

THIRU. K.V. GIRIDHAR, I.F.S., MEMBER SECRETARY

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY – TAMIL NADU

3rd Floor, Panagal Maaligai, No.1, Jeenis Road, Saidapet, Chennai-15. Phone No. 044-24359973 Fax No. 044-24359975

ENVIRONMENTAL CLEARANCE (EC)

Letter No. SEIAA-TN/F.No.8419/EC/5(f)/86/2021 dated: 05.07.2021

To

The Director,
M/s. Sthree Chemicals Private Limited,
SF No.534/4A2B, Samy Apartments,
Chettinadu Hospital Road,
Padur, Chennai – 603 103.

Sir,

Sub: SEIAA-TN – Environmental Clearance – Proposed installation of new API unit with production capacity of 35.236 TPM & Intermediates of Capacity 7.18 TPM by M/s. Sthree Chemicals Private Limited, at S.F.Nos. 87/2B1A(pt), 87/2B2(pt), 108/1A(pt), 108/1B(pt), 108/2B(pt), 108/3A(pt), 108/3B(pt), 108/4(pt), 108/6B(pt), 108/7(pt), 108/8(pt), 108/9(pt), 108/11(pt), 108/12A(pt), 108/12B, 108/12C(pt), 108/13A(pt), 108/13B, 108/13C, 108/13D, 109/35(pt) in Plot Nos. S-117, S-118 & S-119 & S-120 at Mukundrayapuram Village, Ranipet SIPCOT Industrial Complex, Phase-III, Wallajah Taluk, Ranipet District, Tamil Nadu – Category - "B2" and Schedule 5(f) - Active Pharmaceutical Ingredients (API) under the EIA Notification, 2006 as amended – Issued – Regarding.

Ref: 1. Online Proposal No. SIA/TN/IND2/199135/2021 dated 19.02.2021

- 2. Your application for Environmental Clearance dated: 05.03.2021
- 3. Office Memorandum issued by MoEF& CC vide F.No.22-25/2020-IA.II dated: 13.04.2020 and as per S.O. 1223(E) dated: 27.03.2020, and S.O. 3636(E) dated: 15.10.2020

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- 4. Minutes of the 212th meeting of SEAC held on 04.05.2021
- 5. Minutes of the 446th Authority meeting held on 18.06.2021 & 19.06.2021

This has reference to your application 2nd cited, the proposal for the Proposed installation of new API unit with production capacity of 35.236 TPM & Intermediates of Capacity 7.18 TPM by M/s. Sthree Chemicals Private Limited, at S.F.Nos. 87/2B1A(pt), 87/2B2(pt), 108/1A(pt), 108/1B(pt), 108/2B(pt), 108/3A(pt), 108/3B(pt), 108/4(pt), 108/6B(pt), 108/7(pt), 108/8(pt), 108/9(pt), 108/11(pt), 108/12A(pt), 108/12B, 108/12C(pt), 108/13A(pt), 108/13B, 108/13C, 108/13D, 109/35(pt) in Plot Nos. S-117, S-118 & S-119 & S-120 at Mukundrayapuram Village, Ranipet SIPCOT industrial complex, Phase-III, Wallajah Taluk, Ranipet District, Tamil Nadu under Item No. 5(f) – Active Pharmaceutical Ingredients (API) & Category 'B2' of the Schedule to the EIA Notification, 2006.

S. No	Description	Details			
1.	Name of the	Proposed in	Proposed installation of new API unit with production capacity of		
	Project	35.236 TPM	35.236 TPM & Intermediates of Capacity 7.18 TPM by M/s. Sthree		
		Chemicals P	Chemicals Private Limited		
2.	Location	S.F.Nos.	87/2B1A(pt), 87/2B2(j	pt), 108/1A(pt), 108/1B(pt),	
		108/2B(pt),	108/3A(pt), 108/3B(pt),	108/4(pt), 108/6B(pt), 108/7(pt),	
		108/8(pt), 1	0 8/9(pt) , 108/11(pt), 108	/12A(pt), 108/12B, 108/12C(pt),	
	:	108/13A(pt).	, 108/13B, 108/13 C, 108	/13D, 109/35(pt) in Plot Nos. S-	
		117, S-118 & S-119 & S-120 at Mukundrayapuram Village,			
		Ranipet SIPCOT industrial complex, Phase-III, Wallajah Taluk,			
		Ranipet Dist	rict, Tamil Nadu		
		S.No	Latitude	Longitude	
		1.	12°59'56.34"N	79°17'46.11"E	
		2. 12°59'45.38"N 79°17'52.30"E 3. 12°59'44.98"N 79°17'51.55"E 4. 12°59'45.18"N 79°17'48.15"E			
!					
		5. /	12°59'46.60"N	79°17'47.35"E	

