



THIRU A.V. VENKATACHALAM,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. 6495/5(D)/EC - 60/2018 dated: 24.04.2018.

To

The General Works Manger
Asian Paints Limited
Penta Division
B5-B10, Sipcot Industrial Complex,
Kudikadu Village,
Cuddalore – 607005.

Sir,

Sub: SEIAA -TN –Environmental Clearance-Expansion in production of Pentaerythritol and Sodium Formate by M/s. Asian Paints Limited in their existing plant at Plot No. B5 – B 10, SIPCOT Industrial Complex, Kudikadu Village, Cuddalore, Tamil Nadu - Category - "B1" and Schedule 5(f)-Synthetic Organic Chemical Industry (Dyes and Dye Intermediate)under the EIA Notification, 2006–Issued-Regarding.

- Ref: 1. ToR issued by MoEF&CC F.No.J-11011/181/2017-IA-II(I) dated 21.12.2017.
2. EIA report submitted for Environment Clearances dated: 25.01.2018.
3. Lr. No.SEIAA-TN/F.No. 6495/2018 dated: 08.02.2018.
4. Proponent reply letter dated 14.02.2018.



V.D.
24/4
MEMBER SECRETARY
SEIAA-TN
S.A.
(3/A)



5. Minutes of the 103rd SEAC meeting held on 24.02.2018.
6. Minutes of the 104th SEAC meeting held on 19.03.2018.
7. Lr. No.SEIAA-TN/F.No. 6495/SEAC/2018 dated: 22.03.2018.
8. Proponent reply letter dated 05.04.2018.
9. Minutes of the 286th SEIAA meeting held on 16.04.2018.
10. Proponent reply letter dated 20.04.2018.
11. Minutes of the 290th SEIAA meeting held on 23.04.2018.
12. Minutes of the 291st SEIAA meeting held on 24.04.2018.

1. This has reference to your application dated 25.01.2018 and subsequent communication on the above mentioned subject by M/s. Asian Paints Limited for Expansion in production of Pentaerythritol and Sodium Formate in their existing unit for obtaining Environmental Clearance for the proposed Expansion in production of Pentaerythritol from 560 MTM to 730 MTM (Powder and Solution form) and Sodium Formate from 336 MTM to 480 MTM (Powder and Solution form) at Plot No. B5 – B 10, SIPCOT Industrial Complex, Cuddalore, Tamil Nadu under Item No. 5(f)– ‘ Synthetic Organic chemicals Industry (dyes & dyes intermediate; bulk drugs and intermediates excluding drug formulation; Synthetic rubbers; basic Organic Chemicals, other synthetic organic chemicals and chemical intermediates (located in a notified industrial area/estate) &Category ‘B1’ of the Schedule to the EIA Notification, 2006.
2. The Proponent, M/s. Asian Paints Limited, has applied to MoEF& CC, GoI, for Terms of Reference for the proposed Expansion in production of Pentaerythritol from 560 MTM to

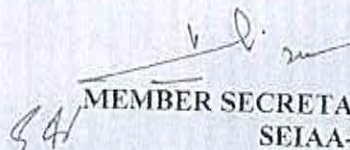



MEMBER SECRETARY
SEIAA-TN



- 730 MTM (Powder and Solution form) and Sodium Formate from 336 MTM to 480 MTM (Powder and Solution form) at Plot No. B5 – B 10, SIPCOT Industrial Complex, Cuddalore, Tamil Nadu.
3. In response to the application, Terms of Reference (ToR) was issued vide File. No. J-11011/181/2017-IA-II (I) dated: 21.12.2017 by MoEF& CC. Public hearing was exempted as per section 7(i), (iii) stage (3), Para (i)(b) of EIA Notification, 2006, and request to submit the EIA/EMP report to the SEIAA for grant of Environment Clearance.
 4. Based on the ToR issued by the MoEF& CC, the proponent prepared the EIA report and submitted the same to SEIAA on 25.01.2018. The proposal (EIA report) was placed in the 103rd meeting of the SEAC held on 24.02.2018. Accordingly, the SEAC decided to make an inspection and based on the outcome of the inspection, SEAC will take a decision regarding the grant of EC to the industry. The technical team inspected the site on 03.03.2018 and submitted a report on 12.03.2018. The technical team, based on the site inspection and discussion with the proponent at the site has requested the proponent to furnish additional particulars/proposals. Accordingly, the proponent has submitted the additional particulars/proposals to the technical team on 12.03.2018. After the perusal of the additional particulars/proposals, the inspection report was placed in the 104th Meeting of SEAC held on 19.03.2018. Based on the recommendations of the technical team, the SEAC decided to recommend the proposal for the grant of Environmental Clearance to SEIAA – TN subject to certain conditions.
 5. The subject was placed before 286th SEIAA Meeting held on 16.04.2018. The Authority called for certain additional details and the proponent has submitted the additional




