	ENVIRONMENTAL CLEARANCE		To,	The -1 GHARDA CHEMIC Plot No. C-393 to (392140 (Guiarat)	Goveri nvironmer npact Ass CALS LIMITE C-396, Saykha Bharuch Guia	nment of India ht, Forest and Climate Change sessment Division) D a GIDC Estate, Tal: Vagra, Dist.: Bharuch -
	y Interactive,	(qnH mop	Sub Sir/N in r IA/G clea	ject: Grant of Environmo under the provision Madam, This is in referen espect of project su GJ/IND3/417731/2023 da rance granted to the pro	ental Clearan of EIA Notifi de to your ap lomitted to ated 10 Mar 2 bject are as b	ce (EC) to the proposed Project Activity cation 2006-regarding plication for Environmental Clearance (EC) the Ministry vide proposal number 023. The particulars of the environmental elow.
PARIVESH	nd Responsive Facilitation by	ous Environment Single-Win	1. 2. 3. 4. 5.	EC Identification No. File No. Project Type Category Project/Activity includ Schedule No. Name of Project	ing the Protects	EC23A017GJ174749 J-11011/09/2016-IA.II(I) Expansion A 5(b) Pesticides industry and pesticide specific intermediates (excluding formulations) M/s. Gharda Chemicals Ltd. proposes expansion of Agrochemicals (Pesticides) & Organic Chemicals Manufacturing in Existing Unit (from 22750 MTPA to 77450 MTPA) located at Plot No. C-393 to C- 396, Sayakha GIDC Estate, Tal: Vagra, Dist: Bharuch – 392 140 (Gujarat).
	e a	rtuc	7. °	Name of Company/Org	ganization	GHARDA CHEMICALS LIMITED
	-Activ	in ba	9.	TOR Date		N/A
	(Pro	Ø	The no 2	project details along with onwards.	terms and co	onditions are appended herewith from page
		1	Date	e: 12/05/2023		(e-signed) Mr. Motipalli Ramesh Scientist E IA - (Industrial Projects - 3 sector)
	and a state	08/	Note num num	e: A valid environment bber & E-Sign genera bber in all future corr	al clearance ated from P. espondence	shall be one that has EC identification ARIVESH.Please quote identification

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F. No. J-11011/09/2016-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: 12th May, 2023

То

M/s. Gharda Chemicals Ltd.

Plot No. C-393 to C-396, Saykha GIDC Estate, Tal: Vagra, Dist.: Bharuch - 392140 (Gujarat) Email: neeraj.garg@gharda.com

Subject: Proposed Expansion of Agrochemicals (Pesticides) & Organic Chemicals Manufacturing in Existing Unit (from 22750 MTPA to 77450 MTPA) located at Plot No. C-393 to C-396, Sayakha GIDC Estate, Taluka Vagra, District Bharuch, Gujarat by M/s. Gharda Chemicals Ltd. - Consideration of Environmental Clearance

exe

Sir,

This has reference to your proposal No. IA/GJ/IND3/417731/2023, on the above subject matter.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for Environmental Clearance to the project for Expansion of Agrochemicals (Pesticides) & Organic Chemicals Manufacturing in Existing Unit (from 22750 MTPA to 77450 MTPA) located at Plot No. C-393 to C-396, Sayakha GIDC Estate, Taluka Vagra, District Bharuch, Gujarat by M/s. Gharda Chemicals Ltd.

3. The project/activity is covered under Category 'A' of item 5(b)- Pesticides and 5(f) - Synthetic Organic Chemicals of Schedule of EIA Notification, 2006 (as amended) and requires appraisal at Central Level by the EAC.

The standard ToR has been issued by Ministry vide letter no. IA- J-11011/09/2016-IA 4. II (I) dated 30.9.2020. The PP submitted that Unit is located in Sayakha GIDC Estate. Which falls in PCPIR region. EC of PCPIR Region was obtained File no. 21-49/2010-IA-III dated 14th September, 2017 so the Public Hearing (PH) is exempted as per para 7 (i) Stage III (3)(i)(b) of the EIA notification, 2006. The PP applied for Environment Clearance on 14.2.2023 in CAF and submitted EIA/EMP Report and other documents. The PP reported in Form that it is an Expansion EC. Due to some shortcomings, the proposal was referred back to PP on 2.3.2023 and the reply for the same has been submitted on 10.3.2023. The proposal was placed in 49th EAC Meeting held on 3, 5-6 April, 2023, wherein the PP and an accredited consultant, M/s. Aqua-Air Environmental Engineers Pvt. Ltd. [Accreditation number NABET/EIA/2023/IA0062, Valid up to 7.10.2023] made a detailed presentation on the salient features of the project. The information submitted by the PP is as follows:

5. The PP reported that the total 75,410.29 m² (Existing -75,410.29 m² + Additional -0 m²) and no R& R is involved in the Project. The details of products are as follows:

S	Name of Product	CAS	Exis	Prop	То	End	LD	Categ	Rem
•		No.	ting	osed	tal	Use	50-	ory as	arks
Ν			(TP	(TP	(T		Ora	per	
0.			A)	A)	PA		1	EIA	
)		(Ra	Notifi	
							t)	cation	
							mg/	5(f)	
							kg	or	
								5(b)	
1	Para Dichloro Benzene	106-	600	0	60	Chemi	500	5f	No
		46-7	0	1.77	00	cal			chan
		1.1		1.6	12	Interm			ge
		0.5	100	0	10	ediate			
2	O-Phenylenediamine	95-	100	0	10	Chemi	516	51	No
	(OPDA)	54-5	0		00				chan
	1/					Interm			ge
2	2 Aming 0 Ethel Carboral	120	150	0	15	Lutane	144	5.6	NT-
3	(AEC) and its intermediates	132-	150	0	15	Interm	144	51	N0 ahan
	(AEC) and its intermediates	32-1 96	1.000		0	for	NIA	5£	chan
	a) Ethyl Carbazole	80- 28-2		γ.	1 N I	niama	INA	51	ge
	b) Nitro Ethyl Corborolo	20-2		1.1	~	nt	NIA	5f	
	b) Nillo Etilyi Carbazole	20.4		1		m	INA	51	
1	Chloranil and its	118	150	0	15	Fungi	400	5h	No
-	intermediates	75-2	150	U	0	cide	0	50	chan
	a) 246-Tri	88-			V	cide	820	5f	ge
	Chlorophenol	06-2			1		020	51	80
5	Meta Phenoxy Benzyl	1382	100	0	10	Chemi	149	5f	No
-	Alcohol (MPBA)	6-	100	Ŭ	0	cal	6	01	chan
		35-2				Interm			ge
	a) Meta bromo	3132				ediate	112	5f	0
	benzaldehyde	-99-			and the second second	<u>_</u>	6		
	- Dr.	8			A	÷ '			
	b) Meta bromo	6237	t i f	199	16 - C		NA	5f	1
	benzaldehyde acetal	3-							
	-	79-9							
6	A) Poly Ether Ketone	1041	500	0	50	Specia	NA	5f	No
	(PEK)	35-			0	lty			chan
		57-1				Polym			ge
	a) Para Chloro Benzoyl	122-				er		5f	
	Chloride (PCBC)	01-0							
	b) Chlorohydroxy	4201						5f	
	Benzophenone (CHBP)	9-							
		78-3							
	c) Sodium Salt of 4-	1202						5f	
	Chloro-4'-hydroxy	872-							

	Benzophenone (NaCHBP)	85-2							
	d) Diphenyl Sulphone	127-						5f	
	(DPSO2)	63-9							
	B) Poly Ether Ketone	3060						5f	
	Ketone (PEKK)	4-							
		15-0							
	a) Terepthaloyl Chloride	100-						5f	
	(TPC)	20-9							
	C) Polybenzimidazole	2969						5f	
	(ABPBI)	2-							
		96-4							
7	Poly Ether Imide and its	6112	500	0	50	Specia	>50	5f	No
	intermediates	8-	0	100 m	00	lty	00		chan
		46-9	1261	10-2		Polym			ge
	a) 4-Nitro N-Methyl	4166	100	1.6.1	12	er	280	5f	U
	Pthalimide (Nitro NMPI)	3-		-	- C	6022	0	-	
	Lais -	84-7							
	b) Bis Phenol A Bis	3810				~ 0	NA	5f	
	Ether – Tetra Carboxylic	3-						01	
	Acid (BPA-BE-TCA)	05-8							
8	Hexaconazole and its	7998	300	0	30	Fungi	218	.5b	No
Ũ	intermediates	3-	200		0	cide	9		chan
		71-4			Ŭ				ge
	a) Valeryl Chloride	638-				100	NA	5f	8-
	u) · · · · · · · · · · · · · · · · · · ·	29-9		1.2	\sim	5 Q.		01	
	b) 2.4-Dichloro	6102	1.1	1		2.4	NA	5f	-
	Valerophenone	3-		C 3	11		1 11 1	51	
	, aler opnenone	66-3		E. 9	1	11	11		
	c) $2-Butyl-2-(2.4-)$	8837					NA	5h	
	Dichklorophenyl) Oxirane	4-					1111	50	
	Diemkiorophenyi) Owname	07-6	-	-			1.2		
9	Propiconazole	6020	500	0	50	Fungi	>15	5h	No
	Topiconazoie	7_	500	U	0	cide	17	50	chan
	0.	, 90-1			U	Ciuc	- 1		oe
1	Dicamba and its	1918	500	0	50	Herbi	274	5b	No
0	intermediates	-00-	0	U	00	cide	$\begin{bmatrix} 2 \\ 0 \end{bmatrix}$	50	chan
Ŭ		9	Ŭ	54	00	erae	Ŭ		ge.
1	a) 2 3 Di Chloro Nitro	3209					381	5f	5~
1	Benzene	-22-					501	51	
	Denzene	1							
1	b) 2.3 Di Chloro Aniline	- 608-					NA	5f	
	<i>z, z, z</i> , <i>z</i> , <i>z</i> , <i>z</i> , <i>z</i> , <i>z</i> , <i>z</i> ,	27-5					1,111		
	c) 2.3 Di Chloro Phenol	576-					258	5f	
	<i>z, z, z</i> , <i>z</i> , <i>z</i> , <i>z</i> , <i>z</i> , <i>z</i> , <i>z</i> ,	24-9					5	51	
1) (mo		
1							use)		
	d) Dipotassium salt of	6893					NA	5f	
	3 6-Dichloro salievlie acid	8-					11/1	51	
1	(DCSA K 2 Salt)	80-7							
		007	I		l		I		

	e) 3,6-Dichloro-2-	6597					NA	5f	
	methoxy methyl benzoate	-78-							
	(Dicamba Ester)	0							
1	Profenofos and its	4119	100	0	10	Insecti	162	5b	No
1	intermediates	8-	0		00	cide			chan
		08-7							ge
	a) 4-Bromo-2-	3964					NA	5f	
	chlorophenol (BCP)	-56-							
		5							
	b) Phosphorothioic	6073					NA	5f	
	acid O-(4-bromo-2-	1-							
	chlorophenyl) O,O-diethyl	55-7							
	ester (PC-1)			1000					
1	Bifenthrin and its	8265	200	0	20	Pyreth	53.	5b	No
2	intermediates	7-			0	roid	4		chan
		04-3			-	1,252			ge
	a) Bifenthrin chloride	8454				1.00	NA	5b	
	~//	1-				N 1			
		46-8							
1	Lambda Cyhalothrin and its	9146	100	0	10	Pyreth	79	5b	No
3	intermediates	5-			0	roid	N		chan
		08-6	100					~1	ge
	a) 3-(2-Chloro-3-	3938		× .	1.1	~	NA	5b	
	Trifluoropropenyl-2,2-	70-		1. 20	Sec.	2.0			
	Dimethyl Cyclopropane	46-7		1.2					
1	Carbonyl Chloride (CHAC)	1527	500	0	50	Incerti		51	Na
1	Imametnoxam	1557	500	0	50	insecti	>	50	NO
4		19-			0	cide	200	A	chan
1	Difenthiuron and its	23-4	500	0	50	Incocti	206	55	ge No
5	intermediates	0	300	0	0	cide	200	50	chan
5	Intermediates	0-00			0	CIUC	0		
	a) 1 (2.6 Disisopropul	1352					NA	5h	ge
	4-Phenoxyphenyl)	1352 52-				1.0	INA	50	
	(Thiourea)	10-7				- C.			
	b) 4 -phenoxy-2 6 -	8005	_			6 °	NA	5f	
	disopropylaniline	8-	e i de	54	12 I		1111	51	
	isothiocvanate	93-1		10 C					
1	Metalaxyl and its	5783	100	0	10	Fungi	669	5b	No
6	intermediates	7-	0	Ŭ	00	cide	007	50	chan
		19-1	Ť						ge
	a) Methoxy Acetyl	3887					NA	5f	0-
	Chloride	0-					1,111	01	
		89-2							
	b) Methyl (2.6-Dimethyl	5288					NA	5b	
	Phenylamino) Propanoate	8-							
	,, pano are	10.0							
1	(Alaninate)	49-0							
1	(Alaninate) Buprofezin	49-0 6932	250	0	25	Insecti	219	5b	No

