	80	25.5	27.9	19.1	27.1	26.4	25.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
TSDF	PM 2.5	60	29	43	24	27	28	29
	PM10	100	56	79	53	51	49	50
	SO <sub>2</sub>	80	19.3	17.6	12.3	16.4	13.4	12.9
	NO <sub>2</sub>	80	26.1	22.2	17.3	23.6	28.9	30.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Main Guest House	PM 2.5	60	36.9	50.8	32.5	32.9	33.4	32.9
	PM10	100	58.3	88.6	53.3	55.4	60.4	59.7
	SO <sub>2</sub>	80	30.4	24.6	15.5	16.4	19.3	20.7
	NO <sub>2</sub>	80	25.3	29.8	19.3	26.7	27.1	22.6
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Wyeth Colony	PM 2.5	60	28	44	22	30	32	30
	PM10	100	41	72	48	54	56	54
	SO <sub>2</sub>	80	23.4	21.6	12.9	17.7	16.7	17.6
	NO <sub>2</sub>	80	28.8	26.9	18	20.1	22.3	29.7
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Gram panchayat	PM 2.5	60	48.7	32.6	31.9	34.6	30.6	48.7
hall	PM10	100	88.6	52.3	53.7	62.3	61.8	88.6
	SO <sub>2</sub>	80	23.7	15.6	17.3	20.7	19.3	23.7

	NO <sub>2</sub>	80	29.4	22.3	26.8	29.8	29.6	29.4
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Main office, North	PM 2.5	60	60.2	29.3	29.6	30.7	31.9	60.2
site	PM10	100	88.1	55.3	58.7	55.9	50.3	88.1
	SO <sub>2</sub>	80	23.6	15.3	19.9	18.8	20.7	23.6
	NO <sub>2</sub>	80	27.8	18.6	26.8	29.8	29.7	27.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND
Haria water tank	PM 2.5	60	51.3	29.4	30.6	35.6	30.8	51.3
	PM10	100	84.6	52.6	55.9	57.1	52.9	84.6
	SO <sub>2</sub>	80	23.6	17.1	17.8	18.1	18.3	23.6
	NO <sub>2</sub>	80	29.8	20.3	24.1	29.8	27.9	29.8
	Ammonia	400	ND	ND	ND	ND	ND	ND
	HCI	200	ND	ND	ND	ND	ND	ND

Sr	Location	Noise Le	Permissibl					
No.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	e Limits, dBA
1	66KVA substation	67.2	68.2	67.1	68.9	69.2	70.3	75
2	Opposite shed D	63.3	62.2	61.1	60.4	61.3	61.3	75
3	West site ETP	64.5	66.3	65.5	66.4	65.4	64.9	75
4	North site ETP	60.9	59.1	60.3	59.7	58.8	59.1	75
5	Near TSDF	65.9	66.9	65.2	64.3	63.8	65.4	75
6	Near main office North site	66.3	69.7	68.4	65.7	66.3	68.1	75

# Table 5: Noise level monitoring data (Night Time)

Sr	Location	Noise Level, dBA							
No.		April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	e Limits, dBA	
1	66KVA substation	59.2	58.4	59.3	53.6	52.4	53.4	70	
2	Opposite shed D	52.4	52.1	52.5	51.6	50.1	51.3	70	
3	West site ETP	56.9	58.8	57.5	58.9	57.1	57.3	70	
4	North site ETP	60.4	61.3	60.3	59.7	55.6	59.7	70	
5	Near TSDF	52.6	51.4	52.3	51.7	54.3	53.9	70	
6	Near main office North site	56.9	58.8	57.3	53.8	59.2	60.7	70	

Sr. No.	Name of Project	Budget in Rs.	Actual expense in Rs	
1	Enhancement of educational practices in Kalyani Shala	50,00,000	27,29,746	
2	Improvement of teaching methodology for primary school children - Adhyapika project	90,00,000	61,53,561	
3	Support to tribal children in Atul Vidyamandir	15,00,000	8,26,996	
4	Support to develop a school in a tribal area	1,00,000	1,42,671	
5	Provision of scholarships to needy and meritorious students	5,00,000	2,20,779	
6	Provision of education kits to children	8,00,000	9,45.476	
7	Conservation of manuscripts	30,00,000	15,00,000	
8	Promote learning and life skills among children through art therapy	1,00,000	7	
9	Contribution towards publication of books on Indian culture   Ecology   Philosophy	4,00,000	-	
10	Support to develop a school in West Bengal	2,00,000	-	
NEW Project	Enhancement of educational practices in Valsad College- Nootan Kelvani Mandal		5,51,000	
NEW Project	Other Education project		31,154	
NEW Project	Mobile Science Lab Project		11,21,575	
	Total education budget (a)	2,06,00,000	1,42,22,958	
11	Skills training to youth as apprentices	90,00,000	48,78,585	
12	Empowerment of women   youth through various vocational training courses	25,00,000	7,12,180	

13	Develop five Industrial Training Institute	10,00,000	-
14	Develop micro-entrepreneurs to provide sustainable livelihood	15,00,000	2,96,155
15	Create livelihood opportunities for tribal families by providing cows -Godaan project	55,00,000	20,35,393
16	Empower women through self-help groups- Atul Uttara project	35,00,000	10,59,475
NEW Project	Project -Adhikar Haqdarshak	-	-
NEW Project	Migrant Worker Project	-	-
	Total empowerment budget (b)	2,30,00,000	89,81,788
17	Enhancement of rural health through health camps	40,00,000	17,86,043
18	Support to Atul Healthcare Centre	1,00,00,000	69.47.727
19	Promote health and wellbeing of adolescent girls and women – Sampoorna project	27,00,000	17.34.988
20	Nourish first 1000 days of child through training pregnant -lactating mothers and stakeholders	16,00,000	3,89,740
21	Upgradation of sports infrastructure and equipment	40,00,000	-
NEW Project	Donation for health-Kasturba Rahat Mandal		10,00,000
	Total health budget (c)	2,23,00,000	1,18,58,498
22	Provision of medical treatment to needy patients	20,00,000	8.29.396
23	Provide assistance to children with special needs - Ojas	1,00,000	5,32,467
NEW Project	Flood Relief Ankleshwar		45.000

