

Period: April 2022 to September 2022

## Project: Expansion in manufacturing plant of 'synthetic organic chemicals' [API and API intermediate]

Sr.	Condition	Compliance			
No					
A. C	A. Conditions				
A.1 9	A.1 Specific Condition:				
1	PP shall comply conditions pf any Noted and compliance assured				
	subsequent amendment or expansion				
	or change in product mix, after the 30 <sup>th</sup>				
	March 2021, considered as per the				
	provisions in force at that time as				
	mentioned in the Notification vide S.O.				
	1223 (E) dated 27/03/2020 and S.O.				
	3636 (E) dated 15/10/2020.				
2	PP shall carried out proposed	Noted and compliance assured			
	project/activities in respect of Active				
	Pharmaceutical Ingredients (API) as per				
	the amended EIA Notification vide S.O.				
	1223 (E) dated 27/03/2020 and any				
	subsequent amendments.				
3	PP shall submit six monthly compliance	Noted and will be assured			
	report of Environmental Clearance	This is our 1 <sup>st</sup> compliance report. We assure to regularly submit half-yearly compliance			
	without fail and the same shall be	report in respect of the stipulated prior environmental clearance terms and conditions			
	critically assessed by the regulatory	through E-mail as well as in hard copy to the concerned regulatory authority, on or before			
	authority.	1 <sup>st</sup> June and 1 <sup>st</sup> December of each calendar year.			



Sr.	Condition	Compliance
No		
4	Waste water shall be fed in-house MEE only after providing adequate treatment in such a way that no pollutant get air borne during evaporation to avoid adverse impact on Human Health & Environment.	Noted and will be complied as project is in implementation stage.  The ZLD system is under commissioning and expected to be completed by December 15, 2022. ABL ETP has been commissioned and in use presently and treated effluent is being sent to Atul Ltd's for final discharge as per point 4 of EC F. No. J -11011/84/2009-IA II (I) dated April 9, 2009. Effluent trail is ongoing in the UF-RO system, and water followed by effluent trail will start next month in MEE to achieve ZLD.  At present, 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 of Atul Ltd for treatment.
		It may be please noted that we have still not started production as per the new EC.
5	Close loop solvent recovery system with adequate condenser system shall be provide to recover vapors in such a manner that recovery shall be maximum and recovered solvent shall be reused in the process within premises.	Noted and will be complied for proposed project Solvent recovery system has been already installed for existing project. All the reactors are equipped with vents/stacks, which are connected to either vapor recovery system consisting of condensers to get the maximum recovery, ejector/vacuum pumps and/or scrubbers. Recovered solvent is being reused in the process within premises.
6	Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines, LDAR Logbook shall be maintained.	Noted and compliance assured  We have installed Distributed Control System (DCS) for close loop automated transferring of materials. We have provided vapor recovery system with adequate capacity of condenser with chilled brine cooling to recover the maximum solvent. Solvent pumps are provided with mechanical seals and LDAR covered under procedure of preventive maintenance system.
7	PP shall maintain Complete Zero Liquid Discharge (ZLD) status all the time	<b>Noted and will be complied</b> with as the ZLD system is under commissioning and expected to be completed by December 2022. Effluent trail is ongoing in the UF-RO system, and



Sr. No	Condition	Compliance
	after expansion and there shall be no drainage connection from the premises and no waste water discharge outside premises by any means.	water followed by effluent trail will start next month in MEE. We assure that we will start production as per the new EC only after fully commissioning of ZLD system.
8	The unit shall submit the list of authorized end users of hazardous wastes along with MoU signed with them at least two months in advance prior to the commencement of production. In the absence of potential buyers of these items, the unit shall restrict the production of the respective items.	Noted and complied.  Presently, we are using captive facilities of Atul Ltd as per point 5 of EC F. No. J -11011/84/2009-IA II (I) dated April 9, 2009.  We have also obtained membership of SEPL for integrated common hazardous waste management facility which is valid up to 24/03/2027 and the same is attached for your ready reference.  **Certificate**  **Certificate**  **Certificate**  **Certificate**  **Certificate**  **Certificate**  **Continuo No. 1460 to 1600 to 1
9	PP shall obtain raw water permission for explanation project from competent authority before start expansion production activity.  PP shall not dig bore well within premises as per details submitted by PP and shall abstract raw water from	Noted and compliance assured. Water required for the proposed expansion project is being obtained from River water (Par River). Necessary permission is already obtained.  Noted and compliance assured. There is no ground water source (bore well or any) within industry premises.
11	ground water source, l.e. bore well within premises after obtain permission from CGWA.  PP shall strictly adhere and complying	Noted and compliance assured.



Sr.	Condition	Compliance
No		
	agreement made by PP for power and steam requirement for proposed project, form nearby sister concern unit M/s Atul Ltd as per agreement submitted by PP.	
12	Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water in case of any shut down of MEE.	Noted and will be complied
13	The PP shall developed green belt within premises (12855 m² i.e. 33% of the total plot area) as per the undertaking submitted before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.	Noted and compliance assured.  Green belt development and tree plantation is carried out inside the plant premises to increase the bio-diversity of the area. In future more plantations will be carried out. Photographs and details of existing greenbelt are given herewith for your ready reference.







Sr. No	Condition				Compliance
INO					
14	Unit shall	obtained	all	required	Not Applicable as acetic anhydride and any such chemicals are not being used by the unit



Sr.	Condition	Compliance
No		
	permissions from the Narcotics Control	till date.
	Bureau for manufacturing, storage and	Required permission from the Narcotics Control Bureau will be obtained prior use of Acetic
	handling of Acetic Anhydride & any	Anhydride & any such chemicals.
	such chemicals	
15. 9	Safety & Health :	
a)	PP shall provide Occupational Health	Noted and compliance assured.
	Center (OHC) as per the provisions	As the M/s. Atul Bio- Science Ltd. is situated in the Atul Complex, a mutual aid agreement
	under the Gujarat Factories Rule 68-U.	with neighboring parent company Atul Ltd is already done who is having well qualified
		resident doctors, whenever required instantly apart from nearby renowned hospitals.
b)	PP shall obtain fire safety certificate /	We have already applied for fire NOC.
	Fire No-Objection certificate (NOC)	
	from the concern authority as per the	
	prevailing Rules / Gujarat Fire	
	Prevention and Life Safety Measures	
	Act, 2016.	
c)	Unit shall adopt functional	Noted and compliance assured.
	operations/process automation system	Unit has adopted operational process automation system like DCS, PSVs, safety interlocks,
	including emergency response to	emergency on/off buttons, LEL detectors etc for early detection of emergency and eliminate
	eliminate risk associated with the	the risk in line with HAZOP study.
	hazardous processes.	
d)	PP shall carry out mock drill within the	Noted and compliance assured.
	premises as per the prevailing	Unit regularly conducts mock drills within the premises.
	guidelines of safety and display proper	Last mock drill was conducted on July 2, 2022.
	evacuation plan in the manufacturing	Report of the mock drill is attached herewith for your ready reference.
	area in case of any emergency or	
	accident.	



Sr.	Condition	Compliance
No		
		And Bischene Ltd  Souther 1998 Security Security  September 1, 100 Security Security Security  September 1, 100 Security Security Security  September 1, 100 Security Security  September 1, 100 Security Security Security Security Security  September 1, 100 Security
e)	PP shall obtain PESO permission for	Noted and compliance assured.
	the storage and handling of hazardous	PESO permission is already obtained for the storage
	chemicals. (if applicable)	and handling of class A and class C hazardous
		chemicals vide license no. P/HQ/GJ/15/41 (P9652),
		valid up to December 31, 2028. Copy of the same is
		attached herewith for your ready reference.  ***The control of the



exothermic reaction vessel safety.

Sr.	Condition	Compliance
No		
f)	Flame proof electrical fittings shall be	Noted and compliance assured.
	provided in the plant premises,	Electrical Flame Proof fittings has been provided as per hazardous area classification.
	wherever applicable.	
g)	PP shall install adequate fire hydrant	Noted and compliance assured.
	system within premises and separate	Unit has adequately provided fire hydrant system with dedicated fire water reservoir of
	storage of water for the same shall be	capacity approx. 877 m³ is provided.
	ensured by PP.	
h)	PP shall take all the necessary steps for	Noted and compliance assured.
	control of storage hazards within	All materials are stored as per approved compatibility matrix in dedicated warehouse
	premises ensuring incompatibility	only.
	storage raw material and ensure the	
	storage keeping safe distance as per	
	the prevailing guideline of the	
	concerned authority.	
i)	PP shall, take all the necessary steps	Noted and being ensured through regular safety audits, trainings, mock drills, SOPs,
	for human safety within premises to	providing appropriate PPE's etc.
	ensure that no any harm is caused to	
	any worker/employee or labor within	
	premises.	
j)	Unit shall provide water sprinkler to the	Not applicable as the unit is not using ammonia presently, and hence, storage is not
	ammonia storage cylinder	required. Water sprinkler or appropriate control system will be provided for ammonia
	_ ,	storage cylinder prior use and storage of the same.
k)	Unit shall provide safety valve and	Noted and compliance assured.
	rupture disc, as well as auto dump or	Photographs of the safety valve and rupture disc provided to the reaction vessels are
	autos quench/, suppress system for	attached herewith for your ready reference.
1		



Sr. No	Condition	Compliance
1)	Unit shall provide safety valve & rupture disc to the Hydrogenation vessel.	Noted and compliance assured. Unit has provided safety valve & rupture disc in all Hydrogenation vessel. Photographs of the same is attached herewith for your ready reference.
		Safety valve & rupture disc in Hydrogenation vessel