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		6.	12°5	9'46.82"N	79°17'47.9	93"E
		7.	12°5	9'54.93"N	79°17'43.4	13"E
3.	Type of	Schedu	le 5 (f) - Ac	tive Pharmaceutical In	gredients (A	PI)
	Project					
4.	Total Area	8.71 A	cres (35248.	12 Sq.m)		
5.	Area Breakup	S.No	Γ	escription	Area	Percentage
	- Land area				(Sq. m)	(%)
			Admin / R UGT	&D/ Canteen / QC /	2115.00	6.00
			Ware Hous	e	1476.00	4.19
			Intermediat	e 1	1192.90	3.38
			Intermediat	e 2	1192.90	3.38
			Crystallizer		1623.60	4.61
			AGU		670.00	1.90
			Utility/ Toi	lets	1180.00	3.35
		1.	Solvent Rec	covery	620.00	1.76
			Class-A tan	ks(UG)	100.00	0.28
	- 1 - 2 - 2 - 4 - 4 - 4 - 4 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7		ETP includ	es solid waste yard	1500.00	4.26
			Boiler		1530.00	4.34
			Hydrogena	or	235.00	0.67
			EB Yard		510.00	1.45
			Security Ca	bin	48.00	0.14
		_	Total (A)		13993.40	39.70
		2.	Road (B)		6717.60	19.06
		3.	Green Are	a (C)	14537.12	41.24
			Total Plot A	Area (A+B+C)	35248.12	100
4.	Cost of	Rs.150	1.80 Lakhs	, . Tiul. II. II.	١.	
	Project (INR)					
5.	Brief	The u	nit proposed	to produce API a	and Intermed	diates with the
	description of	product	production capacity of API 35.236 TPM & Intermediates of Capacity			
	the project	7.18 TPM				
					· · · · · ·	

6.	TOR issued?	No. A	s per Office Memorandum issued by MoEF&	& CC vide		
	(If yes then	F.No.F.No.22-25/2020-IA.II dated: 13.04.2020 and as per S.O.				
	specify the	1223(E) dated: 27.03.2020, and S.O. 3636(E) dated: 15.10.2020				
	1 - '					
	details)					
7.	Details of	S.No	Products	Total		
	Proposed			(TPM)		
	Product	1.	Alosetron Hydrochloride	0.003		
		2.	Atropine Sulfate Monohydrate	0.0025		
		3.	Brivudine	0.0083		
		4.	Carglumic acid	0.0333		
		5.	Chlorzoxazone	1.6667		
		6.	Dapsone	0.25		
		7.	Diazoxide	0.0167		
		8.	Dichlorphenamide	0.0083		
		9.	Glycerol Phenyl butyrate	0.025		
		10.	L-Methyl Folate	0.05		
		11.	Methyl testosterone	0.0167		
		12.	Nitisinone	0.0025		
	E	13.	Oxandrolone	0.0125		
İ		14.	Parecoxib Sodium	0.0208		
		15.	Phenoxy benzamine Hydrochloride	0.0025		
		16.	Prazosin Hydrochloride	0.1333		
		17.	Ramelteon	0.0083		
		18.	Stiripentol	0.1		
		19.	Thiothixene	0.167		
		20.	Treprostinil Diolamine	0.0005		
		21.	Treprostinil Sodium	0.0002		
		22.	Trientine Hydrochloride	0.05		
		23.	Betaine Anhydrous	0.3333		
		24.	Methsuximide	0.0333		
		25.	Nitrofurantoin	0.0833		
		26.	Piribedil	0.0417		
		27.	Fludrocortisone acetate	0.0008		
1		28.	Atovaquone 0.166			
		29.	Cinacalcet Hydrochloride	0.0167		
		30.	Tafamidis Meglumine (
		31.	Tafamidis	0.0167		

