F. No. J-11011/108/2015-IA-II(I)

Government of India Ministry of Environment, Forest and Climate Change (Impact Assessment Division)

Indira Paryavaran Bhawan Jorbagh Road, New Delhi - 110003

Dated: 16th June, 2023

To

M/s Atul Limited

Atul, District Valsad, Gujarat – 396020

Email: hriday_desai@atul.co.in

Sub.: Expansion of Dyes, Chlor-Alkali, Pesticides, Bulk Drug and Pharmaceuticals, Resins, Other Chemicals, Flavors & Fragrances & Co Products Manufacturing Unit at Atul and Haria village, Taluka & Dist.: Valsad, Gujarat by M/s. Atul Ltd. – Amendment/Split of Environmental Clearance

Sir.

This has reference to your proposal No. IA/GJ/IND3/278608/2018 on the above subject matter.

- 2. The Ministry of Environment, Forest and Climate Change has examined the proposal for Amendment/Split of Environmental Clearance (EC) dated 03.08.2021 granted to M/s. Atul Ltd. for the Expanison of Dyes, Chlor-Alkali, Pesticides, Bulk Drug and Pharmaceuticals, Resins, Other Chemicals, Flavors & Fragrances & Co Products Manufacturing Unit at Survey No. 5, 6, 29, 30, 33 to 38, 80, 81, 84, 85, 91, 96 to 105, 108, 112 to 117, 142, 144 to 148 of Atul village and 274, 275, 276, 315, 316 to 321 of Haria village, Taluka & Dist.: Valsad, Gujarat by M/s. Atul Limited.
- 3. The details of products and their capacity before and after the split are as under:

S.	Name of Products	Category	Atul Ltd as	Atul ltd	APL after	Total MT/M
No.	78 A		per EC MT/M	after split MT/M	split MT/M	
A	DYES	5 (f)		9		
1	Azo dyes	5(f)	550	550	0	550
2	Sulfur Black		2500.33	2500.33	0	2500.33
3	Sulfur Dyes range		25	25	0	25
4	Naphthol range		75	75	0	75
5	Fast Color Bases		40	40	0	40
6	Disperse dyes		118.5	118.5	0	118.5
7	Optical Brighteners		10	10	0	10
8	Reactive Dyes		961.3	961.3	0	961.3
9	Vat dyes	-	105	105	0	105
10	Indigo		500	500	0	500
11	Manganese sulphate		1000	1000	0	1000
12	40 % Manganese sulphate solution		2500	2500	0	2500

13	Pigments		200	200	0	200
14	1-Aminoanthraquinone		417	417	0	417
15	H-acid		500	500	0	500
16	4-amino-phenyl-4-beta hydroxy ethyl sulphone sulphate ester, Para base ester		834	834	0	834
17	DNCB (Di Nitro ChloroBenzene)		834	834	0	834
Tota	l Production Capacity of DYES		11170.13	11170.13	0	11170.13
В	CHLOR-AKLALI	4 (d)				
18	Caustic soda/potash & sodium sulfide	4(d)	15100	4000	11100	15100
19	Liquid Chlorine /HCl		13268	3500	9768	13268
20	Hydrogen		265.29	0	265.29	265.29
	Total Production Capacity of CHLOR-ALKALI		28633.29	7500	21133.29	28633.29
C	PESTICIDES TECH	5 (b)		1		
21	Carbamate group of Agrochemicals (Indoxacarb Tech, Propoxur etc.)	5(b)	110	110	0	110
22	Diuron	7 3	420	420	0	420
23	Trichlo Carbon		8.3	8.3	0	8.3
24	Cartap HCl	100.1	50	50	0	50
25	Carbendazim		201	201	0	201
26	Phenoxy Herbicides (e. g. 2,4-D & related products)	3//	5670	5670	0	5670
27	4-chloro-2-methyl phenoxy- acetic acid (MCPA)		34		3/5	
28	Pyridine based insecticides & Herbicides chemical e. g. Imidacloprid	_	125	125	0	125
29	Triazole based Fungicide	Town	102	102	0	102
30	Pyrethroides	Tects	10	10	0	10
31	Sulphonyl Urea		70	70	0	70
32	Glyphosate		3000	3000	0	3000
33	Isoprothiolane		100	100	0	100
34	Fipronil		30	30	0	30
35	Formulations		2200	2200	0	2200
36	Buprofezin		4	4	0	4
37	Imazethapyr		1.83	1.83	0	1.83
38	Kresoxim Methyl		2.08	2.08	0	2.08
39	Fenoxaprop		0.83	0.83	0	0.83
40	Cyhalofop		0.83	0.83	0	0.83
41	Mesotrione		300	300	0	300
		•				300