Sr.	Condition	Compliance			
No					
m)	Unit shall provide chlorine leakage control emergency kit and FRP hood with scrubber system for chlorine safety.	<b>Not applicable</b> as unit is provided appropriate safe		g chlorine presently. Hov	vever, we have
n)	Unit shall provide effective isolation for process area and storage of hazardous chemicals.	Noted and compliance ass Unit has already provided hazardous chemicals.		ss area and warehouse f	for storage of
o)	Unit shall provide adequate safety system such as water sprinklers, water curtains, foam pouring system etc. To restrict cascade fire emergency in solvent tank farm.	Noted and compliance ass The unit has already proving with proper earthing, flam Fire extinguishers, flame p	vided underground stora ne arresters, lightening a	rresters, fencing, Fire hyd	
A. 2	WATER				
16	Total water requirement for the project shall not exceed 598 KLD. Unit shall reuse 399.20 KLD treated waste water. Hence fresh water shall not exceed 198.80 KLD. It shall be met through	Noted and compliance ass The average total fresh we well within the limit. Mon portal on regular basis. De	ater consumption for the thly water consumption	reports are submitted o	
	from River water (Par River) and from	Month	Water consumption, m <sup>3</sup>		
	nearby municipal STPs. Prior		m³/month	m³/day	
	permission from the concerned	April 2022	2897	96.6	
	authority shall be obtained for	May 2022	2587	83.5	
	withdrawal of water.	June 2022	2527	84.2	
		July 2022	2241	72.3	
		August 2022	1685	54.4	
		September 2022	1292	43.1	
		Average	2205	72.3	



Sr.	Condition	Compliance				
17	The industrial effluent generation from the project shall not exceed 450.50 KLD after expansion.	The average total indu	Noted and compliance assured.  The average total industrial effluent generation for the report period is 20.4 m³/day only which is well within the limit. Details given in below table:			20.4 m³/day only
		Month	Wastew	ater generation	, m <sup>3</sup>	
		Monun	m³/month		m³/day	
		April 2022	422		14.1	
		May 2022	275		8.9	
		June 2022	570		19.0	
		July 2022	1085		35.0	
		August 2022	863		27.8	
		September 2022	527		17.6	
		Average	623.66		20.4	
		The maximum values of generation went beyon  Waste- water generation		Values for the April 2022 – S	iven below: e period September 2022	2
				Min.	Max.	Avg.
		Wastewater generation, m³/day	450.5	8.9	35.0	21.9
18	Industrial effluent shall be segregated into two streams (1) High COD and TDS effluent (2) Low COD and TDS effluent and it shall be managed as below.					



Sr.	Condition	Compliance
No	• Link COD and TDC officers (1.47	Natadayada ili ba asayadi adagtay sayagai si ayis sa af 71 Dagataya
	High COD and TDS effluent (147)	Noted and will be complied after commissioning of ZLD system.
	KLD):	At present, all the high COD streams are being diverted to recovery system rather than
	147 KLD, high COD effluent from	incineration. Streams containing Solvents, etc. are taken for the recovery of the same and
	process shall be treated in primary ETP	reused. Hence, there is no high COD waste water stream remaining.
	followed by solvent stripper and then it	
	shall be evaporated in in-house MEE	
	cum ATFD.137 KLD, MEE condensate	
	shall be further treated in Low COD	
	Stream ETP.  • Low COD and TDS effluent	Noted and will be complied after commissioning of ZLD system.
	(303.50 KLD):	Noted and will be complied after commissioning of ZED system.
	> 303.50 KLD, Low COD and TDS	Project work is under process. ZLD work is ongoing. Hence, lean effluent of COD <2000 ppm
	effluent from utility along with 137	is being sent to ETP of Atul Ltd for treatment final discharge as per point 4 of EC F. No. J
	KLD, MEE condensate shall be treated	-11011/84/2009-IA II (I) dated April 9, 2009.
	in ETP consist of primary, secondary	
	and tertiary ETP units. Treated effluent	
	shall be further passed through	
	ultra-filtration/RO plant and 399.20	
	KLD, RO permeate shall be reused	
	back in process while 44.30 KLD, RO reject shall be evaporated in in-house	
	MEE.	
19	Domestic waste water generation shall	Noted and compliance assured.
	not exceed 10 KL/Day for proposed	Domestic wastewater generated from existing as well as proposed project is being
	project and it shall be treated in STP.	disposed off through a septic tank/ ETP.
	Treated sewage shall be utilized for	
	gardening and plantation purpose	The average total domestic wastewater generation for the report period is 16 m³/day only



Sr. No	Condition	Compliance		
	within premises after achieving on-land discharge norms prescribed by the GPCB.	against consented quantity of 160 KL the limit prescribed in valid CCA order up to 30/06/2023. Details given in belo	no. GPCB/CCA-VSD-199(3	
		Month	Domestic wastewat	er generation, m <sup>3</sup>
		Month	m³/month	m³/day
		April 2022	1571	52.4
		May 2022	387	12.5
		June 2022	310	10.3
		July 2022	450	14.5
		August 2022	90	2.9
		September 2022	29	1.0
		Average	473	15.6
20	During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, it shall be stored within premises. There shall be no discharge of waste water outside the premises in any case.	Domestic wastewater is being dispose Hence, there is no discharge of wastew	vater outside the premises i	
21	Unit shall feed waste water to in-house MEE only after ensuring content of effluent for COD/VOC so as not to get air borne during evaporation in order to achieve no adverse impacts on Environment and Human Health.	Noted and will be complied as project in The ZLD system including UF-RO and completed by December 15, 2022. A borne or VOC emissions.	d MEE is under commissio	·
22	The unit shall provide metering facility	Noted and compliance assured		



Sr. No	Condition	Compliance
	at the inlet and outlets of ETP, RO, MEE and maintain records for the same.	Electromagnetic Flow meters has been provided at all the inlet and outlet streams for ETP (ABL) and UF-RO and log book is maintained regularly for ETP operation. Flow meter of MEE will be installed in next month.
		Photographs of the flow meter installed in ETP and UF-RO are attached herewith for your ready reference.
		ETP Inlet (ABL)  ETP Outlet (ABL)  (Treated effluent goes from ABL to Atul Ltd's ETP for final discharge)



Sr. No	Condition	Compliance		
		UF-RO Inlet	UF-RO Permeate	UF-RO Reject
		MEE	(Commissioning is under progre	ess)



Sr.	Condition	Compliance			
No	5	N			
23	Proper logbooks of ETP, chemical	Noted and compliance			
	consumption in Effluent treatment,			•	uantity and quality) and chemical
	quantity & quality of effluent sent to		basis. Separate	logbook for RC	and MEE will be maintained post
	MEE, quantity & quality of effluent	commissioning.			
	recycle back in process, power				
	consumption etc shall be maintained				
	and shall be furnished to the GPCB				
	from time to time.				
A.3	AIR:				
24	Unit shall not exceed fuel consumption	Noted and compliance	assured.		
	for DG set as mentioned below:	DG sets is being used	only as a power b	ackup only.	
	Sr. Source of emission With Capacity (meter) Type of Quantity of Fuel MT/Day Type of emissions i.e. Air Pollution Control Measures (APCM)	Details of HSD consum	ption in DG sets	given in below t	able:
	1 Steam from - Co-gen CPP of Atul Limited	N 4 41-	HSD con	sumption	
	2 DG Set (50 11 HSD 12 Lit/Hrs Adequate Stack height	Month	Litre/month	KL/month	
	Proposed  No additional Filip gas stack proposed	April 2022	0	0	
	Pholi conside admirzi - A DOSE vitt. 8	May 2022	0	0	
		June 2022	6	0.006	
		July 2022	5	0.005	
		August 2022	0	0	
		September 2022	0	0	
25	Unit shall provide adequate APCM with	Not applicable as stea	m will be supplie	d by parent con	npany Atul Ltd. Hence, no flue gas
	flue gas generation sources as		• •		nt is provided for stack attached to
	mentioned above.	DG set.		3	·



Sr. No	Condition	Compliance
26	Unit shall provide adequate APCM with Process gas generation sources as mentioned below:  Specific Source of entission no large of the Process (SO2, HCI, Cletc) (meter)  Marrie of the Product & (SO2, HCI, Cletc) (meter)  MPP: HCI, SO2, NH5 12 Water & Alkaline Scrubber (APCM)  MPP3 HCI, SO3, NH5 12 Water & Alkaline Scrubber (APCM)  MPP3 HCI, SO3, NH5 12 Water & Alkaline Scrubber (APCM)  MPP3 HCI, SO3, NH5 12 Water & Alkaline Scrubber (APCM)  MPP3 HCI, SO3, NH5 12 Water & Alkaline Scrubber (APCM)  MPP4 HCI, SO3, NH5 12 Water & Alkaline Scrubber (APCM)  MPP5 HCI, SO3, NH5 12 Water & Alkaline Scrubber (APCM)  MPP5 HCI, SO3, NH5 12 Water & Alkaline Scrubber (APCM)  MPP6 HCI, SO3, NH5 12 Water & Alkaline Scrubber (APCM)  MPP6 HCI, SO3, NH5 12 Water & Alkaline Scrubber (APCM)	Noted and compliance assured. Water and alkaline scrubber are installed as Air Pollution Control Measures (APCM) having stack height of 12 meters. Photograph is attached herewith for your ready reference.
27	The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e g. Directors of Industrial Safety & Health). Following indicative guidelines shall also be followed to reduce the fugitive	Noted and compliance assured.  Work Zone Environment Monitoring is carried out and record maintain in Form No. 37.  Summary of results of VOC monitoring is given in below table:



Sr. No	Condition	Compliance								
	emission.	Location	Permissible	Values for the period						
				limit mg / Nm³	Apr-22	May-22		Jul- 22	Aug -22	Sep- 22
		Ground Floor	Chlorine	3	0.8	ND	ND	ND	ND	ND
		MPP2	Toluene	150	120	98.2	128	75	104	90
	concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.  Air borne dust shall be controlled with water sprinklers at suitable	asphalted or poreference.							TOT YOU	reduy



Sr. No	Condition	Compliance
	A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.	We have planted trees along the boundary wall and both side of road. Photographs and details of existing greenbelt are attached in point no. 13 for your ready reference.
28	Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.	Noted and compliance assured.  Work zone environment and ambient air monitoring is carried out monthly by NABL accredited laboratory and records are maintained.  Summary of results of VOC monitoring and ambient air monitoring are given in point no. 27 and 31 respectively.
29	For control of fugitive emission, VOCs, following steps shall be followed:	
a.	Closed handling and charging system shall be provided for chemicals	Noted and compliance assured.  All reactors are in close loop and connected with condensers having cooling tower water, chilled water or brine water supply for control of fugitive emission.
b.	Reflux condenser shall be provided over Reactors/Vessels	Noted and compliance assured.  Photographs of the reflux condenser provided over reactors/vessels are attached herewith for your ready reference.



