



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

To,

The Managing Director  
CHEMPLAST SANMAR LIMITED  
9 Cathedral Road, Chennai, Chennai, Tamil Nadu-600086

**Subject:** Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/TN/IND2/156565/2020 dated 02 Dec 2020. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.	<b>EC21A020TN119228</b>
2. File No.	IA-J-11011/132/2020-IA-II(I)
3. Project Type	New
4. Category	A
5. Project/Activity including Schedule No.	5(e) Petrochemical based processing (processes other than cracking &
6. Name of Project	Proposed Project of Poly Vinyl Chloride (PVC) Paste Resin Plant of 70,000 TPA Plant of M/s. Chemplast Sanmar Limited at Cuddalore, Tamilnadu
7. Name of Company/Organization	CHEMPLAST SANMAR LIMITED
8. Location of Project	Tamil Nadu
9. TOR Date	24 Jul 2020

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 16/11/2021

(e-signed)  
**A.K Pateshwary**  
Director  
IA - (Industrial Projects - 2 sector)

*Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.*

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This has reference to your online proposal No. IA/TN/IND2/156565/2020, dated 02<sup>nd</sup> December, 2020 for environmental clearance to the above mentioned project.

**2.** The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the Proposed Project of Poly Vinyl Chloride (PVC) Paste Resin Plant of 70,000 TPA Plant by M/s Chemplast Sanmar Limited located at Cuddalore, Tamilnadu.

**3.** The project/activities are covered under category B of item 5(e) 'Petrochemical based processing (processes other than cracking & reformation and not covered under the complexes)' of the Schedule to the Environment Impact Assessment Notification, 2006. Due to applicability of general conditions (location of the project site in SPA), the project requires appraisal at central level by the sectoral Expert Appraisal Committee (EAC) in the Ministry).

**4.** The Standard ToR has been issued by Ministry vide letter No. J-11011/132/2020- IA-II(I); dated 24th July 2020. Public Hearing for the project is exempted as the industry is located in Notified Industrial Area SIPCOT Industrial Complex Phase-II. It was also reported by the PP that there is no litigation pending against the proposal.

**5. The details of products and capacity are as under: -**

<b>S. No.</b>	<b>Product/Activity (Capacity/Area)</b>	<b>Quantity</b>	<b>Unit</b>	<b>Mode of Transport / Transmission of Product</b>
1	Poly Vinyl Chloride Resin	70,000	TPA	Road

**6.** The land area available for the project is 48543 m<sup>2</sup>. Industry will develop greenbelt in an area of 33% i.e. 16428 m<sup>2</sup>, out of total area of the project. The estimated project cost is Rs. 450 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 10.50 crore and the Recurring cost (operation and maintenance) will be about Rs. 1.90 crore per annum. Total Employment will be 450 persons as direct & 820 persons indirect during operation phase. Industry proposes to allocate Rs. One crore fifty lakhs (Rs. 1.50 crores) towards Corporate Social Responsibility.

**7.** There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. Uppanar river is flowing at a distance of 0.06 km in East direction.

**8.** Ambient air quality monitoring was carried out at 8 locations during March, 2018 to May, 2018 and the baseline data indicates the ranges of concentrations as: PM<sub>10</sub> (43 µg/m<sup>3</sup> to 60 µg/m<sup>3</sup>), PM<sub>2.5</sub> (12 µg/m<sup>3</sup> to 23 µg/m<sup>3</sup>), SO<sub>2</sub> (8.69 µg/m<sup>3</sup> to 9.21 µg/m<sup>3</sup>) and NO<sub>2</sub> (18.38 µg/m<sup>3</sup> to 20.06 µg/m<sup>3</sup>). AAQ modelling study for point source emissions indicates that the

maximum incremental GLCs after the proposed project would be 4.79 µg/m<sup>3</sup>, 0.01 µg/m<sup>3</sup> and 1.29 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

**9.** Total water requirement is 1486 m<sup>3</sup>/day of which fresh water requirement of 1148 m<sup>3</sup>/day will be supplied from M/s Chemplast Cuddalore Vinyls Ltd. (CCVL). Effluent of 320 KLD (300 KLD industrial + 20 KLD domestic) quantity will be treated through ETP & STP. The plant will be based on Zero Liquid discharge system.

**10.** Power requirement after expansion will be 7 MW and it will be met from Tamil Nadu Electricity Board (TANGEDCO). 3 DG sets will be used as standby during power failure. Stack (height 30 m) will be provided as per CPCB norms to the proposed DG sets. No boiler will be installed as steam will be provided by group company M/s Chemplast Cuddalore Vinyls Ltd situated adjacent to the proposed project site.