43	Glycin		1000	1000	0	1000
44	Pyrazosulfurone	-	30	30	0	30
45	BisPyribac Sodium	-	30	30	0	30
46	Azoxystrobin		150	150	0	150
47	Quizalofop		50	50	0	50
48	Thiamethoxam		100	100	0	100
49	Metribuzin		60	60	0	60
50	Diafenthiuron		30	30	0	30
51	Chlorantraniliprole		70	70	0	70
52	5-Chloro 1-Indanone		60	60	0	60
34	Total Production Capacity of		14285.87	14285.87	0	14285.87
	PESTICIDES		14203.07	14203.07	U	14203.07
D	BULK DRUG AND	5(f)	0-53			
	PHARMACEUTICALS	S. 3.				
53	Mebendazole	5(f)	2	2	0	2
54	Tolbutamide	and the same of th	2.5	2.5	0	2.5
55	Quiniodochlor	. 40	15	15	0	15
D1	Bulk Drugs & Intermediates		194.6	194.6	0	194.6
56	Dapsone-API		_	10		
57	Valacyclovir HCL		- T	D. 3.1		
58	Celecoxib	7 3		- 11		
59	Desvenlafixine	/ AT	A 10			
60	Mirabegron	70.1	100	5.70		
61	Vildagliptin		7/6/	19.74 A		
62	Venlafaxine Hydrochloride	411	N / 24	A 6. 1. VI		
63	5-Hydroxy methyl thiazole (5-HMT)	3//		الل	-0	
64	Thiophene-2-carboxaldehyde (2-TC)	W_		-//	e e	
65	1-Chloroacetyl-2-carbonitrile pyrrolidine (CACP)			28	,	
				100		
66	Dechlofenac sodium / potassium	1	2.5	2.5	0	2.5
67	Atenolol	4.0.13	1.7	1.7	0	1.7
68	Furosemide		1.3	1.3	0	1.3
69	Trimethoprim		0.9	0.9	0	0.9
70	Para hydroxy acetophenone		1.7	1.7	0	1.7
71	Para hydroxy phenyl acetamide		3	3	0	3
72	Acyclovir		5.2	5.2	0	5.2
73	Bathanechol		5.2	5.2	0	5.2
D2	Pharma Intermediates &		2094	2094	0	2094
	Chemicals					
74	4,4 Diamino diphenyl sulphone					
75	4,4 Dichloro diphenyl sulphone					
76	3,3 Diamino diphenyl sulphone					
77	DHDPS & Other sulfones					

	Total Production Capacity of BULK DRUG AND PHARMACEUTICALS		2329.6	2329.6	0	2329.6
E	RESINS	5(f)				
78	Epoxy Resin	5(f)	17600	17600	0	17600
79	Vinyl Ester Resins	. ,	37.5	37.5	0	37.5
80	Ketone Formaldehyde Resins & Sulphonamide, Formaldehyde Resins		20.8	20.8	0	20.8
81	UF/MF/PF/DiCyandiamide Resins		270.9	270.9	0	270.9
82	Polyamide resins		161.7	161.7	0	161.7
83	Polygrip TPU based		341.67	341.67	0	341.67
84	Polygrip rubber based	30.00	2000	2000	0	2000
	Total Production Capacity of	6.4.	20432.57	20432.57	0	20432.57
	RESINS	And the second				
F	OTHER CHEMICALS	-		S. S.		
85	Anthraquinone, Naphthalene, Benzene Intermediates. (Including Beta – Napthol & BON Acid)	5(f)	740	740	0	740
86	Resorcinol (Meta hydroxy phenol)	5 (f)	1060	1060	0	1060
87	Carbamite	5(b)	30	30	0	30
88	Chlorzoxazone & other related products	5(f)	5	5	0	5
89	4 Ethyl 2,3 – Diorcopiperazino carbonyl Chloride	5(f)	3.3	3.3	0	3.3
90	Imino Dibenzyl 5 carbonyl Chloride	5(f)	0.8	0.8	0	0.8
91	Formaldehyde and base products	5(f)	15200	15200	0	15200
92	Sulfuric Acid / Oleum / Chlorosulphonic Acid & Salts	Teers	11550	11550	0	11550
93	Sulpha Drug Intermediate	5(f)	193.8	193.8	0	193.8
94	Acetyl Sulphanilyl Chloride and its derivatives.	5(f)	1500	1500	0	1500
95	Acetanilide	5(f)	500	500	0	500
96	Sulpha Methyl Phenazole Sodium	5(f)	1.1	1.1	0	1.1
97	Pyrazole Base	5(f)	10.5	10.5	0	10.5
98	Sulphanilic acid	5(f)	25	25	0	25
99	Bis Phenol A	5(f)	416.7	416.7	0	416.7
100	Hexamine	5(f)	150	150	0	150
101	Epoxy Intermediates	5(f)	23.8	23.8	0	23.8
102	Hardners and auxiliaries	5(f)	4000	4000	0	4000