Sr. No	Condition	Compliance	
C.	Pumps shall be provided with	Noted and compliance assured.	
	mechanical seals to prevent leakages	Reactor and solvent handling pump do h Photographs of the same are attached herew	ave <b>mechanical seals</b> to prevent leakages. ith for your ready reference.
		Reactor	Solvent handling pump



Sr. No	Condition	Compliance
d.	Air borne dust at all transfers operations points shall be controlled either by spraying water or providing enclosures	No such aspect (air borne dusty operation) is there in our plant. All the processes are being carried out in closed vessels only.
30	Solvent management shall be carried out as follows:	
	Measures shall be taken to reduce the process vapours emissions as far as possible. Use of toxic solvents shall be minimum. All venting equipment shall have vapour recovery system.	Noted and compliance assured.  Reactions are carried out in closed reactors with primary and secondary condenser to control solvent vapour. Chilled water is used in condenser. As far as practicable we will avoid using toxic solvents or minimizing its use.
	Reactor shall be connected to adequate chilling system to condensate solvent vapours and reduce solvent losses	Noted and compliance assured. Reactors are connected to chilled brine condenser system.
	Reactor and solvent handling pump shall have mechanical seals to prevent leakages.	Noted and compliance assured.  Reactor and solvent handling pump do have mechanical seals to prevent leakages.  Photographs of the same are attached in point no. 29 (c) for your ready reference.
	The condensers shall be provided with sufficient HTA and residence time so as to achieve maximum solvent recovery.	Noted and compliance assured.  The condensers are provided with sufficient HTA and residence time to achieve maximum solvent recovery.
	Solvents shall be stored in a separate space specified with all safety	Complied. The unit has already provided underground storage tanks with secondary containment to



Sr.	Condition	Compliance
No No	measures.  Proper earthing shall be provided in all	restrict fire emergency in solvent tank farms. Photographs of the same are attached herewith for your ready reference.
	the electrical equipment wherever solvent handling is done.	Double earthing is provided and regular checking and testing of the same is being done and recorded.
	Solvent storage and handling area shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.	Noted and compliance assured. Solvents are being stored in PESO approved tank farms complying with all the stipulated conditions including flameproof electrical equipment. Breather valve is also provided on solvent storage tank.
31	Regular monitoring of level concentration of PM10, PM2.5, SO2, NOX, HC, NH3 and VOC shall be carried out in the impact zone and its records shall be maintained. Ambient	Noted and compliance assured.  We are regularly doing ambient air monitoring through NABL approved agency at 02 locations at a time. We have provided ambient air monitoring stations in line with guidelines of CPCB/GPCB.



Sr.	Condition	Com	pliance								
No											
	air quality levels shall not exceed the	Sum	mary of ambient monito	oring is g	iven in be	low table	:				
	standards stipulated by the GPCB. If at				Near MP	P 2 Plant					
	any stage these levels are found to					oncentratio	n in Ambier	nt air in ug/	M <sup>3</sup>		
	exceed the prescribed limits, necessary additional control measures shall be	S No.	Pollutant	GPCB limits	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	
	taken immediately. The location of the	1.	Sulphur Dioxide (S02)	80	16.2	12.3	11.4	9.8	5.6	9.4	
	stations and frequency of monitoring	2.	Nitrogen Dioxide (N02)	80	27.8	21.2	23.2	18.3	14.2	17.6	
	shall be decided in consultation with the GPCB.	3.	Particulate Matter (Size less than 10 um) OR PM10	100	88.4	81.7	87.4	71.6	61.4	81.4	
		4.	Particulate Matter (Size less than 2.5 um) OR PM2.5	60	51.7	48.2	43.1	38.4	30.9	49.2	
						P 1 Plant			_		
		S			C	oncentratio	n in Ambier	nt air in ug/	M <sup>3</sup>		
		No.		GPCB limits	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	
		1.	Sulphur Dioxide (S02)	80	14.8	17.2	13.2	10.4	6.4	10.6	
		2.	Nitrogen Dioxide (N02)	80	33.7	23.4	26.6	20.2	15.8	21.2	
		3.	Particulate Matter (Size less than 10 um) OR PM10	100	99.8	93.6	46.2	78.9	66.8	77.9	
		4.	Particulate Matter (Size less than 2.5 um) OR PM2.5	60	56.7	51.4	86.2	41.6	35.3	44.8	



	Condi	tion						Comp	liance					
_	20115		200		A / A C									
1 5	SOLID/	HAZAF	RDO	ius v	VAS	ΙĿ								
T	All the	e haza	rdou	JS W	aste	man	agement	Noted	and will be com	plied.				
							entioned			•	ur authorizatio	n as soon as I	oroject is commission	ned.
	below												mises as per valid Co	
			10						/CCA-VSD-199(		•	•	·	
	Sr. Type/ No. Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product	No. as per HWM	Existing	Quantity Proposed	Total	Method of Disposal		,	,		•		
	ETP     Waste     MEE Selt	ETP	rules, 2016 35.3	0.0*	1200 MT/Annum 8767	1200 MT/Annum 11326	Göllection, storage & disposal at TSDF site approved by GPCB	S	I I am and a		Consented	Actual		
	Distillation residue- Process     Distillation residue- Stripper	Process	28.1	20.64 MT/Annum	MT/Annum 4002 36 MT/Annum 624 MT/Annum	MT/Annum 4023 MT/Annum 936 MT/Annum	Collection, storage & disposal at CHWIF or co-processing.	No.	Hazardous waste	Cat.	Generation Qty	Generation Qty	Mode of Dispo	sal
	5 Inorganic salt	Process	28.1	0.0	1144 MT/Annum 78	1144 MT/Annum 78 MT/Annum	Collection, storage & disposal at TSDF site approved by GPCB.  Collection, storage & -		5			4.137 MT	Incineration	at
	Activated carbon 7 Spent catalyst	Process	28.2	0.0	MT/Annum 30 MT/Annum	MT/Annum 30 MT/Annum	disposal at CHWIF or a co-processing.  Collection, storage & return back to	1	Process	28.1	20.64	(Apr-22 to	incineration system	em of
	8 Spent solvent	Process	28.6		66264 MT/Annum	66264 MT/Annum	supplier for regeneration. Collection, storage, Distillation and reuse		waste		MT/Year	Sept-22)	Atul Ltd	
	Discarded containers, barrels/	Storage & handling of Raw	33.1	6000 Nos./Annum 26.4	18000 Nos./Annum 79.2 MT/Annum	2400 Nos./Annum 105.6	in process/selling to actual user Collection, storage and reuse for packing of products or		Discarded		26.4		Selling to aut	horized
	Liners 10 Off		28.4	MT/Annum Wh	MT/Annum atsoever genera	MT/Annum ation	disposal by selling to approved recycler. Collection, storage & disposal at CHWIF.	2	Containers/	33.1	MT/Year		recycler	
	Specific Products  11 Date expired product  12 Used		28.5	Wh	atsoever genera	ition			Bags/ Liners		WIT/TEGI			
	Oil	D G Sets & other machineries	5.1	0.5 KL/Annum	0.5 KL/Annum	0.6 KL/Annum	Collection, storage & use within premises as lubricant/sell to registered recycler.				153		Selling to unit wh	
	13 Scrubber Blow Down 14 Aluminum	Scrubber Process of 4	-	780 KL/Annum	3120 KL/Annum 402	3900 KL/Annum 402	Collection, storage and treated in ETP Collection, storage,	3	HCI (30%)	B15	MT/Month		obtained rule	9
	Hydroxide 15 Zinc	MAP, 4 MEP					transportation and				1V11/1VIOTICIT		permission.	
	16 Calcium Phosphate	Process of 5 HMT Process of N- Methy-1[2-	-	-	91.2	209.6 91.2	disposal by selling to actual users under Rule-9 of Haz. waste							
	17 Benzyl Alcohol	(Propane-2YL)- 1,3-Thiazole-4- YL]Methanamine Process of (2S.3S.5S)-2-	-		456	456								
		Amino-3- Hydroxy-5-(Tert- Butyloxy Carbonyl)												
		Amino-1,6- Diphenyl Hemi Succinic Acid												
	18 4-Nitro Phenol Existing of	Process of 4 NPTC	- entral Side E	TP with other	37.5	37.5	d by other units of							
	** There is n	ox. Hence ETP slud	set up and :	after expansis	on total blob C	ence Limited.	Ant going to MEE after							
		e is no stripper for	nuty and tota	an quantity of	Salt is differ.									
	stripper	hence expansion o	quantity and	total quantit	expansion, tot v of Residue is	as nigh COD e	Muent going to							



Sr. No	Condition	Compliance
33	Authorized end-users shall have permissions from the concerned authorities under the Rule 9 of the Hazardous and Other wastes (Management and Trans boundary Movement) Rules 2016.	Noted and compliance assured.  Presently, we are not generating any waste that needs to be disposed off under the Rule 9 of the Hazardous and Other wastes (Management and Trans boundary Movement) Rules 2016 according to valid consent order no GPCB/CCA-VSD-199(3)/ID: 33661/531257, valid up to 30/06/2023.
34	Unit shall explore the possibilities for environment friendly methods like co-processing of hazardous waste for disposal of Incinerable & land fillable wastes before sending to CHWIF & TSDF sites respectively.	Noted.
A. 5	OTHER:	
35	The project proponent shall allocate the separate fund of Rs. 76.50 Lakhs as committed before SEAC. The entire activities proposed under CER shall be part of the Environment Management Plan (EMP) as per the MoEF& CC's OM no. F. No. 22-65/2017-IA III dated 30.09.2020. This shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly	Noted and will be complied. Please note that the project is in implementation stage. We assure you to carry out CER activities as committed.



