



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

To,

The ASSOCIATE GENERAL MANAGER
ASIAN PAINTS LIMITED

ASIAN PAINTS LIMITED, PENTA DIVISION, B5 TO B10, SIPCOT
INDUSTRIAL COMPLEX, KUDIKADU VILLAGE, CUDDALORE, TAMIL
NADU,,Cuddalore,Tamil Nadu-607005

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/IND3/288480/2017 dated 23 Sep 2022. The particulars of the environmental
clearance granted to the project are as below.

- | | |
|---|--|
| 1. EC Identification No. | EC22A021TN152664 |
| 2. File No. | IA-J-11011/283/2021-IA-II(I) |
| 3. Project Type | Expansion |
| 4. Category | A |
| 5. Project/Activity including
Schedule No. | 5(f) Synthetic organic chemicals industry
(dyes & dye intermediates; bulk |
| 6. Name of Project | Expansion of Pentaerythritol from 730
MTM to 1500 MTM, Sodium Formate from
480 MTM to 1050 MTM and
Formaldehyde from 675 MTM to 1800
MTM and Captive Power Plant from 1.5
MW to 3.5 MW in Manufacturing |
| 7. Name of Company/Organization | ASIAN PAINTS LIMITED |
| 8. Location of Project | Tamil Nadu |
| 9. TOR Date | 21 Dec 2017 |

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

Date: 29/11/2022

(e-signed)
Mr. Motipalli Ramesh
Scientist E
IA - (Industrial Projects - 3 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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File No. IA-J-11011/283/2021-IA II(I)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division
(Industry-3)

Indira Paryavaran Bhawan,
Jorbagh Road,
New Delhi – 110003.

Dated: 28th November, 2022

To

The Associate General Manager,
Asian Paints Limited, Penta Division,
B5 To B10, Sipcot Industrial Complex,
Kudikadu Village, Cuddalore District, Tamil Nadu-607005.
Email: s.senthilkumaran@asianpaints.com
Tel. No: 04142- 239423

SUB.: Expansion of Pentaerythritol from 730 MTM to 1500 MTM, Sodium Formate from 480 MTM to 1050 MTM and Formaldehyde from 675 MTM to 1800 MTM and Captive Power Plant from 1.5 MW to 3.5 MW in Manufacturing Units located at Penta Division at Plot No. B5–B10, SIPCOT Industrial Complex, Kudikadu Village, Cuddalore Taluk, Cuddalore District, Tamil Nadu by M/s Asian Paints Limited - Environmental Clearance.

REF.: Your proposal No. IA/TN/IND3/288480/2017, Dated: 23rd Sep. 2022, on the above subject matter.

Sir/Madam,

1. The project-bearing proposal no. IA/TN/IND3/288480/2017 is for the environmental clearance for Expansion of Pentaerythritol from 730 MTM to 1500 MTM, Sodium Formate from 480 MTM to 1050 MTM and Formaldehyde from 675 MTM to 1800 MTM and Captive Power Plant from 1.5 MW to 3.5 MW in Manufacturing Units located at Penta Division at Plot No. B5–B10, SIPCOT Industrial Complex, Kudikadu Village, Cuddalore Taluk, Cuddalore District, Tamil Nadu by M/s Asian Paints Limited.
2. The project/activity is covered under Category 'B' of item 5(f) (Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates) of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended). However, since the project site is located in a severely polluted area, as per the O.M. dated 31st October 2019, the project is considered as Category 'A' at Centre.
3. The PP applied for the ToR vide proposal number IA/TN/IND3/219681/2021 dated 10.1.2022 and the ToR was issued by the Ministry, vide letter No. IA-J-11011/283/2021-IA-II(I) dated 10.1.2022. The PP reported that Public Hearing was exempted as it is located in the notified industrial area designated by SIPCOT. The PP applied for Environment Clearance on 12.8.2022 in Form-2 and submitted the EIA/EMP Report and other documents. The PP reported in Form-2 that it is an **Expansion EC**. Due to some shortcomings, the project was referred back to PP on 23.8.2022, 22.9.2022, 22.9.2022 and

reply to the same was submitted on 10.9.2022, 22.9.2022, 23.9.2022. The proposal was placed in 39th EAC Meeting held on 29-30th September, 2022, wherein the Project Proponent and an accredited Consultant, ABC Techno Labs India Pvt. Ltd. [Accreditation number NABET/EIA/1922/RA0155 valid up to 7.11.2022] made a detailed presentation on the salient features of the project and informed the following:

- The PP reported that the proposed land area is 11.82 Ha and no R&R is involved in the Project. The details of products are as follows:

S. No.	Product Details (complete name)	CAS NO.	Existing Quantity (Metric Tonnes per month)	Proposed Quantity (Metric Tonnes per month)	Total Quantity (Metric Tonnes per month)
1	Pentaerythritol (Powder & Solution)	115-77-5	730	770	1500
2	Sodium Formate (Powder & solution)	141-53-7	480	570	1050
3	Formaldehyde (100% concentration)	50-00-0	675	1125	1800

- The PP reported that there is no violation case as per the Notification No. S.O.804(E) dated 14.03.2017 and no direction is issued under E(P) Act/Air Act/Water Act.
- The PP reported that certified compliance report has been issued by the IRO, Chennai vide F.No.EP/12.1/2021-22/SEIAA/11/TN dated 12.10.2021. Most of the conditions are complied and a few generic conditions are agreed to comply.
- The PP reported that National Green Tribunal (South Zone) in the judgement dated 4th May 2022, has dismissed the appeal citing that there is no merit in the appeal and cleared that the EC is considered valid and the appeal fails.
- The PP reported that there are no National Parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from site. Gadilam River – 0.5 Km (E) Bay of Bengal – 1.9 Km (E), Capper Hills Lake – 4.5 Km (NE) Perumal Lake – 8.8 Km (SE) and no Schedule-I species exist within 10 km study area of the project.
- The PP reported that the ambient **air** quality monitoring was carried out at 8 locations during 5th April 2021 to 26th June 2021 and the baseline data indicates the ranges of concentrations as: PM₁₀ (41.0 -70.0 µg/m³), PM_{2.5} (19.0-34.0 µg/m³), SO₂ (5.8-14.2 µg/m³) and NO₂ (12.9-23.6 µg/m³). The AAQ modeling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 71.29 µg/m³, 19.06 µg/m³ and 24.03 µg/m³ with respect to PM₁₀, SO_x and NO_x. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS). The ambient **noise** level monitoring was carried out at 8 locations and the baseline data indicates the ranges of daytime noise levels as 47.5 – 63.2 dB(A) and Night time noise levels as 42.7 – 53.6 dB(A). The **ground water** quality monitoring was carried out at 8 locations during 27th May 2021 to 28th May 2021 and the baseline data indicates the ranges of pH varied from 7.58 to 8.04. TDS varied between 266 to 2648 mg/l. Total Hardness varied from 117 mg/l to 820 mg/l. Chloride varied from 68 mg/l to 1253 mg/l and Nitrate varied from 2 to

17 mg/l. Heavy metals like Arsenic, Manganese, Chromium, Lead, Mercury, and Cadmium were found to be below detection limit at all locations. Total coliform found to be <2 to 4 MPN/100ml. The **surface water** quality monitoring was carried out at 8 locations during 27th May 2021 to 28th May 2021 and the baseline data indicates the ranges of pH varied from 7.76 to 8.22. Turbidity varied between 1.8 to 14 NTU. TDS varied from 231 to 32278 mg/l. BOD found between <2 mg/l to 5.4 mg/l. Dissolved Oxygen varied from 4.5 mg/l to 5.9 mg/l. Heavy metals like Chromium, Mercury and Lead were found to be below detection limit at all locations. Total Coliform count varies between 80 to >1600 MPN/100ml. **Soil** quality monitoring was carried out at 8 locations during 25th May 2021 to 28th May 2021 and the baseline data indicates the ranges of pH varied from 7.51 to 8.41. Electrical conductivity found within a range from 0.17 to 1.02 mS/cm. The texture of soil is predominantly clay in most of the places with loamy sand in some locations. Available Nitrogen ranged from 159 kg/ha to 264 kg/ha, Potassium ranged from 272 ha to 560 kg/ha, Available Phosphorus ranged from 18.8 kg/ha to 42.4 kg/ha. Soil organic content varied from 0.5% to 0.87%, which indicates moderate fertility.