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			76-0							ge
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1	Carbendazim and its	1060	500	0	50	Insecti	>	5b	No
0 0 ge a) Ortho Nitro Aniline 88- (ONA) 74-4 0 205 5b 0 b) O-Phenylenediamine (OPDA) 54-5 516 5f 516 5f c) Cyano Methyl Carbamate (CMC) 9- 98-6 00 4000 40 Herbi 74 5b NA 5b 1 Dicamba and its 1918 0 4000 40 Herbi 74 5b New Product 9 intermediates -00- 9 30 2,5-Dichloro Phenol 583- 78-8 00 56 10 10 230 5f 0 2,5-Dichloro Nitro 89- 61-2 61-2 61-2 10 230 5f 10 212 5f 0 2,5-Dichloro Aniline 95- 82-9 10 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14 14 15	8	intermediates	5-			0	cide	500		chan
a) Ortho Nitro Aniline 88- 74-4 b) O-Phenylenediamine 95- (OPDA) 54-5 c) Cyano Methyl 2172 Carbamate (CMC) 9- 9 a) 2,5-Dichloro Phenol 583- 78-8 b) Mono Chloro Benzene 108- 90-7 c) Para Dichloro Benzene 108- 90-7 d) 2,5-Dichloro Nitro 89- 80- 80-7 b) Mono Chloro Benzene 108- 90-7 d) 2,5-Dichloro Nitro 89- 80- 80-7 g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 j) Ortho Dichloro Benzene 50- 76-1 j) Ortho Dichloro Benzene 82-1 73-1 j) 1,2,3-Tri Chloro Benzene 87- 73-1 j) 1,2,3-Tri Chloro Benzene 87- 70-3 o) 2,3-Dichloro Nitro 820-			21-7					0		ge
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		a) Ortho Nitro Aniline	88-					205	5b	
b) O-Phenylenediamine 95- 54-5 c) Cyano Methyl 2172 Carbamate (CMC) 9- 98-6 1 Dicamba and its 1918 9 intermediates -00- 90- a) 2,5-Dichloro Phenol 583- 90-7 c) Para Dichloro Benzene 106- 46-7 d) 2,5-Dichloro Nitro 89- 90-7 e) 3,4-Dichloro Nitro 89- 8enzene g) 3,4-Dichloro Aniline 95- 76-1 h) 2,5-Dichloro Aniline 95- 76-1 g) 3,4-Dichloro Aniline 95- 76-1 g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 j) Ortho Dichloro 95- 76-1 j) Ortho Dichloro 95- 78- 78- 77 j) Ortho Dichloro 95- 78- 78- 73-1 j) 1,2,3-Tri Chloro 87- 80- Benzene 61-6 n) 1,2,3-Tri Chloro Benzene 70- 70-3 o) 2,3-Di		(ONA)	74-4					0		
(OPDA) 54-5 (a) NA 5b c) Cyano Methyl Garbamate (CMC) 9- 9- 98-6 NA 5b 1 Dicamba and its intermediates 1918 -00- 9- 9 4000 40 Herbi 274 5b New Prod uct 3 2,5-Dichloro Phenol 583- 78-8 580 5f b) Mono Chloro Benzene 108- 90-7 230 5f c) Para Dichloro Benzene 106- 46-7 230 5f d) 2,5-Dichloro Nitro 89- 80- 80-7 212 5f e) 3,4-Dichloro Aniline 95- 80- 82-9 89- 9 5f 160 5f g) 3,4-Dichloro Aniline 95- 80- 78- 7 78- 7 160 5f NA 5f i) Nitrosyl Sulphate 7782 78- 7 78- 7 500 5f i) 1,2,4-Tri Chloro 82-1 7 NA 5f i) 1,2,3-Tri Chloro 87- 7 800 5f ii) 1,2,3-Tri Chloro 68-6 800		b) O-Phenylenediamine	95-					516	5f	
c) Cyano Methyl Carbamate (CMC) 2172 9- 98-6 1 Dicamba and its intermediates 1918 -00- 9 4000 40 400 400 400 were 0 580 5f a) 2,5-Dichloro Phenol 583- 78-8 580 5f 230 5f b) Mono Chloro Benzene 106- 46-7 46-7 6 212 5f (a) 2,5-Dichloro Nitro 89- Benzene 61-2 95- 76-1 953 5f (a) 2,5-Dichloro Aniline 95- 76-1 76-1 160 5f (b) 2,3-Dichloro Aniline 95- 76-1 76-1 NA 5f (b) 2,3-Dichloro Aniline 95- 76-1 76-1 NA 5f (c) 3,4-Dichloro Aniline 608- 27-5 7 7 7 7 (j) Ortho Dichloro 95- 8enzene 50-1 NA 5f (j) 0,1,2,3-Tri Chloro 87- 7 7 7 7 7 (j) 0,2,3-Dichloro Nitro		(OPDA)	54-5							
Carbamate (CMC) 9- 98-6 9 1 Dicamba and its 1918 0 intermediates 00- 9 a) 2,5-Dichloro Phenol 583- 90-7 c) Para Dichloro Benzene 108- 90-7 c) Para Dichloro Benzene 108- 90-7 c) Para Dichloro Benzene 108- 90-7 c) Para Dichloro Benzene 106- 90-7 c) Para Dichloro Nitro 89- Benzene e) 3,4-Dichloro Nitro 99- 82-9 g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 j) Otho Dichloro 95- 82-9 g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 j) Otho Dichloro 95- 80-1 k) Meta Dichloro Benzene 541- 73-1 j) Otho Dichloro 87- 7 j) Otho Dichloro 95- 80-1 k) Meta Dichloro Benzene 541- 756 m) 1,2,3-Tri Chloro 87- 80- m) 1,3,5-Tri Chl		c) Cyano Methyl	2172					NA	5b	
98-6 98-6 1 Dicamba and its intermediates 1918 0 4000 40 Herbi 274 5b New Prod uct 9 a) 2,5-Dichloro Phenol 583- 78-8 580 5f b) Mono Chloro Benzene 108- 90-7 230 5f (c) Para Dichloro Benzene 106- 46-7 230 5f (c) Para Dichloro Nitro 89- Benzene 61-2 7 (c) 2,5-Dichloro Nitro 89- Benzene 54-7 9 9 g) 3,4-Dichloro Aniline 95- 7- 7 160 5f (j) Ortho Dichloro 95- 8- 75 160 5f (j) Ortho Dichloro 95- Benzene 50-1 NA 5f (j) Ortho Dichloro 95- Benzene 75-1 10 13,5-Tri Chloro 87- 82-1 (j) 0,2,3-Dichloro Nitro 3209 80- 8- 1 NA 5f (j) 0,2,3-Dichloro Nitro 3209 80- <t< td=""><td></td><td>Carbamate (CMC)</td><td>9-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		Carbamate (CMC)	9-							
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9 0	9	intermediates	-00-	1.00	100	00	cide	0		Prod
a) 2,5-Dichloro Phenol 583- 78-8 b) Mono Chloro Benzene 108- 90-7 c) Para Dichloro Benzene 106- 46-7 d) 2,5-Dichloro Nitro 89- Benzene e) 3,4-Dichloro Nitro 99- Benzene g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 608- 27-5 i) Nitrosyl Sulphate 7782 778- 7 j) Ortho Dichloro 95- Benzene m) 1,2,4-Tri Chloro 120- Benzene m) 1,2,3-Tri Chloro 175- 80- 90 m) 1,3,5-Tri Chloro 108- 800 Benzene 70-3 o) 2,3-Dichloro Nitro 3209 Benzene 70-3 o) 2,3-Dichloro Nitro 3209 Benzene 1 p) Dipotassium salt of 6893 3,6-Dichloro salicylic acid 8- 8-		0	9	201	177					uct
b) Mono Chloro Benzene 108- 90-7 c) Para Dichloro Benzene 106- 46-7 d) 2,5-Dichloro Nitro 89- Benzene e) 3,4-Dichloro Nitro 99- Benzene f) 2,5-Dichloro Aniline 95- 76-1 h) 2,5-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 608- 77-5 i) Nitrosyl Sulphate 7782 -78- 7 j) Ortho Dichloro 95- 8enzene f) 1,2,4-Tri Chloro 120- 8enzene genzene 61-6 n) 1,2,3-Tri Chloro go) 2,3-Dichloro Nitro 82-1 70-3 go) 2,3-Dichloro Nitro 3209 Benzene -22- 1 NA p) Dipotassium salt of 3,6-Dichloro salicylic acid 80-7		a) 2,5-Dichloro Phenol	583-		199	12	15.8	580	5f	
b) Mono Chloro Benzene 108-90-7 c) Para Dichloro Benzene 106-46-7 d) 2,5-Dichloro Nitro 89- Benzene 61-2 0 e) 3,4-Dichloro Aniline 95- g) 0 O 95- g) 0 O 95- g) 0 O 95- Benzene 50-1 k) Meta Dichloro 95- go 500 5f i) 1,2,3-Tri Chloro 87- Benzene 70-3 0 2,3-Dichloro Nitro go 3,6-Dichloro salicylic acid 8- <t< td=""><td></td><td></td><td>78-8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>			78-8							
90-7 (c) 0 Para Dichloro Benzene 00 46-7 (d) (d) 2,5-Dichloro Nitro 89- Benzene (e) 3,4-Dichloro Nitro 99- Benzene (f) 2,5-Dichloro Aniline 95- 82-9 (g) 3,4-Dichloro Aniline 95- 82-9 (g) 3,4-Dichloro Aniline 95- 76-1 (h) 2,3-Dichloro Aniline 95- 76-1 (h) 2,3-Dichloro Aniline 95- 77- (i) Nitrosyl Sulphate 778- 778- 778- (j) Ortho Dichloro 95- 8enzene (j) Ortho Dichloro 95- 8enzene (j) 1,2,4-Tri Chloro 87- 82-1 (m) 1,2,3-Tri Chloro 87- 80- (j) 2,3-Dichloro Nitro 3209 8enzene (j) 2,3-Dichloro Nitro 3209 8enzene (j) 0,2,3-Dichloro Nitro 3209 8enzene (j) Dipotassium salt of 3,6-Dichloro salicylic acid 80-7		b) Mono Chloro Benzene	108-				49 A	230	5f	
c) Para Dichloro Benzene 106-46-7 d) 2,5-Dichloro Nitro 89- Benzene e) 3,4-Dichloro Nitro 99- Benzene f) 2,5-Dichloro Aniline 95- 82-9 g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 i) Nitrosyl Sulphate 778- 7 j) Ortho Dichloro 95- Benzene k) Meta Dichloro Benzene 541- 73-1 l) 1,2,4-Tri Chloro 120- Benzene Benzene 61-6 n) 1,3,5-Tri Chloro 87- 800 Benzene 61-6 n) 1,3,5-Tri Chloro 108- 800 Benzene 70-3 o) 2,3-Dichloro Nitro 3209 Benzene -22- 1 1 p) Dipotassium salt of 3,6-Dichloro salicylic acid 8893 3,6-Dichloro salicylic acid 80-7			90-7	1.1			$\sim \cdot$	0		
46-7 0 d) 2,5-Dichloro Nitro 89- Benzene 61-2 e) 3,4-Dichloro Nitro 99- Benzene 54-7 f) 2,5-Dichloro Aniline 95- 82-9 953 g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 j) Ortho Dichloro 95- Benzene 7 7 j) Ortho Dichloro 95- Benzene 800 5f n) 1,2,3-Tri Chloro 87- 82-1 m) 1,2,3-Tri Chloro 87- 800 Benzene 61-6 n) 1,2,3-Tri Chloro 108- 800 Benzene 70-3 o) 2,3-Dichloro Nitro 3209 Benzene 10 p) Dipotassium salt of 3,6-Dichloro salicylic acid 8893 3,6-Dichloro salicylic acid 80-7		c) Para Dichloro Benzene	106-					295	5f	
d) 2,5-Dichloro Nitro 89- Benzene 61-2 e) 3,4-Dichloro Nitro 99- Benzene 54-7 f) 2,5-Dichloro Aniline 95- 82-9 96 g) 3,4-Dichloro Aniline 95- 76-1 160 5f h) 2,3-Dichloro Aniline 608- 27-5 74- 7 NA 5f i) Nitrosyl Sulphate 7782 78- 7 -78- 7 500 5f j) Ortho Dichloro 95- Benzene 50-1 NA 5f k) Meta Dichloro Benzene 54-1 73-1 756 5f i) 1,2,3-Tri Chloro 120- Benzene 87- 82-1 NA 5f m) 1,2,3-Tri Chloro 120- 800 5f 800 5f g) 2,3-Dichloro Nitro 3209 NA 5f g) 2,3-Dichloro Nitro 3209 NA 5f g) Dipotassium salt of 3,6-Dichloro salicylic acid 8- 80-7 NA 5f		· · · · · · · · · · · · · · · · · · ·	46-7				1	0	-	
Benzene 61-2 0 e) 3,4-Dichloro Nitro 99- Benzene 54-7 f) 2,5-Dichloro Aniline 95- 82-9 g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 608- 27-5 i) Nitrosyl Sulphate 7782 -78- 7 j) Ortho Dichloro 95- Benzene k) Meta Dichloro Benzene 541- 73-1 l) 1,2,4-Tri Chloro 120- 82-1 m) 1,2,3-Tri Chloro 82-1 m) 1,3,5-Tri Chloro n) 1,3,5-Tri Chloro 82-1 m) 1,3,5-Tri Chloro n) 1,3,5-Tri Chloro 108- Benzene genzene 70-3 0) 2,3-Dichloro Nitro genzene 70-3 0) j) Dipotassium salt of 3,6-Dichloro salicylic acid genzene 6893 80-7		d) 2.5-Dichloro Nitro	89-					212	5f	
e) 3,4-Dichloro Nitro 99- 54-7 f) 2,5-Dichloro Aniline 95- 82-9 g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 608- 27-5 i) Nitrosyl Sulphate 7782 7782 j) Ortho Dichloro 95- Benzene k) Meta Dichloro Benzene 541- 73-1 l) 1,2,3-Tri Chloro 87- Benzene m) 1,2,3-Tri Chloro 87- Benzene m) 1,3,5-Tri Chloro 108- Benzene go) 2,3-Dichloro Nitro 3209 Benzene genzene -22- 1 1 p) Dipotassium salt of 3,6-Dichloro salicylic acid 8- 80-7		Benzene	61-2	1.00				0	-	
Benzene 54-7 f) 2,5-Dichloro Aniline 95- 82-9 g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 608- 27-5 i) Nitrosyl Sulphate 7782 7 j) Ortho Dichloro 95- Benzene k) Meta Dichloro Benzene 541- 73-1 l) 1,2,3-Tri Chloro 120- Benzene m) 1,2,3-Tri Chloro 108- Benzene m) 1,2,3-Tri Chloro 87- Benzene o) 2,3-Dichloro Nitro 3209 Benzene p) Dipotassium salt of 3,6-Dichloro salicylic acid 8- 80-7		e) 3.4-Dichloro Nitro	99-			1.0		953	5f	
f) 2,5-Dichloro Aniline 95- 82-9 g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 608- 27-5 i) Nitrosyl Sulphate 7782 -78- 7 j) Ortho Dichloro 95- Benzene k) Meta Dichloro Benzene 50-1 541- 73-1 l) 1,2,4-Tri Chloro 120- Benzene m) 1,2,3-Tri Chloro 87- Benzene m) 1,2,3-Tri Chloro 87- Benzene m) 1,3,5-Tri Chloro 108- Benzene genzene 70-3 o) 2,3-Dichloro Nitro 3209 Benzene genzene -22- 1 p) Dipotassium salt of 3,6-Dichloro salicylic acid 8- 8-		Benzene	54-7				100		• -	
g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 608- 27-5 i) Nitrosyl Sulphate 7782 -78- 7 j) Ortho Dichloro 95- Benzene k) Meta Dichloro Benzene 541- 73-1 l) 1,2,4-Tri Chloro 120- Benzene m) 1,2,3-Tri Chloro 82-1 82-1 m) 1,2,3-Tri Chloro 87- Benzene 0 2,3-Dichloro Nitro 3209 Benzene p) Dipotassium salt of 3,6-Dichloro salicylic acid 6893 8- 80-7		f) 2.5-Dichloro Aniline	95-		12	- A	2.4	160	5f	
g) 3,4-Dichloro Aniline 95- 76-1 h) 2,3-Dichloro Aniline 608- 27-5 i) Nitrosyl Sulphate 7782 -78- 7 j) Ortho Dichloro 95- Benzene k) Meta Dichloro Benzene 541- 73-1 l) 1,2,4-Tri Chloro 120- Benzene m) 1,2,3-Tri Chloro 87- Benzene m) 1,2,3-Tri Chloro 87- Benzene g) 2,3-Dichloro Nitro 3209 Benzene p) Dipotassium salt of 3,6-Dichloro salicylic acid 6893 8- 80-7			82-9		1		1.0	0	-	
B) 2,3-Dichloro Aniline 76-1 h) 2,3-Dichloro Aniline 608- 27-5 i) Nitrosyl Sulphate 7782 -78- 7 j) Ortho Dichloro 95- Benzene k) Meta Dichloro Benzene 541- 73-1 l) 1,2,4-Tri Chloro 120- Benzene m) 1,2,3-Tri Chloro 87- Benzene m) 1,2,3-Tri Chloro 87- Benzene o) 2,3-Dichloro Nitro 3209 Benzene Benzene -22- 1 p) Dipotassium salt of 3,6-Dichloro salicylic acid 8- 80-7		g) 3.4-Dichloro Aniline	95-					545	5f	
h) 2,3-Dichloro Aniline 608- 27-5 i) Nitrosyl Sulphate 7782 -78- 7 j) Ortho Dichloro 95- Benzene k) Meta Dichloro Benzene 541- 73-1 l) 1,2,4-Tri Chloro 120- Benzene m) 1,2,3-Tri Chloro 87- Benzene m) 1,2,3-Tri Chloro 87- Benzene o) 2,3-Dichloro Nitro 3209 Benzene b 0) 2,3-Dichloro Nitro j) Dipotassium salt of 3,6-Dichloro salicylic acid 6893 8- 80-7		8, 0, 0	76-1			1	- 2	11	-	
$\begin{array}{ c c c c c }\hline \hline & 27-5 \\ \hline i) & Nitrosyl Sulphate & 7782 \\ & -78- \\ 7 \\ \hline j) & Ortho Dichloro & 95- \\ \hline Benzene & 50-1 \\ \hline k) & Meta Dichloro Benzene & 541- \\ \hline 73-1 \\ \hline l) & 1,2,4-Tri Chloro & 120- \\ \hline Benzene & 82-1 \\ \hline m) & 1,2,3-Tri Chloro & 87- \\ \hline Benzene & 61-6 \\ \hline n) & 1,3,5-Tri Chloro & 108- \\ \hline Benzene & 70-3 \\ \hline o) & 2,3-Dichloro Nitro & 3209 \\ \hline Benzene & -22- \\ \hline 1 \\ p) & Dipotassium salt of & 6893 \\ 3,6-Dichloro salicylic acid & 8- \\ \hline 80.7 \\ \hline \end{array}$		h) 2.3-Dichloro Aniline	608-		-	1		NA	5f	
i) Nitrosyl Sulphate 7782 -78- -7 j) Ortho Dichloro 95- Benzene 50-1 k) Meta Dichloro Benzene 541- 73-1 73-1 NA i) 1,2,4-Tri Chloro 120- Benzene 82-1 NA m) 1,2,3-Tri Chloro 87- Benzene 61-6 NA n) 1,3,5-Tri Chloro 108- Benzene 70-3 0) 2,3-Dichloro Nitro o) 2,3-Dichloro Nitro 3209 Benzene -22- 1 p) Dipotassium salt of 6893 3,6-Dichloro salicylic acid 8-		-, -,-	27-5					$\mathcal{I}_{\mathcal{A}}$		
-78- 7 j) Ortho Dichloro 95- Benzene k) Meta Dichloro Benzene 50-1 k) Meta Dichloro Benzene 541- 73-1 l) 1,2,4-Tri Chloro 120- Benzene m) 1,2,3-Tri Chloro 87- Benzene Benzene 61-6 n) 1,3,5-Tri Chloro 108- Benzene o) 2,3-Dichloro Nitro 3209 Benzene p) Dipotassium salt of 6893 8- 80-7		i) Nitrosyl Sulphate	7782				CH .	NA	5f	
7 7 j) Ortho Dichloro 95- Benzene Benzene 50-1 k) Meta Dichloro Benzene 541- 73-1 l) 1,2,4-Tri Chloro 120- Benzene Benzene 82-1 m) 1,2,3-Tri Chloro 87- Benzene Benzene 61-6 n) 1,3,5-Tri Chloro 108- Benzene Benzene 70-3 o) 2,3-Dichloro Nitro 3209 Benzene -22- 1 p) Dipotassium salt of 3,6-Dichloro salicylic acid 6893 80-7 8-			-78-				//	. 5		
j) Ortho Dichloro 95- Benzene 500 5f k) Meta Dichloro Benzene 541- 73-1 NA 5f l) 1,2,4-Tri Chloro 120- Benzene 756 5f m) 1,2,3-Tri Chloro 87- Benzene 61-6 NA 5f n) 1,3,5-Tri Chloro 108- Benzene 800 5f o) 2,3-Dichloro Nitro 3209 Benzene NA 5f p) Dipotassium salt of 3,6-Dichloro salicylic acid 6893 8- 80-7 NA 5f			7							
Benzene 50-1 k) Meta Dichloro Benzene 73-1 73-1 l) 1,2,4-Tri Chloro Benzene 82-1 m) 1,2,3-Tri Chloro Benzene 61-6 n) 1,3,5-Tri Chloro Benzene 70-3 o) 2,3-Dichloro Nitro Benzene -22- 1 1 p) Dipotassium salt of 3,6-Dichloro salicylic acid 80-7		i) Ortho Dichloro	95-			- <i></i>	6.00	500	5f	
k) Meta Dichloro Benzene 541- 73-1 l) 1,2,4-Tri Chloro 120- Benzene m) 1,2,3-Tri Chloro 87- Benzene m) 1,2,3-Tri Chloro 87- Benzene n) 1,3,5-Tri Chloro 108- Benzene o) 2,3-Dichloro Nitro 3209 Benzene p) Dipotassium salt of 3,6-Dichloro salicylic acid 6893 8- 80-7		Benzene	50-1		-	· .	$\sim 10^{-1}$		• -	
73-1 73-1 1) 1,2,4-Tri Chloro Benzene 82-1 m) 1,2,3-Tri Chloro Benzene 61-6 n) 1,3,5-Tri Chloro Benzene 70-3 o) 2,3-Dichloro Nitro Benzene 70-3 o) 2,3-Dichloro Nitro Benzene -22- 1 p) p) Dipotassium salt of 6893 8- 80-7 8-		k) Meta Dichloro Benzene	541-	1.1	52	11.1		NA	5f	
1) 1,2,4-Tri Chloro 120- 82-1 m) 1,2,3-Tri Chloro 87- 86-6 Benzene 61-6 n) 1,3,5-Tri Chloro Benzene 70-3 o) 2,3-Dichloro Nitro Benzene -22- 1 p) Dipotassium salt of 3,6-Dichloro salicylic acid 80-7		,	73-1	F 11	2^{n}	1.00			-	
Benzene 82-1 m) 1,2,3-Tri Chloro 87- Benzene 61-6 n) 1,3,5-Tri Chloro 108- Benzene 70-3 o) 2,3-Dichloro Nitro 3209 Benzene -22- 1 p) Dipotassium salt of 6893 3,6-Dichloro salicylic acid 8- 80-7		1) 1.2.4-Tri Chloro	120-					756	5f	
m) 1,2,3-Tri Chloro 87- Benzene 61-6 n) 1,3,5-Tri Chloro Benzene 70-3 o) 2,3-Dichloro Nitro Benzene -22- 1 1 p) Dipotassium salt of 6893 3,6-Dichloro salicylic acid 8- 80-7 8-		Benzene	82-1						• -	
Benzene 61-6 n) 1,3,5-Tri Chloro Benzene 70-3 o) 2,3-Dichloro Nitro Benzene -22- 1 1 p) Dipotassium salt of 3,6-Dichloro salicylic acid 8- 800 5f NA 5f		m) 1.2.3-Tri Chloro	87-					NA	5f	
n) 1,3,5-Tri Chloro 108- Benzene 70-3 o) 2,3-Dichloro Nitro 3209 Benzene -22- 1 1 p) Dipotassium salt of 6893 3,6-Dichloro salicylic acid 8- 800 5f		Benzene	61-6						-	
Benzene70-3o) 2,3-Dichloro Nitro3209Benzene-22-11p) Dipotassium salt of68933,6-Dichloro salicylic acid8-80-71		n) 1.3.5-Tri Chloro	108-					800	5f	
o)2,3-Dichloro Nitro3209Benzene-22-11p)Dipotassium salt of 3,6-Dichloro salicylic acid6893 8- 80-7		Benzene	70-3					200		
Benzene-22- 1p) Dipotassium salt of 3,6-Dichloro salicylic acid6893 8- 80-7		o) 2.3-Dichloro Nitro	3209					NA	5f	
p) Dipotassium salt of 6893 3,6-Dichloro salicylic acid 8- 80-7 0		Benzene	-22-							
p) Dipotassium salt of 6893 3,6-Dichloro salicylic acid 8- 80-7			1							
3,6-Dichloro salicylic acid 8- 80-7		p) Dipotassium salt of	6893					NA	5f	
80-7		3,6-Dichloro salicvlic acid	8-						-	
		, , , , , , , , , , , , , , , , , , ,	80-7							

	q) Methyl Chloride	74-					180	5f	
		87-3					0		
	r) 3,6-Dichloro-2-	6597					NA	5b	
	methoxy methyl benzoate	-78-							
	(Dicamba Ester)	0							
2	Mesotrione and its	1042	0	2500	25	Herbi	>20	5b	New
0	intermediates (MCB Route)	06-			00	cide	00		Prod
		82-8							uct
	a) 4-chloro benzene	98-					425	5f	
	sulfonyl chloride (MCB	60-2					0		
	sulfonyl chloride)								
	b) 1-Chloro-4-(methyl	98-					400	5f	
	sulfonyl) benzene	57-7	100	-					
	c) 1-Chloro-2-nitro4-(97-	201	17-17	100		NA	5f	
	methyl sulfonyl) benzene	07-4		1.1.1	P	16.8			
	(Chloro NMSB)	and the second division of the second divisio			- C	KC 28			
	d) Methyl-2-Cyano-2-(4-	NA				$\sim 10^{-1}$	NA	5b	
	(methyl sulfonyl)-2-					\sim			
	Nitrophenyl) acetate Cyano								
	NMSB)								_
	e) 2-Nitro-4-methyl	1109				. ``	NA	5b	
	sulfonyl benzoic acid	64-	100				1		
	(NMSBA)	79-9		× .	÷ •	N			
	f) 2-Nitro-4-methyl	1109		. 1	1	2.0	NA	5b	
	sulfonyl benzoyl chloride	64-		• /					
	(NMSBAC)	80-2		/	1	101	N T 4		-
	g) 1,3-Cyclohexane dione	504-	N.C.,	- 4		- 1 A	NA	51	
	-sodium salt (1,3-CHD -Na	02-9			Ζ.		11.	- m.	
	$\frac{1}{2} = \frac{2}{4} \frac{1}{2} $	2260					NTA	51	-
	n) 3-(4-methylsunonyl-2-	2209					INΑ	30	
	avalahayana 1 ana	44-				1 I I	1.64		
	(Masotrione and aster)	49-0					1.00		
2	(Mesotrione and its	1042				1.5	NΛ	5h	
	intermediates (TSC Route)	06			-	- C.	INA	50	
1	intermediates (TSC Route)	82-8		-		4.2			
	a) 4-Methyl sulfonyl	3185	t i fi	54	12.1		NΔ	5f	
	toluene (MST)	-99-		1. C. C.			1 1 1	51	
		7							
1	b) 2-Nitro-4-methyl	, 1671					NA	5f	1
1	sulfonyl toluene (NMST)	-49-					1 1 1 1		
1		4							
	c) 2-Nitro-4-methyl	1109					NA	5f	1
	sulfonyl benzoic acid	64-					1111		
	(NMSBA)	79-9							
1	d) 2-nitro -4-(methyl	1109					NA	5f	1
	sulfony) benzovl chloride	64-							
1	(NMSBAc)	80-2							
	e) 1,3-Cyclohexane dione	504-					NA	5f	1