Sr. No	Condition	Compliance				
	compliance report and to the District Collector. The monitoring report shall be posted on the website of the project proponent.					
36	All the environmental protection measures and safeguards proposed in the Form-1 & PFR submitted by the project proponent and commitments made in their application shall be strictly adhered to in letter and spirit.	Noted and compliance assured.  We have taken and will continue to implement all the environmental protection measures and safeguards proposed in the Form-1 and PFR and are strictly adhering to them in true spirit.				
B. Gl	B. GENERAL CONDITIONS :					
B1.	31. CONSTRUCTION PHASE:					
37	Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices.	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '				
38	Project proponent shall ensure that surrounding environment shall not be affected due to construction activity. Construction materials shall be covered during transportation and regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.	Noted and compliance assured.  Regular water sprinkling is being done near construction site to controlling fugitive emission of dust.				



Sr.	Condition	Compliance
No 39	All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.	<ul> <li>Noted and compliance assured.</li> <li>Adequate sanitary and hygienic measures has been provided at the site and will be maintained throughout the construction phase as below: <ul> <li>Clean up of jobsite after major tasks or at least daily;</li> <li>Avoiding the build-up of hazardous, flammable, or combustible materials.</li> <li>Keeping walkways, stairs, and work areas clear.</li> <li>Separate bathroom facilities are provided for male and female workers on a job site. Washing facilities on the site is provided for workers to wash their hands and avoid cross-contamination before eating, drinking or heading home for the day. Hence, workers can wash away harmful substances and use the washing area to service and decontaminate personal protective equipment (PPE).</li> </ul> </li> </ul>
40	First Aid Box shall be made readily available in adequate quantity at all the times.	Noted and compliance assured.  First Aid boxes have been provided in adequate quantity.
41	The project proponent shall strictly comply with the building and other construction workers (Regulation of employment & conditions of service) Act 1996 and Gujarat rules made there under and their subsequent amendments. Local bye-laws of concern authority shall be letter ans spirit.	We abide to comply by the Building and other Construction Workers (Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments.
42	Ambient noise levels shall conforms to residential standards both during day	Noted and compliance assured.  We are regularly doing noise monitoring through NABL approved agency.  Summary of noise monitoring is given in below table:



Compliance Sr. Condition No and night. Incremental pollution load on the ambient air and noise quality shall Sr. Date of Permissible Test Sampling location Unit Results Parameter closely monitored during No. Monitoring limits construction phase. 11/04/2022 74.5 16/05/2022 81.4 3 06/06/2022 Utility Near 81.8 Nosie dB (A) 85 Compressor 4 19/07/2022 76.6 5 18/08/2022 80.3 17/09/2022 81.4 Use of Diesel Generator (DG) sets 43 Noted and compliance assured. We have not proposed any new DG sets. Existing DG sets are being used in case of power during construction phase shall be failure only. equipped with strictly acoustic Noise Abatement: Enclosed with acoustic enclosure type DG sets are installed. enclosure and shall conform to the EPA Rules for air and noise emission Fuel: Fuel used in DG sets conforms to Environment (Protection) rules prescribed for air and standards. noise emission standards. Safe disposal of waste water and Noted and compliance assured. 44 The wastewater generated is being disposed off through a septic tank/ETP and solid waste municipal solid wastes generated generated is being properly collected, segregated and disposed on regular frequency. during the construction phase shall be ensured. Noted and compliance assured. 45 ΑII topsoil excavated durina All the top soil excavated during construction work is utilized in horticulture/landscape construction activity shall be used in development within the premises. horticultural landscape development within the project site.



amendments from time to time.

49

"Wind - breaker of appropriate height

i.e. 1/3rd of the building height and

Compliance Sr. Condition No Excavated earth to be generated during Noted and compliance assured. 46 All the top soil excavated during construction work is utilized in horticulture/ landscape the construction phase shall be utilized within the premises to the maximum development within the premises. extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during construction phase shall not create adverse effect on neighbouring communities. Project proponent shall ensure use of Noted and compliance assured. 47 Fly Ash bricks is being used along with Ready Mix Concrete [RMC] and fly ash paver blocks eco-friendly building materials including fly ash bricks, fly ash paver for the construction. blocks, Ready Mix Concrete [RMC] and lead free paints in the project. Fly ash shall be used in construction We shall explore feasibility for usage of fly ash in construction activities, shall ensure 48 wherever applicable as per provisions compliance of notification under E.P. Act, 1986 and its subsequent amendments from time of Fly Ash Notification under the E.P. to time. Act, 1986 and its subsequent

Temporary wind shielding had been provided and barricades of adequate height also had

Noted and complied.



out without adequate dust mitigation

Dust mitigation measure shall be

prominently

construction site for easy public

at

the

measures in place.

displayed

54

Compliance Sr. Condition No maximum up to 10 meters shall be been provided along the periphery of the project site. provided. Individual building within the project site shall also be provided with barricades. "No uncovered vehicles carrying Noted and is being ensured that the materials are covered using carpet cloth during 50 transportation to control the fugitive emission. construction material and waste shall be permitted." "No loose soil or sand or construction & Noted and is being ensured. 51 demolition waste or any other construction material that cause dust shall be left uncovered. Uniform piling and proper storage of sand to avoid fugitive emissions shall be ensured." Roads leading to or at construction site Noted and ensured. 52 must be paved and blacktopped (i.e. metallic roads). No excavation of soil shall be carried Utmost measures are being adopted to prevent dust at our construction sites before 53 carrying out any excavation activity.

Noted for compliance.



Sr. No	Condition	Compliance			
	viewing.				
55	Grinding and cutting of building materials in open area shall be prohibited.	The stated condition is noted and being implemented.			
56	Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.	Noted.			
57	Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site. (If applicable).	Noted.			
B.2 (	B.2 OPERATION PHASE:				
B.2.1	B.2.1 WATER:				
58	The water meter shall be installed and records of daily and monthly water consumption shall be maintained.	Noted and compliance assured.  Monthly water consumption reports are submitted onto GPCB XGN portal on regular basis.			
59	All efforts shall be made to optimize water consumption by exploring Best Available Technology (BAT). The unit	We have taken a note of the same and will explore the same.			



Sr. No	Condition	Compliance
	shall continuously strive to reduce, recycle and reuse the treated effluent.	
B.2.2	2 AIR:	
60	In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & it's APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance reports.	
61	Acoustic enclosure shall be provided to the DG sets (if applicable) to mitigate the noise pollution and shall conform to the EPA Rules for air and noise emission standards.	Noted and compliance assured.  We have not proposed any new DG sets. Existing DG sets are being used in case of power failure only.  Noise Abatement: Enclosed with acoustic enclosure type DG sets are installed.  Fuel: Fuel used in DG sets conforms to Environment (Protection) rules prescribed for air and noise emission standards.
62	Stack/Vents (Whichever is applicable) of adequate height shall be provided as	Noted and compliance assured.  Adequate height of stack provided as per prevailing norms.



Sr. No	Condition	Compli	ance								
	per the prevailing norms for flue gas emission/Process gas emission.										
63	Flue gas emission & Process gas emission (If any) shall conform to the standards prescribed by the GPCB/CPCB/ MoEF&CC. At no time, emission level should go beyond the stipulated standards.	There is no flue gas emission. Two Stage Water + Caustic Scrubber are provided to control emissions.  We are regularly doing process ags emission through MoEF&CC & NABL approved agency.				ency.					
						IPP 1 Plant					
		S No.	Pollutant	Concentration in Ambient air in ug/M <sup>3</sup>							
		5110.	rollatarit	GPCB limits	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	
		1.	Chlorine (Cl <sub>2</sub> )	09	4.90	3.70	4.60	5.2	6.2	4.90	
		2.	Hydrochloric acid (HCl)	20	5.03	4.90	5.71	5.76	6.37	5.03	
64	All the reactors/vessels used in the manufacturing process shall be closed to reduce the fugitive emission.	Noted and compliance assured.  All reactors are in close loop and connected with condensers having cooling tower water, Chilled water or Brine water supply for control of fugitive emission.			wer						
B.2.3	B.2.3 HAZARDOUS/SOLID WASTE:										
65	The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous	We ho	and compliance ive taken autho ous wastes vide	rization	of GPCB						



Sr.	Condition	Compliance	
No	waste in accordance with the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment /storage/ disposal of hazardous wastes.	complying with the rules and regulations with red Hazardous waste in accordance with the Hazardou and Trans boundary Movement) Rules 2016, as may For EC project, we will amend our authorization as so	us and Other Wastes (Management be amended from time to time.
66	Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.	Noted and compliance assured. We have provided dedicated facility for treatment/ waste as per Hazardous Waste Rules, 2016 as may	
67	The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)	Noted and complied. Presently, we are using captive facilities of Atul Ltd as per point 5 of EC F. No. J -11011/84/2009-IA II (I) dated April 9, 2009.  We have also obtained membership of SEPL for integrated common hazardous waste management facility which is valid up to 24/03/2027 and the same is attached for your ready reference.	