MEMBER SECRETARY
SEIAA-TN



STATE LEVEL ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY-TN | 2018

particulars/proposals to the SEIAA on 05.04.2018 and SEIAA after careful consideration decided to issue Environmental Clearance in its 291th meeting held on 24.04.2018 vide Item No. 291-01 subject to terms and conditions stipulated under the provisions of Environment Impact Assessment Notification, 2006 as amended based on the Information submitted by you which are extracted below:

1	(i) Name of the Project: (ii) Date of Application:	(i) Proposed Expansion in production of Pentaerythritol from 560 MTM to 730 MTM (Powder and Solution form) and Sodium Formate from 336 MTM to 480 MTM (Powder and Solution form) at Plot No. B5 – B 10, SIPCOT Industrial Complex, Cuddalore, Tamil Nadu by M/s. Asian Paints Limited (ii) 25.01.2018.
2	Name of Sector: Schedule No(in the EIA Notification,2006)	Schedule S.No. 5(f) of Category "B1" – Synthetic Organic chemicals Industry (dyes & dyes intermediate; bulk drugs and intermediates excluding drug formulation; Synthetic rubbers; basic Organic Chemicals, other synthetic organic chemicals and chemical intermediates (located in a notified industrial area/estate).
3.	New Project/ Expansion	Expansion
4	Name of the Applicant/Project Proponent	M/s. Asian Paints Limited
	(i) Project	Plot No. B5 – B 10, SIPCOT Industrial Complex, Kudikaddu




MEMBER SECRETARY
SEIAA-TN



STATE LEVEL ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY-TN | 2018

5		Village, Cuddalore, Tamil Nadu	
	(ii) Co-ordinates (lat-long) of all four corners of the site	11040°58.66''N, 79045°07.07''E 11040°52.60''N, 79045°04.98''E 11040°50.07''N, 79045°12.15''E 11040°56.01''N, 79045°14.26''E	
	(iii) Whether any GO attracted	No.	
6	(i) Area of the Site (in Hectares)	29.2 acres (11.8 Ha) (No Additional land is required for the proposed expansion)	
	(ii) Land use are (in Ha)	Total Land Area	29.2 acres (11.8 Ha)
		Plotted industrial area	5.6 acres (2.27 Ha)
		Green belt area	15.7 acres (6.35 Ha)
		Roads	2.6 acres (1.05 Ha)
		Lawn and garden	5.3 acres (2.14 Ha)
8	Land use Classification as per Record	Industrial area - SIPCOT Industrial Estate.	
9	TOR issued? (If yes then	Yes. Terms of Reference (ToR) was issued vide File. No. J-	



[Signature]
MEMBER SECRETARY
SEIAA-TN



STATE LEVEL ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY-TN | 2018

	specify the details)	11011/181/2017-IA-II (I) dated: 21.12.2017 by MoEF& CC. Public hearing was exempted as per section 7(i), (iii) stage (3), Para (i)(b) of EIA Notification, 2006, and request to submit the EIA/EMP report to the SEIAA for grant of Environment Clearance.		
10	Project Cost (after expansion)	Rs. 4.8 Crores		
11	Distance from Protected areas Areas/Critically Polluted areas/Eco-Sensitive areas/Inter-State Boundaries.	Cuddalore industrial area has been notified by CPCB as critically polluted area and moratorium was imposed. However, due to various action implemented by SPCB , the moratorium in this area has been lifted based on the office memorandum vide letter number J-11013/5/2010-IA.II(I) dated 25.11.2016 by MoEF& CC		
12.	Production Details	Products manufactured (In Powder & Solution Form)	Existing production TPM	Production after expansion TPM
		Pentaerythritol	560	730
		Sodium Formate	336	480
13	Manufacturing Process	The increase in production capacity is envisaged through, Process Modification, Process Automation, Reliability Improvement, Debottlenecking Activities.		