	-sodium salt(1,3-CHD -Na	02-9							
	salt)								
	f) 3-(4'-methylsulfonyl-	2269					NA	5b	
	2'-nitro-benzoyloxy)-2-	44-							
	cyclohexene-1-one	49-6							
	(Mesotrione enol ester)								
2	Tembotrione and its	3351				Herbi	>	5b	New
2	intermediates	04-				cide	200		Prod
		84-2					0		uct
	a) Methane thiol	74-					61	5f	
		93-1							
	b) 3-Chloro-2-methyl	8296					NA	5f	
	phenyl methyl sulphide	1-		100 m					
	(CMTT)	52-2	1221	125					
	c) 2-Chloro-3-methyl-4-	1819		1.6.2	12	16.10	NA	5f	
	methylthio acetophenone	97-		-	1	100			
	(Acyl CMTT)	71-7				16 A A	S		
	d) 2-chloro-3-methyl -4-	1819				\sim	NA	5b	
	methyl sulfonyl	97-				\sim			
	acetophenone	72-8				N 1			
	e) 2-chloro-3-methyl -4-	1069					NA	5b	
	methyl sulfonyl benzoic	04-	100	-	1	L 1	1		
	acid (CMMSBA)	0 <mark>9-</mark> 0		. .					
	f) 2-chloro-3-methyl -4-	1201			-	100	NA	5b	
	methyl sulfonyl benzoic	00-		1 2		2.4			
	acid methyl <mark>ester</mark>	04-1	100	1		12/19			
	(CMMSBA Ester)	1.1				•)]			
	g) Methyl-(2-chloro-3-	1201	-	- T	1	1.1	NA	5b	
	bromomethyl-4-methyl	00-		_			11		
	sulfonyl benzoate	44-9					14	- C	
	(CBrMMSBA Ester)			-		C/ ,	6		
	h) 2-chloro-4-	1201				//	NA	5b	
	(methylsulfonyl)-3-[(2,2,2-	00-							
	trifluoroethoxy)methyl]	77-8			1	605			
	benzoic acid	-			· ·	2. 1			
	(CTFEMMSBA)		1.10	12	10.1				-
	i) 2-chloro-4-	1118	F 11	27	1.00		NA	5b	
	(methylsulfonyl)-3-[(2,2,2-	729-							
	trifluoroethoxy)methyl]	23-9							
	benzoyl chloride								
1	(CTFEMMSBAc)								
1	j) 1,3-Cyclohexane dione	504-					NA	5f	
	-sodium salt (1,3-CHD -Na	02-9							
	salt)								
1	k) 3-oxo-cyclo hexyl-2-	2634					NA	5f	
1	chloro-4-(methyl sulfonyl)-	01-							
1	3-((2,2,2-trifluoro	21-4							
	ethoxy)methyl) benzoate								
	(Tembotrione enol ester)								

2	Sulcotrione and its	9910				Herbi	NA	5b	New
3	intermediates	5-				cide			Prod
		77-8							uct
	a) 4-Methyl sulfonyl	3185					NA	5f	
	toluene (MST)	-99-							
		7							
	b) 2-Chloro-4-Methyl	1671					NA	5f	
	sulfonyl toluene (CMST)	-18-							
		7							
	c) 2-Chloro-4-Methyl	5325					NA	5f	
	Sulfonyl Benzoic Acid	0-							
	(CMSBA)	83-2							
	d) 2 Chloro-4-Methyl	1069					NA	5f	
	sulfonyl benzoic acid	04-	cEa	1-2					
	chloride (CMSBAc)	10-3	60	101	1.3	100			
	e) 1 3-Cyclohexane dione	504-		-		6.93	NA	5f	
	-sodium salt (1.3-CHD -Na	02-9	-	in the second se	1	2020	1.111	01	
	salt)	02)				$\sim c$			
	f) Sulcotrione Ester	1149				$\sim \sim$	ŇΔ	5f	-
	i) Sucourone Ester	11-				1 N	1111	51	
		83-0	1				Λ.		
2	Sulfantrazone and its	1228	0	1500	15	Horbi	285	5h	Now
	intermediates	36	0	1500	10	cide	205	50	Prod
4	Intermediates	35 5	1.1		00	Ciue	5		uct
	a) 5 Mathul 2 phanul	22-2		A 3.	~	50 h.	ΝΛ	5f	uct
	a) 3 -ivietityi-2-pitettyi- 2.4 dibudro [1.2.4] triozol	2280		1			INA	51	
	2,4-ullyulo-[1,2,4]-ulluzoi-	3-		1	10				
	b) 4 Difluoromethyl 5	1229		- 4		- / J	NA	5h	-
	b) 4-Diffuoromethyl-3-	1556					INA	50	
	dibudro [1.2,4] triazol 2	80.0			10			e	
	(DEMPT)	00-9			E		13		
	olie (DI-MFT)	1110				60 1	NLA	51	-
	c) 4-Diffuoromethyl-5-	1119					NA	50	
	dichlorophonyl) 24	92-				1 -	37.		
	dictiorophenyl)-2,4-	10-0			-	1.00			
	(DCPT)	-		and the second division of the second divisio		1 N 1			
	d) 4 Diffuserer that 5	1110-	12	S.L	12.1	1 C 1	NT A	51	4
	a) 4-Dilluoromethyl-5-	02	+ 1 T	21			INA	50	
	meinyi-2-(2,4-dichloro-5-	92-							
	nitrophenyl)-2,4-dihydro-	1/-/							
	[1,2,4]-triazoi-3-one								
1	(DUNP1)	1110					NT A	C1	4
1	e) 4-Difluoromethyl-5-	1119					NA	56	
1	methyl-2-(5-amino-2,4-	92-							
1	dichlorophenyl)-2,4-	18-8							
	dihydro-[1,2,4]-triazol-3-								
	one (ADCPT)								-
	OR	1689					250	5b	
	Bromoxynil Octanoate and	-99-							
	its intermediates	2							

	P-Hydroxy benzonitrile	767-					450	5f	
		00-0							
	2,6 – Dibromo-4-cyano-	1689					190	5f	
	phenol	-84-							
	-	5							
	Octanoyl chloride	111-					>20	5f	
	5	64-8					00		
	OR	5663					550	5b	
	Bromoxynil Heptanoate and	4-							
	its Intermediates	95-8							
	P-Hydroxy benzonitrile	767-					450	5f	-
		00-0						01	
	2.6 – Dibromo-4-cyano-	1689					190	5f	
	phenol	-84-	e Far	1-2			170	01	
		5	1903	101	1.3	100			
	Heptanovl chloride	2528				6.93	N/A	5f	-
	rieptanoyremoriae	-61-	-	lines.	1 A A	200	1 1/ 1 1	51	
		2			-	$\sim c$	A		
2	Bispyribac Sodium	1254	0	200	20	Herbi	500	5h	New
5	Dispyriode Sociali	01-	U	200	0	cide	0	50	Prod
5		92-5	-		U	ciuc	U		uct
2	Anilophos and its	6424	0	1200	-12	Harbi	500	5h	Now
6	intermediates	6	0	1200	12	cide	500	50	Prod
0	Intermediates	01-0	1.1		00	Ciuc	1.1		uct
	a) 2 Chloro N (4)	8401		1 N	2	S. D.	ΝΛ	5h	uct
	a) 2-CHIOIO -IN- (4-	0401	1. 2	1			INA	50	
	isopropyl acetamide	61 3			10				
	(Apilide)	01-3		r (- / J	11		
	(Annue)	1066			r	_	NA	51	
	Dimothyl Dithio Phoenhoria	1000					ΝA	50	
	Acid (Ammonium DMTA)	-97-				11	1.3		
2	Acid (Allinolium Divira)	5	0	1500	15	Harbi		5h	Now
	Estar and its intermediates	0470	0	1300	15	neroi	>	50	Dred
/	Ester and its intermediates	0-			00	cide	100		Prod
		30-7			-	r (m	U NA	<i>5</i> 1.	uct
	a) 5,4,5 I fichioro	3743				6 N	NA	50	
	(NaTCDOL)	9-	125	< b	12.7	1 m			
	(NaTCPOL)	34-2	8 P.T.	1997 B			NT A	<i>5</i> 1.	
	b) Iriclopyr Acid	6082					NA	50	
	Methyl Ester)-)()							
		20-5					650	C1	-
	c) 3,5,6-1 richloro-2-	5533					650	50	
	pyridinyloxy acetic acid	-5							
	(Triclopyr Acid)	3-06					A 1 -	~1	
2	Diuron and its intermediates	330-	0	5000	50	Herbi	340	5b	New
8		54-1			00	cide	0		Prod
	a) N Methyl-N-(3,4	1918					522	5b	uct
	Dichloro) Phenyl	-18-							
	Carbamate	9							
2	Pinoxaden and its	2439	0	1000	10	Herbi	312	5b	New

9	intermediates Route 1	73-			00	cide	9		Prod
		20-8							uct
	a) 2,6-diethyl -4-methyl	3140					NA	5f	
	bromo-benzene	84-							
		61-2							
	b) 1-(2,6-diethyl -4-	3140					NA	5f	
	methyl phenyl)-	20-							
	malononitrile	53-6							
	c) 1-(2,6-Diethyl-4-	3140					NA	5b	
	methyl-phenyl)-	20-							
	malonamide	40-1							
	d) N,N'-	3148					NA	5f	
	diacetylhydrazine (DAH)	-73-		1000					
		0	フィー	124					
	e) 2,2'-Dichlorodiethyl	111-	100	11.1	12	15.16	75	5b	
	ether (DCDEE)	44-4		-	1	622			
	f) 4,5-Diacetyl-1,4,5-	8359		in the second second	1		NA	5b	
	hexahydro-oxadiazepine	8-				~ 2	1 A 4		
	(DAODAP)	13-4							
	g) Hexahydro-1,4,5-	4052	_				NA	5b	
	oxadiazepine HCl	81-	-			. N	N		
	(OXA.HCl)	14-3			1		N		
	h) Pyrazole-	3140			1.6		NA	5b	
	oxadiazepine	20-	1			100			
		44-5		12	\sim	5 Q.			
	Or	2439	1.1	1		2.19	312	5b	New
	Pinoxaden and its	73-					9		Prod
	intermediates Route 2	20-8		C. 1	1	1	11		uct
	Heptylene-4-malononitrile	3329		-	- A		NA	5f	
		6-					13		
		20-7		-		11	12	-	
	Methacrolein	78-				~/	NA	5f	
		85-3							
	2-(2,6-diethyl -4-methyl	2231			- J	Call.	NA	5f	
	cyclohexene-1-ylidine)-	217-			e	\mathcal{N}^{1}			
	malononitrile	69-7			- A - A	12			
	1-(2,6-diethyl -4-methyl	3140	i i th	258	199		NA	5f	
	phenyl)-malononitrile	20-							
		53-6							
	e) 1-(2,6-Diethyl-4-	3140					NA	5b	
	methyl-phenyl)-	20-							
	malonamide	40-1							
	f) N,N'-	3148					NA	5f	
	diacetylhydrazine (DAH)	-73-							
	` ` ` /	0							
	g) 2,2'-Dichlorodiethyl	111-					75	5b	
	ether (DCDEE)	44-4							

	h) 4 5-Diacetyl-1 4 5-	8359					NA	5b	
	hexahydro-oxadiazepine	8-					1111	50	
	(DAODAP)	13-4							
		13-4							
	i) Havebudro 145	4052					NLA	5h	
	1) Hexallydro-1,4,3-	4032					INA	50	
	oxadiazepine HCI	81-							
	(UXA.HCI)	14-3							-
	j) Pyrazole-	3140					NA	5b	
	oxadiazepine	20-							
		44-5							
3	Imazethapyr	8133	0	2000	20	Herbi	>50	5b	New
0		5-	100	0	00	cide	00		Prod
		77-5	100	1778					uct
3	Fipronil and its	1200			12	Insecti	200	5b	New
1	intermediates	68-		-	- C	cide			Prod
	2001	37-3		and the second second					uct
	a) Trichloro methyl	594-				~ 2	82	5f	
	sulfervl chloride	12-3				$\sim \infty$	6	51	
	b) Thiophosgon	462				1 A	020	5 f	
	b) Thiophosgen	405-	100				929	51	
		/1-8	100	· ·					
	c) Ortho-Chloro benzyl	2519					NA	51	
	trifluoromethyl sulfide	26-	1. 1	P 4		N	1.1		
	(OCBTMS)	48-4		. 1	1	1.1			
	d) Trifluoromethyl	2062		1			NA	5f	
	sulfinyl chloride	1-		1	10	100			
	(CF3SOCI)	29-8				- J J			
	e) Aminopyrazole	1200		100	1		NA	5f	
	21 13	68-							
		79-3					14	.	
3	Indoxacarb and its	1735	0	600	60	Insecti	>	5b	New
2	intermediates	84-			0	cide	500		Prod
-	Interineunites	44-6			Ŭ	erae	0		uct
	a) 5-Chloro Indanone	1234		100	· ·	1 al	ΝA	5f	uct
	a) 5-Chioro Indanone	8			1997 - C.	1.50	1171	51	
	201	0- 96 7		-		÷ .			
	b) 5 Chlere Inderson	00-7	e i fe	5	12 I		NT A	5.6	
	b) 5-Chloro Indanone	05/3		1. A.			NA	51	
	Ester	8-							
		56-9							
	c) 5-Chloro Indanone	1441					NA	5f	
	Hydroxy Ester	72-							
		24-7							
	d) Urea Derivative	1441					NA	5f	
		72-							
		25-8							
	e) Oxadiazine	2005	1				NA	5f	
	,	68-						-	
		74-7							
3	Temenhos and its	3383	0	400	40	Insecti	420	5b	New
	remephos and its	5505	U	+00	HU	motell	+20	50	TNOW

3	intermediates	-96-			0	cide	4		Prod
		8							uct
	a) Dimethyl	2524					134	5f	
	Thiophosphoryl Chloride	-03-					0		
	(DMTC)	0							
3	Chlorpyriphos Methyl and	5598	0	7000	70	Insecti	300	5b	New
4	its intermediates	-13-			00	cide	0		Prod
		0							uct
	a) 3,4,5-Trichloro	3743					NA	5b	
	Pyridinol Sodium Salt	9-							
	(NaTCPOL)	34-2							
	b) Dimethyl	2524					134	5f	
	Thiophosphoryl Chloride	-03-	0	5			0		
	(DMTC)	0	25	1776	1.00				
3	Chlorpyriphos and its	2921			H.	Insecti	200	5b	New
5	intermediates	-88-			- C	cide			Prod
		2				1.10			uct
	a) 3,4,5-Trichloro	3743				N -	NA	5b	
	Pyridinol Sodium Salt	9-							
	(NaTCPOL)	34-2							
	b) Di-ethyl	2524					800	5b	
	Thiophosphoryl Chloride	-04-	100	-		b 1	(mo		
	(DETC)	1					use)		
3	Diflubenzuron and its	3536	0	1000	10	Insecti	>46	5b	New
6	intermediates	7-		1.2	00	cide	40		Prod
		38-5	1.1			21.4			uct
	a) 2,6-	1806		<u> </u>		- J J	329	5f	
	Difluorobenzamide (2,6-	3-		1	1		9	-	
	DFBA)	03-1		_					
3	Cartap Hydrochloride and	1526	0	2500	25	Insecti	345	_5b	New
7	its intermediates	3-			00	cide	1.1		Prod
		52-2				//			uct
	a) N,N-Dimethyl allyl	2155		-		1	NA	5f	
	amine	-94-			1	105			
		4		and the second division of the second divisio		2. 10			
	b) 2,3-Dichloro-N,N-	5078	1.15	62	11	7 - C	641	5f	
	Dimethyl propyl amine	6-	- IT.	27					
	hydrochloride	84-1							
	(DCDMPA.HCI)								_
	c) 2-N,N-	2954					333	56	
	dimethylanino-1-Sodium-3-	7-							
	thiosulphate propane	00-0							
	(Monosultap)	1000		1000	10	.	4 7 0		
3	Imidacloprid and its	1382	0	1000	10	Insecti	450	56	New
8	intermediates	61-			00	cide			Prod
		41-3					100	7 0	uct
	a) Nitro Guanidine	556-					102	51	
		88-7					00		
	b) N-(Nitro-imono)	5465					NA	51	

	imidazolidine (NIIMDA)	-96-							
	,	3							
	c) 2-Chloro-5-Methyl	1836					100	5f	-
	Pyridine (CMP)	8-					0	51	
	Tyridine (Civir)	6 64-4					U		
	d) 2 Chloro 5	7025					NΙΛ	5f	
	d) 2-Clilolo-5-	7023 o					INA	51	
	(CCMD)	0- 10-2							
2		10-5				T /	017	C1	NT
3	Acetamiprid and its	1354				Insecti	217	50	New
9	intermediates	10-				cide			Prod
		20-7							uct
	a) Dry HCl gas	7647					277	5f	
		-01-	100	5					
		0	15	1.75	1.00				
	b) Methyl-N-Cyano	5652			12	16.8	432	5f	
	acetamide (NCMA)	-84-				1222			
	L'OS M	6				10 A	Sec. 11		
	c) 2-Chloro-	1207				\sim	NA	5f	
	5(Methylaminomethyl)Pyri	39-				\sim	- C		
	dine (CMPMA)	62-0	_						
4	Clothianidin and its	2108	0	2500	25	Insecti	>50	5b	New
0	intermediates	80-			00	cide	-00		Prod
Ũ		92-5					00		uct
	a) 2.3 Dichloropropene	78-				100	320	5f	
	(2 3-DCP)	88-6		1 N	~	S. D.	520	51	
	b) 2-Chloroallyl	1/21		1			NΔ	5f	-
	isothiocyanate	1421		\sim	11	1 C	INA	51	
	isotinocyanate	4 - 21 /		r (T / 1	11		
	a) = 2 Chlore 5	1059					NTA	5.6	
	c) 2-Chioro-5-	1058			10		ΝA	51	
	CONT	27-					1 3		
	(CCMT)	91-6					100		-
	d) Nitro guanidine	556-				//	102	51	
		88-7				1 -	-00		-
	e) N-methyl-N'-nitro	4245		-	1	65	100	5f	
	guanidine	-76-		-		2.3	0		
		5	1.1.1	52	10.1	7 - C			
	f) 1,5-dimethyl-2-	1365	- 11	27	1.0		320	5f	
	nitroiminohexahydro-1,3,5-	16-					0		
	triazine (DMNITCH)	16-0							
	g) 1-(2-chloro-5-	NA					NA	5f	
	thiazolylmethyl)-3,5-								
	dimethyl-2-nitroimino-								
	hexahydro-1,3,5-triazine								
	(DMNITCH + CCMT)								
4	Chlorantraniliprole and its	5000	1			Insecti	>50	5b	New
1	intermediates Route 1	08-				cide	00		Prod
		45-7					-		uct
	a) 2.3-Dichloropyridine	2402					NA	5f	1
	(DCP)	-77-							