Sr. No	Condition	Compliance
68	Trucks/Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.	Noted and compliance assured.  We have agreement with authorized vendors which complies with the provisions under the Motor Vehicle Act, 1988, and rules made there under for transportation of Hazardous Waste.
69	The design of the Trucks/tankers shall be such that there is no spillage during transportation	Noted and being ensured.
70	All possible efforts shall be made for Co-Processing of the Hazardous waste	Noted.



Sr. No	Condition	Compliance
	prior to disposal into TSDF/CHWIF	
71	Management of fly ash (If any) shall be as per the Fly ash Notification 2009 & its amendment time to time and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.	It may be please noted that there is no fly ash generation from unit.
B.2.4	4 SAFETY	
72	The occupier/manager shall strictly comply the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963.	We are complying with the stated condition and submitting required compliance to DISH.



Sr.	Condition	Compliance
No 73	The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented.	Complied. Following measures are taken  • MSDS for all chemicals.  • Licenses for petroleum product, gas cylinders, poison/toxic chemical.  • Plan approval from DISH.  • Factory license from DISH.  • A mutual aid agreement with neighboring parent company Atul Ltd to render all emergency services.  • On site emergency plan and offsite mutual aid.  Etc.
74	Main entry and exit shall be separate and clearly marked in the facility	Noted.  Adequate width of road (excluding greenbelt) is provided for ease in transportation.  Separate entry and exit is provided.
75	Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.	Noted and compliance assured.  A clear margin excluding greenbelt has been provided for free movement of fire tender/ emergency vehicle around the premises.
76	Storage of flammable chemicals shall be sufficiently away from the production area.	Noted and compliance assured.  Dedicated storage facility of flammable chemicals provided at safer distance from production area as per PESO approval.



Sr. No	Condition	Compliance
77	Sufficient number of fire extinguishers shall be provided near the plant and storage area.	Noted and compliance assured. We have provided approx. 100 Nos of fire extinguishers (Foam type, CO <sub>2</sub> type, ABC type) across the site to cover all area.
78	All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.	Noted and compliance assured.  All necessary precautionary measures are taken to avoid any kind of accident during storage and handling of toxic/hazardous chemicals. HAZOP and Risk assessment system is in place. Induction/Refresher/specific training system is carried out on regular basis for all employees.
79	All the toxic/hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this regard shall be obtained before commencing the expansion activities	Noted and compliance assured.  All the toxic/hazardous chemicals are stored in optimum quantity and all necessary permissions are obtained with regards to the storage and handling of the same.
80	The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.	Noted and compliance assured.  HAZOP/HIRA/ Audit is the tool used for carrying out risk assessment and mitigation measures. Safety as well as Environment audit is also being carried out.
81	Only flame proof electrical fittings shall be provided in the plant premises.	Noted and compliance assured.  Electrical Flame Proof fittings has been provided as per hazard area classification.
82	Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks/ containers	Noted and compliance assured.  We have already identified the toxic chemicals and following proper handling and control procedure during handling of the same. We are using required chemicals in very optimum



C-	Condition	Compliance
Sr. No	Condition	Compliance
140	instead of one single large capacity tank/containers.	quantity.
83	All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.	Noted and compliance assured.  A dyke is provided to contained spill to all the existing storage tanks. Mechanical seals are installed on existing pumps, mixers, and reactors.
84	Handling and charging of the chemicals	·
	shall be done in closed manner by	Filling is done on weighing balance manually but in controlled manner to minimize

spillage. All reactors are in close loop and connected with condensers having cooling tower



Sr.	Condition	Compliance
No		
	pumping or by vacuum transfer so that	water, Chilled water or brine water supply for control of fugitive emission.
	minimal human exposure occurs	
85	Tie up shall be done with nearby health	Noted and compliance assured.
	care unit/ doctor for seeking immediate	As the M/s. Atul Bio- Science Ltd. is situated in the Atul Complex, a mutual aid agreement
	medical attention in the case of	with neighboring parent company Atul Ltd is already done who is having well qualified
	emergency.	resident doctors, whenever required instantly apart from nearby renowned hospitals.
86	Personal Protective Equipment (PPEs)	Noted and compliance assured.
	shall be provided to workers and its	We are providing necessary PPE's, respiratory systems to all the employees of the
	usage shall be ensured and supervised.	company. We have prepared the SOP for the use of PPE's and training for the same is being given to all the employee regularly.
87	First Aid Box and required Antidotes for	Noted and compliance assured.
0,	the chemicals used in the unit shall be	First aid box and required antidotes for the chemicals used in the unit area are available in
	made readily available in adequate	adequate quantity.
	quantity.	
88	Training shall be imparted to all the	Noted and compliance assured.
	workers on safety and health aspects	Regular training is being provided on handling of chemicals to all workers. Induction /
	of chemicals handling.	Refresher / specific topic related training is being regularly conducted on various topics.
	3	
		Last six month topics covered i.e.:  > Emergency siren testing
		<ul><li>Work place safety</li></ul>
		➤ SCBA donning procedure
		➤ Process safety



the plant area shall be kept well within

the standards by providing noise control measures including engineering

Compliance Sr. Condition No Occupational health surveillance of the Noted and compliance assured. 89 Pre-employment & periodic medical examinations as per statutory requirement are regularly workers shall be done and its records conducted & records of the same are maintained in Form No. 32 & 33 as per Gujarat Factory shall be maintained. Pre-employment Rules, 1962 respectively. and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules. Transportation of hazardous chemicals Noted and compliance assured. shall be done as per the provisions of the Motor Vehicle Act & Rules. Noted and compliance assured. The company shall implement all 91 Risk assessment & mitigation is a part of plant design. preventive and mitigation measures suggested in the Risk Assessment Report. Necessary permissions from various Noted and compliance assured. 92 We have obtained necessary permission from various statutory authorities as applicable. statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project. B.2.5 NOISE: The overall noise level in and around Noted and compliance assured. 93

We are regularly doing noise monitoring through NABL approved agency.

Summary of noise monitoring is given in below table:



Sr. No	Condition	Compli	ance						
	controls like acoustic insulation hoods, silencers, enclosures etc. on all sources	Sr. No.	Date of Monitoring	Test Parameter	Unit	Sampling location	Results	Permissible limits	
	of noise generation. The ambient noise	1	11/04/2022				74.5		
	level shall confirm to the standards	2	16/05/2022				81.4		
	prescribed under The Environment	3	06/06/2022	Nosie	dB (A)	Utility Near	81.8	- 85	
	(Protection) Act, 1986 & Rules.	4	19/07/2022	110310	GD (A)	Compressor	76.6		
		5	18/08/2022				80.3		
		6	17/09/2022				81.4		
B.2.6	3.2.6 CLEANER PRODUCTION AND WASTE MINIMISATION:								
94	The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.	We ha continu below:	ously working Optimisation of Replacement Avoid use of t Optimisation	art R&D ce g on such co of use of wa of hazardou oxic materia of exother	oncept. I ter in plo s raw m I. nic rea	ith latest research Drug is developed value of solvent in man aterial with less haz action. Control on s will improve yield.	with such b nufacturing ardous raw	oasic philosop activity. v material.	ohy as
95 a.	The company shall undertake various waste minimization measures such as:  Metering and control of quantities of active ingredients to minimize waste.	• ,	meters to con	ingredients trol on quar proper weig	ntity as   ghment	ng charged through per the stoichiometr only. All these mete ined.	y. All the s	solid ingredier	nts are



	0 1111			
Sr.	Condition	Compliance		
No				
b.	Reuse of by-products from the process	<ul> <li>Recovered solvents are being used as raw material in further steps.</li> </ul>		
	as raw materials or as raw materials substitutes.	• Filling is done on weighing balance manually but in controlled manner to minimize spillage.		
C.	Use of automated and close filling to minimize spillages	• All reactors are in close loop and connected with condensers having cooling tower water, Chilled water or Brine water supply for control of fugitive emission.		
d.	Use of close feed system into batch reactors.	• 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.		
e.	Venting equipment through vapour recovery system.	• Many equipment like reactors, spray dryers, condenser wherever necessary are being cleaned with high pressure sparger/jet to reduce waste water generation.		
f.	Use of high pressure hoses for cleaning to reduce wastewater generation.	<ul> <li>Preventive Maintenance of Equipment's is being carried out as per Standard Operating Procedure.</li> </ul>		
g.	Recycling of washes to subsequent batches.			
h.	Recycling of steam condensate.			
i.	Sweeping/mopping of floor instead of floor washing to avoid effluent generation.			
j.	Regular preventive maintenance for avoiding leakage, spillage etc.			
B.2.7	B.2.7 GREEN BELT AND OTHER PLANTATION:			



Sr.	Condition	Compliance
No		
96	The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in consultation with the GIDC/ GPCB and submit an action plan of plantation for next three years to the GPCB.	Noted and compliance assured.  Green belt development and tree plantation is carried out inside the plant premises to increase the bio-diversity of the area. In future more plantations will be carried out.  Photographs of existing greenbelt are attached in point no. 13.
97	Drip Irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.	Noted and compliance assured.  We are using low-volume, low-angle sprinkler system for the green belt development within the premises.
B.3 (	OTHER CONDITION :	
98	Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 22-34/2018-IA III dated 09/08/2018 for Pharmaceutical and Chemical industries mentioned at (Sr. no XX).	Noted and compliance assured.
99	The provisions of the Solid Waste	Noted and being ensured.