	Total relief budget (d)	21,00,000	14,06,863
24	Develop community infrastructure in Atul village	3,40,00,000	25,50,189
25	Development of community infrastructure in Atul village – post office and police station	60,00,000	77,76,682
26	Infrastructure development in Atul and surrounding villages	30,00,000	21,11,101
27	Construction of toilet blocks in Kalyani Shala	60,00,000	
28	Develop Ulhas cricket ground	40,00,000	-
NEW Project	Improvement In School and Anganwadi		86,460
	Total infrastructure budget (e)	5,30,00.000	1,25,31,016
29	Establishment of solid waste management system in Atul village- Ujjwal Atul project	25,00.000	26.15.724
30	Initiate waste management project in 42 village	35,00,000	-
31	Set up plastic waste management unit /Rag pickers Livelihood Project	15,00,000	1,91,079
32	Initiate natural resource management project to conserve soil and water	50,00,000	20,75,457
33	Conservation of energy through Solar	50,00,000	7,59,563
34	Set up nature-based wastewater recycling systems	50,00,000	19,18,794
35	Conservation of water through various interventions	20,00,000	7,25,243
36	Enhance green cover- Tree Plantation project	30,00,000	13,09,274
37	Protection of animals	10,00,000	-

38	Initiate biogas project	30,00,000	-
	Total conservation budget (f)	3,15,00,000	95,95,570
Total <b>b</b>	pudget (a+b+c+d+e+f)	15,25,00,000	5,85,96,693

### Annexure 1: Environmental Statement





ID: 23158

Utilities and Services Unit Atul 396 020. Gujarat, India services@atul.co.in | www.atul.co.in (+91 2632) 230000

Atul Ltd

Atul|GPCB|Form V September 22, 2023

To, Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector 10 – A GANDHINAGAR - 382 010

Subject: Submission of Form V

Dear Sir,

We are enclosing herewith duly filled form - V for the financial year ending March 31, 2023.

Kindly receive the same.

Thanking you.

Yours faithfully,

For Atul Ltd,

Hriday Desai (Vice President- EHS Assurance)

C.C. Regional officer, GPCB, Vapi (Dist: Valsad)

> Registered office: Atul House, G | Patel Marg, Ahmedabad 380 014, Gujarat, India CIN: L99999Gj1975PLC002859

> > S Lalbhai Gro

### [Form V]

### (See Rule 14)

Environmental Statement for the financial year ending the 31st March 2023

### Part - A

(i) Name and address of the owner/occupier of the industry operation or process. Mr. B. N. Mohanan Occupier, Atul Limited, Atul – 396 020, Dist.: Valsad

(ii) Industry category Primary (STC code) Secondary (STC code) Large scale Chemical Manufacturing Industry

(iii) Production Capacity – Please refer Annexure - 1

(iv) Year of establishment : 1952

(v) Date of last environmental Statement submitted: September 20, 2022

### Part - B

### Water and Raw Material Consumption

(1) Water consumption m³/day

Process : 7663 kl/day Cooling : 1887 kl/day Domestic : 380 kl/day

Sr. No.	Name of products	Process water consumption per unit of product output					
		During the previous financial year (1)	During the current financial year (2)				
		(1)	(2)				
1. C	rop Protection	16.35 kl/mt	15.39 kl/mt				
2. B	ulk Intermediate	1.38 kl/mt	1.31 kl/mt				
3. C	olours	87.84 kl/mt	81.31 kl/mt				
4. Ph	arma & Polymer	5.27 kl/mt	4.16 kl/mt				

Page 1 of 33

#### (2) Raw material consumption

*Name	of	Name	of	Consumption of raw n	naterial per unit of output
raw materials		products		During the previous financial year	During the current financial year

#### Please refer Annexure - 2

\* Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

#### Part - C

### Pollution discharged to environment/unit of output

(Parameter as specified in the consent issued)

Pollutants	Quantity pollutants discharged (mass/day)	of Concentrations of pollutants in discharges (mass/volume)	prescribed standards with
(a)Water (b)Air	COD         : 20           SO2         : 17           NOx         : 16           HCI         : 5.8           Cl2         : 5.4	40 kg/day (224 mg/lit) 55 Mg/Nm <sup>3</sup> 96 Mg/Nm <sup>3</sup> (Process 1 Mg/Nm <sup>3</sup> 67 Mg/Nm <sup>3</sup>	NIL Stack)
(c)Air	SO2 : 0.6 PM : 51 SO2 : 31	5 Kg/Ton 38 Mg/Nm <sup>3</sup> (Flue gas 5.25 Mg/Nm <sup>3</sup> 1.28 Mg/Nm <sup>3</sup>	stack )

Page 2 of 33

#### Part - D

### Hazardous Wastes

(as specified under Hazardous Wastes (Management & Handling) Rules, 1989)

Hazardous Wastes	Total Quantity (kg)			
	During the previous financial year	During the current Financial year		
From process	73671645	55393165		
From pollution control facilites (ETP sludge and Salt from MEE)	29847720	67684765		
Total	103519365	123077930		

### Part - E

### Solid Waste

Solid Wastes	Total Quantity (kg)		
	During the previous financial year	During the current financial year	
(a)From process (Fly Ash)	79867000	41266787	
(b)From pollution control facility			
(c) (1) Quantity recycled or re-utilised within the unit	Nil	Nil	
(2) Sold	79867000	41266787	
(3) Disposed			

### Part – F

Please specify the characterisation (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes. Please Refer Annexure - 3

### Part – G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production. Please Refer Annexure - 4

## Part – H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution. Please Refer Annexure - 5

Page 3 of 33

### Part – I

Any other particulars for improving the quality of the environment.