103	Hardener Intermediates	5(f)	700	700	0	700
104	Bisphenol S & Intermediate Chemicals	5(f)	16.6	16.6	0	16.6
105	Sodium Thio sulphate (dry basis)		2500	2500	0	2500
106	Sodium Thio sulphate (wet basis)		5300	5300	0	5300
107	Phosgene	5(f)	832.827	832.827	0	832.827
108	HX-13059	5(f)	5	5	0	5
109	Alkyl ketene dimer	5(f)	500	500	0	500
110	Anisole	5(f)	306	306	0	306
111	PF Resin	5(f)	200	200	0	200
112	CMC (Carboxy methyl cellulose)	5(f)	2000	2000	0	2000
113	HMMM (Hexa Methoxy Methyl Melamine)	5(f)	40	40	0	40
114	m-Amino phenol	5(f)	250	250	0	250
115	Mono chloro benzene	5(f)	2500	2500	0	2500
116	Propionyl chloride	5(f)	200	200	0	200
117	Resorcinol derivatives	5(f)	100	100	0	100
118	RF Resin (Resoform P- 18,19,20)	5(f)	405	405	0	405
119	Trichloro acetyl chloride	5(f)	200	200	0	200
120	Thio glycolic acid	5(f)	200	200	0	200
121	Thionyl chloride		1000	1000	0	1000
122	1,3 Cyclohexanedione	5(f)	120	120	0	120
F1	Agro, Pharma intermediates,	5(f)			and the same	
	Isocyanats & Carbonat	The same		7//	20	
102	Esters, etc. Trans-4-MCHI	F (C)	2220	2220	0	2220
123 124	p-Anisyl chloroformate	5(f)	2230	2230	0	2230
124	Di-Tert-Butyl Dicarbonate	5(f)		/ 28		
123	(Boc. anhydride)	5(f)		100		
	(Boe. amryariae)	-		- A. V.		
126	N, N- Disuccinimidyl Carbonate	5(f)	if She	12		
F1.1	Chloroformate	5(f)				
127	1-Chloro ethyl chloroformate (1-CECF)	5(f)				
128	4-Nitrophenyl chloroformate (4-NPCF)					
129	n-Pentyl chloroformate (n-PCF)					
130	Isobutyl chloroformate (IBCF)					
131	2 Ethyl Hexyl Cholroformate (2-EHCF)					
132	Phenyl Chloroformate (PCF)					
133	Benzyl Chloroformate (BCF)					
134	Methyl chloroformate (MCF)					