Sr. No	Condition	Compliance
	Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and the Plastics Waste Management Rules, 2016 shall be followed.	
100	Rain water harvesting (Off-site) shall be undertaken to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter. (Applicable for units consuming ground water 250 KLD in line with the prevailing guidelines of SPCB).	Not applicable as unit is not consuming ground water.
101	The unit shall join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the Industrial Association or GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDC.	Noted.



Sr.	Condition	Compliance
No 102	Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting in addition the provision for solar water heating system shall also be provided.	
103	The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.	Noted and compliance assured.  Dedicated green belt area is embarked for plantation.
104	All the commitments / undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.	Noted. All the recommendations / commitments made during the appraisal of the project will be implemented for EC project.
105	The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.	Noted.  Unit assures to comply with any additional conditions that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of environmental protection and management.
106	In the event of failure of any pollution	Noted. Unit has provided the system to close down the operation in the event of failure of any



Sr. No	Condition	Compliance
	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.	pollution control equipment.
107	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.	Noted and being ensured.  We have been following all the conditions given by GPCB.  The GPCB's Schedule 1 environment auditor also verifies compliance with specified conditions on a regular basis.
108	During material transfer there shall be no spillages and garland drain shall be constructed to avoid mixing of accidental spillages with domestic waste water or storm water.	Noted and compliance assured.  Liquid material transfer is done in closed system (pipelines) or closed containers/ barrels.  There are separate drain constructed for domestic waste water/storm water and waste water to avoid mixing of accidental spillages with domestic wastewater or storm water.
109	Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	Noted and compliance assured. Pucca flooring/ impervious layer is provided in the work areas, chemical storage areas and chemical handling areas to prohibit soil contamination.
110	Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.	Noted and compliance assured. Unit is using only mechanical seal pumps in order to avoid the leakages.



Sr.	Condition	Compliance
No 111	No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.	Noted.  No further expansion or modifications will be carried out in the plant without obtaining prior Environment clearance from the concerned authority.
112	The above conditions will be enforced, inter-alla under the provisions of the Water (Prevention & Control of Pollution Act, 1974, Air (Prevention & 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.	Noted and compliance assured.  We have taken all the necessary permissions under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Trans boundary Movement) Rules, 2008 vide consent order no GPCB/CCA-VSD-199(3)/ID: 33661/531257, valid up to 30/06/2023 and PLI policy vide UIN number - IRDAN190P0076100001, valid up to 31/03/2023 11:59:59 PM under the provision of the Public Liability Insurance Act, 1991 along with their amendments and rules.
113	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.	Agreed and Noted.
114	The project management shall ensure that unit complies with all the	Noted and compliance assured. Unit complies with all the environment protection measures, risk mitigation measures and



Sr. No	Condition	Compliance				
	environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.	safeguards recommended in t	he EMP report and Risk As	ssessment study report.		
115	adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for	Noted and compliance assured.  Adequate funds are allocated for compliance of all conditions and OPEX are also provided to sustain compliance level on continuous basis.  A separate budget is being allocated every year to comply with all the legal requirement stipulated by SPCB, CPCB and MoEF&CC apart from upkeep of pollution control systems and facilities. Total expenditure for the report period is given in below table:				
	any other purpose.	Period	Particular	Expenses Rs.		
			Effluent treatment	6915183.24		
		April 2022 –	EMS Monitoring	86176.69		
		September 2022	Horticulture	122880.25		
			Miscellaneous	38000.00		
				7162240.19		
116	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	leading newspapers. Copy of the same was submit	ublishing advertisement ab ted to local Government a	out the grant of EC in following two uthorities [i.e. Atul gram panchayat, , and to regional office of MoEF&CC		



Sr. No	Condition	Compliance	
	may also be seen at the 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 Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.	on July 27, 2021.    Continue   C	Group booked for holding agitations against inflation  Offence  Of
117	It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.	Noted and will be assured.  This is our 1 <sup>st</sup> compliance report. We assure report in respect of the stipulated prior envithrough E-mail as well as in hard copy to the 1 <sup>st</sup> June and 1 <sup>st</sup> December of each calendar yea	to regularly submit half-yearly compliance ironmental clearance terms and conditions concerned regulatory authority, on or before



Sr. No	Condition	Compliance
118	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Agreed and Noted.
119	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	Noted.  We are complying with all the stipulations made by the Gujarat Pollution Control Board.
120	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	Noted and Agreed.
121	The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.	Noted and compliance assured  Company is implementing these conditions in a time bound manner.



Sr. No	Condition	Compliance
122	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.	Noted and compliance assured
123	This environmental clearance is valid for seven years from the date of issue.	Noted and Agreed.
124	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted and Agreed.
125	Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.	Noted and Agreed.



#### Atul Bioscience Ltd

Project: Change in product mix of organic chemicals EC Compliance Report for EC F. No. J -11011/84/2009-IA II (I) dated April 9, 2009. Report Period October 2021 – March 2022

No.	Condition	Compliance	9						
A. Sp	ecific Condition								
i	The industrial effluent generation shall not exceed 326.8 m³/d. (Total process effluent generation after expansion will be 588.6 m³/d- ref. point 4 of EC)	Complied. However, since we have another EC granted in 2021 for expansion addition of new products, we request to consider latest figures give same.  According to specific condition No .17 of EC SEIAA/GUJ/EC/5(f)/965/2021 dated June 24, 2021, Industrial was water generation shall not exceed 450.50 KLD.  The average total industrial effluent generation for the report period is 1 m³/day only which is well within the limit. Details given in below table:						res given in  EC No. trial waste	
		Wastewate generation, m <sup>3</sup>	∣ ∆nrii	May 2022	June 2022		Augus 2022		Average
		m³/ Month	422	275	570	1085	863	527	623.66
		m³/day	14.1	8.9	19.0	35.0	27.8	17.6	20.4
		given belov Wast	_	Stipulat	ted V	alues for	the peri		Summary is
		gene	duon	Value		Min. Max. Avg.			_
			ewater ation m³/d	450.	5	8.9	35.0	21.9	)
	Out of 326.8 m³/d, 24 m³/d of high COD effluent shall be incinerated in the incinerator (of Atul Ltd as stated in point 4 of EC)  Remaining 302.8 m³/d of normal effluent stream after mixing with other effluent like cooling tower (111.8 m³/d) shall be treated in ETP for primary and secondary treatment.	is being take All the high incineration same and remaining Rest lean each ABL ETP h	ten for reconn COD streen. Streams of reused. He cand therefore the control of Country to Atul Literature.	eams are containing tence, the containing tence, the containing tence are no incommission talls for the containing tence are the containing tence	being ng solve here is ineration 00 ppm ned and	diverted ents, etc. no Hig on was d n is finally d in use p scharge.	to recov are taker Ih COD one durir sent to presently	ery system n for the red <b>Waste w</b> ng this perio ABL ETP for and treate	rather than covery of the ater stream od. or treatment. ed effluent is C F. No. J -

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

#### Complied.

The treated effluent after confirming to the prescribed standards is being discharged into estuary of river Par through a 4 km long pipe line of Atul Ltd. (Ref. point 4 of EC F. No. J -11011/84/2009-IA II (I) dated April 9, 2009). The discharged effluent is meeting all pollution board limits and values of various parameters of treated effluent is given in **Table 1**.

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

Sr	Parameter	Limit	Values for the period				
No.		Mg/l	April 2022 – September 2022				
			Min.	Max.	Avg.		
1	рН	5.5 - 9.0	7.3	7.9	7.5		
2	Temperature	40 oC	30.1	30.9	30.4		
3	Colour (pt. co.		40.0	70.0	55.0		
	scale)in units						
4	Suspended solids	100	31.0	58.0	46.1		
5	Oil and Grease	10	2.9	5.2	4.1		
6	Phenolic	5	0.7	1.0	0.8		
	Compounds						
7	Cyanides	0.2	ND	ND	ND		
8	Fluorides	2	0.7	1.1	0.8		
9	Sulphides	2	0.5	1.6	0.9		
10	Ammonical	50	7.2	14.8	9.8		
	Nitrogen						
11	Arsenic	0.2	ND	ND	ND		
12	Total Chromium	2	0.1	0.1	0.1		
13	Hexavelent	1	ND	ND	ND		
	Chromium						
14	Copper	3	0.3	0.2	0.1		
15	Lead	2	ND	ND	ND		
16	Mercury	0.01	ND	ND	ND		
17	Nickel	5	0.1	0.1	0.1		
18	Zinc	15	0.1	0.4	0.3		
19	Cadmium	2	ND	ND	ND		
20	Phosphate	5	1.8	3.8	2.2		
21	BOD (3 days at	100	42.0	58.0	49.5		
	27oC)						
22	COD	250	208.0	244.0	224.1		
23	Insecticide/Pestici	Absent	Absent	Absent	Absent		
	de						
24	Sodium	26	6.1	24.4	11.2		
	Absorption Ratio						
25	Manganese	2	0.1	0.9	0.2		
26	Tin	0.1	ND	ND	ND		
27	Bio Assay Test	90%	100%	100%	100%		
		survival	survival	surviva	survival		
		of fish	of fish	I of fish	of fish		
		after 96	after 96	after	after 96		
		hrs. in	hrs. in	96 hrs.	hrs. in		
		100%	100%	in	100%		
		effluent	effluent	100%	effluent		
		%		effluent			

ii	Process emissions in the form of HCI shall be scrubbed with water and caustic scrubber and HCI recovered as by product.	Complied.  We have provide water and caustic scrubber to scrub HCI. Please note that HCI generating product is not manufactured during reporting period.
	The emissions shall be dispersed through stack of adequate height as per CPCB standards.	Complied. The emissions is being dispersed through stack of adequate height as per CPCB standards. Gaseous emissions from process units are monitored regularly every month and same are given in point no. iii. The same is being monitored online and connected with CPCB and GPCB.
	The gaseous emissions 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 dispersed through stack of adequate height as per CPCB standards.  The minimum height of stack is provided using the following formula (ref. CPCB):  H = h+0.2x√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 set is being used only during emergency.
	Acoustic enclosures shall be provided to the DG set to control the noise pollution.	Complied.  DG Set is having inbuilt acoustic enclosure to control noise pollution.
iii	The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically.	Complied. The status of compliance of stipulated environmental clearance conditions including results of monitored data is posted on our web site www.atulbio.co.in
	It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the State Pollution Control Board.	Complied. Compliance status report is regularly submitted to the Regional office of MOEF&CC, the respective Zonal office of CPCB and the State Pollution Control Board.
	The criteria pollutant levels namely: SPM. RSPM, S02. NOx (ambient levels as well as stack emissions) or critical sectorial parameters like VOC indicated for the project shall be monitored and displayed at a convenient	Complied. The critical pollutants parameters are monitored regularly on monthly basis and displayed at board at the company entrance. Details of stack results, ambient air monitoring and VOC measured in fugitive emission is given in below tables.  The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards.

location near the main gate of the company in the public domain.