	2. Paracetamol/acetaminophen	1.25
!	3. Faviparavir	0.416
	4. Alprazolam	1.25
	5. Azithromycin	1.25
	6. Minocyclin Hydrochloride	8.33
	7. Oxcarbazepine	1.25
	8. Ketoconazole	0.333
	9. Aliskiren Hemifumarate	0.25
	0. Amphetamine	0.25
	1. Baclofen	0.75
4	2. Benzotropine Mesylate	0.25
4	3. Bismuth subcitrte Potassium	0.20
4	4. Carbinoxamine	0.10
4	5. Dantrolene sodium	0.25
	6. Darifenacin Hydrobromide	0.20
	7. Doxepin hydrochloride	0.25
4	8. Fluphenazine Decanoate	0.08
	9. Fluvoxamine maleate	0.35
5	0. Glipizide	0.50
5	Mafenide Acetate	0.80
5	2 Methohexital	0.15
	3 Perphenazine	0.20
4	4 Sucrofericoxy hydroxide	0.50
	5 Zafirlukast	0.50
	6 Clindamycin	0.83
	7 Lamotrigine	0.42
	8 Alfuzosin Hydrochloride	1.67
	9 Colpidogrel	1.67
[6	0 Entacapone	0.83
	1 Irbesartan	0.42
[6	2 Levtiracetam	0.42
	3 Levofloxacin	0.42
	4 Pantoprazole	0.83
	5 Pioglitazone	1.67
	6 Telmisartan	0.42
	7 Cabergoline	0.17
· · · · · · · · · · · · · · · · · · ·	8 Nefazodone Hydrochloride	0.17
	9 Terbutalinesulphate	1.00

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	<u> </u>	70	Tigabine Hydrochloride	1.00			
		71	Acebutolol Hydrochloride	0.50			
			Total API per month	35.236			
			Intermediates				
		72	Dorzolamide intermediate (6-Methyl-5,6-	1.60			
			dihydro-thieno[2,3-b]thiopyran-4-one)				
		73	Gesitinib intermediate (4-(3-Chloro-4- fluoro-	1.81			
			phenylamino)-7- methoxy-quinazolin- 6-ol)				
		74	Prazosin intermediate (2-Chloro-6,7- dimethoxy-	1.40			
		75	quinazolin-4- ylamine)	1.07			
	:	75	Levetiracetam Intermediate (2-(2-Oxo-pyrrolidin-1-yl)- butyric acid)	1.87			
		76	R&D products	0.5			
			Total Intermediates/R&D per month	7.18			
			Total production per month	42.416			
			Total production per Annum	508.992			
8.	a) Water	Total w	vater requirement: 490.3 kLD				
	requirement	Fresh v	vater requirement: 259.3 kLD				
		Source	SIPCOT				
:		Recycle	Recycled treated water: 231 kLD				
		Greenb	elt Development: 12 kLD (Recycled treated sewage)			
9.	Quantity of	Sewage	Sewage Generation: 12 kLD				
	Sewage &	Effluer	tt Generation: 220 kLD				
	Effluent	(i) Pro	cess - 70 kLD				
	(KLD)	(ii) Cod	oling Tower make up - 115 kLD				
		(iii) Bo	iler Blow down - 20 kLD				
		(iv) R&	zD/QC/AD - 12 kLD				
		(v) Scr	ubber effluent - 3 kLD				
10.	Details of	Propos	ed STP capacity of 15 kLD.				
	Sewage &	1.	Bar Screen chamber				
	Effluent	2.	Collection tank				
	Management	3.	HECS Packaged STP				
	(KLD)	4.	Filter feed tank				
		5.	Pressure Sand filter				
			<u> </u>	· · · · · · · · · · · · · · · · · · ·			

		6. Activated carbon filter
		7. Treated water tank
		Effluent (220 kLD) will be treated in the Proposed ETP capacity of
		280 kLD generated from the Process, Cooling Tower make up, Boiler
!		blow down, R&D/QC/AD and scrubber.
		Effluent (220 kLD) treated through ETP, R.O, MEE & ATFD
		1. Bar screen chamber
		2. Oil skimmer tank
		3. Flash mixer tank
		4. Primary clarifier Tank
		5. Anerobic disgestor tank
		6. Aeration tank
		7. Secondary clarifier Tank
		8. Clarified water tank
	į.	9. Pressure Sand filter
		10. Activated carbon filter
		11. Sludge Holding Tank
	15 1301	12. UF Feed tank
		13. UF Permeate tank
		14. RO I & RO II system (280 KLD Capacity)
		15. RO I & RO II Permeate Tank
		16. RO I Reject Tank & RO II Reject tank
		17. MEE (50 KLD capacity)
		18. ATFD (7 KLD capacity)
		R.O. Permeate will be reused and Salt from ATDF will be
		disposed through TSDF.
11.	Details	of Treated Sewage water 12 kLD will be used for Green belt
	Recycled	& development.
	Recovered	
	Water	