	0							
	9							
b) 3-Chloro-2-	2284					NA	5f	
hydrazinopyridine (CHP)	1-							
	92-5							
c) Ethyl 2-(3-	5000					NA	5b	
chloropyridin-2-yl)-5-oxo-	11-							
pyrazolidine-3-carboxylate	88-1							
(DHPy)								
d) Ethyl 3-bromo-1-(3-	5000					NA	5b	
chloro-2-pyridinyl)-4.5-	11-							
dihydro-1H-pyrazole-5-	91-6							
carboxylate (DHBrPy)								
e) Ethyl 3-bromo-1-(3-	5000		-			NA	5b	
chloro-2-pyridinyl)-1H-	11-	्र मिल	1-2				• •	
pyrazole-5-carboxylate	92-7	5	16.3	100	100			
(BrPv)				1.1	$C \leq 0$			
f) $3-Bromo-1-(3-)$	5000	-	in the second se	1	2012	NΔ	5h	
chloro-2-pyridinyl)-1H-	11-				~ 0	1 1 1 1	50	
pyrazole-5-carboxylic acid	86-9				\sim			
(Intermediate-B)	00 /							
(Interineutate-D)	1122	-				ΝΔ	5h	
g) 2-Hydroxymmio-IN-	02	100				INA	50	
(Isopitroso)	-05-					1.1		
(Isolitioso)	4	1.1			1	NIA	5.6	
n) /-Methylisatin //-	50		1 N .	~	235.	INA	51	
Methylindole-2,3-dione	-39-		1					
·	9	1		1	101	NTA	C1	
1) 5-Chloro-7-	1438		- 4		- 1 I	NA	50	
methylisatin/5-Chloro-7-	9-			Ζ.	_	11.	A	
methylindole-2,3-dione	06-1		-					
J) 6-Chloro-8-	1203				11	NA	51	
methylisatoic anhydride/6-	74-				61			
chloro-8-methyl-1 H-	68-7				//	1.0		
benzo[d][1,3]oxazine-2,4-			-		1			
dione					6.65			
Or	5000		-	· .	2.20	>50	5b	New
Chlorantraniliprole and its	08-	1.10	62	11.1	÷ .	00		Prod
intermediates Route 2	45-7	111	27	1.00				uct
3-Chloro-2-	2284					NA	5f	
hydrazinopyridine (CHP)	1-							
	92-5							
Ethyl 2-(3-chloropyridin-2-	5000					NA	5b	
yl)-5-oxo-pyrazolidine-3-	11-							
carboxylate (DHPy)	88-1							
Ethyl 3-bromo-1-(3-chloro-	5000					Na	5b	
2-pyridinyl)-4,5-dihydro-	11-							
1H-pyrazole-5-carboxylate	91-6							
(DHBrPy)								
Ethyl 3-bromo-1-(3-chloro-	5000					NA	5b	
2-pyridinyl)-1H-pyrazole-5-	11-							

	carboxylate (BrPy)	92-7							
	2 bromo 1 (2 abloro 2	5000	-				NIA	5h	
	5-DIOINO-1-(5-CINOIO-2-	3000					INA	50	
	pyriumyi)-iH-pyrazole-3-	11-							
	carboxylic acid (Inter-B)	86-9	-				D.T.A	61	
	Isonitroso	1132					NA	50	
		-03-							
		2	-						-
	7-Methylisatin (7-	1127					NA	5f	
	Methylindole-2,3-dione)	-59-							
		9							
	5-Chloro-7-methylisatin (5-	1438					NA	5b	
	Chloro-7-methylindole-2,3-	9-	1.00	0					
	dione)	06-1	100	12-1	100				-
	2-Amino-5-chloro-3-	2077		1.6.1	12	16.8	NA	5f	
	methylbenzoic acid	6-				1222			
	(ACMBA)	67-4				18 M (2)			
4	Azoxystrobin and its	1318	0	6000	60	Fungi	>20	5b	New
2	intermediates	60-			00	cide	00		Prod
		33-8							uct
	a) 3-Methoxymethylene	4080					NA	5b	
	benzofuran-2(3H)-one	0-	1.00						
	(MMB)	90-6	1.000				1.1		
	b) Methyl 2-(2-	1759				1 mar	NA	5b	
	hydroxyphenyl)-3,3-	71-		1.2	~	NO.			
	dimethoxy propanoate	61-6	1.1	1					
	(MMB inter)	1.1		6.3	11	P 1 1			
	c) 2-((6-	9138		E. 4	1	11	NA	5b	
	chloropyrimidin-4-yl)oxy)	46-	1.1	1	r		11.	<u> </u>	
	benzonitrile (CPOB)	53-4					1.	5	
	d) Dimethoxy	NA		-		11	>	5b	
	Azoxystrobin					~/	500		
					_		0		
4	Pyraclostrobin and its	1750		100	· .	Fungi	>50	5b	New
3	intermediates	13-			and the second second	cide	00		Prod
	101	18-0		-		÷ .			uct
	a) Sodium salt of 1-(4-	7620	1.46	14			NA	5b	_
	chlorophenyl)-3-	5-		10 C					
	hydroxypyrazole	19-1							
	b) 1-(4-chlorophenvl)-3-	2203	1				NA	5b	1
	[2-(nitrophenyl)-methoxyl-	68-					1111		
	1H-pyrazole (PNBE)	29-6							
1	c) Methyl N-hydroxy-	NA	-				ΝΔ	5h	1
1	$N-(2-\{[1-(4-chlorophenvl)]$	1 1 1 1					1111	50	
1	1H-pyrazol-3-yll								
	oxymethyl} nhenyl)								
	Carbamate (PHAREC)								
Δ	Trifloxystrobin and its	1415	-			Fungi	<u> </u>	5h	New
	intermediates	17-				cide	200	50	Prod
L F	mormoulutos	1/	I			VIGC	200		1100

		21-7					0		uct
	a) 3-Bromo	401-					NA	5f	
	benzotrifluoride	78-5							
	b) 3-Trifluoromethyl	349-					NA	5f	
	acetophenone	76-8							
	c) 3-Trifluoromethyl	9970					NA	5f	
	acetophenone oxime	5-					1.11	01	
		50-7							
	d) Methyl -2-0x0-2-(0-	3496					NA	5f	
	tolvl) acetate	6-					1 17 1	51	
	tory i) accure	54-6							
	e) Methyl-2-(2'-	1265					NΔ	5h	
	bromoethylphenyl)-2-	34-					1 17 1	50	
	oxoacetate	57-4	cE_{cT}	1-2					
	f) Methyl (E) 2 ovo 2	1/1/	14 U	101	1.25	100	NΛ	5h	
	$(2) ((((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-0} (2) (((1) (2))^{-2})^{-2} (2) (((1) (2))^{-2})^{-2} (2) (((1) (2))^{-2})^{-2} (2) (((1) (2))^{-2})^{-2} (2) (((1) (2))^{-2})^{-2} (2) (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2} (((1) (2))^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2})^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-2})^{-2})^{-2})^{-2})^{-2})^{-2})^{-2} (((1) (2))^{-2})^{-$	02		-	. N	6.93	INA	50	
	(2- ((((1-(3	05.2		lines.	1	$\sim \sim$			
	(trificono) amino) avv)	05-2				~ 0			
	mothyl) phonyl) sostate					\sim	1		
	Mathul(7) 2	NIA					NIA	51	
	g) $\operatorname{Methyl}(Z)$ -2-	INA	- C		1.1		INA	50	
	(IIYUIOXYIIIIIIO)-2-(2-						N		
	(((((E)-1-(3 (trifluoromethyl) phonyl)	-					11		
	(trifituorometriyi) pitenyi)	1.0	1.5	. I		1			
	mothyl)phonyl acatata	6.0.1		A 3.	~	235.			
	(Ovima Product)		1.1	774			× 1		
	(Oxime Product)	5201	0	1000	10	Drmoth	07	51	Naw
4	(Oxime Product) Deltamethrin and its	5291	0	1000	10	Pyreth	87.	5b	New
4 5	(Oxime Product) Deltamethrin and its intermediates	5291 8- 62 5	0	1000	10 00	Pyreth roid	87. 4	5b	New Prod
45	(Oxime Product) Deltamethrin and its intermediates	5291 8- 63-5	0	1000	10 00	Pyreth roid	87. 4	5b	New Prod ucts
4 5	(Oxime Product) Deltamethrin and its intermediates a) Tetrachloro	5291 8- 63-5 4179	0	1000	10 00	Pyreth roid	87. 4 NA	5b 5f	New Prod ucts
4 5	a) Tetrachloro Butyronitrile (TBN)	5291 8- 63-5 4179 7- 05 0	0	1000	10 00	Pyreth roid	87. 4 NA	5b 5f	New Prod ucts
4 5	(Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN)	5291 8- 63-5 4179 7- 95-9	0	1000	10 00	Pyreth roid	87. 4 NA	5b 5f	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric 	5291 8- 63-5 4179 7- 95-9 4387	0	1000	10 00	Pyreth roid	87. 4 NA NA	5b 5f 5f	New Prod ucts
45	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) 	5291 8- 63-5 4179 7- 95-9 4387 -77-	0	1000	10 00	Pyreth roid	87. 4 NA	5b 5f 5f	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3	0	1000	10 00	Pyreth roid	87. 4 NA NA	5b 5f 5f	New Prod ucts
45	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812	0	1000	10 00	Pyreth roid	87. 4 NA NA	5b 5f 5f 5f	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 2-	0	1000	10 00	Pyreth roid	87. 4 NA NA	5b 5f 5f 5f	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 36-8	0	1000	10 00	Pyreth roid	87. 4 NA NA	5b 5f 5f 5f	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) d) 2 Chlorobutanone (2- 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 36-8 6869	0	1000	10 00	Pyreth roid	87. 4 NA NA NA	5b 5f 5f 5f 5f	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) d) 2 Chlorobutanone (2- CB) 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 36-8 6869 7- 2-	0	1000	10 00	Pyreth roid	87. 4 NA NA NA	5b 5f 5f 5f 5f	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) d) 2 Chlorobutanone (2- CB) 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 36-8 6869 7- 08-5	0	1000	10 00	Pyreth roid	87. 4 NA NA NA	5b 5f 5f 5f 5f	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) d) 2 Chlorobutanone (2- CB) e) Cypermethric Acid 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 36-8 6869 7- 08-5 5904	0	1000	10 00	Pyreth roid	87. 4 NA NA NA	5b 5f 5f 5f 5f 5f 5b	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) d) 2 Chlorobutanone (2- CB) e) Cypermethric Acid (CMA) 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 36-8 6869 7- 08-5 5904 2-	0	1000	10 00	Pyreth roid	87. 4 NA NA NA	5b 5f 5f 5f 5f 5f 5b	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) d) 2 Chlorobutanone (2- CB) e) Cypermethric Acid (CMA) 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 36-8 6869 7- 08-5 5904 2- 49-8	0	1000	10 00	Pyreth roid	87. 4 NA NA NA NA	5b 5f 5f 5f 5f 5f 5b	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) d) 2 Chlorobutanone (2- CB) e) Cypermethric Acid (CMA) f) R,R-Sodium salt of 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 36-8 6869 7- 08-5 5904 2- 49-8 1282	0	1000	10 00	Pyreth roid	87. 4 NA NA NA NA	5b 5f 5f 5f 5f 5b 5b	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) d) 2 Chlorobutanone (2- CB) e) Cypermethric Acid (CMA) f) R,R-Sodium salt of Cypermethric Acid (Na- 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 36-8 6869 7- 08-5 5904 2- 49-8 1282 41-	0	1000	10 00	Pyreth roid	87. 4 NA NA NA NA	5b 5f 5b	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) d) 2 Chlorobutanone (2- CB) e) Cypermethric Acid (CMA) f) R,R-Sodium salt of Cypermethric Acid (Na- CMA) 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 36-8 6869 7- 08-5 5904 2- 49-8 1282 41- 41-8	0	1000	10 00	Pyreth roid	87. 4 NA NA NA NA	5b 5f	New Prod ucts
4 5	 (Oxime Product) Deltamethrin and its intermediates a) Tetrachloro Butyronitrile (TBN) b) Tetrachloro Butyric Acid (TBA) c) Tetrachloro Butyric Acid Chloride (TBAC) d) 2 Chlorobutanone (2- CB) e) Cypermethric Acid (CMA) f) R,R-Sodium salt of Cypermethric Acid (Na- CMA) g) R,R-Cypermethric 	5291 8- 63-5 4179 7- 95-9 4387 -77- 3 6812 1- 36-8 6869 7- 08-5 5904 2- 49-8 1282 41- 41-8 5566	0	1000	10 00	Pyreth roid	87. 4 NA NA NA NA NA	5b 5f 5f 5f 5f 5b 5b 5b	New Prod ucts

		40-8							
	h) Dibromo	6359	-				NA	5h	
	Cypermethric Acid	7_					1111	50	
	(DBCMA)	73_9							
	i) Di Promo	6177					NΙΛ	5h	-
	1) Di Biolilo Cuparmathria A aid astar	5					INA	50	
	(DR Ester)	J- 97 0							
	(DB Ester)	87-9	-				NT A	51.	-
	J) DI Bromo	55/1					ΝA	50	
	Cypermethric Acid	0-							
	Chloride (DBCMAC)	82-2	-			D 1	200	-1	
4	Alphamethrin and its	6/3/				Pyreth	200	56	New
6	intermediates	5-				roid			Prod
		30-	. O.,	5					ucts
		80	crt	167	200				-
	a) Tetrachloro	4179			H.	1.0	NA	5f	
	Butyronitrile (TBN)	7-			-	1.11			
		95-9							
	b) Tetrachloro Butyric	4387				\sim	NA	5f	
	Acid (TBA)	-77-							
		3					S		
	c) Tetrachloro Butyric	6812					NA	5f	
	Acid Chloride (TBAC)	1-	1.00			L 1	٠ ١		
		36-8					1.1		
	d) 2 Chlorobutanone (2-	6869	1.20			the second	NA	5f	-
	CB)	7-		12		1 . 1 .			
		08-5	1.1	1		2.4			
	e) Cypermethric Acid	5904		1	1		NA	5b	
	(CMA)	2-	1.00	C. 9	1	1.1	11		
	······································	49-8			- A		11.		
	f) Cypermethric Acid	5231					NA	5b	-
	Chloride (CMAC)	4-		-					
	emoriae (envirie)	67-7				~/	67		
	g) Cynermethrin	5231			_		500	5h	-
	g) Cypermetnini	5				1.0	500	50	
	12.5	07.8			and the second	<u>_</u>			
Λ	Cynermethrin and its	5221	0 -	5200	52	Duroth	500	5h	Now
7	cypermetinin and its	5251	0	5200	00	roid	500	50	Drod
<i>'</i>	memerales	07 0	- FT	1. S.	00	1010			note
	a) Tatrashlara	4170					NT A	5£	ucts
	a) I etrachioro	41/9					INA	51	
	Butyronitrile (IBN)	/-							
		93-9					NT 4	7 C	-
	b) Tetrachloro Butyric	4387					NA	51	
	Acid (TBA)	-///-							
		3						= -	
	c) Tetrachloro Butyric	6812					NA	51	
	Acid Chloride (TBAC)	1-							
		36-8							
	d) 2 Chlorobutanone (2-	6869					NA	5f	
	CB)	7-							