[Signature]
MEMBER SECRETARY
SEIAA-TN



	<p>The reactor is the heart of the plant where Pentaerythritol is formed. The reaction is a batch process. Pentaerythritol is produced in a reactor by the reaction of calculated quantity of Formaldehyde, Acetaldehyde and Caustic Soda Lye in water. The mole ratio of Formaldehyde to Acetaldehyde determines the composition of the Pentaerythritol. The mole ratio of Caustic to Acetaldehyde determines the quantity of Sodium Formate formed. Also, Caustic Soda Lye acts as a Catalyst for the reaction. The reaction is the Aldol condensation of Aldehydes and Cannizaro reaction. The reaction is carried out in dilute phase with very high excess presence of water. Initially, a predetermined quantity of known strength of Formaldehyde solution in water is prepared in the reactor. This solution is cooled to 20 deg. C and predetermined quantity of Acetaldehyde and Caustic are added over a period of 38 minutes. The reaction being exothermic, the temperature is controlled to reach a value of 45 to 48 deg. C during the reaction period of 38 minutes. Pentaerythritol, Di Pentaerythritol and Sodium Formate is formed along with small quantity of Formals. The entire reaction takes place in aqueous environment.</p> <p>After completion of reaction the excess 85% water present along with the product is removed through various unit operations viz. Stripping, Multiple effect Evaporation, Crystallization,</p>
--	--



[Signature]
MEMBER SECRETARY
SEIAA-TN



	<p>purification, separation and drying. The reactor product is fed to the stripper to remove the traces of un-reacted Methanol & Formaldehyde present in the process stream for recovery and reuse. The stripper product is then fed continuously to the five-effect evaporator where the Concentration is increased upto 60%. The water evaporated from Evaporator is reused in the process. The concentrated mixture is then fed to Crude Vacuum Crystallizer which causes the Pentaerythritol (PE) product to crystallize and precipitate, keeping the Sodium Formate in liquid form. Subsequent to filtration in Crude Belt filter, the precipitated PE is separated from the filtrate Crude Mother Liquor (CML) containing the bulk of Sodium Formate. The PE cake is re-slurried and re-dissolved. The PE solution is then passed through the deionizer in order to reduce the Sodium Formate slippages and through Carbon column for color removal. This solution is stored in a tank called Pure Pentaerythritol Solution Tank. Depending on the grade to be manufactured, the solution is then transferred either to the Pure Vacuum Crystallizer or to the Tech Dissolver in the Mono and Di Pentaerythritol section of the plant.</p> <p>Sodium Formate:</p> <p>The filtrate from Crude Belt Filter (CBF) is stored in a Tank and fed continuously to the Sodium Formate Evaporator cum</p>
--	---