12.	Quantity of	(i) Organic wastes - 67.5 kg/day (Local SIPCOT Bins)				
12.	``	·· -				
		(ii) Inorganic waste - 45.0 kg/day (Authorized Recyclers)				
	generated per	` '	(iii) STP sludge - 17 kg/day (Used as manure)			
	day (in Kgs),		ss wastes (Non-hazardous			
.	Mode of	Cartons, Pa	per and stationary scrap –	10 MT/Yr – ′	To scrap vendors	
	treatment and					
	Disposal of					
	Solid Waste					
13.	Hazardous waste Management	Category No.	Description of Hazardous Wastes	Quantity MT/Yr (Proposed)	Disposal Method	
:		5.1	Used oil/ Spent Oil	8.0	Authorized Recycler	
		5.2 Wastes or Residues Containing Oil 0.5 Co-processing				
		20.3	Distillation residues	90	Co-processing	
		28.1	Residues & wastes	50	Co-processing	
		28.2	Spent Catalyst	5	Co-processing	
<u>.</u>		28.3	Spent Carbon	30	Co-processing	
		28.4 Off specification Products 10 Co-processing				
		28.5	Date of expired, discarded products	10	Co-processing	
		28.6	Spent solvent	1250	Co-processing	
		35.3	Chemical sludge from waste water treatment	750	Co-processing	
		33.1	Discarded containers	50	Authorized Recyclers	
14.	Power	2000 kVA	(TANGEDCO)	· · · · · · · · · · · · · · · · · · ·	<u> </u>	
	requirement					
15.	Details of	Backup po	wer:	<u>.</u> .	<u>,, , , , , , , , , , , , , , , , , , ,</u>	
	D.G. set with	> D.G. sets - 1000 kVA Acoustic enclosures with stack height of				
	Capacity	15m - 02 Nos				
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16.	Air Pollution	➤ Boiler (6000 kg/hr) - 2 Nos - Mechanical dust collectors/cyclone
	Control	seperators for each Boiler with common stack of height - 30 m.
	Measures	(Bio Briquette - Fuel)
	(Stack)	> Reactor area vent - 7 Reactors connected to Alkali/Acid based
		common wet scrubber with stack height of 10.5m.
		DG sets - 02 Nos (1000 kVA capacity) - Acoustic enclosures
•		with Stack height of 15m.
17.	Details of man	Construction phase – 50 Nos
	power	Operation Phase – 250 Nos
18.	Details of	14537.12 Sq.m (41.24 % Green belt development is proposed)
	Green Belt	
	Area	
19.	Provision for	Rain water harvesting pits - 29 Nos
	rain water	
	harvesting	
20.	EMP Cost	Rs. 405 lakhs
	(INR)	
21.	CER Cost	Rs. 60 lakhs Affidavit furnished for CER proposal (2% of Project cost)

The proponent has furnished the sworn of affidavit in Rs. 100 stamp paper:

I, Mr. Ravi .K, (General Manager) Authorized Signatory, representing M/s. Sthree Chemicals Private Limited having registered office at SF No.534/4A2B, Samy Apartments, Chettinadu Hospital Road, Padur, Chennai — 603 103, "Proposed API and Intermediates manufacturing plant" at Survey Nos. 108/6B pt,108/7 pt,108/8 pt,108/9 pt,108/11 pt,108/12A pt,108/12B,108/12C pt,108/13A pt,108/13B, 108/13C,108/13D,109/35 pt,108/1B pt,108/2B pt,108/3A pt,108/3B pt,108/4 pt,108/6B pt,108/9 pt,87/2B1A pt,87/2B2 pt,108/1A pt, Plot No S-117 to S-120,SIPCOT Industrial Complex, Phase-III, Mukundarayapuram Village, Walajapet Taluk, Ranipet District and Tamil Nadu State, hereby take oath and state as under in this affidavit:

I. The total water requirement of the project is 490.3 KLD (Fresh water: 259.3 KLD and Recycled water: 231 KLD). Total fresh water requirement will be sourced from SIPCOT.