		08-5							
	e) Cypermethric Acid	5904					NA	5b	
	(CMA)	2-							
		49-8							
	f) Cypermethric Acid	5231					NΔ	5h	
	Chloride (CMAC)	Δ_					1 17 1	50	
	emonue (ennice)	67-7							
1	Rifanthrin and its	8265				Duroth	500	5h	Now
9 8	intermediates	8203 7				roid	500	50	Drod
0	linelinediates	04.2				1010			riou
	\mathbf{D}	04-5					275	51.	ucis
	a) Bitentinrin chioride	8454					375	50	
		1-							
_		46-8	0.	0		D 1		71	N
4	Lambda Cyhalothrin and its	9146	001	107	125	Pyreth		56	New
9	intermediates	5-	_	-	1	roid			Prod
		08-6				140			ucts
	a) 3-(2 Chloro 3 Trifluoro	3938	100		· · · ·	$\sim 2 c^{-1}$	56	5b	
	Propenyl -2, 2- Dimethyl	70-				\sim			
	Cyclopropane Carbonyl	46-7				1 N			
	Chloride (CHAC)					N			
5	Permethrin and its	5264				Pyreth	N	5b	New
0	intermediates	5-	100		1.1	roid	1		Prod
		53-1							ucts
	a) Tetrachloro	4179				100	383	5f	
	Butyronitrile (TBN)	7-		1 2		2.4			
		95-9	1.1	1			i		
	b) Tetrachloro Butyric	4387		- I	1 J	.	NA	5f	
	Acid (TBA)	-77-		- · · ·	1	1.1	11		
	7.1 7.13	3		-	- A		r 5 -		
	c) Tetrachloro Butyric	6812					NA	5f	-
	Acid Chloride (TBAC)	1-		-		11.	1.2		
		36-8				//	1.67		
	d) 2 Chlorobutanone (2-	6869					NA	5f	
	CB)	7-		100	· · ·	1 - 2	1111	51	
	(1)	08-5				1 N 1			
	e) Cypermethric Acid	5904	-	-		÷ .	NΔ	5h	
	(CMA)	2-	t i f	150	16 I		11/1	50	
		<u> </u>	5 F.L.	1997 C	-				
	f) Cynormethria Aaid	+7-0 5021					NI A	5h	-
	Chlorida (CMAC)	JZ31 1					INA	50	
	CHIOTUE (CMAC)	4- 67 7							
5	Maniquet Chleride	0/-/	0	100	10	Casard	161	51	Nerr
) 1	Mepiquat Chloride	2430	U	100	10	Growt	464	30	INEW
		/-			U				Prod
		26-4				Regul			uct
~		2051		6000	60	ator	.	7 0	
5	A) Meta Phenoxy	3951	0	6000	60	Chemi	NA	51	New
2	Benzaldehyde (MPB) and	5-			00	cal			Prod
	its intermediates	51-0				Interm			uct
	a) Meta bromo	3132				ediate	112	5f	

	benzaldehyde	-99-					6		
		8					NT A	5 £	
	b) Meta bromo	6237					NA	51	
	benzaldenyde acetai	3- 70_0							
	B) Meta Phenoxy Benzyl	1382					NΔ	5f	
	Alcohol (MPBA) and its	1302 6-					INA	51	
	intermediates	35-2							
	a) Meta bromo	3132					112	5f	
	benzaldehyde	-99-					6	51	
		8					Ũ		
	b) Meta bromo	6237					NA	5f	
	benzaldehyde acetal	3-		-					
		79-9	1200	1-7					
5	EKKE Monomer	5429	0	500	50	Specia	NA	5f	New
3	600	9-			0	lty			Prod
		17-1				Polym	1		uct
	PEKK Polymer 100:00 OR	6546		6. U		er	NA	5f	
	1/ 20	1-							
		61-2							
	PEKK Polymer 80:20 OR	1211					NA	5f	
		15-	100	1			1		
		58-0		γ.	÷ •	<u> </u>			
	PEKK Polymer 70:30 OR	1211		- N	1	1.1	NA	5t	
		15-		1		1.46-1			
	DEKK Dolumor 60:40 OB	<u>58-0</u>	× .		1	101	NIA	5 £	
	PERK POlymer 00.40 OK	1211	1	r 4		- / /	INA	51	
	-1	58-0			r		17.	<u>_</u>	
	S PEKK and its	2217			1		NA	5f	
	Intermediates	635-		-		11	1111	51	
		74-8				191	1.0		
5	Pigment Violet 23 and its	228-	0	2000	20	Pigme	>20	5f	New
4	intermediates	767-			00	nt &	00	-	Prod
	12	9				Chemi			uct
	a) Carbazole	86-		100	- e - 1	cal	500	5f	
	1	74-8	F i th	257	P.6	interm			
	b) Ethyl Carbazole	86-				ediate	NA	5f	
		28-2							
	c) Nitro Ethyl Carbazole	86-					NA	5f	
		20-4							
	d) Amino Ethyl	132-					NA	5f	
	Carbazole	32-1							
	e) Chloranil	118-					400	5f	
		75-2					0		
5	Pigment Yellow-237	4038				Pigme	NA	5f	New
5	(Florescent Yellow 8501 B	2-				nt &			Prod
	and its intermediates)	92-1				Interm	3.7.4	7 0	uct
	a) 1,2,3,4 Tetra Chloro	4038				ediate	NA	51	

	isoindolo [2,3-a]	2-							
	benzimidazol-11-one	92-1							
	(TCBBIZ)								
5	Pigment Red 168 and its	4378				Pigme	830	5f	New
6	intermediates	-61-				nt &	0		Prod
		4				Interm			uct
	a) 1,1,Binaphthyl-8,8-	2987				ediate	NA	5f	
	Dicarboxylic Acid (8-							
	DINAH Acid)	91-9							
5	Pigment Red 254	8463				Pigme	838	5f	New
7		2-				nt	0		Prod
		65-5							uct
5	Pigment Red 255	1205	100	5		Pigme	834	5f	New
8	-	00-	15	1.77	1.00	nt	0		Prod
		9 0-5			12	1.2			uct
5	Pigment Red 122 and its	980-				Pigme	>50	5f	New
9	intermediates	26-7				nt &	00		Prod
	a) 2,5-di (P-toludino)	1029				Interm	NA	5f	uct
	Terephalic acid (DTTPA)	1-				ediate			
	//~~	28-8							
6	Pigment Violet 19 and its	1047				Pigme	842	5f	New
0	intermediates	-16-	100			nt &	0		Prod
		1		× .		Interm			uct
	a) 2,5 Dianilino	1010			-	ediate	NA	5f	
	terephthalic acid (DATPA)	9-		12					
		95-2				1211			
6	Pigment Yellow 138 and its	3012	1. C.	<u> </u>		Pigme	837	5f	New
1	intermediates	5-		1.00	1	nt &	0		Prod
	2.1 13	47-4		-		Interm	11		uct
	a) 8-Chloro Quinaldine	3033		- A		ediate	NA	5f	
		-82-				11	6		
		7				//	- 57		
	b) 8-Amino Quinaldine	1897				/	NA	5f	
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	8-				600			
		78-4		-		. N.			
6	Pigment Yellow 139	3688	1.10	17 L	10.1	Pigme	831	5f	New
2		8-	F 11	257	1.0	nt	0		Prod
		99-0							uct
6	Pigment Yellow 151	3183				Pigme	833	5f	New
3		7-				nt	0		Prod
		42-0							uct
6	Pigment Yellow 154	6813				Pigme	>50	5f	New
4		4-				nt	00		Prod
		22-5							uct
Gr	and Total		227	5470	77				
			50	0	45				
					0				

# Products that do not require EC:

Sr.	Name of Product	Existing	Proposed	Total	End Use	Remarks
No.		(TPA)	(TPA)	(TPA)		
1	Pesticide Formulations	6000	6000	12000	Pesticide	CTE from
	(Solid & Liquid) (from					GPCB is
	own technical products					obtained.
	and/or technical products					
	purchased from outside					
	market)					

Sr	Name of	CAS	Exist	Propo	Tota	End Use	LD	Categor	Rema
	Product	No.	ing	sed	1	-	50-	y as per	rks
Ν			(TPA	(TPA)	(TP		Oral	EIA	
0.			)		<b>A</b> )	0.0	(Rat)	Notifica	
			6.15			- 1	mg/kg	tion 5(f)	
		1	1.00					or 5(b)	
1	KCl + KF	7447	0	2898	2898	KCl is	2600 +	Inorgani	By-
		-40-7				used in	245	с	produ
		+	1000	1		making	1		ct
		7789				fertilizer.	$\sim$		
		-23-3		r 💷		KF is used			
			2.67	- Al		in etching			
					1. Sec.	glass, as a		1	
			1	<b>63.</b> 1	N 1	preservativ	<b>D.</b>		
		<b>N</b> 1	Z	1.11.1		e, as an			
			1 4	1.11	N 1	insecticide,			
			0.4		1	and in	1 83	1	
			11 1			organic	- 11	100	
		$\lambda \lambda$	8.5	1.50		synthesis			
2	Calcium	1004	2421	27724	5149	Used in	1000	Inorgani	By-
	Chloride	3-52-	9		3	antifreeze		с	produ
	(35%)	4				mixtures,	13		ct
		1 C -	1 m			as	100		
		1		Station of Concession, Name		coagulant	S		
			100			in rubber			
						etc.		= 10	
3	Ortho	95-	1998	0	1998	Used as a	1516	5(f)	By-
	Dichloro	50-1				solvent for			produ
	Benzene					waxes,			ct
	(ODCB)					gums,			
						resins, tars,			
						rubbers,			
						oils,			
						asphalts			
						and as a			
						degreasing			
						agent for			
						metals and			
						leather			

						Used as			
						starting			
						raw			
						materials			
						for other			
						chemicals			
Δ	Trichloro	120-	312	0	312	Used as a	756	5(f)	Bv-
	Benzene	82-1	512	Ū	512	dve carrier	100	5(1)	produ
	(TCB)	02 1				a herbicide			ct
	$(\mathbf{I} \mathbf{C} \mathbf{D})$					intermediat			Ċt
						e			
						dielectric			
						fluid in			
				-	0-1	transforme			
			100	$\sim 100$	a u	rs a			
			$\mathcal{AC}$	1 ·	~	degreaser	64		
		1				a lubricant	18.		
		$\sim$	1	100		and as a	2.02		
		1997	<ul> <li>A</li> </ul>			solvent in	$\sim 2$		
		11	100			chemical	$\sim$		
		11		1	-	manufactur	$\sim$		
		1.0		7 ( )	_	ing	11		
5	30 % HCl	7647	2076	65594	8635	Will be	900	Inorgani	By_
5	30 % HCI	-01-0	2070	05574	1	used as	(Rabbi	niorgani	nrodu
		-01-0	U	A.1		raw	$(\mathbf{R}_{abbl})$	C	ct
				110.1		material	()		Cl
			5 E	1.11.	<b>T</b> 2	for other	1 A A		
			4.8		2.1	chemical			
			7,3			process	11	1-0-	
	7		1 A 7			internally			
	1.0	$\lambda \lambda$		19		or will be	77 T	19 A. A.	
		$( \mathcal{N})$				sold	21	87	
		$\sim \sim$				externally	1.1	57	
		100				for use in	$\sim 2$		
		- 577				metal	20		
			25.0	The second se		pickling	N		
6	Calcium	1010	9840	3655	1349	Used as	3000	Inorgani	Bv-
0	Sulfate	1-41-	2040	5055	5	landfill /	5000	C	produ
	(92%)	4			- 0	gynsiim		C	ct
7	SO2  or	7446	6500	0	6500	Used as	1310	Inorgani	Bv-
	Sodium	-09-5	0000	Ŭ	0000	Bleaching	(NaHS	C	produ
	Bisulphite	or				agent, and	$(1, \alpha, 1)$	č	ct
	Solution	7631				used in	- 57		
	(NaHSO ₃ )	-90-5				manufactur			
	(20-25%)					e of			
	(/)					chemical			
						intermediat			
						es			
						internally.			
						meet man y.			

8	Aluminum	7446	4690	46804	5149	Used for	3450	Inorgani	By-
	Chloride	-70-0			4	making		c	produ
	Solution					Poly			ct
						Aluminum			
						Chloride			
						(PAC)			
9	Potassium	7447	5000	39130	4413	KCl is	2600	Inorgani	By-
	Chloride	-40-7			0	used in		c	produ
	Solution					making			ct
						fertilizer.			
10	Sulfuric	7664	1909	95721	1148	Used in the	2140	Inorgani	By-
	Acid	-93-9	5		16	manufactur		c	produ
					_	e of			ct
				100	$\mathcal{E}_{T}$ i	fertilizers,			
			- 6-3	(* 1947) 1977 - Star	1.5	chemicals.	1.0		
11	HBr	1003	1525	23	2486	Will be	NA	Inorgani	By-
	Solution	5-10-	21.00	340	5	used		c	produ
		6	× .			internally	203	_	ct
		121				in other	$\sim \sim$		
		11	1000			products or	N		
		11		100		used as	$\sim$		
		1.6		7		pharmaceu	11		
		1 E	0.07	-	1.5	tical and	L 1		
				1.0		chemical		1	
			11	6 N N	N	intermediat	<b>N I</b>		
		1. A	<b>F</b>	1.12.1		е	S 14		
12	Sodium	7647	1158	855	2013	Will be	3500	Inorgani	By-
	Bromide	-15-6	13		1	used	1.81	c	produ
	Solution		11-4			internally	-11	1-	ct
			80. T	1.50		in other	_///	- C	
	- 19.	$\cdot \cdot \cdot$		Z		products or	47	S	
	- X	$\sim 10$				used as	//	÷	
		1. N				pharmaceu	1.8	÷	
		100				tical and			
		~ /	2.7	-		chemical	en i		
			230	-		intermediat	2 C		
			- 16	1000	2.50	е			
13	Ammonia	1336	162	2551	2713	Used in the	350	Inorgani	By-
	Solution	-21-6				production		с	produ
						of			ct
						ammonium			
						fertilizers,			
						synthetic			
						urea,			
						synthetic			
						fibers,			
						dyes, and			
						<b>.</b> .			
						plastics.			
14	Sodium	7757	1312	7985	9297	plastics. Used in	3560	Inorgani	By-

						manufactur			ct
						e. and as			
						bleaching			
						agent			
15	Sodium	144-	0	59960	5996	Used in the	4220	Inorgani	By-
	Bicarbonat	55-8			0	manufactur		c	produ
	e					e of many			ct
						chemicals.			
16	Ammoniu	6484	0	2149	2149	Used in	2217	Inorgani	By-
	m Nitrate	-52-2				pesticide		c	produ
	40%					and			ct
	Solution					fertilizer			
					_	industry			
17	Nitric Acid	7697	0	11331	1133	Used in the	NA	Inorgani	By-
		-37-2	82		1	manufactur	3	с	produ
		1	6 A A	and the second division of		e of	232		ct
		- 63	14	and a second		chemical	149		
		14.7	1			intermediat	< >		
		11				es for	1		
		11		1		fertilizers,	$\sim \sim$		
10			0	1051	1071	dyes, etc.	7 (00)	<b>7</b> ( 0	
18	Methanol	6/-	0	4854	4854	Used as a	5600	5(f)	By-
		56-1	111	-		solvent,			produ
			11	A.1	10 M	fuel	S. 1		ct
						additive,			
			S 1	1.11.1	S. 1	and in the	1.1		
			1.9			manufactur			
	1		1.2			eor	11	1	
	- Z	11	$L \ge 0$			intermediat			
	- Fe	11		19			91 I	1	
10	Compresse	7446		8470	8/70	Ut is used	ΝA	Inorgani	By
19	d SO2	-09.5		0479	0479	internally	INA	niorgani	Dy- produ
	u 502	-0)-5				for our	13	C	ct
		- 57	5			other	22		Ct
			Back	The second se		chemical	S		
			1.10	Sec. 1	1.18	processes			
				1.13	1T .	and in			
						industries			
						such as			
						paper			
						production,			
						waste			
						water			
						treatment			
						and metal			
						and oil			
						refining.			
20	2-chloro-3-	1819	0	438	438	Chemical		5(f)	By-
	methyl -4-	97-				intermediat			produ

	methyl	72-8				е			ct
	sulfonyl								
	acetopheno								
1	ne			1.600	1 60 0	<b>T</b> . <b>I I I I</b>	2.6	= (0	5
21	Chlorofor	67-	0	1602	1602	It is widely	36	5(f)	By-
	m	66-3				used in the	(mous		produ
						production	e)		ct
						of liquid			
						reirigerant,			
						as a			
						solvent,			
						intermediat			
					Que 3	e dry			
			100	1.20	c u	cleaning			
			150			agent	64		
		1			_	fumigant	18.		
		$\mathcal{O}$	1			ingredient	603		
		72	A 1			and in	$\sim \sim$		
		11	A	1.1		synthetic	1		
		11		100		rubber	$\sim$		
		1.8	100	7 C.		production.			
22	Methane	2027	0	102	102	Used in the	NA	5(f)	By-
	Sulfinic	7-69-				manufactur		1	produ
	acid	4	1		N 1	e of alkyl			ct
	Sodium	N 1	Z			methyl	18 C		
	salt		1 A		<b>N</b> 1	sulfones			
			7.9			and other	1.00	1 .	
	7.		113		1	chemicals	- 11	1.0	
			Q			intermediat	91 I	100	
22	Calling	407	0	20206	2090	es.	4000	<b>T</b>	D
23	Sodium	497-	0	20806	2080	Used in the	4090	Inorgani	By-
	Cardonate	19-8			0	manufactur	1.5	С	produ
		- C 3	1			chemicals	20		Cl
		1.1	$\lambda_{1}$	No. of Concession, name		And used	N C		
			107	Sec. 1	1.19	as a			
				- C T S-	11 3	bleaching			
						agent. Will			
						be used as			
						waste			
						alkali			
24	Phosphoric	7664	0	50141	5014	Used in	1250	Inorgani	By-
	Acid	-38-2			1	chemical,		с	produ
						fertilizer			ct
						and dye			
		1015		1505:	4	industries.		<b>.</b> .	-
25	Ammoniu	1212	0	15351	1535	It is used	1410	Inorgani	By-
	m Chloride	5-02-			1	in		с	produ
		9				manufactur			ct

						ing of			
						various			
						various			
						ammonia			
						compounds			_
26	NaSH	1672	0	502	502	Used in the	96	Inorgani	By-
	(Sodium	1-80-				manufactur		с	produ
	hydrosulfid	05				e of			ct
	e)					chemicals.			
	,					pigment &			
						dves. It is			
						also used			
						in			
						III tonnonios			
					C	tanneries			
			100	1. S.	$c_{TI}$	and paper			
			188			and textile	200		
			6 A A	-		industries.	2.2		
27	2,6-DE-4-	3505	0	227	227	Chemical /		5(b) & 5	By-
	Me-Phenol	0-88-	1 -	1990 B		Herbicide	$C^{*}$	(f)	produ
		5				intermediat	$\sim <$		ct
		11	1000			e, used as	1		
		11		100		buffer in	N N		
		1.0		7 (C.		battery.		_	
		1 1			100	photorecen			
			- 107			tor	N 1	1	
20	Promina	7726	0	4210	4210	Will bo	2600	Inorgani	Du
20	Diomine	05.6	U	4219	4219	will be	2000	morgani	Dy-
		-95-0	14 A.		1 A	used		С	produ
			1 4	1.10		internally			ct
			<b>.</b>			as Raw	1 M I		
			11.22			material in		( m)	
		1.1	80. Ja	10 m		other	111	1.1	
	- V.					processes.	91	100	
	- X	$\sim 10$				Also used	F / .	1	
		$\sim 2$				in	1 8	<u> </u>	
		Con.				manufactur	6.27		
		1.1	3			ing of	0.00		
			As	The second se		organic	N		
			1.17	Sec. 1	1.18	and			
				- L T S.	11 3	inorganic			
						chomicals			
						chemicals,			
						Such as			
						Tuel			
						additives,			
						tire			
						retardants,			
						pesticides,			
						oil well			
						drilling			
						fluids.			
						pharmaceu			
						ticals and			
I		1			1	icais and			

						dvestuffs.			
						Also used			
						brominatin			
						g agent			
						g ugent, water			
						disinfectan			
						t and			
						blooching			
						oreachting			
20	Mathal	70	0	6574.0	6571	agent.	5000	5(f)	Dry
29		79-	0	0374.0	0374	Used	3000	3(1)	Dy-
	Acetate	20-9		9		wheely as a			produ
					0.1	solvent and			Cl
			100	. S.	6713	catalyst in			
			100		1997	chemical	25		
		1	S	and the second designed to the second designe		manufactur	258		
		- A2	a se	1		ing. Also	Sec.		
		145	1.1			used in	マン		
		11				paint	$\sim$		
		11		1	_	remover	$\sim$		
		11		10		compounds	11		
		10			-	, lacquer			
			215	-		solvents	1.	ι	
			150	<b>A</b> .T.	1.11	and	1 L	1	
				<b>MB 1</b>		synthetic	- A. I.		
						flavoring.			
30	Acetic	64-	0	5888	5888	Used	3310	5 (f)	By-
	Acid	19-7	P. 9		in the	widely to	1.11	1	produ
	-1		11 12			make other		( m) -	ct
		1.1	10. July 10.	100		chemicals,			
	12			-		and as a	97	Sec. 1	
		$\sim$				solvent in		÷	
		1.0				chemical	13		
		10				manufactur	1.00		
		11	a, ~	1. Contraction 1. Con		ing. It is	<u> </u>		
			200			also used			
			1.10	6.20	44.1	for fabric			
					11.1	dyeing,			
						production			
						of nylon			
						and in			
						leather			
						tanning.			
31	Sodium	127-	0	2624	2624	Used in	3530	5(f)	By-
	Acetate	09-3				manufactur			produ
						ing of			ct
						chemical			
						intermediat			
						es,			
					i i			1	