[Signature]
MEMBER SECRETARY
SEIAA-TN



		Crystallizer. The Sodium Formate crystals formed are further separated from their mother liquor by centrifuging and are dried and packed in solid or liquid form. Sodium Formate is a byproduct and based on the Caustic input to reaction for every MT of Pentaerythritol produced, 0.60 to 0.67 MT of Sodium Formate gets produced.																																				
14	Man-power Requirement(after expansion)	140Nos.																																				
15	Total Water Requirement - 857 KLD (after expansion) Raw water from SIPCOT - 690 KLD Treated water - 167 KLD	<table border="1"> <thead> <tr> <th>S. No</th> <th>Activity</th> <th>Quantity (KLD)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Domestic</td> <td>45</td> </tr> <tr> <td>2.</td> <td>Gardening</td> <td>40</td> </tr> <tr> <td>3.</td> <td>Coal/ vegetation wetting</td> <td>32</td> </tr> <tr> <td>4.</td> <td>FH make up</td> <td>14</td> </tr> <tr> <td>5.</td> <td>WTP back wash</td> <td>20</td> </tr> <tr> <td>6.</td> <td>Cooling tower</td> <td>353</td> </tr> <tr> <td>7.</td> <td>Process</td> <td>17</td> </tr> <tr> <td>8.</td> <td>fan less cooling tower</td> <td>39</td> </tr> <tr> <td>9.</td> <td>Floor washing</td> <td>21</td> </tr> <tr> <td>10.</td> <td>Boiler</td> <td>270</td> </tr> <tr> <td>11.</td> <td>WTP Regenerator</td> <td>6</td> </tr> </tbody> </table> <p>Source of water - SIPCOT</p>	S. No	Activity	Quantity (KLD)	1.	Domestic	45	2.	Gardening	40	3.	Coal/ vegetation wetting	32	4.	FH make up	14	5.	WTP back wash	20	6.	Cooling tower	353	7.	Process	17	8.	fan less cooling tower	39	9.	Floor washing	21	10.	Boiler	270	11.	WTP Regenerator	6
S. No	Activity	Quantity (KLD)																																				
1.	Domestic	45																																				
2.	Gardening	40																																				
3.	Coal/ vegetation wetting	32																																				
4.	FH make up	14																																				
5.	WTP back wash	20																																				
6.	Cooling tower	353																																				
7.	Process	17																																				
8.	fan less cooling tower	39																																				
9.	Floor washing	21																																				
10.	Boiler	270																																				
11.	WTP Regenerator	6																																				
16	Sewage generation and treatment	Sewage Generation -45 KLD, treated in the STP of 50 KLD capacity and the treated sewage is used for gardening																																				
17	ETP Details	<ul style="list-style-type: none"> ETP Capacity 250 KLD. Total Effluent generation - 131 KLD. 																																				



[Signature]
MEMBER SECRETARY
SEIAA-TN



STATE LEVEL ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY-TN | 2018

17A	Reuse of treated effluent	Treated effluent of 124 KLD is recycled in process			
18	Solid waste Management	Name of process	Expected quantity (Kg/annum)	Activities for which Authorization is issued	
		Ion Exchange resin	9600	authorized co processors to be sought for reuse/ recycle of solid wastes	
		Used insulation materials	4100		
		Used HDPE bags	5200		
		Used Filter Clothes	3000		
		Hazardous waste management			
		Spent carbon	7780 kg/annum	Authorized waste processing agency	
		Used spent oil	900 Lts/annum	Authorized waste processing agency	
		Waste oil	300 Lts/annum	Authorized waste processing agency	
		Sludge	172Tons/annum	TSDF Gummidipoondi	
19	Stack emission Details: (All the stacks attached to process units, Boilers, D.G. Sets, (kg/hr)	S. No	Source of Emission	Control Measures	Height
		I	Sodium Formate Drier	wet scrubber followed by stack and the scrubbing medium: water	18m x dia 0.10m



[Signature]
MEMBER SECRETARY
SEIAA-TN



		2	Mono Pentaerythritol Drier	wet scrubber followed by stack and the scrubbing medium water	12m x dia 0.20m
		3	Di Pentaerythritol drier	wet scrubber followed by stack and the scrubbing medium: water	18m x dia 0.25m
		4	Tech Pentaerythritol Drier	Reverse pulse jet bag filter that collects dust followed by stack	Height 10.5m x dia 0.10m
		5	14 TPH FBC Boiler	Reverse pulse jet bag filter	Height 50m x dia 1.20m
		6	16 TPH FBC Boiler	Reverse pulse jet bag filter	42 m x dia 1.10m
		7	500 KVA DG set	Stack	12m x dia 0.25m
		8	600 KVA DG set	Stack	12m x dia 0.25m
20	Details of Fuel to be used:	S.No.	Boiler / DG set	Fuel consumption	Fuel type
		1	Coal Fired Boiler	111.50 T/day	Coal
		2	DG Sets	4.5KL/day	HSD
21	Steam Generation	16 TPH		30 TPH	



MEMBER SECRETARY
SEIAA-TN



STATE LEVEL ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY-TN | 2018

22	Storm Water Management	There is adequate storm drainage system. The storm water in the project area will be collected through existing storm water drains. The excess storm water will be connected to the SIPCOT main storm water drain
23	Rain Water Harvesting	Rainwater harvesting storage capacity is 200cu.m.
24	Green Belt Development	15.7 acres (6.35 Ha)
25	CSR details	The actual CSR funds utilized in future should be atleast be 2% of the annual profit but not less than Rs. 33.60 lakhs per annum.
26	EMP Cost(O&M)	Capital Cost: 576 Lakhs. Operation and Maintenance Cost: 23.6 Lakhs.