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- II. Sewage generation is 12.0 KLD which will be treated through 15 KLD Sewage Treatment Plant and it will be used for green belt development. Total effluent generation is 220 KLD. Effluent from Process, CT, Boiler, Scrubber and R&D/Qc/Ad will be treated through ETP (280 KLD) followed by UF and RO. RO permeate will be used for CT and Boiler Makeup. RO reject will be treated through MEE (50 KLD) and ATFD (7 KLD). Permeate will be reused and Salt from ATFD will be disposed through TSDF. Zero Liquid Discharge concept will be maintained
- III. We are liable for the operation and maintenance of ETP&STP from the date of operation of the project.
- IV. Total municipal solid waste generated expected is 129.5 Kg/day (Organic-67.5Kg/d & Inorganic 45 Kg/d & STP sludge 12 Kg/d) in which Organic waste will be disposed through SIPCOT bins. Inorganic waste will be disposed through TNPCB authorized recyclers. STP sludge will be used as greenbelt manure.
- V. All the generated Hazardous waste will be stored on Concrete platform in leak Proof Barrels/Containers in designated areas. All the Hazardous waste will be disposed to nearby TSDF as well authorized recyclers.
- VI. All mitigation measures will be followed for the flood management, Evacuation plan, Solid waste disposal and Sewage & effluent treatment & disposal.
- VII. There are total 29 Nos of Rain water harvesting pits will be proposed for Rain water harvesting scheme.
- VIII. Storm water drainage will be provided as open concrete channels, all along the road for ensuring proper collection of storm water and the same will be maintained properly. We confirm that the storm water drain would not carry any untreated (or) treated sewage / effluent.
 - IX. The total power requirement for the project is 2000 kVA which will be sourced from TANGEDCO. Back-up power supply will be through DG sets 2x1000 KVA with individual stack height of 15m respectively. Boiler of 2x6000 Kg/hr (one is working and one is standby) will be provided with cyclone separator and Stack with height of 30m.
 - X. No waste of any type will be disposed-off in any other way other than the approved one.

- XI. Total Greenbelt area not less than 33% of the land area all along the periphery of the unit and maximum green belt shall be maintained. Green Belt Area developed within the project site is 14537.12 Sq.m which is 33% of the Total Plot area (35248.12 Sq.m).
- XII. As per CER Notification, the 2.0% of project Cost (INR 15.018 Crore) i.e. 30.04 lakhs need to spend for CER activities. As per OM- F. No. 22-23/2018-IA.III (Pt) Dated: 31.10.2019, if project is coming under CPA than CER amount should be 2 times of normal fund. So Total CER budget is INR 60.08 lakhs. However, As per CER OM F.No. 22-65/2017-IA.III dated: 30.09.2020, CER is not mandatory. However it should be included in EMP cost. So we provided the modified EMP Budget.

S. No	Description	Capital Cost (INR. Lacs)
1	Air Pollution Control (Stacks, scrubbers, Cyclone Separator)	30.00
2	Water Pollution Control (STP, ETP & MEE)	270.00
3	Hazardous Waste Management (Storage ward)	10.00
4	Noise Pollution (Acoustics)	5.00
5	Environmental Monitoring	20.00
6	Green Belt	5.00
7	Statutory Compliance	5.00
8	CER proposal	60.0
	Total Total	405

CER proposal for the Period of 2021-2023

S. No	Activities	2021 (In lakhs)	2022 (In lakhs)	2023 (In lakhs)
1	De-silting and bend formation of Lake near Sikkarajapuram	5	5	5
2	De-silting and bend formation of Kugayanellore Lake	5	5	5
3	De-silting and bend formation of Narasingapuram Lake	5	5	5
4	Medical camp setup to Nearby Habitation	-		5
5 .	Sanitation and Drinking water facility to Government Higher	13.4V	-	5

MEMBER SECRETARY SEIAA-TN

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The Above named deponent to hereby verify that the statement made by me under para (I) to (XII) is true and correct to the best of my knowledge and belief. Nothing is false and nothing is concealed in it. I am responsible for any misrepresentation of facts.

Appraisal by SEAC:-

The proposal was placed in 212th meeting of SEAC held on 04.05.2021. Based on the presentation made and the documents furnished by the Project proponent, SEAC decided to recommend the project proposal to SEIAA for grant of Environmental Clearance subject to the following conditions, in addition to standard conditions stipulated by the MoEF & CC:

- The project proponent shall maintain the Green belt area not less than 33% of the land area all along the periphery of the unit and maximum green belt shall be maintained in the down wind direction as reported. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- 2. The project proponent shall operate and maintain the Sewage treatment Plant and Effluent treatment plant effectively to meet out the standards prescribed by the CPCB.
- 3. It is necessary to be carried out safety audit in the different operating zones of the plant at least once in a year and the same shall be considered as base for reviewing the unsafe conditions during the plant safety meeting.
- 4. The proponent shall strictly follow the norms and guidelines mentioned in the Hazardous waste (Management) Rules, 2016 for the handling and disposal of Hazardous waste to be generated.
- 5. As the plant operation involves the sensitive processing, the medical officer and the supporting staff involved in the health centre activities shall be trained in occupational health surveillance (OHS) aspects through the outsourced training from the experts available in the field of OHS for ensuring the health standard of persons

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employed.