135	n-Hexyl chloroformate (n-HCF)					
F1.2	Carbonates	5(f)	1			
136	Di-tert-butyl dicarbonate (DIBOC)	5(f)				
137	Bis (4-Nitrophenyl) Carbonate (Bis-NPC)					
138	Diphenyl carbonate (DPC)					
139	Dimethyl carbonate (DMC)					
140	1,1'-Carbonylldiimidazole					
	(CDI)					
F1.3	Isocyanates	5(f)				
141	p-Toluene sulphonyl isocyanate (PTSI) and other Isocyanates	5(f)	επ₽.			
F1.4	Acid Chlorides	5(f)	Such !	200		
142	N-Methylpiperazinyl carbamoyl chloride Hydrochloride (NPCCL)	5(f)		S.		
143	(Chlormethylene)dimethylamm					
	onium chloride (VMR)/	7.0		11		
	Phosgeniminium chloride and other Acid chlorides	7 4	-	W 11		
144	N,N-Dimethyl carbamoyl	7 4		- N		
177	chloride (DMCCl)			100 m		
145	Hexaethyl guanidinium chloride (HEGCl)	M	2 1/6	16/4		
F1.5	Urea	5(f)		, T ,		
146	Tetrabutyl Urea (TBU)	5(f)			-	
147	Tetramethyl Urea (TMU)	78.00		- // /	ď.	
F1.6	Carbodiimide	5(f)			5	
148	N,N'-Dicyclohexylcarbodiimide (DCC)	5(f)		1 3	7.	
149	Sodium sulphite		3261	3261	0	3261
150	30% HCl		4622.5	4622.5	0	4622.5
151	Sodium hypo chloride solution (10%)		1853.7	658	1195.7	1853.7
152	Potassium chloride		740	740	0	740
153	Sodium Chloride		2418.5	2418.5	0	2418.5
	Total Production Capacity of this group Including Sodium Thio sulphate (dry basis)		62611.127	61415.427	1195.7	62611.127
	Total Production Capacity of this group Including Sodium Thio sulphate (wet basis)		65411.127	64215.427	1195.7	65411.127
G	Flavors & Fragrances					
G1	Allyl Esters such as	5(f)				
154	Allyl Caproate	† `´	250	250	0	250

155	Allyl cyclohexyl propionate		250	250	0	250
156	Allyl Heptanoate	-	150	150	0	150
157	Cyclogalbanate		25	25	0	25
G2	Styrene Based derivatives	5(f)				
	such as					
158	Phenyl Ethyl Alcohol (PEA)	-	850	850	0	850
159	PE acetate		250	250	0	250
160	PEME (Phenyl ethyl methyl ether)		200	200	0	200
161	Pommerol (Phenyl ethyl isoamyl ether)		100	100	0	100
162	Styrene oxide		500	500	0	500
163	Phenyl ethyl phenyl acetate (PEPA)		100	100	0	100
164	Phenyl acetaldehyde dimethyl Acetal	7:3	250	250	0	250
165	Styrallyl acetate	And the same of th	500	500	0	500
G3	Coumarin derivatives such as	5(f)		16.27		
166	Coumarin		500	500	0	500
167	Dihydrocoumarin	- /_	100	100	0	100
G4	Sunscreen prodcuts such as	5(f)				
168	Avobenzone	7	83.3	83.3	0	83.3
169	Octacrylene		83.3	83.3	0	83.3
170	OctylMethoxy Cinnamate	100.3	200	200	0	200
G5	Others such as		1/0/			
171	Peonile	5(f)	50	50	0	50
172	Mugetanol	5(f)	25	25	0	25
173	Salicylaldehyde	5(f)	500	500	0	500
174	Evernyl	5(f)	200	200	0	200
175	Heliotropin	5(f)	250	250	0	250
176	Helional	5(f)	500	500	0	500
177	1,2 Hexane Diol	5(f)	200	200	0	200
178	Indoflor	5(f)	50	50	0	50
179	Floral	5(f)	50	50	0	50
180	Cyclohexyl Salicylate	5(f)	100	100	0	100
181	Methyl Anthranilate	5(f)	300	300	0	300
182	Dihydroanethole	5(f)	50	50	0	50
183	Benzylideneacetone	5(f)	100	100	0	100
184	Hexenyl -3 -Cis- Benzoate	5(f)	25	25	0	25
185	Hexenyl Hexenoate, Cis-3	5(f)	25	25	0	25
186	Citronellyl Oxyacetaldehyde	5(f)	25	25	0	25
187	Karmaflor	5(f)	25	25	0	25
188	Anethole	5(f)	166.7	166.7	0	166.7
189	Raspberry Ketone	5(f)	100	100	0	100
190	P-AninylPropanal	5(f)	100	100	0	100