10. The PP reported that the total water requirement is 1694 KLD of which fresh water requirement is 1500 KLD and will be met from SIPCOT water supply. The total effluent generated would be 295 KLD (Process & Utility – 250; Domestic – 45). The treated effluent (Process & Utility) of 194 KLD from ETP, RO and MEE will be reused in the process and the treated effluent from the STP (41 KLD) will be used for green belt etc. The plant will be based on Zero Liquid Discharge.
11. The PP reported that the power requirement will be met using the proposed in-house 3.5 MW Captive Power Plant. Additional power requirement will be met from TNEB & Diesel generator in case of emergency. Existing unit has DG sets of 1 no. of 500 kVA & 1 no. of 600 kVA capacity, additionally DG sets are used as standby during power failure. Stack (12m) will be provided as per CPCB norms to the proposed DG sets.
12. **Details of process emissions generation and its management:** Point sources emission of pollutant into air from the proposed project after expansion will be through the dryers, DG sets which run on HSD and the boilers (34 TPH), which operate on coal/lignite/biomass and through process vents. Adequate stack height of DG set will be maintained and Multi cyclone with wet scrubber will be installed at dryers, Multi cyclone separators and bag filters to boilers to control pollutant emission under norms. Solvent recovery system will be related to VOC control system and finally to activated carbon adsorption system to avoid release any solvent vapours/fumes in the atmosphere. There may be possible VOC emissions from the process and the control measures adopted is tank vents are connected to blower suction. The proposed air emissions generated from the above process will be treated in the existing Air Pollution Control (APC) Systems. The adequacy of the existing APCs will be sufficient for the proposed activities as they will be APC facilities will be part of new facilities.
13. **Details of Solid and Hazardous Waste Generation and its Management:** The hazardous waste generated from the site/process units consist of used/spent oil from maintenance activities. The wastes will be classified as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and Solid Waste Management Rules 2016 and be collected, stored, treated and disposed as per rules.

S. No.	Hazardous Waste Type	Category	Quantity		Mode of disposal
			Existing	Expected Quantity (after expansion)	
1	ETP Sludge (TPA)	35.3	172	355	TSDF Gummidipoondi/ any Cement industry
2	Waste from Lime (TPA)	20.4	0	850	TSDF / any cement industry
3	Used or spent oil (TPA)	5.1	0.9	2.6	To authorized recyclers
4	Wastes or residues containing oil (TPA)	5.2	0.3	2.2	To authorized recyclers
5	Spent Carbon (TPA)	36.2	7.78	16	To authorized waste processing agency / cement industry
6	Distillation residue (TPA)	20.3	2640	6000	Authorized agency for cofuel manufacture
7	Spent Ion exchange resin (TPA)	35.2	9.6	19.75	TSDF
8	Spent solvent - Motherliquor (TPA)	20.2	0	1000	Co fuel in Boiler/ authorized agency
9	Spent solvent- Recovered Methanol from off gas (TPA)	20.2	0	100	Co fuel in Boiler
10	Asbestos-containing residues (TPA)	15.2	0	20	TSDF

Details of Solid Waste Generation Details and Disposal Methods

S. No.	Waste type	Quantity (Tons/Annum)		Mode of disposal	Physical status
		Existing	After Expansion		
1	Used HDPE bags	5.2	15.0	Registered recycler	Solid
2	Used filter clothes	3.0	7.0	Registered recycler	Solid
3	Canteen Waste/biodegradable	1.0	5.0	Onsite composting for green belt	Solid
4	Wooden scrap / broken pallet	4.2	10.0	Domestic usage	Solid
5	Paper Waste	0.5	5.0	Municipal agency	Solid
6	Plastic bag / Plastic	0.5	10.0	Registered recycler	Solid
7	Waste				
8	Used insulation material	4.1	20	TSDF	Solid
9	Miscellaneous Garbage, Broken packaging	1.0	10.0	Registered recycler	Solid