- Upgradation of Central effluent treatment plant (CETP) with few additions and alteration. We have built up new collection chamber as we have now made all the incoming effluent lines from production plants to CETP above ground. We are replacing our lamella facility by primary clarifier and also we are adding some equipments/facilities as standby | additional measures for betterment of treatment.
- Unit has Introduced fanton reactor (100 KL), High Efficiency Air Disssolved air Flotation (HEAF) unit (1200 KL), Anoxic Tank (1100 KL), Membrane Bio reactor (1200 KL) At North Site ETP
- 3. Unit has install MEE for High TDS stream from agrochemical manufacturing plant.
- 4. We have upgraded our EMS by installing membrane type filter press followed by paddle dryer at West site

Page 4 of 33

## Annexure : 1: list of Products

Sr. No.	Name of Products	Consented Quanity (MT/M)	
A	DYES		
1	Azo dyes	550	
2	Sulfur Black	2500.33	
3	Sulfur Dyes range	25	
4	Naphthol range	75	
5	Fast Color Bases	40	
6	Disperse dyes	118.5	
7	Optical Brighteners	10	
8	Reactive Dyes	961.3	
9	Vat dyes	105	
10	Indigo	500	
11	Manganese sulphate	1000	
12	40 % Manganese sulphate solution	2500	
13	Pigments	200	
14	1-Aminoantraquinone	417	
15	H-acid	500	
16	4-amino-phenyl-4-beta hydroxy ethyl sulphone sulphate ester, Para base ester	834	
17	DNCB (Di Nitro ChloroBenzene)	834	
В	CHLOR-AKLALI		
18	Caustic soda/potash & sodium sulfide	15100	
19	Liquid Chlorine /Hcl	13268	
20	Hydrogen	265.29	
С	PESTICIDES TECH		
21	Carbamate group of Agrochemicals (Indoxacarb Tech, Propoxur etc.)	110	
22	Diuron	420	
23	Trichlo Carbon	8.3	
24	Cartap Hcl	50	
25	Carbendazim	201	
26	Phenoxy Herbicides (e. g. 2,4-D & related products)	EC70	
27	4-chloro-2-methyl phenoxy- acetic acid (MCPA)	5670	
28	Pyridine based insecticides & Herbicides chemical e.g. Imidacloprid	125	
29	Triazole based Fungicide	102	

Page 5 of 33

30	Pyrethroides	10
31	Sulphonyl Urea	70
32	Glyphosate	3000
33	Isoprothiolane	100
34	Fipronil	30
35	Formulations	2200
36	Buprofezin	4
37	Imazethapyr	1.83
38	Kresoxim Methyl	2.08
39	Fenoxaprop	0.83
40	Cyhalofop	0.83
41	Mesotrione	300
42	Sucotrione	300
43	Glycin	1000
44	Pyrazosulfurone	30
45	BisPyribac Sodium	30
46	Azoxystrobin	150
47	Quizalofop	50
48	Thiamethoxam	100
49	Metribuzin	60
50	Diafenthiuron	30
51	Chlorantraniliprole	70
52	5-Chloro 1-Indanone	60
D	BULK DRUG AND PHARMACEUTICALS	
53	Mebendazole	2
54	Tolbutamide	2.5
55	Quiniodochlar	15
D1	Bulk Drugs & Intermediates	194.6
56	Dapsone-API	61
57	Valacyclovir HCL	
58	Celecoxib	
59	Desvenlafixine	
60	Mirabegron	
61	Vildagliptin	
62	Venlafaxine Hydrochloride	
63	5-Hydroxy methyl thiazole (5-HMT)	
64	Thiophene-2-carboxaldehyde (2-TC)	
65	1-Chloroacetyl-2-carbonitrile pyrrolidine (CACP)	
66	Dechlofenac sodium / potassium	2.5

Page 6 of 33

67	Atenolol	1.7
68	Furosemide	1.3
69	Trimethoprim	0.9
70	Para hydroxy acetophenone	1.7
71	Para hydroxy phenyl acetamide	3
72	Acyclovir	5.2
73	Bathanechol	5.2
D2	Pharma Intermediates & Chemicals	
74	4,4 Diamino diphenyl sulphone	
75	4,4 Dichloro diphenyl sulphone	2094
76	3,3 Diamino diphenyl sulphone	
77	DHDPS & Other sulfones	
E	RESINS	
78	Epoxy Resin	17600
79	Vinyl Ester Resins	37.5
80	Ketone Formaldehyde Resins & Sulphonamide, Formaldehyde Resins	20.8
81	UF/MF/PF/DiCyandiamide Resins	270.9
82	Polyamide resins	161.7
83	Polygrip TPU based	341.67
84	Polygrip rubber based	2000
F	OTHER CHEMICALS	
85	Anthraquinone, Naphthalene, Benzene Intermediates. (Including Beta – Napthol & BON Acid)	740
86	Resorcinol (Meta hydroxy phenol)	1060
87	Carbamite	30
88	Chlorzoxazone & other related products	5
89	4 Ethyl 2,3 – Diorcopiperazino carbonyl Chloride	3.3
90	Imino Dibenzyl 5 carbonyl Chloride	0.8
91	Formaldehyde and base products	15200
92	Sulfuric Acid / Oleum / Chlorosulphonic Acid & Salts	11550
93	Sulpha Drug Intermediate	193.8
94	Acetyl Sulphanilyl Chloride and its derivatives.	1500
95	Acetanilide	500
96	Sulpha Methyl Phenazole Sodium	1.1
97	Pyrazole Base	10.5
98	Sulphanilic acid	25
99	Bis Phenol A	416.7
100	Hexamine	150
101	Epoxy Intermediates	23.8