Summary of stack results:

	Near MPP 1 Plant									
			Concentration in Ambient air in ug/M³							
S No.	Pollutant	GPCB limits	Apr-22	May-22	Jun-22	Jul-22	Aug- 22	Sep- 22		
1.	Chlorine (Cl <sub>2</sub> )	09	4.90	3.70	4.60	5.2	6.2	4.90		
2.	Hydrochloric acid (HCI)	20	5.03	4.90	5.71	5.76	6.37	5.03		

Summary of Ambient Air Quality results:

	Near MPP 2 Plant									
		<u>'</u>	Concentration in Ambient air in ug/M <sup>3</sup>							
S No.	Pollutant	GPCB limits	Apr- 22	May- 22	Jun- 22	Jul-22	Aug- 22	Sep- 22		
1.	Sulphur Dioxide (S02)	80	16.2	12.3	11.4	9.8	5.6	9.4		
2.	Nitrogen Dioxide (N02)	80	27.8	21.2	23.2	18.3	14.2	17.6		
3.	Particulate Matter (Size less than 10 um) OR PM10	100	88.4	81.7	87.4	71.6	61.4	81.4		
4.	Particulate Matter (Size less than 2.5 um) OR PM2.5	60	51.7	48.2	43.1	38.4	30.9	49.2		

	Near MPP 1 Plant								
			Conc	entration	in Ambie	ent air in u	ıg/M³		
S No	Pollutant	GPCB limits	Apr- 22	May- 22	Jun- 22	Jul-22	Aug- 22	Sep- 22	
1.	Sulphur Dioxide (S02)	80	14.8	17.2	13.2	10.4	6.4	10.6	
2.	Nitrogen Dioxide (N02)	80	33.7	23.4	26.6	20.2	15.8	21.2	
3.	Particulate Matter (Size less than 10 um) OR PM10	100	99.8	93.6	46.2	78.9	66.8	77.9	
4.	Particulate Matter (Size less than 2.5 um) OR PM2.5	60	56.7	51.4	86.2	41.6	35.3	44.8	

#### Summary of VOC results:

Ground Floor MPP2										
	Permissible		Values for the period							
Parameter	limit mg / Nm³	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22			
Chlorine	3	0.8	ND	ND	ND	ND	ND			
Toluene	150	120	98.2	128	75	104	90			

iv The company shall adopt cleaner production technology to minimize the quantity of fresh water requirement and process effluent generation.

#### Complied.

Steam condensate is being collected and used in place of raw water. Various wash water streams are being utilized in the further steps of the process. We have already optimized our fresh water consumption as well as wastewater generation up to possible extent with the available technologies.

The Company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans boundary movement) Rules. 2008 for management of hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF.	Complied.  We have obtained authorization under Haz. Waste management rules 2016 and available in our valid current CCA No. AWH 96246, valid up to 30/06/2023 for handling, storage and disposal of hazardous waste.
The concerned company shall undertake measures for firefighting facilities in case of emergency.	Compiled.  We have well established fire hydrant network apart from adequate number of different type of fire extinguishers are available. We have mutual aid with parent company - Atul Ltd for emergency help, which is located just besides our company. Atul Ltd has three nos. of fire tenders, fully adequate hydrant system and trained staff, emergency response team(ERT) of trained workers, power supply from two source with emergency backup power provision from DG set as well grid.  We have on-site emergency plan. Mock drills are also being carried out at regular interval. Last mock drill was conducted on July 2, 2022.
The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules. 1989 as amended in October, 1994 and January, 2000.	Complied.  We are complying with all the requirement of MSIHC rule 1989 as amended in October, 1994 and January, 2000 and having proper storage and handling system, Onsite emergency plan, Licenses, reporting, schedule 7, safety report, etc.  The company complies with all stipulated norms mentioned in MSIHC rule. This has been certified by our Environmental auditors, an authorized agency and nominated by GPCB; through Environmental audit every year.
All Transportation of Hazardous Chemicals shall be as per the MVA. 1989.	Complied.  Transportation of Hazardous chemicals are being done as per the MVA 1989.
The company shall undertake following Waste Minimization measures:-  Metering and control of quantities of active ingredients to minimize waste.	All the liquid ingredients are being charged through measure vessels and/or
	Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans boundary movement) Rules. 2008 for management of hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF.  The concerned company shall undertake measures for firefighting facilities in case of emergency.  The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules. 1989 as amended in October, 1994 and January, 2000.  All Transportation of Hazardous Chemicals shall be as per the MVA. 1989.  The company shall undertake following Waste Minimization measures:-  Metering and control of quantities of active ingredients to minimize

	Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.	Complied.  Recovered solvent are being used as raw material in further steps as far as possible.					
	Use of automated filling to minimize spillage.	Complied. Filling is done on weighing balance manually but in controlled manner to minimize spillage apart from having suction hood to take care of fugitive emissions.					
	Use of "Close Feed' system into batch reactors.	Complied. All reactors are in close loop and connected with condensers having cooling tower water, chilled water or brine water supply for control of fugitive emission.					
	Venting equipment through vapor recovery system.	Complied.  All the reactors are equipped with vents/stacks, which are connected to either vapor recovery system consisting of condensers, ejector/vacuum pumps and/or scrubbers.  Photographs of the reflux condenser provided over reactors/vessels are attached herewith for your ready reference.					
	Use of high pressure hoses for equipment clearing to reduce wastewater generation.	Complied.  Many equipment like reactors, condenser wherever necessary are being cleaned with high pressure sparger / jet to reduce waste water generation.					
viii	Fugitive emissions in the work zone environment, product, raw material storage area shall be regularly monitored.	Complied. Fugitive emissions in the work zone environment and raw material storage area is being regularly monitored by GPCB approved third party. The emission is always being confirmed to the limits.					
	The emissions shall conform to the limits imposed by SPCB.	·					

ix	The project authorities shall provide the chilled brine solution in secondary condenser for condensation of the VOCs.	Complied. Chilled brine solution is provided in secondary condenser for condensation of the VOCs.
	The project authority shall ensure that the solvent recovery shall not be less than 95%.	Complied. The condensers are provided with sufficient HTA and residence time to achieve maximum solvent recovery.
	The VOC monitoring shall be carried in the solvent storage area and data submitted to the Ministry.	Complied. We are monitoring VOC as well as other chemicals in work area as per Factories Act and records are being maintained in For No. 37. VOC monitoring done on regular bases and the results are given in point no. iii.
X	Solvent management shall be as follows :	
	Reactor shall be connected to chilled brine condenser system	Complied. Reactors are connected to chilled brine condenser system.
	Reactor and solvent handling pump shall have mechanical seals to prevent leakages.	Complied. Reactor and solvent handling pump do have mechanical seals to prevent leakages. Photographs of the same are attached herewith for your ready reference.
		Reactor Solvent handling pump
	The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery.	Complied. The condensers are provided with sufficient HTA and residence time to achieve maximum solvent recovery.
	Solvents shall be stored in a separate space specified with all safety measures.	Complied.  The unit has already provided underground storage tanks with secondary containment to restrict fire emergency in solvent tank farms. Photographs of the same are attached herewith for your ready reference.





Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.

Double earthing is provided and regular checking and testing of the same is being done and recorded.

Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.

#### Complied.

Plants are equipped with Jumpers, flame proof electrical fittings and proper earthing as per the Hazardous area classification study.

Hazardous chemicals shall χi be stored in tanks in tank farms, drums, carboys, etc.

#### Complied.

Hazardous chemicals are being stored in tanks, drums and carboys considering the storage quantity and chemical stored.

An area of 33% green belt and selection of plant species shall be as per the guideline of CPCB.

#### Being Complied.

Green belt development and tree plantation is carried out inside the plant premises to increase the bio-diversity of the area. In future more plantations will be carried out.

We have planted trees along the boundary wall and both side of road. Photographs of the same are attached herewith for your ready reference.





xii	The Company shall harvest surface as well as rainwater from the rooftops of the buildings and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.	Complied.  We have installed 120 KL underground tank and 2 nos 30 KL overhead tank to collect rain water from roof tops.
xiii	Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act.	Complied. As the M/s. Atul Bio- Science Ltd. is situated in the Atul Complex, a mutual aid agreement with neighboring parent company Atul Ltd is already done who is having well qualified resident doctors, whenever required instantly.
B. Ge	eneral Conditions	
i	The project authorities shall strictly adhere to the stipulations made by the 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.
ii	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted and ensured.  Unit has obtained prior Environment Clearance from Ministry vide EC No. SEIAA GUJ EC 5(f) 965 2021 dated June 24, 2021 for proposed expansion of Active Pharmaceutical Ingredients (API).
iii	At no time, the emissions shall exceed the prescribed limits.	Complied.  Monthly monitoring is being done by GPCB approved, NABL approved agencies.  At no time, the emissions exceeded the prescribed limits during report period.  Summary of stack emission is given in special condition iii.