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:




MEMBER SECRETARY
SEIAA-TN



(A) 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) 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.
- (iv) The residue collected from the evaporator shall be documented by maintaining proper register and it should be made available at the time of inspection.
- (v) 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.
- (vi) The proponent shall carryout best housekeeping practices as spillage management for handling and maintenance of raw materials and products inside the unit premises.
- (vii) Nature of chemicals Handled, the Do and Don'ts shall be displayed at all vital locations as laided down in MSDS.
- (viii) The proponent shall ensure that the quantity of Hazardous Waste handed over to the TSDF shall match with the quantity generated.



[Signature]
MEMBER SECRETARY
SEIAA-TN



- (ix) The proponent shall provide a separate closed area earmarked for storing solid waste including Hazardous Waste as proposed.
- (x) 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.
- (xi) The Plastic wastes shall be segregated and disposed as per the provisions of Plastic Waste (Management & Handling) Rules 2016.
- (xii) The e - waste generated should be collected and disposed to a nearby authorized e-waste centre as per e waste (Management & Handling), Rules 2016 as amended.
- (xiii) The Municipal solid waste generated shall be collected, segregated and disposed as per Solid Waste Management Rules, 2016.
- (xiv) 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.
- (xv) 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.
- (xvi) 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.

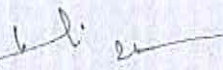



MEMBER SECRETARY
SEIAA-TN



- (xvii) The Green belt area already developed within the project area shall be properly maintained.
- (xviii) The industry shall promote tree plantation to neutralize their carbon foot print. The industry shall engage regularly in afforestation programme.
- (xix) 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.
- (xx) The industry shall conduct air sampling at least twice in a week (104 times in a year), as stipulated under EP Act 1986.
- (xxi) Risk cum disaster management plan should be in placed in the industry premises at all time.
- (xxii) 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.
- (xxiii) 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.
- (xxiv) 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.
- (xxv) All the assurances given in EIA and EMP shall be adhered to strictly.



94/ 
MEMBER SECRETARY
SEIAA-TN



- (xxvi) Detail study shall be carried out by engaging accredited agencies / reputed institutions for Risk management and detailed Disaster management plan prepared for compliance.
- (xxvii) Sufficient funds should be provided for Disaster management.
- (xxviii) The Project Proponent shall provide disinfection by UV system for the sewage treatment plant for treating the sewage before applying on land for gardening.
- (xxix) The project proponent has to provide close loop silo for ash handling and the same shall be installed before 30.05.2016 as committed and submit the proof to SEIAA-TN.
- (xxx) 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.
- (xxxi) The industry should completely revamp fly ash collection from the source, conveyance, storage and disposal in a more scientific manner and to reduce the fugitive emissions in fly ash handling. The final disposal of the fly ash will be as per MoEF & CC Notification S.O. 254 (E) dated: 25th January, 2016.
- (xxxii) 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.
- (xxxiii) 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.
- (xxxiv) 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




MEMBER SECRETARY
SEIAA-TN



- 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.
- (xxxv) The Activity of the industry should no way pollute water bodies such as Uppanar River, Perumal Lake & Bay of Bengal.
- (xxxvi) The Activity of the industry should not impact on agricultural, irrigation system and mangroves surrounding the area.
- (xxxvii) The EMP cost of Rs.576 lakhs and operation and maintenance cost Rs. 23.6 lakhs 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 200cu.m 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.
- (xlili) The industry shall develop green belt in the open areas by planting the following species in future:
- (i) Calophyllum inophyllum-Pungan
 - (ii) Syzygium cumini- Naval