Page 7 of 33

102	Hardners and auxiliaries	4000
103	Hardener Intermediates	700
104	Bisphenol S & Intermediate Chemicals	16.6
105	Sodium Thio sulphate (dry basis)	2500
106	Sodium Thio sulphate (wet basis)	5300
107	Phosgene	832.827
108	HX-13059	5
109	Alkyl ketene dimer	500
110	Anisole	306
111	PF Resin	200
112	CMC (Carboxy methyl cellulose)	2000
113	HMMM (Hexa Methoxy Methyl Melemine)	40
114	m-Amino phenol	250
115	Mono chloro benzene	2500
116	Propionyl chloride	200
117	Resorcinol derivatives	100
118	RF Resin (Resoform P-18,19,20)	405
119	Trichloro acetyl chloride	200
120	Thio glycolic acid	200
121	Thionyl chloride	1000
122	1,3 Cyclohexanedione	120
F <b>1</b>	Agro, Pharma intermediates, Isocyanats & Carbonat Esters, etc.	
123	Trans-4-MCHI	
124	p-Anisyl chloroformate	
125	DI-TERT-BUTYL DICARBONATE (Boc. anhydride)	
126	N, N- Disuccinimidyl Carbonate	
F1.1	Chloroformate	
127	1-Chloro ethyl chloroformate (1-CECF)	
128	4-Nitrophenyl chloroformate (4-NPCF)	
129	n-Pentyl chloroformate (n-PCF)	
130	Isobutyl chloroformate (IBCF)	2230
131	2 Ethyl Hexyl Cholroformate (2-EHCF)	
132	Phenyl Chloroformate (PCF)	
133	Benzyl Chloroformate (BCF)	
134	Methyl chloroformate (MCF)	
135	nHexyl chloroformate (n-HCF)	
F1.2	Carbonates	
136	Di-tert-butyl dicarbonate (DIBOC)	
137	Bis (4-Nitrophenyl) Carbonate (Bis-NPC)	1

Page **8** of **33** 

138	Diphenyl carbonate (DPC)	
139	Dimethyl carbonate (DMC)	
140	1,1'-Carbonylldiimidazole (CDI)	
F1.3	Isocyanates	
141	p-Toluene sulphonyl isocyanate (PTSI) and other Isocyanates	
F1.4	Acid Chlorides	
142	N-Methylpiperazinyl carbamoyl chloride Hydrochloride (NPCCL)	
143	(Chlormethylene)dimethylammonium chloride (VMR)/ Phosgeniminium chloride and other Acid chlorides	
144	N,N-Dimethyl carbamoyl chloride (DMCCI)	
145	Hexaethyl guanidinium chloride (HEGCI)	
F1.5	Urea	
146	Tetrabutyl Urea (TBU)	
147	Tetramethyl Urea (TMU)	
F1.6	Carbodiimide	
148	N,N'-Dicyclohexylcarbodiimide (DCC)	
149	Sodium sulphite	3261
150	30% HCI	4622.5
151	Sodium hypo chloride solution (10%)	1853.7
152	Potassium chloride	740
153	Sodium Chloride	2418.5
G	Flavors & Fragrances	
G1	Allyl Esters such as	
154	Allyl Caproate	250
155	Allyl cyclohexyl propionate	250
156	Allyl Heptanoate	150
157	Cyclogalbanate	25
G2	Styrene Based derivatives such as	
158	Phenyl Ethyl Alcohol (PEA)	850
159	PE acetate	250
160	PEME ( Phenyl ethyl methyl ether)	200
161	Pommerol (Phenyl ethyl isoamyl ether)	100
162	Styrene oxide	500
163	Phenyl ethyl phenyl acetate (PEPA)	100
164	Phenyl acetaldehyde dimethyl Acetal	250
165	Styrallyl acetate	500
G3	Coumarin derivatives such as	
166	Coumarin	500
167	Dihydro Coumarin	100

Page 9 of 33

G4	Sunscreen prodcuts such as	
168	Avobenzone	83.3
169	Octacrylene	83.3
170	OctylMethoxy Cinnamate	200
G5	Others such as	
171	Peonile	50
172	Mugetanol	25
173	Salicylaldehyde	500
174	Evernyl	200
175	Heliotropin	250
176	Helional	500
177	1,2 Hexane Diol	200
178	Indoflor	50
179	Floral	50
180	Cyclohexyl Salicylate	100
181	Methyl Anthranilate	300
182	Dihydroanethole	50
183	Benzilydine acetone	100
184	Hexenyl -3 -Cis- Benzoate	25
185	Hexenyl Hexenoate, Cis-3	25
186	Citronellyl Oxyacetaldehyde	25
187	Karmaflor	25
188	Anethole	166.7
189	Raspberry Ketone	100
190	P-AninylPropanal	100
н	Co Products:	
191	Phenol	3
Total Pr	oduction including Sodium Thiosulphate (dry basis)	146698.887
Total Pr	oduction including Sodium Thiosulphate (wet basis)	149498.887

Page **10** of **33** 

Raw Material	Quantity TPA
Aniline	59650
Anhydrous NH3	1494
Acetic Acid	10331
Anthranilic acid	74
ААМХ	125
Acetyl chloride	800
Acetone	6996
Allyl Alcohol	4305
Acetic anhydride	12249
Anhydrous potassium carbonate	8
Anhd. AICI3	11784
Acetyl Chloride	255
Acetophenone	4980
Ammonium acetate	200
Anhydrous Glauber's salt	19
Acid resin	300
Aq Disodium Carbonate	300
Acetonitrile	18000
acetone cyanohydrine	1008
Ammonia solution (25%)	3974
Activted carbon	42
Acetaldehyde	3840
Barbituric Acid	277
Benzoic acid	406
Bromamine Acid	667
Bromine liquid	112
Butylted Hydroxy Toluene	20
Benzyl Cyanide	450
Benzophenone	559
Benzyl chloride	240
Barium carbonate (100%)	2091
Butyl acetate-Fresh+Recovered	612
Benzyl triethyl ammonium chloride	132
Benzene	5143

