

ENVIRONMENTAL
CLEARANCE

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive,
and Virtuous Environmental Single-Window Hub)



Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), Tamil Nadu)

To,

The Sitehead
M/S GRASIM INDUSTRIES LIMITED BIRLA PAINTS DIVISION
A2 Aditya Birla Centre Sk Ahire Marg Worli Mumbai -400030

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 SEIAA vide proposal number SIA/TN/IND2/66529/2021 dated 11 Aug 2021. The particulars of the environmental clearance granted to the project are as below.

- | | |
|--|--|
| 1. EC Identification No. | EC22B023TN110286 |
| 2. File No. | 8560/2021 |
| 3. Project Type | New |
| 4. Category | B1 |
| 5. Project/Activity including Schedule No. | 5(h) Integrated paint industry |
| 6. Name of Project | Integrated Paint manufacturing Industry with a total capacity of 8,75,000 KL/Annum |
| 7. Name of Company/Organization | M/S GRASIM INDUSTRIES LIMITED BIRLA PAINTS DIVISION |
| 8. Location of Project | Tamil Nadu |
| 9. TOR Date | 23 Jun 2021 |

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

Date: 09/06/2022

(e-signed)
Tmt.P.RAJESWARI,IFS
Member Secretary
SEIAA - (Tamil Nadu)

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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**TMT. P. RAJESWARI, 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
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ENVIRONMENTAL CLEARANCE (EC)

Letter No. SEIAA-TN/F.No.8560/EC/5(h)/96/2021 dated: 06.06.2022

Sub: SEIAA-TN – Environmental Clearance – Proposed Integrated Paint manufacturing Industry with a total capacity of 8,75,000 KL/Annum by M/s.Grasim Industries Limited at Plot No. A3/1, A4/2 of SIPCOT Industrial Park, S.F.Nos. 285/1, 2, 3, 4, 5, 6, 7, 292/1, 2, 294/1, 2, 3, 4, 295/1, 2A, 2B, 2C, 3, 296/2B pt, 2C pt, 3 pt, 297/ 1pt, 2A pt, 2B pt, 2C pt, 2D pt, 3A pt, 3B pt, 296/ 1A, 1B,1C, 2A, 2B pt, 2C pt, 3pt, 297/ 1pt, 2A pt, 2B pt, 299, 300pt, 334, 335/1, 2A, 2B, 3A, 3B, 4A, 4B, 336, 359/1A, 1B, 2, 3, 353/5B pt, 5C pt, 5D pt, 345/2pt, 348/ 2A1pt, 2A2, 2B pt, 2C1, 2C2, 347/ 1Bpt, 2Bpt, 351/ 1A1, 1A2,1A3,1B, 2, 3, 4A, 4B, 4C, 352/ 1, 2Apt, 2B1, 2B2, 3pt, 4, 339/ 4pt, 340/ 1Apt, 2pt, 353/ 1, 2, 3A,3B, 4A,4B, 5A, 5B, 5C pt, 5D pt, 354/ 1,2, 355,358, 350/ 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I of Magajanapakkam Village, Cheyyar Taluk, Thiruvannamalai District, Tamil Nadu under Category B1 & Schedule Item No. 5(h) – “Integrated Paint Industry” of EIA Notification, 2006 as amended – Issued – Regarding.

- Ref: 1. Application submitted for Terms of Reference vide Proposals
No.SIA/TN/IND3/63411/2021 dated 19.05.2021.
2. Hard Application submitted for Terms of Reference to SEIAA-TN on 15.06.2021
 3. Auto-ToR issued Dated: 23.06.2021
 4. Minutes of the 215th meeting of SEAC held on 29.06.2021
 5. Minutes of the 449th meeting of SEIAA held on 24.07.2021
 6. Online Proposal No. SIA/TN/IND2/66529/2021, dated: 11.08.2021(EIA report based on the Auto ToR conditions without conducting public hearing)
 7. Minutes of the 233th meeting of SEAC held on 21.09.2021