	Total Production Capacity of this group		7233.3	7233.3	0	7233.3
H	Co Products:					
191	Phenol	-	3	3	0	3
192	30% HCl (By product)	-	417	417	0	417
	Total Production Capacity of this group		420	420	0	420
	Total Production including Sodium Thio sulphate (dry basis)		147115.887	124786.897	22328.99	147115.887
	Total Production including Sodium Thio sulphate (wet basis)	7: T	149915.887	127586.897		149915.887

- 4. It is reported that the land area is 1067118.27 sq. m. Industry has developed greenbelt in an area of Industry has developed greenbelt in an area of 388848 sq. m [293435.8 sq. m inside plant premises + 95412.2 sq. m (Survey No. 39 & 40) outside plant premises], covering 36.4% of total project area. The estimated project cost is Rs. 1489.03 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 433.94 crore and the recurring cost (operation and maintenance) will be about Rs. 136.30 crore per annum. The project will lead to additional employment for 75 persons directly and 175 persons indirectly after expansion. Industry proposes to allocate Rs. 7.051 crore towards Corporate Environmental Responsibility.
- 5. It is reported that there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km of the project site. Parnera Reserve Forest is at 0.62 km, Par river is at 0.25 km (SE) and Pond of Hariya Village is at 0.07 km (W) from project site.
- 6. It is noted that the total water requirement is 40042.5 m³/day of which fresh water requirement of 16101.5 m³/day will be met from Surface Water Source Par River, 9090 m³/day will be recycled/treated water, 11778 m³/day will be Treated STP water from Valsad/Pardi Nagarpalika and 3073 m³/day will be water from Rain water harvesting. Total effluent generation will be 34560.25 KLD including domestic effluent (322.5 KLD). High TDS effluent of 443 KLD will be taken to MEE, 99 KLD of high COD w/w will be incinerated in incinerator. Low COD, low TDS effluent is 27143 KLD; out of which 19379 KLD will be treated in ETP and 7764 KLD will further passed through RO after treatment followed by MEE. Utility w/w generation is 4480 KLD; out of which 2500 KLD taken to RO followed by MEE and 1980 KLD w/w is direct disposal. So total 22513 KLD of effluent [323 Domestic sewage, 433 KLD MEE Condensate, 19379 KLD process effluent, 2378 Washing effluent] will be treated in ETP and propose to discharge 24493 KLD. The operations in the unit shall be managed further better and the total effluent shall be restricted to 20514 KLD for discharge to Estuary Zone of Par River through 4 km long pipeline from Industry. The details of water consumption, wastewater generation and its treatment are as follows:

Water	Water Consumption Details (in KLD)								
S. No.	Description	Atul Ltd	Atul Ltd (after	APL (After	Total				
		as per EC	Split)	Split)					
A	Gardening	538	537.5	0.5	538				
В	Domestic	416	412	4	416				
С	Industrial								

1	Process	26917	25227.5	1689.5	26917
2	Cooling Tower	8859	8359.5	499.5	8859
3	Washing (Reactor and Floor)	2378	2378	0	2378
4	Boiler	3128	3128	0	3128
	Total	42236	40042.5	2193.5	42236
	Recycled Water	9335	9090	245	9335
	Treated STP water	11778	11778	0	11778
	Rain water harvesting	3073	3073	0	3073
	Fresh Water Requirement	18050	16101.5	1948.5	18050

Waste	Waste Water generation (KLD)							
Sr.	Source	Atul Ltd	Atul Ltd (after	APL (After	Total			
No.		as per EC	Split)	Split)				
I	Domestic	323	322.5	0.5	323			
II	Industry	· 2016	7					
A	Processing	27685	27518.5	166.5	27685			
В	Boiler	1431	1431	0	1431			
C	Cooling Tower	3049	2910.25	138.75	3049			
D	Washing to ETP	2378	2378	0	2378			
	Total Industrial generation (II)	34543	34237.75	305.25	34543			
	Grand Total (I+II)	34866	34560.25	305.75	34866			