### Annexure : 2 : List of major raw material

Page 11 of 33

Benzyle Alcohol	264
Caproic Acid	3420
Calcium carbonate	4140
Calcium hydroxide (Hydrated lime)	131938
Calcium cyanamide	2364
Carbon	19
Caustic (including 25%, lye,Flackes, 48%)	274167
Cyanuric chloride	20
crotonaldehyde	152
Cu Bronz	534
Chlorosulfonic acid	2500
Cinnamic Acid	2700
Cyclohexanol	650
Cis-Anethole	592
Cumene	330
Cycloheaxnone	450
Cyanoacetic acid	395
Cyclohexane	276
Citrenellol	280
Chloroacetaldehyde dimethylacetal	495
Chlorine gas	71116
Cellulose	15240
Citric acid	250
Cyclohexane-1,3-dione	5357
cyclohexane	3600
CS2	360
СРОРМА	1084
Cinconine base	15
Cuprous chloride	11
Chloroform	18782
Chiroacetyl chloride	187
Dimethy succynil succinate (DMSS)	114
Dimethyl malonate	7152
Darco	109
Diethyl ether	120
Di Isopropyl Melonate	888
Dimethyl formate	9444
Dimethoxy methane (Methylal)	1372

Page **12** of **33** 

DCDMP HCI	478
Dichloro acetic acid	3499
DEA	8467
Dibutyl amine	936
Dichloromethane	10255
Dimethyl amine	936
Dimethyl Formamide(DMF)	25979
Dimethyl sulphate	6501
Divyol	318
Dimetyl amine	16541
Dinitro diphenyl sulfone	64
DMAP	38
Ethyl acetate	19782
Ethanol	1604
EDTA	2
Ethylene Oxide	1000
Epi Chloro Hydrine (ECH)	99000
Ethylene Dichloride	3670
Ethyl-2-(4-hydroxy phenoxy) -propionate	264
Ethylene Glycol dimethyl ether	420
Fummed silica	213
Fipronil sulfide	396
Formic acid	6080
Ferric Chloride	550
Fumaric acid	2100
Glyoxylic acid 50%	4437
Glacial acetic acid	690
Glaubers salt fresh	1872
Hexene	26105
Hydrgen	1578
Hydrogen Peroxide	26320
Hydrochloric acid	157753
Heptanoic acid	1494
Hydroquinone	1
Hyflosupercell	2716
Hexanoic acid	210
Hyflo	31

Page **13** of **33** 

Heptane	19171
Isobutyl alcohol	2467
Iron powder	4320
Isoprenol	463
Iso Valeraldehyde	463
Indene	700
Isoamyl Bromide	900
Iron Fillings	88
Imidazole	269
Isobutanol	5587
Isopropyl alcohol	9427
KOH flakes	2608
m-Urido aniline	16
Monochloro acetic acid	103270
MEG	64
Methyl ethyl ketone	252
Magnusium Oxide	130
Methanol	209304
MDC	6600
Mg	1200
Methyl Salicylate	371
Melamine	79
Methylene Dichloride	62448
M-phenoxy benzaldehyde	60
Mixed xylene	504
Mesitylene	33
MTBE	9112
NaNO2	80
Na (metal)	2309
Naphthol ASIRG	140
Nitric acid	13959
Nitrogen gas	60
NaOCI	5457
ΝαCΙ	214045
NaHSO3 (100%)	53
Nitrobenzene	3540
n-Butyl acetate	27
n-Butyl Isocyanate	54

Page **14** of **33** 

N -Methyl Piperazine	314
N,N-Dimethyl ammonium chloride	685
n-hexyl alcohol	7498
Ortho nitro aniline	203
Oleum 65 %	38268
Orthophenylene diamine	1549
para toluidine	143
Phenyl methyl Pyrazolone	117
p - Toluene Sulphonic Acid monohydrate (PTSA)	220
Phenoxy acetic acid	444
Phenyl acetaldehyde	2775
Phenyl acetic acid	810
Phenol	44686
Para formaldehyde	8748
P-Anisaldehyde	1419
Phosphoric acid (85%)	480
P-cresol	2160
Palladium on Barium sulfate	6
Para Flock	7
Para toluene sulfonic acid	59
Para Chloronitro Benzene	84
Para Chloro Aniline	50
Para trifluro methoxy Aniline	459
Phosphorus Pentaoxide	1732
PCF	517
Phosgene	6187
Potassium carbonate	9148
Propene Gas	7632
Propionaldehyde	2886
Pthalamide	3503
Pommerol	1200
p-Toluene sulfonic acid	11
Precoat alfa cellulose	47
Potassium hydroxide	4500
Propionic acid	1968
Potassium hydrosulfide	1440
Poly 80	15

Page **15** of **33** 

PMIDA 98%	1836
p-Toluene sulfonamide	3672
Pyridine	30
Resist Salt	107
Resin	1787
Rubber	2344
Raney nickel	1620
Sulphur	15622
Sodium Carbonate	5881
Sodium bicarbonate	7120
Sodium Nitrite	266
Sulphamic acid	50
Soda Ash	3343
Sodium acetate	780
Sodium sulphate	11402
Salicylic Acid	950
Sodium methoxide	3996
Sulfuric acid	139812
Sulphury chloride	6000
Styrene	19592
Silica	288
Sulfur trioxide	8886
Sodium sulfide flakes	77
Succinic acid	277
Sodium hydride	225
Sodium Cyanide	552
Sodium Meta Bisulfide	168
salt Ground	6700
Toluene	161854
Tetrachloro Pthalic Anhydride	211
Tri ethyl Amine	14971
Trimethyl orthoformate	1545
Titanium isoprpoxide	1
Tartaric acid	1
Tetrahydrofuran(THF)	6482
Tetra ethyl benzyl ammonium chloride	44
Tertiary butyl amine	244
Tertiary butyl hydro peroxide	478