						ticals,			
						buffer			
						solutions.			
						soaps and			
						dehvdratin			
						g agents. It			
						is also used			
						in			
						electroplati			
						ng tanning			
						textile and			
						food			
						industries			
32	Calcium	7780	0	1044	1044	It is used	4250	Inorgani	By_
52	Eluoride	-75-5	0	1044	1044	in in	+230	norgani	Dy- produ
	Tuonde	-75-5	150			manufactur	64	C	ct
		1				e of glass	18		Cl
		100	1	100		iron and	erra.		
		- S. J	1			steel	$\sim 2$		
		11	A			castings	N.		
33	Benzotriflu	98-	0	838	838	Used as a	15000	5(f)	Bv-
55	oride	08-8	U	050	050	chemical	15000	5(1)	produ
	onde	00 0			a co	intermediat	. N		ct
			- 107	1.0		e in the		1	Ct.
			11	6 N N	× .	manufactur	N 1		
				1 12.1		e of dyes	19 E I		
			1 1		<b>T</b> .	polymers	11		
			1.3	1.10		insecticide	1.		
	_		1.25			s and	111	1	
	- Lo	1.1	h =	Sec.	-	pharmaceu	- 11 1	1 A A	
	1.0	11				ticals	///	100	
34	Magnesiu	1003	0	8786	8786	It is used	NA	Inorgani	Bv-
51	m Sulphate	4-99-	Ŭ	0700	0700	in the		C	produ
	in Sulphace	8				manufactur	1.5	Ŭ	ct
		Ű	5 m		_	e of	20		
			24.1	The second se		plastics	N		
			10%	Sec. 1	1.19	fertilizers			
				- C 15	11	detergents			
						and			
						ceramics			
						and			
						textiles			
35	Succinimid	123-	0	2661	2661	It is used	14000	5(f)	Bv-
55	e	56-8		2001	_001	in the	11000		produ
	÷					manufactur			ct
						e of			~~
						chemical			
						intermediat			
						es and			
						pharmaceu			
L		1	I		1	r	I		

						tical			
						preparation			
						s.			
36	t-Butanol/	75-	0	1411	1411	Used as a	3100	5(f)	By-
	tertiary	65-0				solvent,			produ
	butyl					denaturant			ct
	alcohol					for ethanol,			
						paint			
						removers			
						and octane			
						booster in			
						gasoline. It			
					A 1	is also used			
				15	2771	in the			
			187		100	manufactur	2		
		1.1	6.12	and the second designed to the second designe		e of	222		
		- 63	14			flotation	100		
		14.0	1			agents,	< >		
		11	. T			flavors,	1		
		11	-	1	_	perfumes,	$\sim$		
		1.4			_	oil-soluble	11		
		/ 8			1000	resins and			
			- 17			antioxidant			
27	Dhanal	109	0	222	222	S.	217	5(f)	Du
57	Filelioi	106- 95_2	0	555	555	chemical	517	3(1)	Dy- produ
		)5-2	1. 1	1.11.	1 A	manufactur	1.1		ct
			1.8	1.10		ing	1.11		Ct
	-		7, 3			appliance	11	1-	
	2	11	1 A 🖻	1.00	-	and	111	1.1	
	19	11				automotive		1	
		$( \mathcal{N})$				industries.	11	5	
		6. N				Other uses	12	5	
		Co.	<b>N</b>			of include	1.5		
		12	2			as a	05		
			Buch	-		slimicide,	<b>N</b>		
			- 10	Sec.	250	as a			
				12	н.	disinfectan			
						t.			
38	Diethyl-5-	1051	0	472	472	Chemical		5(b)	By-
	ethyl-	51-				intermediat			produ
	pyridine-	39-1				e			ct
	2,3-								
	dıcarboxyli								
	c acid								
20	(Diacid)			1107	1106	XX 7'11 1	70.00	<b>F</b> (0)	D
39	Ethanol	04- 175	0	1180	1186	Will be	7060	5(1)	By-
		17-5				used as a			produ
						solvent in			ci
						cleaners			

	6.1.1	7704				and as a fuel additive. It is also used in the production of other chemicals, perfumes, pharmaceu ticals, and cosmetics. It is also used as a fungicide and to regulate plant growth.			D
40	Sulphur	7704				It is used in the as fumigants, Fungicides , Acaricides, Repellants, pulp and paper, cosmetics, rubber vulcanizati on, detergents, petroleum refining, dyes, drugs and pharmaceu tical intermediat es.	5000	Inorgani c	By- produ ct
41	Methyl Chloride	74- 87-3	0	1125	1125	It is used in the manufactur e of various chemical intermediat es, silicone resins and	1800	5(f)	