- 6. Necessary permission letter for the supply of water shall be obtained from the competent authority before obtaining consent from TNPCB.
- 7. The effluent generated from the process should be treated through the ETP to achieve the treated effluent standards prescribed by the CPCB.
- 8. The proponent shall ensure the zero-liquid discharge.
- 9. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- 10. The proponent shall continuously operate and maintain the Air-pollution control measures.
- 11. The proponent should continuously monitor the VOC and ensure that VOC levels are within permissible limits.
- 12. The proposed Solvent storage area should not be placed near by the boiler, further the proponent may submit the safety measures on the same.
- 13. A detail report on the safety measure and health aspects of the workers shall be submitted.
- 14. As per the MoEF&CC Office Memorandum F. No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall furnish the detailed EMP mentioning all the activities as proposed in the CER and furnish the same before placing the subject to SEIAA.

Discussion by SEIAA and the Remarks:-

The proposal was placed before the SEIAA in its 446th Authority meeting held on 18.06.2021 & 19.06.2021. After detailed discussion, the Authority unanimously accepts the recommendation of SEAC and decided to grant Environmental Clearance subject to the conditions as recommended by SEAC & normal condition in addition to the following condition.

 As per the MoEF&CC office memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall furnish the detailed EMP, mentioning all the CER activities for Rs.60 lakhs as committed. All the CER activity shall be carried out before obtaining CTO from TNPCB.

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- 2. The Proponent shall carry out manufacture of API products (71 Nos) & Intermediates (5 Nos) mentioned in the EC only.
- 3. The Proponent shall store the raw materials within the threshold limit and adhere the conditions as per the guidelines of the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended.
- 4. The Proponent shall handle the raw materials and products and adhere the conditions as per the guidelines of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2020, as amended.

Validity:

The SEIAA hereby accords Environmental Clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 as amended, with validity for Seven years from the date of issue of EC, subject to the compliance of the terms and conditions stipulated below:

(A) Statutory compliance

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.

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- v. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- vi. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989

(B) Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10and PM25 in reference to PM emission, and SO2and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

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- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16thNovember, 2009 shall be complied with

(C) Water quality monitoring and preservation:

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD)
- ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- iii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- iv. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- v. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- vi. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- vii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

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(D) Noise monitoring and prevention:

- Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. 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.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

(E) Safety, Public hearing and Human health issues:

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. 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.
- iii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iv. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- v. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vii. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

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(F) Corporate Environment Responsibility:

- The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1stMay 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other 5 purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

(G) Waste management:

Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys
etc. Flame arresters shall be provided on tank farm and the solvent transfer
through pumps.

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- Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iii. The company shall undertake waste minimization measures as below:
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation

(H) SPECIFIC CONDITIONS:

- (i) It is mandatory for the project proponent to furnish to the SEIAA, Half yearly compliance report in hard and soft copies on 1st June and 1st December of each calendar year in respect of the conditions stipulated in the prior Environmental clearance issued.
- (ii) "Consent for Establishment" shall be obtained from Tamil Nadu Pollution Control Board and a copy of the same shall be furnished to the SEIAA, Tamil Nadu before start of project construction activity at the site.
- (iii) "Consent to Operate" should be obtained from the Tamil Nadu pollution Control Board before the start of the operation of the project and copy shall be submitted to the SEIAA-TN.
- (iv) The implementation of Environmental Management Plan in regard to treatment and disposal of sewage & Effluent, Solid waste Management, Hazardous - Waste Management, and CSR Activities should be carried out, as proposed and committed. Regular monitoring should be carried out during operation phases.
- (v) The residue collected from the evaporator shall be documented by maintaining proper register and it should be made available at the time of inspection.