Page **16** of **33** 

Thiophene	929
Tosyl urea	252
Tri-n-butyl amine	754
Zeoliite based catalyst	1350
Zinc Bromide	30
Zn Powder	511
1,3-diimino isoindolene	97
1,1-binaphthyl-8,8-dicarboxylic acid	210
1,2-MDOB	3660
2,6-dichloro quinoxaline	232
2,6-dihydroxy benzoic acid	252
1-Methyl-4-Ethoxycarbonyl-5-sulfonamide	276
2-(2,4-Dichlorophenyl)-2-n-butyl oxirane	994
1,2,4-Triazole	328
2-Nitroimino imidazolidin	1036
2-Chloro-5-chloromethyl pyridine	1105
3,4-Dichloro aniline	3900
3 -Chloro propionyl chloride	1280
3-methyl-4-nitroimino-perhydro-1,3,5-oxadiazine	1054
30 % NaSH	901
4,6-dimethoxy-2-sulfomethyl pyrimidine	696
4-(methylsulphonyl)-2-chlorobenzoylchloride	6264
4-(methylsulphonyl)-2-nitrobenzoylchloride	6264
5-amino 6-methyl benzimidazolone	107
5-amino acetoacetyl benzimidazolone	290
4-Methoxyacetophenone	730
4-Tert. Butyl benzoic acid	753
6 Methyl coumarin	1200
4-Heptyn-2-ol	222
4-phenoxy-2,6-diisopropyl phenyl isothiocyanate	330
4-amino-6-tertiary-butyl-3-mercapto-1,2,4-triazinone	758
4-chloro-o-cresol	22236
4-Nitro phenol	7171

Page **17** of **33** 

#### Annexure: 3: Description of Solid Waste at Atul

Description of waste	Physical form	Calorific Value Cal / gms	Biodegradability	Nature / Chemical composition of Waste	Mode of Disposal
Used oil, Kl	Wet cake	-	Biodegradable	Lubricant oil with minor contamination	Collection, Storage, Transportation, sell to registered refiners/recyclers.
Wastes / residues / contaminant cotton rags or other cleaing material	Solid	-	Biodegradable	Lubricant oil with minor contamination	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator.
Sludge & filters contaminated with oil,	Semi solid	-	*	-	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator.
Membranes	Solid	-		Polyfluoro & Polycarboxylic groups	Collection, Storage Transportation, disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator/co processors/ pre-processors/CHWIF TSDF sites by use of GPS mounted vehicles and XGN Manifest system.
Waste Resin,	Solid	-	Non biodegradable	Polymer	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/CHWIF/TSDF sites by use of GPS mounted vehicles and XGN Manifest system.
Sulfurised Carbon,	Solid	6000		Carbon and impurity of product	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ CHWIF/TSDF sites by use of GPS mounted vehicles and XGN manifest system.

Page 18 of 33

Activated Carbon,	Solid	6000	-	Carbon and impurity of product	Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator /coprocessors/ pre-processors/CHWIFTSDF sites by use of GPS mounted vehicles and XGN manifest system.
Brine purification sludge,	Sludge	No Calorific Value	Non biodegradable	Inorganic compounds e.g. CaCo <sub>3</sub> , Mg(OH) <sub>2</sub>	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/C HWI F/TSDF sites by use of GPS mounted vehicles and XGN manifest system.
Sulphur sludge,	Solid	5000	Partially Bio- degradable	Inorganic compounds and Sulphur	Collection, Storage, Transportation, and Disposal at TSDF OR sends to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ preprocessors disposal at common facility.
Hot Gas filter Ash,	Solid	No calorific Value	Non biodegradable	Inorganic Material	Collection, Storage, Transportation, Disposal at own TSDF OR disposal by sending to authorized regenerator/co processors/ pre-processors/CHWI F sites by use of GPS mounted vehicles and XGN manifest system
Bottom Sludge after recovery of Sulphur Sludge,	Solid	5000	Partialy Biodegradable	Inorganic	Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator coprocessors/ pre-processors/CHWI F sites by use of GPS mounted vehicles and XGN manifest system.
Waste Catalyst,	Solid	No calorific Value	Non biodegradable	Inorganic, Not explosive, Non Reactivie	Collection, Storage, Transportation, Disposal at own TSDF OR OR send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page **19** of **33** 

Spent Solvents, Kl/Month	Liquid	-		Solvent	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR selling to actual user by use of GPS mounted vehicles and XGN manifest system.
Various type of Residue	Solid	6500	Partially Bio- degradable	Polymeric aromatic Organics.	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/TS DF/CHWI F sites by use of GPS mounted vehicles and XGN manifest system.
OCBC / OCT distillation residue,	Visc. Liq.	8000	Not Blo- degradable	Polymeric aromatic compound.	Collection, Storage, Transportation, Disposal by incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
waste residue Bulk Intermediate ( meta hydroxy phenol ) (Tar),	Solid	-	-	10-12% Hydroxyl based benzene derivative	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR selling to actual user OR co-processing at cement industry OR disposal by sending to authorized regenerator r/coprocessor/ Pre-processors/ CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Waste residue (from resorcinol plant)	Solid	-	*)	-	Collection, Storage, Transportation, Disposal by incineration at own incinerator OR selling to actual user OR co-processing at cement industry OR disposal by sending to authorized regenerator/co processors/ Pre-processors/ CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Gypsum (From meta hydroxy phenol Plant),	Solid	Not Applicable	Non biodegradable	Inorganic Compound Mostly Calcium Sulphate 75 - 77%, Moisture 23-25%	Collection, Storage, Transportation, Disposal at own TSDF OR selling to actual user OR send to cement industry for co-processing OR disposal by sending to authorized regenerator Coprocessors/ pre-