						rubbers.			
42 .	Sodium	7647	0	18402	1840	It has wide	3000	Inorgani	By-
(	Chloride	-14-5			2	application		c	produ
						s in			ct
						chemical,			
						highway			
						de-icing			
						and			
						stabilizatio			
						n			
						agriculture			
						and water			
						conditionin			
				-	Q-1	g field. It is			
			100	$\sim 100$	КU	widely			
			150			consumed	64		
		1			_	in textiles	18 A.		
		$\sim$	1	-		dveing	100		
		777	r 📣			pulp and	$\sim \sim$		
		11	A			paper	N.		
		11		1	100	metal	18		
		1.0	1.00	7 (		processing	11		
		7 F			<b>1</b>	tanning,	. N		
			107			and leather			
			11	A 1	× .	treatment			
				1 13 1		and rubber			
			1. 1	1.11.	1 A	manufactur	1 A A		
			1.8	1.10		e	1.11		
43 F	Bisultap	5220	0	2131	2131	Pesticide	120	5(b)	Bv-
	a is wrong	7-48-				and	(Mous		produ
	i i ter	4		1		Chemical	e)		ct
		(X)				intermediat		67	•••
		$\sim $				e	1		
44 A	mmoniu	7783	0	1927	1927	Used as	2840	Inorgani	Bv-
m	Sulphate	-20-2				chemical		C	produ
	~~~p	_0	24.1	The second se		intermediat	N	·	ct
			1.1	Sec. 1	1.18	e and			
				- 13-	11	fertilizer.			
45 E	Dimethvl	124-	0	712	712	It will be	1000	5f	Bv-
	Amine	40-3	-		-	used for		-	produ
	-					the			ct
						manufactur			
						e of			
						chemical			
						intermediat			
						es			
						internally			
			1		1	, J	1		
1						or to other			
						or to other manufactur			

46	Benzyl	100-	0	640	640	It is used	1231	5f	Bv-
	Chloride	44-7	-			as a			produ
						chemical			ct
						intermediat			•••
						e in the			
						manufactur			
						e of certain			
						dves and			
						nharmacau			
						ticals			
						plasticizers			
						plasticizers			
						, disinfactan			
					O.S.	ts and			
			12	6 Q.	cau	ts and			
			10	1.1		transfor	2		
		1		-		catalysts	2X -		
17	N N bis	3464	0	1280	1280	Chemical	100	5f	By
+/	(dichlorom	5-08-	-0	1200	1200	intermediat	~ 2	51	nrodu
	(dictionation) ethyl)		100			P	\sim		ct
	methyl	11		1	-	č	\sim		Ct
	amine	10		7 (_		- N N		
48	KHSO4	7646	0	281	281	It is used	2340	Inorgani	Bv-
-0	KIISO+	-93-7	U	201	201	in the	2340	norgani	nrodu
		<i>)3 </i>	11	A 1	N	manufactur	N 11	C	ct
						e of			Ct
			1 1	1.11.	T 2	chemical	1 A A		
			4.8	1.10		intermediat	1.11		
	-		1.25	1.1.1		es It is		1-	
	- Lo	1.1	h =	100	-	also used	- 77 - 7	1.24	
	1.0	\mathbf{N}	100		_	in	71 I	24	
						bleaching	11	67	
		$\sim $				and	1.0	5	
		100				cleaning	$\sim s$		
		1.11	5.7		_	products	20		
49	Cupric	1012	0	1542	1542	Used as	140	Inorgani	Bv-
	Chloride	5-13-		1012	1012	catalyst	110	C	produ
	emorrae	0		1.15	11	and		č	ct
		Ŭ				oxidizing			
						agent for			
						organic			
						and			
						inorganic			
						reactions.			
						used in			
						dyeing and			
						printing			
						textiles.			
						Also used			
						in			

						manufactur			
						e of glass			
						ceramics			
						wood			
						woou			
						preservativ			
						es,			
						disinfectan			
	~		<u>^</u>	0.40.4	0.40.4	ts.	1010		-
50	Sodium	7631	0	8491	8491	Used in the	1310	Inorgani	By-
	Bisulphite	-90-5				manufactur		с	produ
						e of			ct
						chemicals,			
					A 18	vat dyes			
				- 5 C	2511	textiles. It			
			52	e, ne i	1.21	is also used	20		
				-		as a	50		
		- 60	an a			bleaching			
		100	Z .			agent,	202		
		11				reducing	$\sim <$		
		11	1000			agent, and	1		
		11		1.00		color	N N		
		1 8		/ I.		preservativ	11		
				-	100	e for pale			
				2.0		crepe		۱	
					N	rubber and	Ъ. II		
		- A	F			for wood			
			1 1		1.1	pulp			
			4.8			digestion.	1.11		
51	Bromoben	108-	0	3372	3372	Used in the	2383	5f	Bv-
	zene	86-1	<u> 8 </u> =			manufactur	- 77		produ
	Lone	001				e of	7//	100	ct
		(X)				chemical	11	57 C	01
		$\sim $				and	1.		
		100				nharmaceu	1.3		
		1.57				tical	18 C		
		1.1	$\lambda_{1,1}$	The second se		intermediat	N C		
			10M		1.1	es as a			
				1.15	11 1	crystallizin			
						a solvent			
						g solvent,			
						solvent in			
						organia			
						organic			
52	ы	106	0	450	450	Jead for	3120	5 f	By
52	DI	27 4	U	430	430	the organic	$(M_{\rm OVC})$	51	Dy-
	Diomoden	57-0				aunthosis	(mous		produ
	zene					synthesis	<i>e)</i>		Cl
						OI			
						& drugs,			
						manufactur			

						e of chemical intermediat es and as a			
						fumigant.			
53	Ammoniu	631-	0	850	850	Used in the	NA	5f	By-
	m Acetate	61-8				manufactur			produ
						e of			ct
						chemical			
						intermediat			
						es, foam			
						rubbers,			
						vinyl			
				100	Seri	plastics,			
			- 62			and drugs.			

6. The PP reported that there is no violation case as per the Notification No. S.O. 804(E) dated 14.03.2017 and no direction is issued under E (P) Act/Air Act/Water Act.

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7. The PP reported that Ministry had issued EC earlier vide letter no. J-11011/09/2016-IA-II (I), dated 19.12.2017 for setting up Agro- chemical (pesticides) & organic chemical manufacturing unit of capacity 22750 TPM at plot no. C-393 to C-396, Sayakha GIDC Estate, Tal: Vagra, Dist: Bharuch – 392 140 (Gujarat) by M/s. Gharda Chemicals Ltd. Certified compliance report has been issued by the IRO, Gandhinagar dated 13.1.2023, out of 35 condition it may be seen that 10 are compiled 4 are partly complied and 21 are agreed to comply. Action Taken Plan for the partly complied and agreed to comply conditions of CCR is also submitted to Government of India, Ministry of Environment, Forest & Climate Change, Integrated Regional office, Gandhinagar dated 11.02.2023

8. The PP reported that there are no national parks and Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River Narmada is flowing at distance of 10.0 Km in South direction. Schedule I species or Indian Peafowl exist within 10 km study area of the project, for which conservation plan is submitted to PCCF/ chief wildlife warden dated 1.2.2023.

9. The PP reported that the **ambient air quality** monitoring was carried out at 8 locations during October, 2020 to December, 2020 and the maximum concentration of SPM (140.4 $\mu g/m^3$), PM₁₀ (78.63 $\mu g/m^3$), PM_{2.5} (47.41 $\mu g/m^3$), SO₂ (14.38 $\mu g/m^3$), NOx (16.96 $\mu g/m^3$), O₃ (13.72 µg/m³) & VOC (0.8 ppm) was recorded in study area. The minimum concentration of SPM (124.2µg/m³), PM₁₀ (70.43 µg/m³), PM _{2.5} (40.86 µg/m³), SO₂ (9.13 µg/m³), NOx (10.25 $\mu g/m^3$), O₃ (10.67 $\mu g/m^3$) & VOC (0.3 ppm) was recorded in study area. Noise- Based on noise level data obtained during the survey for residential area and industrial area, it is interpreted that noise levels are within the standard norms prescribed by CPCB. Looking towards the increase in noise generating sources it is suggested that there is need to apply noise reducing devices at noise generating sources and generate public awareness. Soil- The porosity of soils can be considered as moderate too good for air and water movement in the soil and the pH of soils are slightly alkaline. The concentration of available Nitrogen, Phosphorous and Potassium in the soil samples signifies that the soil of the area is fertile. Groundwater- Based on comparison study with drinking water standards, it is interpreted that water samples collected from the villages should not be directly used in drinking but can be used in other domestic purposes like

washing, bathing and irrigation. Results of copper, lead in the water sample of all the villages are found below detectable. It can be observed that ground water qualities in terms of various essential and desirable characteristics are found within the limits specified by IS 10500:2012. Surface water- There are seven ponds considered in the study area. However, this water is not used for domestic/industrial activities; as the raw water is easily available through pipelines of local authorities. These water sources cannot be utilized for drinking but the water of these ponds can be used in irrigation. The water quality is good and it was observed that all the parameters are well within the range of acceptance criteria as per IS: 10500.

The PP reported that the total water requirement is 8164 KLD of which fresh water 10. requirement of 3447 KLD and will be met from GIDC Water Supply letter no. GIDC/DEE/WS/BRH/421, Dated: 28/07/2022. Effluent will be treated in ETP having primary, secondary, tertiary treatment, RO, Solvent striper & MEE. The wastewater generation will be 5098.0 KLD (Existing – 319 KLD + Additional proposed - 4779 KLD). Wastewater generated will be segregated into high concentration and low concentration streams. High concentration stream will be treated in Multiple Effect Evaporator (MEE) and low concentration stream will be treated in ETP followed by Reverse Osmosis (RO). Wastewater generated (5098 KLD) will be segregated into high concentration and low concentration streams. High concentration stream will be treated in Multiple Effect Evaporator (MEE) and low concentration stream will be treated in ETP followed by Reverse Osmosis (RO). Out of 5098 KLD, 1399 KLD will be discharged to deep sea via CETP, 157 KLD solids from MEE will be disposed to CHWTSDF, 63 KLD treated sewage will be used for tree plantation & remaining 3454 KLD treated effluent along with 1200 KLD steam condensate (Total 4617 KLD) will be recycled/reused back in process. Domestic waste water 70 KLD will be treated in STP and 63 KLD will be reused for Gardening.

11. The Power requirement will be 14.2 MW (DGVCL/Torrent Energy Ltd:./Captive Power Plant @ 4.8 MWH), DG Set (1500 KVA x 3 Nos.). Unit will have 3 Nos. DG sets of 1500 KVA capacity, additionally DG sets are used as standby during power failure. Stack (height 15 m) will be provided as per CPCB norms to the proposed DG sets. Unit will have 3 Nos. of Cogen Boilers (30 TPH (2 Nos.) & 50 TPH (1 Nos.)) & 2 Nos. of Hot Oil Unit (10 lac KCal/hr) will be installed. Adequate Stack Height of 35 m & 30 m will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm3 for the proposed boilers.

12. **Details of Process Emission Generation and Its Management:**

	Flue Gas Stack Existing												
Sr. no.	Source of emission With Capacity	Stack Height (meter)	Type of Fuel	Quantity of Fuel	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)							
Existing Flue Gas Stacks & Emission Details:													
1	Boiler-1 (10 TPH)	30	Coal	1500 kg/h		Electrostatic Precipitator + Water scrubber							
2	Boiler-2 (10 TPH)	30	Coal	1500 kg/h	PM, SO ₂ , NOx	Electrostatic Precipitator + Water scrubber							
3	Boiler-3 (10 30		Coal	1500 kg/h		Electrostatic							

	TPH)					Precipitator + Water
						scrubber
4	Hot oil unit-1 (5 lac KCal/hr)	30	HSD	45 L/h		
5	Hot oil unit-2 (5 lac KCal/hr)	30	HSD	45 L/h		
6	Coal Fired Boiler (30 TPH) for (3 MW Power Plant)	30	Coal	4500 kg/h	PM, SO ₂ , NOx	Electrostatic Precipitator + Water scrubber
7	D.G. Set-1 (1150 KVA (Stand-by))	30	HSD	300 L/h	PM, SO ₂ , NOx	Adequate stack height
8	D.G. Set-2 (1150 KVA (Stand-by))	30	HSD	300 L/h	PM, SO ₂ , NOx	Adequate stack height

71.				N	1
771	Fotal After	· Proposed	Expansion		

		10		oposcu	Expansion				
Sr.	Source of 🏅	Stack	Stack	Type	Quantity	Type of	Air		
No.	emission 📕	Height	Diameter	of	of Fuel	emissions	Pollution		
	With	(meter)	(meter)	Fuel		i.e. Air	Control		
	Capacity				- e * .	Pollutants	Measures		
	Supurity	- 17	- 6 N. N.		200		(APCM)		
	Total Flue	Cas Stack	e & Emissio	n Dotoi	ls Aftor Pr	anosod Evnan	sion.		
4	Total Flat Gus Diacks & Emission Details Arter Floposed Expansion.								
1	Cogen	35	1.25	Coal	4500	$PM, SO_2,$	Electrostatic		
	Boiler-1				kg/h	NOx	Precipitators		
	(30 TPH)	1.1			//	1111	(1 for each)		
	- 51 V		age -		1	1113	+ Caustic		
2	Cogen		-	Coal	4500	PM, SO ₂ ,	scrubber		
	Boiler-2				kg/h	NOx			
	(30 TPH					15			
3	Cogen	35	1.25	Coal	7500	PM, SO ₂ ,			
	Boiler-3	12.	The subscription of the su		kg/h	NOx			
	(50 TPH)	10	1 m m		Ŭ				
	(4.8 MW	1	1.1.1	i f - 5	144 C				
	Power Plant								
	considering								
	all boilers in								
	operation)								
3	Hot oil unit-1	30	1.0	HSD	90 I /h	PM SO ₂	Adequate		
5	$(10 \log 1)$	50	1.0	nob)0 L/II	NOv	stack height		
	(10 lac)					NOX	stack neight		
	KCal/III)								
4	Hot oil unit-2								
	(10 lac								
	KCal/hr)								
5	D.G. Set-1	15	0.4	HSD	400 L/h	PM, SO ₂ ,	Adequate		
	(1500 KVA					NOx	stack height		

	(Stand-by))						
6	D.G. Set-2	15	0.4	HSD	400 L/h	PM, SO ₂ ,	Adequate
	(1500 KVA					NOx	stack height
	(Stand-by))						
7	D.G. Set-3	15	0.4	HSD	400 L/h	PM, SO ₂ ,	Adequate
	(1500 KVA					NOx	stack height
	(Stand-by))						

Note: All Existing Flue Gas Stacks are to be removed and replaced with new ones after proposed expansion

Existing											
Sr.	Process Stack	No. Of	Height	Diameter	- Air Pollution	Expected					
No.	Attached To	Scrubbers	from	(M)	Control System	Pollutants					
		1000	Ground		2.42.8	Mg/Nm ³					
		14	-(M)		- VA	0					
Exist	ting Process Vent	t Details			~~~						
1	Chloranil	2	20	0.08,0.1	Caustic Scrubber,						
		//	1		Venturi Scrubber	HCl, Cl_2 , SO_2					
2	PDCB	2	20	0.08,0.1	Caustic Scrubber,	HCl, Cl ₂					
		125.07		2	Venturi Scrubber						
3	Hexaconazole	2	20	0.08,0.1	Caustic Scrubber,	HCl, Cl ₂ , SO ₂					
				S	Venturi Scrubber						
4	Dicamba	NA	20	NA	Sent to Co-	CH ₃ Cl					
		N 1 1 1	1.11.1	r / 9,	incineration						
5	Profenophos	4	20	0.1, 0.08	Caustic Scrubber,	HBr, HCl, Cl ₂ ,					
					Venturi Scrubber	Br ₂					
6	Lambda	2	20	0.08,0.1	Caustic Scrubber,	HCl, Cl ₂ , SO ₂					
	Cyhalothrin				Venturi Scrubber						
7	Difenthiuron	2	20	0.08,0.1	Caustic Scrubber,	HCl, Cl ₂ , SO ₂					
					Venturi Scrubber						
8	Metalaxyl	3	20	0.08,0.1	Caustic Scrubber,	HCl, Cl ₂ , SO ₂					
	-	122			Venturi Scrubber						
		- Bur	-		1.2.1						
			Total I	Proposed	o 17						
a	D 0 1	NL OS		- Di							

Process Stack Trictin

S.	Process Stack	No. Of	Height	Diameter	Air Pollution	Expected				
No.	Attached To	Scrubbers	from	(M)	Control System	Pollutants				
			Ground			Mg/Nm3				
			(M)							
Addi	Additional Process Vent Details									
1	Chloranil	2	33	0.08,0.1	Caustic Scrubber,	HCl, Cl2, SO2				
					Venturi Scrubber					
2	PDCB	2	33	0.08,0.1	Caustic Scrubber,	HCl, Cl2				
					Venturi Scrubber					
3	Hexaconazole	2	33	0.08,0.1	Caustic Scrubber,	HCl, Cl2, SO2				
					Venturi Scrubber					
4	Dicamba	NA	33	NA	Methanol	CH3Cl				
					Scrubber					

5	Profenophos	4	33	0.1, 0.08	Caustic Scrubber,	HBr, HCl, Cl2,
					Venturi Scrubber	Br2
6	Lambda	2	33	0.08,0.1	Caustic Scrubber,	HCl, Cl2, SO2
	Cyhalothrin				Venturi Scrubber	
7	Difenthiuron	2	33	0.08,0.1	Caustic Scrubber,	HCl, Cl2, SO2
					Venturi Scrubber	
8	Metalaxyl	3	33	0.08,0.1	Caustic Scrubber,	HCl, Cl2, SO2
					Venturi Scrubber	
9	Tembotrione	2	NA	NA	Flame arrestor	H2
					followed by	
					Blow down tank	
			33	0.1	Emergency	SO2
					Caustic scrubber	
10		-	33	0.08	Water scrubber	HCl
10	Mesotrione (MCB	3	33	0.08	Water scrubber	HCl
	Sulfonyl Chloride	1182	33	0.1	Caustic Scrubber	CO2
	Route)	S	NA	NA	Methanol	CH3Cl
	-	1			Scrubber	
		100	33	0.1	Emergency	SO2
	/		27.4		Caustic scrubber	
		S. 199	NA	NA	Flame arrestor	H2
			27.6		followed by	
11			22	0.1	Blow down tank	
11	Mesotrione	4	33	0.1	Caustic Scrubber	CO2
	(Toluene sulfony)	<i>.</i>	NA	NA	Methanol	CH3CI
	Chioride Roule)	1 I A A A	22	0.00	Scrubber	NO
		V S.	33	0.08	H2O2 Scrubber	NOX UCI
	-11		22	0.08		
	6- V	1 A 2	55	0.1	Coustie scrubber	302
	12 N		NIA	NIA	Elama arrestor	Ш2
			INA	INA	followed by	112
	· · · · · · · · · · · · · · · · · · ·				Blow down tank	
12	Sulfentrazone	3	NΔ	ΝΔ	Flame arrestor	Freon-22
12	Sunentrazone	5	33	0.1	Caustic Scrubber	C12
		1000	33	0.08	H2SO4 Scrubber	NOx
			NA	NA	Flame arrestor	H2
			11/1	1111	followed by	112
					Blow down tank	
			33	0.08	Water scrubber	HC1
13	Bromoxynil	4	33	0.08	Water scrubber	HCl
-	Octanoate		33	0.1	Caustic scrubber	SO2
			33	0.1	Water Scrubber	HBr
			33	0.08	Water Scrubber	NH3
14	Bromoxynil	4	33	0.08	Water scrubber	HCl
	Heptanoate		33	0.1	Caustic scrubber	SO2
			33	0.1	Water Scrubber	HBr
			33	0.08	Water Scrubber	NH3
15	Sulcotrione	4	NA	NA	Methanol	CH3Cl

					Scrubber	
			33	0.1	Caustic Scrubber	CO2
			33	0.1	Caustic Scrubber	Cl2
			33	0.08	Water scrubber	HCl
			33	0.1	Emergency	SO2
				•••	Caustic scrubber	~ ~ _
			NA	NA	Flame arrestor	H2
					followed by	
					Blow down tank	
16	Dicamba	4	33	0.08	Water scrubber	HCl
			33	0.1	Caustic Scrubber	Cl2
			NA	NA	Flame arrestor	H2
					followed by	
		-	2578	10.56	Blow down tank	
			33	0.1	Caustic Scrubber	CO2
		1.00	NA	NA	Methanol	CH3Cl
		مريعي	- 1 T	in the second second	Scrubber	
17	Bispyribac Sodium	0	NA	NA	Flame arrestor	H2
					followed by	
			/		Blow down tank	
18	Anilophos	3	33	0.08	Water scrubber	HCl
		PT 17	33	0.1	Caustic Scrubber	H2S
		F 17 .	33	0.08	Water scrubber	NH3
19	Diuron	1 /	33	0.08	Water scrubber	HCl
			NA	NA	Water Scrubber	DMA
20	Pinoxaden	4	33	0.1	Caustic Scrubber	Cl2
			33	0.1	Caustic Scrubber	Br2
		M. 3.	NA	NA	Flame arrestor	H2
	Z.\	12		_	followed by	
	1 1	1.0	P		Blow down tank	
	54.3		33	0.08	Water scrubber	HCl
	1 A A		33	0.1	Caustic Scrubber	CO2
21	Pyraclostrobin	2	33	0.1	Caustic Scrubber	C12
		3	33	0.1	Caustic Scrubber	CO2
22	Trifloxystrobine	5	33	0.1	Caustic Scrubber	Br2
		100	33	0.1	Calcium	HF
			- 48 IT	Sin	Hydroxide	
					Scrubber	
			33	0.1	Caustic Scrubber	HBr
			33	0.08	Water scrubber	HCl
			33	0.1	Caustic Scrubber	Cl2
23	Indoxacarb	2	33	0.08	Water scrubber	HCl
			33	0.1	Emergency	SO2
					Caustic scrubber	
			NA	NA	Flame arrestor	H2
					followed by	
L					Blow down tank	
24	Fipronil	3	33	0.1	Caustic Scrubber	Cl2
			33	0.1	Emergency	SO2

					Caustic scrubber	
			33	0.08	Water scrubber	NH3
25	Imazethapyr	0	NA	NA	Flame arrestor	H2
					Blow down tank	
26	Temephos	2	33	0.1	Caustic Scrubber	C12
-0	remephos	-	33	0.08	Water scrubber	HCl
27	Chloropyriphos	2	33	0.1	Caustic Scrubber	Cl2
		_	33	0.08	Water scrubber	HCl
28	Chloropyriphos	2	33	0.1	Caustic Scrubber	Cl2
	Methyl	_	33	0.08	Water scrubber	HCl
29	Cartap	1	NA	NA	Water scrubber	DMA
	Hydrochloride		33	0.1	Caustic Scrubber	Cl2
	5		NA	NA	Methanol	CH3Cl
		- S.A.	and set	and b	Scrubber	
30	Imidacloprid	2	33	0.08	Water Scrubber	DMA
		Carlor,	33	0.1	Caustic Scrubber	Cl2
	×	1	33	0.08	Water scrubber	HCl
31	Acetamiprid	1	33	0.08	Water scrubber	HCl
			NA	NA	Water scrubber	MMA
32 Clothian	Clothianidin	5	33	0.1	Caustic Scrubber	Cl2
		121	33	0.08	Water scrubber	HCl
		T 17 -	33	0.1	Emergency	SO2
		- / /			Caustic scrubber	
			33	0.08	Water scrubber	NH3
		81 18	33	0.1	Caustic Scrubber	CO2
33	Chlorantraniliprole	3	33	0.1	Caustic Scrubber	Cl2
	-11		33	0.1	Caustic Scrubber	CO2
	4		NA	NA	Flame arrestor	H2
	12.1		_		followed by	
					Blow down tank	
		N N	33	0.08	Water scrubber	HCl
34	Deltamethrin	4	33	0.1	Caustic Scrubber	Cl2
		\sim	33	0.08	Water scrubber	HCl
		200	33	0.1	Emergency	SO2
			to it	6.42	Caustic scrubber	
			33	0.08	Water Scrubber	HBr
35	Cypermethrin	3	33	0.1	Caustic Scrubber	Cl2
			33	0.08	Water scrubber	HCl
			33	0.1	Emergency	SO2
				0.1	Caustic scrubber	~1.
36	Alphamethrin	3	33	0.1	Caustic Scrubber	Cl2
			33	0.08	Water scrubber	HCI
			33	0.1	Emergency	SO 2
27			22	0.1	Caustic scrubber	C10
37	Permethrin	3	33	0.1	Caustic Scrubber	
			33	0.08	Water scrubber	HCI
			33	0.1	Emergency	802
					Caustic scrubber	

38	Mepiquate Choride	0	NA	NA	Methanol	CH3Cl
					Scrubber	
39	Amino Ethyl	0	NA	NA	Flame arrestor	H2
	Carbazole				followed by	
					Blow down tank	
40	Meta Phenoxy	0	NA	NA	Flame arrestor	H2
	Benzyl Alcohol				followed by	
					Blow down tank	
41	Meta Phenoxy	2	33	0.08	Water scrubber	HCl
	Benzaldehyde		33	0.1	Caustic Scrubber	Cl2
42	Meta Phenoxy	2	33	0.08	Water scrubber	HCl
	Benzaldehyde		33	0.1	Caustic Scrubber	Cl2
	Acetal			- C		
43	O-Phenyline	0	NA	NA	Flame arrestor	H2
	Diamine	100		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	followed by	
		Alt -			Blow down tank	
44	PEKK	2	33	0.1	Emergency	SO2
	~	~ <u>~</u>			Caustic scrubber	
		1	33	0.08	Water scrubber	HCl
45	PEK	2	33	0.1	Emergency	SO2
		1 11 1			Caustic scrubber	
			33	0.08	Water scrubber	HCl
46	ABPBI	2	33	0.1	Emergency	SO2
		- <i>II</i> 1			Caustic scrubber	
			33	0.08	Water scrubber	HCl
47	Carbendazim	2	33	0.08	Water scrubber	NH3
		14	NA	NA	Flame arrestor	H2
		1.34	1. A.	501/	followed by	
	2.\	1			Blow down tank	
	Te A		33	0.08	Water scrubber	HCl
48	Thiamethoxam	1	33	0.08	Water Scrubber	HCl
49	Metalaxyl	3	33	0.08	Water scrubber	HCl
	1		33	0.1	Emergency	SO2
		2			Caustic scrubber	
		12.0	33	0.08	Water scrubber	NH3
		100	33	0.1	Water Scrubber	HBr
			33	0.1	Caustic Scrubber	Br2
			33	0.08	Water scrubber	HCl
			33	0.1	Caustic Scrubber	C12
50	Hexaconazole	2	33	0.08	Water scrubber	HCl
			33	0.1	Emergency	SO2
					Caustic scrubber	
51	Lambda	2	33	0.08	Water scrubber	HCl
	Cyhalothrin		33	0.1	Emergency	SO2
					Caustic scrubber	
52	Difenthiuron	5	33	0.1	Caustic Scrubber	Br2
			33	0.1	Water Scrubber	HBr
			33	0.1	Caustic Scrubber	Cl2
			33	0.08	Water scrubber	HC1

			33	0.08	Water scrubber	NH3
53	Triclopyr Acid / Triclopyr Butotyl Easter	1	33	0.1	Caustic Scrubber	Cl2
54	Azoxystrobin	1	33	0.1	Caustic Scrubber	CO2
55	PV 23	V 23 4		NA	Flame arrestor followed by Blow down tank	H2
			33	0.08	Water scrubber	NH3
			33	0.1	Emergency Caustic scrubber	SO2
			33	0.08	Water scrubber	HCl
			33	0.1	Caustic Scrubber	Cl2
56	PR-168	2	33	0.1	Water Scrubber	HBr
		X	33	0.08	Caustic Scrubber	Br2
57	PR-254	0	NA	NA	Flame arrestor followed by Blow down tank	H2
58	PR-255	0	NA	NA	Flame arrestor followed by Blow down tank	H2
59	PR-122	0	NA	NA	Flame arrestor followed by Blow down tank	H2
60	PV-19	0	NA	NA	Flame arrestor followed by Blow down tank	H2
61	PY-138		33	0.1	Emergency Caustic scrubber	SO2
	1 51		33	0.08	Water scrubber	NH3
	194.1		33	0.1	Caustic Scrubber	CO2
	1 Sec. 19.	1	33	0.1	Caustic Scrubber	Cl2
		\sim	33	0.08	Water scrubber	HCl
		2	33	0.1	Emergency Coustie completer	SO2
		124	ΝA	ΝA	Elamo arrestor	<u>ц</u> р
				She la	followed by	
					Blow down tank	

13. **Details of Solid Waste/ Hazardous Waste Generation and Its Management:** 12 Categories of Hazardous/Solid Wastes and their management & 2 Nos. of Non-Hazardous waste.

Hazardous/Solid Wastes

Sr	Type of Waste	Nature/	Hazard	Existin	Additio	Total	Treatment
•		Type of	ous	g Qty	nal	Qty	/Disposal
Ν		solid	Waste	(MT/Y	Propos	(MT/Y	
0.		waste	Catego	ear)	ed Qty	ear)	
			ry		(MT/Y		

					ear)		
1	Used/ spent Oil	Liquid	5.1	24	14	38	Collected,
							Stored,
							Transported
							& Disposed
							by CHWIF/
							Co-
							Processing/Pr
							e-Processing
							or selling it to
							Authorized
							registered
2	Oil Wests	Calid/Ca	5.2	- 16	5.0	21.0	recyclers
2	Oil waste	Solid/Se	- 5.2	10	5.0	21.0	Collected,
		IIII-Solid			12.	2	Stored, Transported
		182			19	х. —	& Disposed
		11	- A.S.		2	18 A.	by CHWIE/
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	/ 🌰	1.0			1	Co-
	1	A-3-3			1.00	N	Processing/Pr
		1	100				e-Processing
				_		11	or selling it to
		201				11	Authorized
		5 11			1.1		registered
				1.1			recyclers
3	Distillation	Solid/Se	20.3	6075	21351	27 <mark>4</mark> 26	Collected,
	Residues	mi-Solid	1.10.1	1 1 2	a v.		Stored &
		<b>1</b> . 9	1.10	- C S	1	<b>M</b> 11	Transported
	7.	13				<b>77   I</b> •	by disposing
	51	- C	19 - T			VI :	1t
	- KA \					1/2	CHWIF0/Co-
	1.1				19	1.5	Processing/
	1	$\sim$			//	1.0	Pre- Processing
1	Spont colvente	Liquid	20.4	25	85.0	110	Collected
4	Spent solvents	Liquid	27.4	23	05.0		Stored
		10%	distant in	000	0.37		Transported
			C 13 T	1 > 1	Par -		& Disposed
							by CHWIF/
							Co-
							Processing/Pr
							e-Processing
							or selling it to
							Authorized
							registered
							refiners
5	ETP Sludge	Solid	35.3	3500	1022	4522	Collected,
1							
							Stored &
							Stored & Transported

6Concentration/ Evaporation Residue (MEE Salt/ Solids)Solid37.369356606573000Collected, Stored & Transported to authorized TSDF Iand filling7Oily Waste from ETPSolid/Se mi-Solid35.42466.090.0Collected, Stored, Transported & Land filling7Oily Waste from ETPSolid/Se mi-Solid35.42466.090.0Collected, Stored, Transported & Land filling8Spent CatalystSolid29.51.24.86.0Collected,								TSDF for