[Signature]
MEMBER SECRETARY
SEIAA-TN



- (iii) Thespesia populnea- Poovarasu
 - (iv) Terminalia arjuna- Neermarudu
 - (v) Ficus bengalensis – Alamaram
 - (vi) Ficus retusa- Atthi
 - (vii) Ficus bengalensis- Arasamaram
 - (viii) Alstonia scholaris- Palai
 - (ix) Mimusops elengi- Mahilam
 - (x) Madhuca longifolia-Izhupai
- (xliv) The project proponent shall take up better housekeeping measures including scraps disposal and up keeping the machineries, pipes, etc.
- (xlv) The proponent should continuously monitor the VOC and ensure that VOC levels are within permissible limits.
- (xlvi) Air pollution control – there are four sources of air emissions within the industry process - Tech PE drier, Sodium formate drier, Mono PE drier and Di PE drier.
- From the Tech PE drier, particulates of Pentaerythritol will be emanating which will be controlled in a bag filter and finally emitted to the environment through a stack. There will be increase in the pollutant load from 1.33 kgs / day to 1.72 kgs/day and hence, additional bag filter capacity should be created.
 - From the Sodium formate drier, suspended particulate matter will be emitted which is sent to wet scrubber and then to the stack. The existing scrubber should be replaced with a new one.




MEMBER SECRETARY
SEIAA-TN




- From both Mono PE drier and Di PE drier, SPM will be emitted which is sent to wet scrubber and then to stacks. There is an increase in the amount of pollutant but the proponent should increase the efficiency of the scrubber to absorb the additional pollutant load.
- (xivii) The project proponent has to provide/ install the following before 30.04.2018 as committed and furnish proof of the same to SEIAA-TN :
- The Sewage sludge bed capacity should be increased from 5.27 m³ to 10.5 m³ .
 - The sludge drying bed 2. Nos should be provided in additional to the existing Sludge drying bed for managing sludge .
 - The agreement with hazardous waste management and disposal facilities shall be made including the quantum of hazardous waste and the life period.

(B) 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 and also at the Website of the SEIAA, TN at <http://www.seiaa.tn.gov.in>.
- 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.




MEMBER SECRETARY
SEIAA-TN



सत्यमेव जयते

- iv. The Environmental Clearance shall also be put on the website of the company.
- v. 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.
- vi. All the environmental protection measures and safeguards as recommended in the EIA report shall be complied with.
- vii. 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.
- viii. 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 NO_x outside the premises at the appropriate place for the general public.
- ix. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- x. Proper house-keeping and cleanliness must be maintained within and outside the plant.
- xi. 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.




MEMBER SECRETARY
SEIAA-TN



- xii. 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).
- xiii. The actual CSR funds utilized in future should atleast be 2% of the annual profit but not less than Rs. 33.60 lakhs per annum.
- xiv. 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.
- xv. 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.
- xvi. 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, NO_x (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.



[Signature]
MEMBER SECRETARY
SEIAA-TN



- xvii. 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.
- xviii. The Environmental Clearance is valid for 7 years from the date of issue.
- 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.




MEMBER SECRETARY
SEIAA-TN



STATE LEVEL ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY-TN | 2018

- 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.
- 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.
- xxvi. The above conditions will 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, 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.
- xxvii. 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.

TN


MEMBER SECRETARY
SEIAA-TN

Copy to:-

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





सत्यमेव जयते

2. The Chairman,
Central Pollution Control Board, Parivesh Bhavan,
CBD Cum-Office Complex, East Arjun Nagar,
New Delhi 110032.
3. The Member Secretary,
Tamil Nadu Pollution Control Board,
76, Mount Salai, Guindy,
Chennai - 600 032.
4. The ACCF(C), Regional Office of MoEF,
34, HEPC Building, 1 & 2 nd Floors,
Cathedral Garden Road, Nungampakkam,
Chennai - 600 034.
5. Monitoring Cell, I A Division,
Ministry of Environment & Forests,
Paryavaran Bhavan, CGO Complex,
New Delhi 110003.
6. The District Collector, Cuddalore District.
7. Stock File.