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- (vi) Adequate dust extraction system such as Ducting with dust extracting arrangement wherever required shall be established to achieve Occupational –health standards and ambient air quality standards.
- (vii) The proponent shall carryout best housekeeping practices as spillage management for handling and maintenance of raw materials and products inside the unit premises.
- (viii) Nature of chemicals Handled, the Do and Don'ts shall be displayed at all vital locations as laid down in MSDS.
 - (ix) The proponent shall ensure that the quantity of Hazardous Waste handed over to the TSDF shall match with the quantity generated.
 - (x) The proponent shall provide a separate closed area earmarked for storing solid waste including Hazardous Waste as proposed.
- (xi) The proponent shall dispose Hazardous Waste generated as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Spent oil from D.G sets should be stored in HDPE drums in an isolated covered facility and disposed off through TNPCB registered recyclers.
- (xii) The Plastic wastes shall be segregated and disposed as per the provisions of Plastic Waste (Management & Handling) Rules 2016.
- (xiii) The e waste generated should be collected and disposed to a nearby authorized ewaste centre as per e waste (Management & Handling), Rules 2016 as amended.
- (xiv) The Municipal solid waste generated shall be collected, segregated and disposed as per Solid Waste Management Rules, 2016.
- (xv) The industry shall conduct air sampling at least once in six months for the general core parameters (PM₁₀, PM_{2.5}, SO_x, NO_{x)} through TNPCB/NABL Accredited Laboratory and maintain records of the same and it should be made available at the time of inspection.
- (xvi) Regular monitoring on the air quality, water quality and noise on the selected locations in and around the project site as mentioned in the EMP report for creating base line data shall be continued and records shall be maintained.
- (xvii) A separate environment and safety management cell with qualified staff shall be set up before establishment of the facility and shall be retained throughout the lifetime of the industry, for implementation of the stipulated environmental safeguards.

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- (xviii) The Green belt area already developed within the project area shall be properly maintained.
- (xix) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xx) The industry shall promote tree plantation to neutralize their carbon foot print. The industry shall engage regularly in afforestation programme.
- (xxi) The proponent shall ensure effective risk management strategy regarding confined space management to avoid risk while handling raw materials, products in the process area and storage.
- (xxii) The energy sources for lighting purposes shall preferably be LED based.
- (xxiii) The industry shall conduct air sampling at least twice in a week (104 times in a year), as stipulated under EP Act 1986.
- (xxiv) Risk cum disaster management plan should be in placed in the industry premises at all time.
- (xxv) Water conservation scheme including rain water harvesting measures to augment ground water resources shall be implemented so as to collect and reuse the entire rainwater harvested as a supplement to fresh water.
- (xxvi) The natural drainage pattern in the project area shall be maintained and storm water drain along the boundary and appropriate places shall be provided considering the Catchment area and maximum intensity of rainfall to collect runoff water/rain water for proper disposal to avoid flooding around the premises.
- (xxvii) The Environmental Clearance is issued without prejudice to any order that may be passed by the Hon'ble NGT/ Honb'le High Court of Madras.
- (xxviii) All the assurances given in EIA and EMP shall be adhered strictly.
- (xxix) Detail study shall be carried out by engaging accredited agencies / reputed institutions for Risk management and detailed Disaster management plan prepared for compliance.
- (xxx) Sufficient funds should be provided for Disaster management.

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- (xxxi) The Project Proponent shall provide disinfection by UV system for the sewage treatment plant for treating the sewage before applying on land for gardening.
- (xxxii) The project proponent shall provide sufficient ventilation (air circulation) in the hazardous waste storage yard where the hazardous waste like spent carbon, Chemical sludge, used or spent oil are being kept.
- (xxxiii) The Project Proponent shall carry out safety audit in the different operating zones of the plant at least once in a year and the same shall be considered as base for reviewing the unsafe conditions during the plant safety meeting.
- (xxxiv) The Project Proponent shall prepare a code of practice for safe operation for educating the safety standards to the work force deployed in the plant through appropriate training by the concerned experts.
- As the plant operation involves the sensitive processing, the medical officer and the supporting staff involved in the health centre activities shall be trained in occupational health surveillance (OHS) aspects through the outsourced training from the experts available in the field of OHS for ensuring the health standard of persons employed.
- (xxxvi) The Activity of the industry should not impact on agricultural, irrigation system and mangroves surrounding the area.
- (xxxvii) The EMP cost of Rs.405 lakhs and operation and maintenance cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually.
- (xxxviii) There should be no threat to Bio diversity due to the operation of the industry.
 - (xxxix) The flora & fauna present in and around the project site should be get affected due to the activity as reported.
 - (xl) The Project Proponent has to provide rain water harvesting collection tank to the capacity of 1930 kL with 6 Numbers of Recharging pit in order to recover and reuse the rain water during normal rains.
 - (xli) The operation of the activity should not impact on the soil, micro flora & Fauna present in and around the project site.
 - (xlii) The project proponent shall carry out risk assessment process for all the operations involved in the plant and a suitable risk management plan showing the contours of sensitive zones should be prepared.