#### **11. Details of Process emissions generation and its management:**

##### *Flue Gas Stacks*

S. No.	Stack Attached to	Capacity	No. of working hrs	Type of Fuel used	Fuel consumption in Hr	Stack Height (m) Provided	Stack Height (m) Calculated as per CPCB Norms <sup>1</sup>	No. of Stacks	Pollutants and control measures
1	DG set - 3 nos	2000 KVA each	Emergency operation (Power failure)	HS D	100 lit/hr each	30 (each)	3.34	3	PM, SO <sub>x</sub> , NO <sub>x</sub> Adequate stack height

\* Operation only during power failure

##### **Process Vents Details:**

S. No.	Stack Attached to	No. of Stacks	No. of working hrs	Stack Height (m)	Pollutants Emitted	Air Pollution Control Measures Attached
1	Vent gas absorption system for VCM recovery	1	Continuous	20	VCM	Stack
2	PVC dryer section-1	1	Continuous	28	VCM and particulate	Multiple Bag filters

					matter	with Adequate stack height
3	PVC dryer section-2	1	Continuous	28	VCM and particulate matter	Multiple Bag filters with Adequate stack height

Stack Height is calculated as per  $H = 14(Q)^{0.3}$ .

## 12. Details of Solid waste/Hazardous waste generation and its management:

S. No	Type of waste	Hazardous waste category	Quantity (Tons per Annum)	Source	Treatment/Disposal
1	Used/Spent oil	5.1	10	Process plant	To authorised recyclers
2	ETP sludge	35.3	400	ETP	Disposal at Tamilnadu waste Management Limited (TNWML) facility at Gummudipondi, authorised agency
3	Evaporator	35.3	500	MEE to ZLD	
4	PVC lumps	22.2	20	Process	

**13.** During deliberations, EAC directed that Green Belt shall be increased to 40% and monitoring of compliance of EC conditions shall be submitted with third party audit every year as the project is located in a Severely Polluted Area.

**14.** The proposal was considered by the EAC in its 36th meeting held during 16th -17th June, 2021 in the Ministry, wherein the project proponent and their consultant M/s. Kadam Environmental Consultants., presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP report complying with the ToR and recommended the project for grant of environmental clearance.

**15.** The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with EIA/EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking 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 report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

**16.** The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data is within NAAQ standards. The Committee has deliberated the action plan proposed by the project proponent to arrest the incremental GLC due to the project. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made 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 Experts Members of the EAC have found the proposal in order and have recommended for grant of environmental clearance.

**17.** The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its 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 project proponent 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.

**18.** Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance for proposed Project of Poly Vinyl Chloride (PVC) Paste Resin Plant of 70,000 TPA Plant by M/s Chemplast Sanmar Limited located at Cuddalore, Tamilnadu, under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under: -

**A. Specific Conditions:**

i. No activity shall be undertaken in the CRZ-III (NDZ) area without prior permission from the Competent Authority.

ii. Monitoring of compliance of EC conditions shall be submitted with third party audit every year.

iii. The company/PP shall ensure that there will be no impact on mangroves plantation present in study area.

iv. 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.

v. Total water requirement is 1486 m<sup>3</sup>/day of which fresh water requirement is 1148 m<sup>3</sup>/day and it is proposed to be met from Chemplast Cuddalore Vinyls

Limited(CCVL). The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises.

vi. Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.

vii. Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.

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

ix. 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. The ash from boiler shall be sold to brick manufacturers/cement industry.

x. Regular VOC monitoring shall be done at vulnerable points.

xi. The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.

xii. Oil catchers/oil traps shall be provided at all possible locations in rain/storm water drainage system inside the factory premises.

xiii. 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 cleaning etc. to reduce wastewater generation.

xiv. The green belt of 5-10 m width shall be developed in more than 40% 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.

xv. As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel

etc., in the nearby villages. The action plan shall to be completed within time as proposed.

xvi. The project proponent shall ensure 70% of the employment to the local people, as per the applicable law. The project proponent shall set up a skill development centre/provide skill development training to village people.

xvii. A separate Environmental Management Cell (having qualified person 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.

xviii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.

xix. Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.

xx. PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. 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.

xxi. The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9<sup>th</sup> November, 2012 as amended time to time shall be followed.

xxii. Recommendations of mitigation measures from possible accident shall be implemented based on advanced risk Assessment studies conducted for worst case scenarios using latest techniques.

## **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 energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.

- (iii) 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).
- (iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (v) 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.
- (vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (viii) The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
- (ix) 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.

- (x) 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.
- (xi) 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.

**19.** 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.

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

**21.** 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.

**22.** 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 Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

**23.** This issues with the approval of the competent authority.

**(Ashok Kumar Pateshwary)**  
**Director**

**Copy to: -**

1. The Principal Secretary, Department of Environment, Ground Floor, Panagal Buildings 1, Jeenu Road, Saidapet, Chennai - 600 015.
2. The Dy. Director General of Forest, MoEF&CC, Regional Office (SEZ), 1<sup>st</sup> and 2<sup>nd</sup> Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, **Chennai**-34
3. The Member Secretary, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** - 32
4. Member Secretary, Tamil Nadu Pollution Control Board, 76, Anna Salai, Guindy Industrial Estate, Race View Colony, Guindy, **Chennai** - 32 (Tamil Nadu)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira

- Paryavaran Bhawan, Jor Bagh Road, **New Delhi**
6. District Collector, Cuddalore, Tamil Nadu
  7. Guard File / Monitoring File / Parivesh Portal / Record File

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