Treatm	Freatment Breakup for Waste <mark>water</mark> (<mark>KLD</mark>)								
S. No.	Description	Atul Ltd	Atul Ltd (after	APL (After	Total				
		as per EC	Split)	Split)					
	Total wasteater generation	34866	34560.25	305.75	34866				
I	To Incinerator	99	99	0	99				
II	To MEE	443	443	0	443				
III	To RO MEE (Boiler and CT	2500	2500	0	2500				
	blow down)	ALC: NO	/ //	174					
IV	low TDS Low COD wastewater	7764	7458.25	305.75	7764				
	to RO MEE after treatment								
V	Direct Disposal (Boiler and CT	1980	1980	0	1980				
	blow down)		100						
VI	low TDS Low COD wastewater to	19379	19379	0	19379				
	ETP	Same of the	140 17						
VII	Wshing to ETP	2378	2378	0	2378				
VIII	To ETP (including Process+ MEE	22513	22513	0	22513				
	condensate + Washing +								
	Domestic)								
IX	Treated effluent	24493	24493	0	24493				
X	Reuse recycle(approx)	4000	4000	0	4000				
	Treated effluent for discharge	20514	20514	0 (APL will be	20514				
				ZLD)					

^{7.} The power connected load is 49000 kVA, which will be sourced from Dakshin Gujarat Vij Company Limited (DGVCL) and Captive Power Plant. No additional requirement of power. Unit has installed 2 D.G. Sets of 1010 kVA and 1500 kVA capacity for the power backup. Stack height of 11 m is provided as per CPCB norms to the proposed DG Set.

^{8.} The existing flue gas emission is from stack attached to Coal/Lignite fired Boilers, PNG

operated Hot Oil Unit, Oil Burner and Thermic Fluid Heater (6 L Kcal/hr). Electrostatic Precipitators with stack of different heights are installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm³ for the existing boilers. There will be no addition of any flue gas stack in proposed expansion. The process emission generation is from 57 nos. of stacks/vents. There will be addition of 30 process stacks in the proposed expansion project. Air pollution control measures like bag filter, cyclone, water, alkali, acid, caustic scrubbers will be provided as separate or in the combination. Details of flue gas stacks, process gas stacks, solid waste/hazardous waste disposal are as per the plan provided in the EIA/EMP report and as deliberated in the EAC. The details of process stacks are as follows:

Description	Atul Ltd as per EC	Atul Ltd (after Split)	APL (After Split)	Total
Nos of Process stacks	89	87	2	89

- 9. The project/activities are covered under Category 'A' of item 5(b) 'Pesticides industry and pesticide specific intermediates', 5(f) 'Synthetic Organic Chemicals Industry' and 4(d) 'Chlor-Alkali Industry' of the Schedule to the Environment Impact Assessment Notification, 2006, and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.
- 10. The proposal was considered by the Expert Appraisal Committee (Industry-3) in its 35th and 37th meetings held during 28-29 July, 2022 and on 29-30 August, 2022 respectively through video conferencing, wherein the project proponent and an accredited consultant, M/s San Envirotech Pvt. Ltd. made a detailed presentation on the proposed split.
- 11. The EAC noted that the project cost, CER budget and Environmental Management aspects (management plan, management body, equipment, man power, green belt, budget etc.) may not be simply additive as quantified by the PP. Since these are likely to vary when they are actually implemented by the PP after split, the EAC recommended that the PP should submit the revised/final figures, if any, to the Ministry and its IRO. Accordingly, and if required, an amendment in the EC may be considered.
- 12. The EAC deliberated on the information and documents submitted by the PP and recommended the proposal subject to the compliance of additional specific conditions. The minutes of the meeting are available on PARIVESH.
- 13. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-3), the Ministry of Environment, Forest and Climate change hereby splits the EC dated 03.08.2021 granted to M/s Atul Ltd. for Expansion of Dyes, Chlor-Alkali, Pesticide, Bulk Drug & Pharmaceutical, Resins, Flavors & Fragrances, Other Chemicals & Co-Products Manufacturing Unit at Survey No. 5, 6, 29, 30, 33 (new Survey no. 256)*- Part A, 34, 35, 36, Survey 37 (new Survey no. 262)- Part A, Survey 37 (new Survey no. 263)- Part A, 38, 80, 81, 84, 85, 91, 96 to 105, 108, 112 to 117, 142, 144 (new Survey no.599)- Part A, 145, 146, 147 (new Survey No. 602)- Part A, 148 (new Survey No. 603)- Part A of Atul Village and 274, 275, 276, 315, 316,317- Part A, 318,319,320, 321 of Haria village, Taluka and District Valsad, Gujarat by M/s Atul Ltd. under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