14. The **Budget** earmarked towards Environmental Management Plan (EMP) is ₹432 lakhs (capital) and the Recurring cost (operation and maintenance) will be about ₹681.97 lakhs per annum. Industry proposes to allocate ₹17 lakhs towards CER.
15. The PP reported that Public Hearing is exempted since the project site is located in the notified Industrial area.
16. The PP reported that APL-Penta Division will continue to maintain existing green belt in the plant premises which is about 37% (43722.2 sq.m) with survival rate of 75-80%. Also developed 0.85 Acres (3540 sq.m) of area as Garden and lawn which accounts for about 2.92%. Total 12894 no.s of trees are present within the plant premises as green belt with a spacing of 2.0 x 2.0 m. APL-Penta Division also planted about 1405 trees outside plant premises from 2018 under Corporate Environmental Responsibility (CER).
17. The PP proposed to set up an Environment Management Cell (EMC) by engaging Senior Manager – Environment & Quality Assurance, Senior Executive Environment, Manger safety, safety engineer, Environment Lab Officer for the functioning of EMC.
18. The PP submitted that the total GHG emissions estimated for Existing operations under Scope 1, Scope 2 and Scope 3 are 44572.1 tCO₂ eq./Annum and for additional expansion the total GHG emissions estimated are 47666 tCO₂ eq./Annum. Thus, Total GHG Emissions from both existing operations and additional expansion will be: **92238.1 tCO₂ eq/ Annum**. APL-Penta Division implemented several activities which lead to reduction in thermal and power consumption for manufacturing process and utilities. For existing operations, Net GHG emission Reduction is estimated to be 2704.63 tCO₂ eq./Annum and for additional expansion will be 5786.4 tCO₂ eq./Annum. Thus, Total GHG emission reduction will be 8491.03 tCO₂ eq./Annum. Reduction in CO₂ emission due to process schemes and Carbon sequestration will be 8777.03 tCO₂ eq./Annum. Total Carbon Footprint of the Penta plant activities after expansion has been estimated as 92238.1 tCO₂ eq./Annum. Total Carbon Footprint with mitigations (Process emission reduction and Carbon Sequestration) will be 83461.07 tCO₂ eq./Annum. Thus, GHG reduction will be about 9.52% after expansion.
19. The PP submitted the disaster and Onsite and Offsite Emergency Plans in the EIA report.
20. The cost for the proposed expansion is estimated at INR **16.43 Crores** The existing manpower is 123 Nos. However, additional manpower is anticipated up to 17 Nos.
21. **Deliberations by the EAC**

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

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

The EAC noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The EAC deliberated on the proposed mitigation measure towards Air, Water, Noise and Soil pollutions. The EAC suggested that the storage of toxic/explosive raw

materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The EAC inter-alia, deliberated on and sought the following:

- Compliance of Ministry's O.M. dated 31.10.2019 regarding mitigation measures for projects located in CPAs and SPAs
- Methodology adopted for estimation of Carbon Sequestration.
- Justification for inclusion of captive power plant in the proposal since it was not mentioned in the ToR.
- Justification for reduction in fresh water requirement.

The PP submitted the same and EAC found it to be satisfactory.

The EAC also deliberated on the Onsite and Offsite Emergency plans and also the various mitigation measures proposed during implementation of the project and advised the PP to implement the provisions of the Rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, as amended from time to time.

The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for grant of environmental clearance. The MoM of 39th EAC were confirmed (with correction) in the 40th EAC meeting held on 18th – 19th October, 2022. The MoM are available on PARIVESH.

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

22. Based on the proposal submitted by the PP and recommendations of the EAC (Industry-3 Sector), the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance for ***“Expansion of Pentaerythritol from 730 MTM to 1500 MTM, Sodium Formate from 480 MTM to 1050 MTM and Formaldehyde from 675 MTM to 1800 MTM and Captive Power Plant from 1.5 MW to 3.5 MW in Manufacturing Units located at Penta Division at Plot No. B5–B10, SIPCOT Industrial Complex, Kudikadu Village, Cuddalore Taluk, Cuddalore District, Tamil Nadu by M/s Asian Paints Limited”*** under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

A. Specific Conditions:

- (i) The operating parameters shall be maintained so that the stack emissions comply with the prescribed norms i.e. PM < 50 ppm; SO_x < 600 mg/Nm³; NO_x < 300 mg/Nm³. Boiler stack emissions shall be maintained as per TPP guidelines for units installed after 1st Jan. 2003 to 31st Dec. 2016.