	In the event of failure of any pollution control system adopted by the units, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Complied.  No such case happened during the compliance period.
iv	The Gaseous emission (NOx, HCl, SO2 and SPM) and Particulate matter along with RSPM levels from various process units shall confirm to the standards prescribed by the concerned authorities from time to time.  At no time, the emission	Complied. The gaseous emissions (HCl, Cl <sub>2</sub> ) from process units confirms to the standards prescribed by GPCB. Gaseous emission is regularly monitored. Results given in special condition iii.  Complied.
	levels shall go beyond the stipulated standards.	The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards.  Summary of stack emission is given in special condition iii.
	In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restricted until the control measures are rectified to achieve the desired efficiency. Stack monitoring for SO2, NOx and SPM shall be carried.	Complied.  No such case happened during compliance period. Whenever such incident of failure of pollution control system happened, we will stop the operation and rectify the problem and then only restart.

V	The Location of ambient air quality monitoring stations shall be decided in consultation with sated pollution control Board and it shall be ensured that at least one station is installed in the up wind and downwind direction as well as where maximum ground level concentration are anticipated.	Complied.  There are two locations have been decided in consultation with GPCB so that at least one station is installed in the up wind and downwind direction as well as where maximum ground level concentration are anticipated for ambient air monitoring. The same had been shown to authority like SPCB, CPCB & MoEF&CC during their visit to our factory.  List of our ambient air monitoring station is given below:  Sr No. Location  1 MPP 1 Plant  2 MPP 2 Plant  Apart from this, 10 ambient air stations of Atul Ltd also monitors the						
		•	unding of ABI					
vi	Dedicated Scrubbers and stacks of appropriate height as per the central pollution control board guideline shall be provided to control the emission from various vents.	Complied.  Dedicated scrubbers and stacks of appropriate height as per the central pollution control board guideline have been provided to control the emission from various vents.  Details of stack results are given in point no. iii						
	The scrubber water shall be sent to ETP for further treatment or sell to actual end users.	Complied. The scrubber water is being sent to ETP for further treatment.						
vii	The overall noise level in and around the plant area shall be kept well within the standard by providing noise control measures including acoustic hoods silencers, enclosures etc. on all source of noise generation.	Complied. In built acoustic enclosure, silencer and insulation are provided on all source of noise generation to keep over all noise level within the stipulated standards like DG set, etc.						
	The ambient noise level shall confirm to the standards prescribed under Environment (Protection) Act-1986 Rules,1989 viz 75 dBA (day time) and 70	The noise level confirm to the standard prescribed under EPA.  The maximum values during the compliance period confirms that at no time the emission level went beyond the stipulated standards.						
	dBA (night time).	Sr. No.	Date of Monitoring	Test Parameter	Unit	Sampling location	Results	Permissible limits
		1 2 3 4 5	11/04/2022 16/05/2022 06/06/2022 19/07/2022 18/08/2022 17/09/2022	Nosie	dB (A)	Utility Near Compressor	74.5 81.4 81.8 76.6 80.3 81.4	85

viii	Training shall be imparted to all employees on safety and health aspects of chemicals handling.  Pre-employment and	Complied.  Company is imparting training to all new employees as well as regular employees at regular intervals. Safety precautions and hazards are also being communicated through display boards at appropriate places in the plants.  Last six month topics covered i.e.:  Emergency siren testing  Work place safety  SCBA donning procedure  Process safety  Complied.
	routine periodical medical examination for all employees shall be undertaken on regular basis.	Pre-employment & periodic medical examinations as per statutory requirement are regularly conducted & records of the same are maintained in Form No. 32 & 33 as per Gujarat Factory Rules, 1962 respectively.
ix	Usage of PPE's by employee/ workers shall be ensured.	Complied.  Company have PPE policy in place and strictly follow for all level of employee.
X	The project proponent shall also comply with all the environmental protection measures and safeguards proposed in project report submitted to the ministry.	Complied.  Company has complied with all the environmental protection measures and safeguards proposed in the report apart from the recommendations made their in.
	All the recommendation made in respect of environmental management and risk mitigation measures relating to the project shall be implemented.	Complied.  Since the project did not require EIA or public hearing, no such recommendations mentioned. However, we are committed for healthy work environment and safe work practices.
xi	The company will undertake all relevant measures for improving the socio economic condition for the surrounding area, CSR activities will be undertaken by involving local villages and administration.	Complied.  Company is doing CSR activities for up gradation of surrounding area and well fare of nearby localities.
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.  The project authorities shall provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forest as well as the State Government along with the implementation	Complied. Company has tie up with its parent company Atul Limited where separate Environmental Management Cell equipped with full-fledged laboratory facilities to carry out the environment management and monitoring functions.  Complied. EMP measures are implemented by 2010.  Recurring cost: A separate budget is being allocated every year to comply with all the legal requirement stipulated by SPCB, CPCB & MoEF&CC apart from upkeep of pollution control systems and facilities. Total expenditure for the report period is given in below table:						
	schedule for all the conditions stipulated herein. The funds so	Period	Particular	Expenses Rs.				
	provided shall not be		Effluent treatment	6915183.24				
	diverted for any other purposes.	April 2022 –	EMS Monitoring	86176.69				
	parpossis	September 2022	Horticulture	122880.25				
			Miscellaneous	38000.00				
				7162240.19				
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/representation, if any, were received while processing the proposal.	Complied.  Latest submission to the Panchayat, Zila parishad, District Industrial Centre was distributed on November 11, 2016. Copy of the same was submitted to Ministry vide our letter Atul/SHE/MoEF/Visit/3 dated April 4, 2017.						
	The clearance letter shall also be put on the web site of the company by the proponent.	Complied. Available at company's website www.atulbio.co.in						
xvi	The implementation of the project vis-à-vis environmental action plan shall be monitored by Ministry's Regional office at Bhopal / SPCB / CPCB.	Complied. SPCB and MoEF&CC is monitoring through their regular visits.						
xvii	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are	Complied. We have already informed the public through advertisement and by sending our EC to local Panchayat, Zila parishad, District Industrial Centre for further actions at their end.						

available with the SPCB/Committee and may also be seen at website of the Ministry of Environment and Forest at <a href="http://www.envfor.ni.in">http://www.envfor.ni.in</a>.

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 forwarded to the concerned Ministry's Regional office at Bhopal.

#### Complied.

Unit has informed public by publishing advertisement about the grant of EC in following "Gujarati" and "English" leading newspapers.





xviii The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closures and final approval of the project by the concerned authorities and the date of start of the project.

9

Complied.

Start date: April 2009

Completion date: March 2010

Final approval: We have obtained NOC and CCA from GPCB.

Company has funded the project internally and hence not submitted the

financial closure details.

The Ministry may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory.

Noted.

10	The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	Noted.
11	Any appeal against this Environment clearance shall lie with the national appellate authority, if preferred, within a period of 30 days as prescribed under section 11 of National Environment Appellate Authority Act, 1997.	Noted.
12	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 the Air ((Prevention and Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted.

Table 1: Quality of Treated Effluent:

Sr No.	Parameter	Results	Results					
140.		April 2022	May 2022	June 2022	July 2022	August 2022	September 2022	Limits Mg/l
1	рН	7.2	7.2	7.9	7.8	7.7	7.3	5.5 to 9.0
2	Temperature	30.3	30.3	30.1	30.3	30.9	30.5	40 °C
3	Colour (pt. co. scale)in units	50.0	40.0	60.0	50.0	60.0	70.0	
4	Suspended solids	58.0	31.0	47.0	37.0	48.0	56.0	100
5	Oil and Grease	4.6	3.8	2.9	3.9	5.2	4.4	10
6	Phenolic Compounds	0.9	1.0	0.8	0.7	0.9	0.7	5
7	Cyanides	ND	ND	ND	ND	ND	ND	0.2
8	Fluorides	0.6	0.9	1.1	0.9	0.8	0.7	2
9	Sulphides	0.5	0.8	0.7	0.8	1.2	1.6	2
10	Ammonical Nitrogen	7.1	14.8	8.1	11.3	9.6	7.9	50
11	Arsenic	ND	ND	ND	ND	ND	ND	0.2
12	Total Chromium	ND	ND	0.1	0.9	0.9	0.1	2
13	Hexavelent Chromium	ND	ND	ND	ND	ND	ND	1
14	Copper	0.1	0.3	0.1	0.2	0.2	0.1	3
15	Lead	ND	ND	ND	ND	ND	ND	2
16	Mercury	ND	ND	ND	ND	ND	ND	0.01
17	Nickel	ND	ND	0.1	0.1	0.1	0.1	5
18	Zinc	0.4	0.6	0.2	0.3	0.2	0.3	15
19	Cadmium	ND	ND	ND	ND	ND	ND	2

20	Phosphate	1.8	3.8	2.1	1.8	2.1	1.9	5
21	BOD (3 days at 27°C)	43.0	48.0	42.0	54.0	58.0	52.0	100
22	COD	216.0	236.0	208.0	231.0	244.0	210.0	250
23	Insecticide/Pesticide	Absent	Absent	Absent	Absent	Absent	Absent	Absent
24	Sodium Absorption Ratio	6.1	24.4	13.5	7.0	8.6	8.0	26
25	Manganese	0.1	0.9	0.1	0.1	0.1	0.1	2
26	Tin	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 %				
Note:	ND is Not Detected.							