6       Concentration/ Evaporation Residue (MEE Salt/ Solids)       Solid       37.3       6935       66065       73000       Collected, Stored & Transported to authorized TSDF for land filling         7       Oily Waste from ETP       Solid/Se mi-Solid       35.4       24       66.0       90.0       Collected, Stored, Transported & Stored, Transported & Stored, Transported & Stored, Transported & Disposed by Incineration/ CHWIF/ Co- Processing/Pr e-Processing         8       Spent Catalyst       Solid       29.5       1.2       4.8       6.0       Collected,								land filling
Evaporation Residue (MEE Salt/ Solids)Stored Kesidue (MEE Salt/ Solids)Stored Kesidue (MEE Salt/ Solids)Stored Kesidue (MEE Salt/ Solids)Stored Kesidue (MEE Salt/ Solids)Stored Kesidue (MEE Salt/ Solids)Stored Kesidue (MEE Salt/ Solid)Stored Kesidue (MEE Salt/ Salt Salt/ SaltStored Kesidue (MEE SaltStored Kesidue (MEE Salt Salt SaltStored Kesidue (MEE SaltStored Kesidue (MEE Salt Salt SaltStored Kesidue (MEE Salt Salt Salt Salt SaltStored Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt Salt 	6 C	Concentration/	Solid	37.3	6935	66065	73000	Collected,
Residue (MEE Salt/Solids)Transported to authorized TSDF for 	E	Evaporation						Stored &
Salt/ Solids)       Salt/ Solids)       to authorized TSDF for land filling         7       Oily Waste from ETP       Solid/Se mi-Solid       35.4       24       66.0       90.0       Collected, Stored, Transported & Disposed by Incineration/ CHWIF/ Co-Processing/Pr e-Processing         8       Spent Catalyst       Solid       29.5       1.2       4.8       6.0       Collected,	R	Residue (MEE						Transported
Solar Solary       Solar Solary       Solar Solary       Solar Solary       TSDF for land filling         7       Oily Waste from ETP       Solid/Se mi-Solid       35.4       24       66.0       90.0       Collected, Stored, Transported & Disposed by Incineration/ CHWIF/ Co-Processing/Pr e-Processing         8       Spent Catalyst       Solid       29.5       1.2       4.8       6.0       Collected,	Sa	Salt/ Solids)						to authorized
7Oily Waste from ETPSolid/Se mi-Solid35.4 and 5000000000000000000000000000000000000		Sonds)						TSDF for
7       Oily Waste from ETP       Solid/Se mi-Solid       35.4       24       66.0       90.0       Collected, Stored, Transported & Disposed by Incineration/ CHWIF/ Co-Processing/Pr e-Processing         8       Spent Catalyst       Solid       29.5       1.2       4.8       6.0       Collected, Stored, Transported & Disposed by Incineration/ CHWIF/ Co-Processing/Pr e-Processing								land filling
A only waste from ETP       Sond/Se of S5.4       55.4       24       60.0       50.0       Concerted, Transported & Disposed by Incineration/ CHWIF/ Co-Processing/Pr e-Processing         8       Spent Catalyst       Solid       29.5       1.2       4.8       6.0       Collected,	7 0	Tily Waste from	Solid/Se	35 /	24	66.0	90.0	Collected
BIT       Inf. bond       Stored, Transported & Disposed by Incineration/ CHWIF/ Co- Processing/Pr e-Processing         8       Spent Catalyst       Solid       29.5       1.2       4.8       6.0       Collected,	, 0.	ETP	mi-Solid	55.1	21	00.0	20.0	Stored
8       Spent Catalyst       Solid       29.5       1.2       4.8       6.0       Collected,	<b>L</b> .	211	in bond					Transported
8       Spent Catalyst       Solid       29.5       1.2       4.8       6.0       Collected,								& Disposed
8     Spent Catalyst     Solid     29.5     1.2     4.8     6.0     Collected,								by
8       Spent Catalyst       Solid       29.5       1.2       4.8       6.0       Collected,				-6	-0-			Incineration/
8       Spent Catalyst       Solid       29.5       1.2       4.8       6.0       Collected,			- 08	. R.O.	1167	Bern		CHWIE/ Co
8       Spent Catalyst       Solid       29.5       1.2       4.8       6.0       Collected,			- 20	-		17.4	S	Processing/Pr
8Spent CatalystSolid29.51.24.86.0Collected,			17.8%			100	X	e-Processing
o Spen Catalyst Solid 27.5 1.2 4.8 0.0 Concered,		Spent Catalyst	Solid	20.5	12	18	60	Collected
Stored &	8 5		Solid	29.5	1.2	4.0	0.0	Stored &
Transported	8 SI	spent catalyst				1 C 1 C 1	N.	Transported
to authorized	8 S _I	spont Cuturyst	1 A					to authorized
TSDE or sell	8 SI		$\sim$	1				to authorized
	8 S _I						<b>N</b> N	TSDE or call
to registered	8 SI	spent Cuturyst	$(\cdot, \cdot)$	9			$\mathbf{N}$	TSDF or sell
to registered	8 SI		9	R	5		$\mathcal{N}$	TSDF or sell to registered
9     Spent     activated     Solid     28.3     103     748.5     851     Collected	8 S _I	Spent activated	Solid	28.3	103	748.5	851	TSDF or sell to registered recyclers
9     Spent activated     Solid     28.3     103     748.5     851     Collected,	8 SI 9 SI	Spent activated	Solid	28.3	103	748.5	851	TSDF or sell to registered recyclers Collected, Stored
9     Spent activated Carbon     Solid     28.3     103     748.5     851     Collected, Stored & Transported	8 SI 9 SI Ca	Spent activated Carbon	Solid	28.3	103	748.5	851	TSDF or sell to registered recyclers Collected, Stored & Transported
9     Spent activated Carbon     Solid     28.3     103     748.5     851     Collected, Stored & Transported by dignosing	8 SI 9 SI Ca	Spent activated Carbon	Solid	28.3	103	748.5	851	TSDF or sell to registered recyclers Collected, Stored & Transported
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing ir	8 SI 9 SI Ca	Spent activated Carbon	Solid	28.3	103	748.5	851	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing ir
9     Spent activated Carbon     Solid     28.3     103     748.5     851     Collected, Stored & Transported by disposing it	8 SI 9 SI Ca	Spent activated Carbon	Solid	28.3	103	748.5	851	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it CHWIF/Co-Processing/Pr	8 SI 9 SI Ca	Spent activated Carbon	Solid	28.3	103	748.5	851	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it         0       Carbon       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td>8 SI 9 SI Ca</td> <td>Spent activated Carbon</td> <td>Solid</td> <td>28.3</td> <td>103</td> <td>748.5</td> <td>851</td> <td>TSDF or sell to registered recyclers Collected, Stored &amp; Transported by disposing it CHWIF/Co- Processing/Pr</td>	8 SI 9 SI Ca	Spent activated Carbon	Solid	28.3	103	748.5	851	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it CHWIF/Co-Processing/Pr e-Processing         10       Discarded       Solid       23.1       20000       30000       Collected	8 SI 9 SI Ca	Spent activated Carbon	Solid	28.3	103	748.5	851	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it CHWIF/Co-Processing/Pr e-Processing/Pr e-Processing         10       Discarded       Solid       33.1       20000       30000       50000       Collected, Stored	8 Sr 9 Sr Ca 10 D	Spent activated Carbon Discarded	Solid	28.3	103 103 20000 Nos	748.5 30000 Nos /	851 50000 Nos /	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing Collected, Stored
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it CHWIF/Co-Processing/Pr e-Processing/Pr e-Processing         10       Discarded barrels/container       Solid       33.1       20000       30000       50000       Collected, Stored, Stored	8 SI 9 SI Ca 10 Di ba	Spent activated Carbon Discarded parrels/container	Solid	28.3	103 103 20000 Nos. / 420.0	748.5 30000 Nos./ 772 MT	851 50000 Nos./	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing Collected, Stored, decontaminat
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it         10       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Stored & Transported by disposing it         10       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Stored, Stored, Transported by disposing it	8 Sp 9 Sp Ca 10 D ba s/l 2)	Spent activated Carbon Discarded parrels/container s/liners	Solid	28.3	103 103 20000 Nos. / 420.0 MT	748.5 30000 Nos./ 772 MT	851 50000 Nos./ 1192. MT	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing Collected, Stored, decontaminat
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it         10       Discarded barrels/container s/liners a) Drums       Solid       33.1       20000       30000       50000       Collected, Stored & Transported by disposing it         10       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Stored, Transported by disposing it         10       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Stored, Transported by disposing it         10       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Stored, Stored, detoxification	8 SI 9 SI Ca 10 D ba s/I a) b)	Spent activated Carbon Discarded parrels/container s/liners a) Drums	Solid	28.3	103 103 20000 Nos. / 420.0 MT	748.5 30000 Nos./ 772 MT	851 50000 Nos./ 1192. MT	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing Collected, Stored, decontaminat ed & detovification
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it         10       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Stored & Transported by disposing it         10       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Stored, decontaminat         a) Drums       MT       MT       MT       MT       ed & detoxification & Sell       Sell       to	8 SI 9 SI Ca 10 D ba s/I a) b) C	Spent activated Carbon Discarded parrels/container s/liners a) Drums b) Carboys b) Class Bottles	Solid	28.3	103 20000 Nos. / 420.0 MT	748.5 30000 Nos./ 772 MT	851 50000 Nos./ 1192. MT	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing Collected, Stored, decontaminat ed & detoxification & Sell to
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it         10       Discarded barrels/container s/liners a) Drums       Solid       33.1       20000       30000       50000       Collected, Stored & Transported by disposing it         10       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Stored, Carbonys         0       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Stored, Store	8Sp9Sp10Dbas/1a)b)c)d)	Spent activated Carbon Discarded parrels/container s/liners a) Drums b) Carboys c) Glass Bottles b) Used	Solid	28.3	103 20000 Nos. / 420.0 MT	748.5 30000 Nos./ 772 MT	851 50000 Nos./ 1192. MT	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing Collected, Stored, decontaminat ed & detoxification & Sell to GPCB
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it         10       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Stored & Transported by disposing it         10       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Processing/Pr e-Processing         10       Discarded barrels/container s/liners       Solid       33.1       20000       30000       50000       Collected, Stored, decontaminat         a) Drums       MT       MT       MT       MT       ed       & detoxification & Sell to GPCB         d)       Used       Used       MT       MT       approved	8 Sr 9 Sr Ca 10 D ba s/1 a) b) c) d) C)	Spent activated Carbon Discarded parrels/container s/liners a) Drums b) Carboys c) Glass Bottles d) Used	Solid	28.3	103 20000 Nos. / 420.0 MT	748.5 30000 Nos./ 772 MT	851 50000 Nos./ 1192. MT	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing Collected, Stored, decontaminat ed & detoxification & Sell to GPCB approved
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing         10       Discarded barrels/container s/liners a) Drums b) Carboys c) Glass Bottles d)       Solid       33.1       20000 Nos.       30000 Nos.       50000       Collected, Stored, Transported by disposing it CHWIF/Co- Processing/Pr e-Processing         10       Discarded barrels/container s/liners a) Drums b) Carboys c) Glass Bottles d)       Solid       33.1       20000 Nos.       30000 Nos.       Solod       Collected, Stored, Nos./         0       Used contaminated PPEs       MT       MT       MT       MT       approved approved	8 SI 9 SI Ca 10 D ba s/1 a) b) c) d) c) d) c) PI	Spent activated Carbon Discarded parrels/container s/liners a) Drums b) Carboys c) Glass Bottles d) Used contaminated DPFs	Solid	28.3	103 20000 Nos. / 420.0 MT	748.5 30000 Nos./ 772 MT	851 50000 Nos./ 1192. MT	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing/Pr e-Processing Collected, Stored, decontaminat ed & detoxification & Sell to GPCB approved end-users
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it         10       Discarded barrels/container s/liners a) Drums b) Carboys c) Glass Bottles d)       Solid       33.1       20000 Nos.       30000 Nos.       50000 Nos./ Nos./       Collected, Stored, Transported by disposing it         10       Discarded barrels/container s/liners a) Drums b) Carboys c) Glass Bottles d)       Solid       33.1       20000 Nos.       30000 Nos./ Nos./       Stored, Stored, Stored, detoxification & Sell to GPCB approved end-users after	8Sp9Sp10Dbas/1a)b)c)d)ccPI	Spent activated Carbon Discarded parrels/container s/liners a) Drums b) Carboys c) Glass Bottles d) Used contaminated PPEs	Solid	28.3	103 20000 Nos. / 420.0 MT	748.5 30000 Nos./ 772 MT	851 50000 Nos./ 1192. MT	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing Collected, Stored, decontaminat ed & detoxification & Sell to GPCB approved end-users after
9       Spent activated Carbon       Solid       28.3       103       748.5       851       Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing         10       Discarded barrels/container s/liners a) Drums b) Carboys c) Glass Bottles d)       Solid       33.1       20000 Nos.       30000 Nos.       500000       Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing         10       Discarded barrels/container s/liners a) Drums b) Carboys c) Glass Bottles d)       Solid       33.1       20000 Nos.       30000 S0000       500000       Collected, Stored, decontaminat         d)       Used contaminated PPEs       MT       MT       MT       detoxification & Sell to GPCB approved end-users after decontaminat	8 Sr 9 Sr Ca 10 D ba s/I a) b) c) d) cC PI	Spent activated Carbon Discarded parrels/container s/liners a) Drums b) Carboys c) Glass Bottles d) Used contaminated PPEs	Solid	28.3	103 20000 Nos. / 420.0 MT	748.5 30000 Nos./ 772 MT	851 50000 Nos./ 1192. MT	TSDF or sell to registered recyclers Collected, Stored & Transported by disposing it CHWIF/Co- Processing/Pr e-Processing Collected, Stored, decontaminat ed & detoxification & Sell to GPCB approved end-users after decontaminat
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14. The Budget earmarked towards the Environmental Management Plan (EMP) is ₹ 70.11 Crore (capital) and the Recurring Cost (operation and maintenance) will be about ₹ 150.0 Lakh per annum, Industry proposes to allocate Rs. 1.07625 Crore in next 2 years towards Corporate Social Responsibility

15. Industry will develop Greenbelt over an area of 34.37% i.e., 25,916.92 m² out of total area of the project. Total 75,410.29 m² land area is available at site; out of this area about 25,916.92 m² (34.37 %) area will be covered as greenbelt. Trees will be planted in the plant premises with spacing of 2m x 2m and Approx. 8630 number of trees will be developed accordingly.

16. The PP proposed to set up an Environment Management Cell (EMC) by engaging Site head- GM EHS- Env. Manager - Env. Deputy manager in charge for the functioning of EMC.

17. The PP reported that the total  $CO_2$  generation would be 130817.5 MT/ annum which is equivalent to 3.61 tonne  $Co_2$  eq/tonne production. The company will sequester 15826.1MT/annum eq.  $Co_2$  through greenbelt development within plant premises.

18. The PP submitted the Disaster and On-site and Off-site Emergency Plans in the EIA report.

19. The Total Project Cost will be Rs. 463.50 Crores (Existing – Rs. 320.0 Crores + Additional Rs. 143.5 Crores). M/s. Gharda Chemicals Ltd. will give direct employment to 775 Nos of people based on qualification and requirement. In addition to direct employment, indirect employment shall generate ancillary business to some extent for the local population.

20. The EAC constituted under the provisions of the EIA Notification, 2006 comprising expert members/domain experts in various fields, examined the proposal submitted by the PP in desired format along with the EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the PP.

The EAC noted that the PP has given an undertaking to the effect that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and EC given, if any, will be revoked at the risk and cost of the PP.

The EAC noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The EAC deliberated on the proposed mitigation measures towards Air, Water, Noise and Soil pollutions. The EAC advised that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The EAC inter-alia, deliberated on the Greenbelt development plan, Fuel, Sewage treatment Plant and advised the PP to submit the following:

- Revised Greenbelt details.
- Undertaking for Usage of agro briquette with imported coal as a fuel in 1:10 ratio, whenever agro briquette are not available, imported coal shall be used as a fuel.
- Process Description for proposed STP.

The PP submitted the above information/documents and the EAC found it to be satisfactory.

The EAC deliberated on the Onsite and Offsite Emergency plans and various mitigation measures to be proposed during implementation also of the project and advised the PP to implement the provisions of the Rules and guidelines issued under 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.

The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The expert members of the EAC found the proposal in order and recommended for grant of EC.

The EAC is of the view that its recommendation and grant of EC by the regulatory authority to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The PP shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

21. Based on the proposal submitted by the PP and recommendations of the EAC (Industry-3 Sector), the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance for the "Expansion of Agrochemicals (Pesticides) & Organic Chemicals Manufacturing in Existing Unit (from 22750 MTPA to 77450 MTPA) located at Plot No. C-393 to C-396, Sayakha GIDC Estate, Taluka Vagra, District Bharuch, Gujarat by M/s. Gharda Chemicals Ltd." under the provisions of the EIA Notification 2006 and its subsequent amendments subject to the compliance of terms and conditions as under:-

### A. Specific Conditions:

(i) The PP shall develop Greenbelt over an area of at least, 25,916.92 m2 (34.37%) by planting 9348 saplings within a period of one year of grant of EC. The saplings selected for the plantation should be of sufficient height, preferably 6-ft (about 2 m). The budget earmarked for the plantation shall be kept in separate account and should be audited

annually. PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of the expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year.

- (ii) 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. PP shall engage Site head- GM EHS- Env. Manager - Env. Deputy manager in charge. In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (iii) 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. The budget propose under EMP is ₹ 70.11 Crore (Capital cost) and ₹ 150.0 Lakh annum (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
- (iv) Agro briquettes shall be used as a primary fuel and only during the unavailability of agro briquettes, imported coal shall be used as fuel.
- (v) The total water requirement is 8164 KLD of which fresh water requirement of 3447 KLD and will be met from GIDC Water Supply. The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawn only after obtaining valid agreement from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (vi) The wastewater generation shall be 5098.0 KLD (Existing 319 KLD + Additional proposed 4779 KLD). Wastewater generated shall be segregated into high concentration and low concentration streams. High concentration stream shall be treated in Multiple Effect Evaporator (MEE) and low concentration stream will be treated in ETP followed by Reverse Osmosis (RO). Wastewater generated (5098 KLD) shall be segregated into high concentration and low concentration streams. High concentration stream shall be treated in ETP followed by Reverse Osmosis (RO). Wastewater generated (5098 KLD) shall be segregated into high concentration and low concentration streams. High concentration stream shall be treated in Multiple Effect Evaporator (MEE) and low concentration stream shall be treated in ETP followed by Reverse Osmosis (RO). Out of 5098 KLD, 1399 KLD shall be discharged to deep sea via CETP, 157 KLD solids from MEE shall be disposed to CHWTSDF, 63 KLD treated sewage shall be used for tree plantation & remaining 3454 KLD treated effluent along with 1200 KLD steam condensate (Total 4617 KLD) shall be

recycled/reused back in process. Domestic waste water 70 KLD shall be treated in STP and 63 KLD shall be reused for Gardening.

- (vii) No banned 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.
- (viii) The project proponent shall comply with the environment norms for Pesticide Industry as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 446 (E), dated 13.6.2011 under the provisions of the Environment (Protection) Rules, 1986.
- (ix) The project proponent shall comply with the environment norms for synthetic organic chemical as notified by the Ministry of Environment, Forest and Climate Change, vide GSR 608 (E), dated 21. 7.2010 under the provisions of the Environment (Protection) Rules, 1986.
- (x) The project proponent 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.
- (xi) All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The project proponent 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.
- (xii) The volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97
   % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
- (xiii) The PP shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.
- (xiv) The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.
- (xv) The occupational health centre for surveillance of the worker's 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.
- (xvi) Training shall be imparted to all employees on safety and health aspects for handling chemicals. Safety and visual reality training shall be provided to employees. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.

- (xvii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xviii) The 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.
- (xix) The PP 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 vapor recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.

## **B.** General Conditions:

- (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, ZillaParishad/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 upload/submit six monthly reports on Parivesh Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated 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 Integrated Regional Office 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.

22. 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.

23. Concealing factual data or submission of false/fabricated data and failure to comply with the conditions mentioned above any of may result in withdrawal of this clearance and action under the attract provisions of the Environment (Protection) Act, 1986.

24. 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.

25. 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. M. Ramesh) Scientist 'E'

### Copy to:

- 1. The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar 382 010 (Gujarat).
- The Deputy Director General of Forests (C) Ministry of Env., Forest and Climate Change, Integrated Regional Office, Gandhi Nagar, A-Wing – 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector-10A, Gandhi Nagar - 382010
- 3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
- 4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043 (Gujarat)
- 5. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
- 6. The District Collector, District Bharuch, Gujarat.

Potects if

7. Guard File/Monitoring File/PARIVESH.

(Dr. M. Ramesh) Scientist 'E' Tel.: 011-20819338 Email: <u>ramesh.motipalli@nic.in</u>