- (ii) Continuous online (24x7) monitoring system for stack emissions shall be provided for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB servers.
- (iii) Cyclone separators and Bag filters shall be provided for effective fugitive emission control. Covered pneumatic system and Silo shall be provided for transport and storage of ash.
- (iv) The transportation of materials shall be by rail/belt conveyor, to the extent feasible.
- (v) Industry shall use biomass as Primary Fuel for Boiler and only in case of shortage of Briquettes, coal/lignite may be used as secondary fuel. Further, efforts shall be made for the usage of natural gas.
- (vi) The PP shall ensure that best available technology is used.
- (vii) The PP shall increase the existing greenbelt of 37% to at least 40 % of total area by planting 570 number of trees within a period of one year from grant of EC. The saplings selected for the plantation should be of sufficient height, preferably 6-ft (about 2m). The budget earmarked for the plantation shall be ₹2 Lakh and shall be kept in separate account and should be audited annually. The PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of the expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (viii) In addition to the above, 1200 number of saplings shall be planted in the next 2 years such as avenue plantation, plantation in vacant areas, social forestry, etc.
- (ix) The transportation load on roads shall be within their carrying capacity and adequate width of the roads shall be maintained inside the industrial premises.
- (x) The treated effluent (Process & Utility) from ETP, RO and MEE shall be reused in the process and the treated effluent from the STP shall be used for green belt etc. Zero Liquid Discharge shall be maintained.
- (xi) Continuous monitoring of effluent quality/quantity shall be provided along with installation of web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (xii) The storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water.
- (xiii) Fly ash shall be utilized as per the fly ash utilization notification from time to time.
- (xiv) Distillation residue/ spent carbon shall be sent for co-processing as per Hazardous waste authorisation. Used or spent oil / waste or residue containing oil shall be sent to authorised recyclers as per Hazardous waste authorisation.
- (xv) Monitoring of compliance of EC conditions shall be submitted with third party audit every year.
- (xvi) Provision of Safe drinking water supply, sanitation & medical facilities, promoting eco-friendly behaviour through use of Green Energy in schools etc. shall be done within the study area under the CER.

- (xvii) A separate Environmental Management Cell (having qualified persons with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. PP shall engage Senior Manager – Environment & Quality Assurance, Senior Executive Environment, Manger safety, safety engineer, Environment Lab Officer. In addition to this one safety & health officer as per the qualification given in Factories Act 1948 shall be engaged within a month of grant of EC. The PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (xviii) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented. The budget proposed under EMP is ₹432 lakhs (Capital cost) and ₹681.97 lakhs (Recurring cost) shall be kept in separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (xix) The total water requirement of 1694 KLD, of which fresh water requirement is 1500 KLD shall be met from SIPCOT water supply. The PP should ensure that water supply should not be above the permissible limit as mentioned in the letter and fresh water shall be withdrawn only after obtaining valid agreement from Concerned Authority. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year.
- (xx) No banned chemicals shall be manufactured by the PP. No banned raw materials shall be used in the unit. The PP shall adhere to the notifications/guidelines of the Government in this regard.
- (xxi) The PP shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.
- (xxii) The project proponent shall comply with the environment norms for Organic Chemical Industry as notified by the Ministry of Environment, Forest and Climate Change, *vide* GSR 1241(E), dated 28.12.2018 under the provisions of the Environment (Protection) Rules, 1986.
- (xxiii) All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The PP shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

- (xxiv) The volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
- (xxv) The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report.
- (xxvi) The occupational health centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
- (xxvii) Training shall be imparted to all employees on safety and health aspects for handling chemicals. Safety and visual reality training shall be provided to employees. Action plan for mitigation measures shall be properly implemented based on the safety and risk assessment studies.
- (xxviii) The unit shall make the arrangement for the protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
- (xxix) The solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
- (xxx) The volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
- (xxxi) The PP shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation.
- (xxxii) The activities and the action plan proposed by the project proponent to address the issues raised during the public hearing as well as the related socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.

B. General Conditions:

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

- (ii) The Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.
- (iii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iv) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (v) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (vi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (vii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (viii) The project proponent shall also upload/submit six monthly reports on PARIVESH Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (ix) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Integrated Regional Office of MoEF&CC by e-mail.
- (x) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at <https://parivesh.nic.in/>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (xi) The project authorities shall inform the Regional Office as well as the Ministry, the date

of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

- (xii) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
23. 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.
24. 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 the Environment (Protection) Act, 1986.
25. 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.
26. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

This issues with approval of the competent authority.

(Dr. Motipalli Ramesh)
Scientist 'E'

Copy to: -

1. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), 1st and 2nd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai-34.
2. The Principal Secretary to Government, Department of Environment, Climate Change and Forests, Government of Tamil Nadu, No. 1, Jeenis Road, Panagal Building, Ground Floor, Saidapet, Chennai-600 015.
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai - 600 032.
5. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
6. The District Collector, Cuddalore District, Tamil Nadu.
7. Guard File/Monitoring File/PARIVESH.

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