Page 20 of 33

					processors/CHWIF TSDF sites by use of GPS mounted vehicles and XGN manifest system.
Sodium Sulphite,	Solid	Not Applicable	. H	Inorganic Compound, Mostly Sodium Sulphite 70- 75%, Moisture 25- 30%	Collection, Storage, Transportation, Disposal at own TSDF OR selling to actual user OR send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Waste/Salt Lime Dust	Powder	****		Inorganic Compound	Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Waste from Urea Formaldehyde Polymer product,	Solid	3500	Bio-degradable	Organic polymeric compound	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/pre- processors/CHWIF GGEPIL sites by use of GPS mounted vehicles and XGN manifest system.
Sludge containing higheramino compound,	Tar	5200	Bio-degradable	Polymeric organic amines.	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Filter cake of Epoxy resins with resin contomination	Semi Solid	3200	Bio-degradable	Polymeric organic compound	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page 21 of 33

Aluminium Hydroxide,	Solid	No calorific Value	Non biodegradable	Mostly Al Hydroxide	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Iron sludge,	Solid	No calorific Value	Non biodegradable	Mostly Iron, oxide	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Brass residue,	Solid	No calorific Value	Non biodegradable	Mostly Copper & Iron.	Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Still / Other residue,	Tar	6500	Partially Bio- degradable	Polymeric aromatic Organics.	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Darco / filter aid sludge,	Solid	2500	Partially Blo- degradable	Mainly Carbon.	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Iron Residue,	Wet cake	P.	Non biodegradable	Water, iron	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page 22 of 33

Hyflo sludge,	Wet cake	-	5.	0.87 % Specific gravity, 80% solid, Inorganic & organic content	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
PER crystal residue,	Semi Solid			Specific gravity 1.1557, Organic	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Filter aid sludge for Hg recovery,				Containing Hg	Collection, Storage, Transportation for recovery of mercury
Aluminium Ash,	Solid	-	Non biodegradable	Water, oxides of Aluminium & Aluminium Metal	Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
N.B.Tar / ODCB Tar	Semi Solid			**	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
ONT Tar	Solid / Tary				Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL /CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page 23 of 33

Copper Hydroxide Wet cake	Solid	Not applicable	Non biodegradable	Copper Hydroxide	Collection, storage, Transportation and sale to authorized industry having permission under rule-9 of Hazardous & other wastes (Management & Transboundary Movement) rule-2016
Dust from Air Filtration System,	Solid	-		Residual product particles	Collection, Storage, Transportation for reprocessing and reusing
Spent Acid	Liquid	Not applicable	Non biodegradable	Sulphuric acid	Collection, storage, transportation and sell to authorized industry having permission under rule-9 of Hazardous & other wastes (Management & Transboundary movement) rule-2016 Or sell to: M/s Shree Cement Ltd., located at Village Ras, Jaitaran Dist: Pali & at Bangumagar, Beawar Dist: Ajmer, Rajasthan.
Spent Organic solvent	Liquid			Mainly contains Spent Organic solvent	Collection, storage, Transportation and sale to authorized industry having permission under rule-9 of Hazardous & other wastes (Management & Transboundary Movement) rule-2016
Waste Residue (Phin)	Solid	67) 		**	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors /GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
DCDPS waste	Solid	(x-4)	1113		Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR selling to actual user OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/ GEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Waste from Pharma intermediates	Solid				Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to

Page 24 of 33

					authorized regenerator/coprocessors/ pre- processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Spent Carbon catalyst	Solid		44)		Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Spent carbon,	Solid	6000	Biodegradable	Carbon cake contains aq. Methanol Aqueous Carbon Cake	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Date expired, discarded and off- specification product,	Solid	-		ч -	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Spent Mother liquor, Kl/Month	Liquid		*	Mainly contains Spent Organic solvent	Collection, Storage, Transportation for recovery and reusing
Spent Solvents, Kl/Month	Liquid	14 C	-	Solvent	Collection, Storage, Transportation for recovery
Still / Other residue,	Tar	6500	Partially Bio- degradable	Polymeric aromatic Organics.	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to
Pyridine based insecticides & herbicides (Darco /	Solid	2500	Partly biodegradable	Mainly carbon	authorized regenerator/coprocessors/ pre processors/ GGEPIL/CHWIF sites by use of GP mounted vehicles and XGN manifest system.

Page 25 of 33

Filter aid Sludge),					
Sulfonyl Urea (Residue),	Solid	6500	Partly biodegradable	Polymeric Organic	
Triazole based Fungicides (Residue),	Solid	6500	Partly biodegradable	Polymeric Organic	
Pyrethroides	Solid	6500	Partly biodegradable	Polymeric Organic	
Dust (Agro plant)	Solid	-	-	Mixture of Dust, Rust & Spillage chemicals	Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN monifest system.
Hyflo,	Semi Solid	No Calorific Value	Non biodegradable	Non flammable, non reactive, partly organic -Inorganic	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Dust from Air Filtration System,	Solid	-		Residual product particles	Collection, storage, Transportation, disposal at OWN TSDF OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Liners /Bags, NOs	Solid	NA	NA	Without any Chemical contamination after decontamination	Collection, Storage, Transportation, Disposal by reuse or sell afterdecontamination within premises or sending to authorized recyclers by use of GPS mounted vehicles and XGN manifest system.
Drums /HDPE Carboys,	Solid	NA	NA	Without any Chemical	