A. Specific conditions:

- (i). The PP should submit the revised/final figures of project cost, CER budget, Environmental Management aspects etc., if any, after the split to the Ministry and its IRO. Accordingly, and if required, the PP shall apply for an amendment in the EC.
- (ii). All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The PP shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.
- (iii). The PP shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (iv). The effluent quantity to be discharged shall be within the prescribed limit as per the existing CRZ clearance and any increase in the effluent load or changes in pipeline attracts the provisions of the CRZ Notification, 2019 & its amendments and the project proponent shall obtain fresh CRZ clearance.
- (v). No banned pesticides/chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.
- (vi). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (vii). The treated effluent of 20514 KLD proposed to discharge to the estuary of Par river through pipeline, shall conform to the standards prescribed under the Environment (Protection) Act, 1986. The project proponent shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
- (viii). Continuous online (24x7) monitoring system for stack emissions shall be installed for the measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB servers. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (ix). The storage of toxic/hazardous raw material shall be bare minimum with respect to their quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.
- (x). Occupational health centre for surveillance of the workers' health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xi). Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall also be provided to employees.
- (xii). The unit shall make arrangement for the prevention and protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. Action plan proposed shall be implemented in letter and spirit.
- (xiii). Solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.

- (xiv). The Action plan submitted for controlling the particulate emissions in the factory shall be satisfactorily implemented.
- (xv). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled up to 99.99% with effective chillers/modern technology.
- (xvi). Total fresh water requirement, proposed to be met from Par River shall not exceed 16101.5 cum/day. Prior permission in this regard shall be obtained from the concerned regulatory authority.
- (xvii). Storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xviii). The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high-pressure hoses for equipment clearing to reduce wastewater generation.
 - (xix). The green belt of at least 5-10 m width shall be developed/strengthened over nearly 33% of the total project area, mainly along the plant periphery/adjacent areas. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Records of tree canopy shall be monitored through remote sensing. Trees have to be planted with spacing of 2m x 2m and number of trees has to be increased accordingly. The plant species can be selected that will give better carbon sequestration. The action plan proposed in this regard shall be implemented.
 - (xx). As proposed, the project proponent shall undertake plantation activities (7,000 plant) in the Parnera hill and other areas with the support of State Forest Department/Village Administration.
 - (xxi). As committed, at least Rs. 4 lakhs shall be allocated for conservation of Schedule I species. The implementation report shall be submitted to the IRO, MoEFCC.
- (xxii). The activities and the action plan proposed by the project proponent to address the socioeconomic/public concern and issues raised during public hearing in the study area shall be completed as per the schedule presented before the Committee and as described in the EMP report in letter and spirit.
- (xxiii). A separate Environmental Management Cell (having qualified persons with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

<u>B. General conditions:</u> The grant of environmental clearance is further subject to compliance of other general conditions as under:-

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.

- (iii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iv) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (v) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (vi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (vii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (viii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (ix) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (x) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (xi) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- (xii) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- **14.** The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.
- **15.** Concealing submission of false/fabricated factual data data and or failure comply with of the conditions mentioned above to any may result withdrawal in of this clearance and attract action under the

provisions of the Environment (Protection) Act, 1986.

- **16.** 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.
- 17. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

This issues with approval of the competent authority.

(Dr. Motipalli Ramesh) Scientist 'E'

Copy to:

- 1. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Gandhi Nagar, A-Wing 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector-10A, Gandhi Nagar 382010.
- 2. The Secretary, Forests and Environment Department, Government of Gujarat, Block 14, 8th Floor, Sachivalaya, Gandhinagar (Gujarat) -10
- 3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi 32
- 4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10A, Gandhinagar (Gujarat) 10
- 5. The District Collector, District Valsad (Gujarat)

Protects

6. Guard File/Monitoring File/PARIVESH

(Dr. Motipalli Ramesh) Scientist 'E' Tel.: 011-20819338

Email: ramesh.motipalli@nic.in