- (xliii) The project proponent shall take up better housekeeping measures including scraps disposal and up keeping the machineries, pipes, etc.
- (xliv) The proponent should continuously monitor the VOC and ensure that VOC levels are within permissible limits.

(I) GENERAL CONDITIONS:-

- i. This Environmental Clearance shall not be cited to relax any other rules applicable to this project.
- ii. The Project Proponent should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the Environmental Clearance informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with TNPCB.
- iii. A copy of the Environmental Clearance shall be sent by the project proponent to concerned local body and local NGO, if any from whom suggestions/representatives, if any were received while processing the proposal.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The Environmental Clearance shall also be put on the website of the company.
- vi. No expansion or modernization in the project shall be carried out without prior approval of the SEIAA-TN. In case of any deviations or alterations in the project proposal from those submitted to this Authority for clearance, a fresh reference shall be made to the SEIAA-TN to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- vii. All the environmental protection measures and safeguards as recommended in the EIA report shall be complied with.
- viii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

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- ix. The implementation of the project vis-à-vis environmental action plans shall be monitored by the Regional office of MoEF& CC at Chennai, TNPCB and CPCB. A six monthly compliance status report shall be submitted to monitoring agencies regularly.
- x. Data on ambient air, stack and fugitive emissions shall be regularly submitted online to the Regional office of MoEF & CC, GOI, at Chennai, TNPCB and Central Pollution Control Board as well as hard copy once in six months and display data on RSPM, SO₂ and NOx outside the premises at the appropriate place for the general public.
- xi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xii. Proper house-keeping and cleanliness must be maintained within and outside the plant.
- xiii. Occupational health surveillance programme shall be undertaken as regular exercise for all the employees, especially for those engaged in handling hazardous substances. The first aid facilities in the occupational health centre shall be strengthened and the medical records of each employee should be maintained separately.
- xiv. The overall noise levels in and around the plant area shall be kept well within the standards prescribed for by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75dBA (day time) and 70 dBA (night time).
- xv. A separate Environmental Management Cell equipped with full fledged laboratory facilities to carry out the various Environmental Management and Monitoring functions shall be set up under the control of a Senior Executive.
- xvi. The requisite amount earmarked towards capital cost and recurring cost/annum for implementing pollution control measures shall be used judiciously to implement the Environment Management Plan as furnished in the EIA report. The funds so provided shall not be diverted for any other purposes.
- xvii. The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their

website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF & CC, GOI at Chennai, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; RSPM, SO₂, NOx (ambient levels as well as stack emissions) or critical sector parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

- xviii. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent 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 conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.
- xix. Environmental Clearance is being issued without prejudice to the action initiated under Environment (Protection) Act, 1986 or any court case pending or any other court order shall prevail.
- xx. The SEIAA, TN may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- xxi. The SEIAA/SEAC or any Competent Authority may suitably add any further condition(s) on receiving reports from the project authority. The above condition shall be monitored by the Regional Office of MoEF located at Chennai.
- xxii. The SEIAA, TN may revoke or suspend the Environmental clearance, if implementation of any of the above conditions is not satisfactory.
- xxiii. The SEIAA, TN may cancel the environmental clearance granted to this project under the provisions of EIA Notification, 2006, if, at any stage of the validity of this environmental clearance, if it is found or if it comes to the knowledge of this SEIAA, TN that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the environmental clearance.
- xxiv. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

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xxv. The SEIAA-TN reserves the right to stipulate additional conditions if found necessary. The industry in a time bound manner shall implement these conditions.

(Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, along with their amendments, draft Minor Mineral Conservation & Development Rules, 2010 framed under MMDR Act 1957, National Commission for protection of Child Right Rules, 2006 and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/Hon'ble High Court of Madras and any other Courts of Law relating to the subject matter.

Any appeal against this environmental clearance shall lie with the Hon'ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

MEMBER SECRETARY
SEIAA-TN

Copy to:-

The Principal Secretary to Government,
 Environment & Forests Department,
 Govt. of Tamil Nadu, Fort St. George, Chennal 600 009.

2. The Chairman,

Central Pollution Control Board, Parivesh Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.

3. The Member Secretary,

Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai - 600 032.

The ACCF(C), Regional Office of MoEF,
 HEPC Building, 1st & 2nd Floors, Cathedral Garden Road, Nungambakkam,
 Chennai - 600 034.

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- Monitoring Cell, I A Division,
 Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex,
 New Delhi 110 003.
- 6. The District Collector, Ranipet District.
- 7. Stock File.