Page 26 of 33

				contamination after decontamination	
Chemical containing residue from decontamination and disposal,	solid		*:	*	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ TSDF/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Flue gas cleaning residue,	Solid	-		ē.	Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Toxic metal containing residue from used-ion exchange material; in water purification,	Solid		-	201	Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Sludge from ETP, Gypsum from ETP, Chemical Gypsum, sludge from waste water treatment	Semi solid	No Calorific Value	Partly biodegradable	Mostly gypsum	Collection, storage. Transportation, disposal at OWN TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
MEA distillation residue,	Visc. Liq.	9500	Partly biodegradable	Polymeric aromatic compound	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/pre- processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page 27 of 33

Spent Catalyst,	Solid				Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Sludge from wet scrubber,	Solid	2		-	Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Incineration ash,	Solid	No Calorific Value	Non biodegradable	Inorganic compounds e.g. Silica, NaCl.	Collection, Storage, Transportation, Disposal at own TSDF OR Send to cement industry for co- processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Salt from MEE	Solid	Not applicable	Non biodegradable	99% Sodium salt	Collection, storage, Transportation, disposal at OWN TSDF OR selling to actual reuser OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Dilute MnSo4	Liquid		**		Collection, Storage, Transportation, Disposal at M/s Atul Limited, Plot No. 297, GIDC Estate, Ankleshwar, Bharuch- 393002
2,6 Dichloro phenol	Solid			Phenolic compound	Collection, storage, Transportation, disposal by selling to actual reuser OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/pre-processors/ GEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.

Page 28 of 33

2,4,6 Trichloro phenol	Solid		-	Phenolic compound	Collection, storage, Transportation, disposal by selling to actual reuser OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
p-CBSA/Na-Salt	Solid		1.200	pCBSA	Collection, storage, Transportation, disposal by selling to actual reuser OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/7pre-processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
High TDS / High COD effluent	Liquid	**	**		Collection, storage, Transportation, disposal to our own MEE/ Incinerator and/or at common GPCB approved facility
30% HCI	Liquid			Spent acid	Collection, storage, transportation, utilize in own plant for captive consumption or sell to authorized end users by use of GPS mounted vehicles and XGN manifest system.
KCI	Solid	771		(**)	Collection, Storage, Transportation, Disposal at own TSDF OR send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN Manifest system.
Distillation Residue(Aromatic High Boiler Waste)			1000		Sell to actual results.
CoCl2	Solid		88.	20	Collection, Storage, Transportation, Disposal at own TSDF OR selling to actual user OR Send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/

Page 29 of 33

					pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Sodium Sulphate	Solid	-	Non biodegradable	••	Collection, Storage, Transportation, Disposal at own TSDF OR selling to actual user OR Send to cement industry for co-processing OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Tula resin					Collection, storage, Transportation, disposal by selling to actual reuser OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/pre-processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Ammonium Hydroxide (5%) & (25%)	Liqiud		Biodegradable		Collection, storage,reuse in in-house production or sell to actual user
Aq. Methanol	Liqiud	er)	Biodegradable		Collection, Storage, Transportation for recovery Or disposal by selling to actual reuser OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/pre-processors/ GEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Spakler filter Pad, Nos.				laat.	Collection, Storage, Transportation, Disposal by Incineration at own Incinerator OR co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre- processors/ GEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
ACP tar low boiler					Collection, Storage, Transportation for recovery Or disposal by selling to actual reuser OR Incineration at own Incinerator OR

Page 30 of 33

				co-processing at cement industry OR disposal by sending to authorized regenerator/coprocessors/ pre-processors/ GGEPIL/CHWIF sites by use of GPS mounted vehicles and XGN manifest system.
Glycolic acid	solid	i Ale S	 	Collection, storage, Transportation and sale to actual users and OR disposal as per Hazardous Waste Management Rule 2016

Page **31** of **33** 

#### Annexure : 4:

#### Water Conservation

Following actions were taken for water conservation during recent year.

1. Vacuum Pump Water Recycling – Reduce the consumption of water by recycle of water using vacuum pump.

2. Recovery of cooling water and chilled water from reactor jacket.

Rain water harvesting: In few plants, rain water is being recharged from the terrace and has been used as a makeup of cooling tower during the monsoon season.

We already have two numbers of check dams in natural storm water drains to collect and harvest rain water in Monsoon.

We have 2 ponds with approximate storing capacity of 14000 KL to store surface runoff coming from Parnera hill and in use.

Company has harvest 4.68 lac KL rain water during 2022

#### **Energy Conservation**

Electricity forms one of the important components of energy used at Atul Limited. Major part of electricity used at Atul, is produced in the coal based captive power plant.

#### Energy Conservation Measures:

1. Replaced old motor by energy efficient motor of cooling tower pump.

2. Isolation of HP steam header – Unused HPS steam heard isolated from the main header and reduce the losses.

3. Motion sensors installation for office area light.

4. Replacement of CFL & SVL lamp by LED lamp.

5. Temperature controller installation for cooling tower fans.

6. Optimisation of chilled brine usage and distribution – Used chilled water instead of chilled brine.

7. Steam condensate recovery – Condensate of some equipment given to the condensate recovery tank and used as Autoclave CT make up.

8. Existing agitator replaced with energy efficient agitator.

Page **32** of **33** 

### Annexure : 5

S.N	Parameter	Recurring Cost per annum (Rs. in lacs) 2022-2023
1	Air Pollution Control	
2	Liquid Pollution Control	4334
3	Environmental Monitoring and Management	51
4	Solid waste Disposal	285
5	Occupational health	35
6	Green belt	25
Total		4730

Details of Investment for Environment Protection for the year 2022-2023

Page **33** of **33**