**MEMBER SECRETARY
SEIAA-TN**

8. Minutes of the 234th meeting of SEAC held on 22.09.2021
9. Minutes of the 473rd meeting of SEIAA held on 23.10.2021
10. Minutes of the 477th meeting of SEIAA held on 28.10.2021
11. Minutes of the 241st meeting of SEAC held on 03.11.2021
12. Minutes of the 484th meeting of SEIAA held on 29.01.2022 & 31.01.2022
13. Minutes of the 246th meeting of SEAC held on 17.02.2022
14. Minutes of the 490th meeting of SEIAA held on 07.03.2022
15. Public hearing conducted from TNPCB on 28.04.2022 Vide Lr.No.F-PH 22/DEE/
TNPCB/TVM/2022 dated: 30.04.2022
16. The project proponent letter dated: 04.05.2022
17. Minutes of the 273rd meeting of SEAC held on 14.5.2022
18. Minutes of the 518th meeting of SEIAA held on 06.06.2022

This has reference to your application under reference 6th cited, wherein you have submitted proposal seeking Environmental Clearance for the proposed Integrated Paint manufacturing Industry with a total capacity of 8,75,000 KL/Annum by M/s. Grasim Industries Limited at Plot No. A3/1, A4/2 of SIPCOT Industrial Park & S.F.Nos. 285/1, 2, 3, 4, 5, 6, 7, 292/1, 2, 294/1, 2, 3, 4, 295/1, 2A, 2B, 2C, 3, 296/2B pt, 2C pt, 3 pt, 297/ 1pt, 2A pt, 2B pt, 2C pt, 2D pt, 3A pt, 3B pt, 296/1A, 1B, 1C, 2A, 2Bpt, 2Cpt, 3pt, 297/ 1pt, 2Apt, 2Bpt, 299, 300pt, 334, 335/1, 2A, 2B, 3A, 3B, 4A, 4B, 336, 359/1A, 1B, 2, 3, 353/5Bpt, 5Cpt, 5Dpt, 345/2pt, 348/ 2A1pt, 2A2, 2Bpt, 2C1, 2C2, 347/ 1Bpt, 2Bpt, 351/ 1A1, 1A2, 1A3, 1B, 2, 3, 4A, 4B, 4C, 352/ 1, 2Apt, 2B1, 2B2, 3pt, 4, 339/ 4pt, 340/ 1Apt, 2pt, 353/1, 2, 3A, 3B, 4A, 4B, 5A, 5B, 5Cpt, 5Dpt, 354/ 1, 2, 355, 358, 350/ 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I of Magajanapakkam Village, Cheyyar Taluk, Thiruvannamalai District, Tamil Nadu under category B1 & Schedule Item No. 5(h) – “Integrated Paint Industry” of EIA Notification, 2006 as amended.

| S.No | Description | Details |
|------|--|--|
| 1. | (i) Name of the Project: | Proposed Integrated Paint manufacturing Industry with a total capacity of 8,75,000 KL/Annum by M/s.Grasim Industries Limited |
| 2. | Name of Sector: Schedule No (in the EIA Notification, 2006) | 5(h) – “Integrated Paint Industry” of EIA Notification, 2006 |


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| 3. | New Project / Expansion | New | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|---|--|-----------------|------------------------|------|-----------|----|---|----|----------|----|---|----|----------|----|-------------------------|----|----------|----|-----------------------|----|--------|----|----------|----|--------|--|--------------|-----------|-----------------|
| 4. | Name of the Applicant/Project Proponent | The Chief Operating Officer (COO), M/s. Grasim Industries Limited Birla Paints Division, A-2, Aditya Birla Centre, Mumbai City – 400 030. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. | Project Location | Plot No. A3/1, A4/2 SIPCOT Industrial Park & S.F.Nos. 285/1, 2, 3, 4, 5, 6, 7, 292/1, 2, 294/1, 2, 3, 4, 295/1, 2A, 2B, 2C, 3, 296/2Bpt, 2C pt , 3 pt, 297/ 1pt, 2Apt, 2B pt, 2C pt, 2D pt, 3A pt, 3Bpt, 296/ 1A, 1B,1C, 2A, 2Bpt, 2Cpt, 3pt, 297/ 1pt, 2Apt, 2Bpt, 299, 300pt, 334, 335/1, 2A, 2B, 3A, 3B, 4A, 4B, 336, 359/1A, 1B, 2, 3, 353/5Bpt, 5Cpt, 5Dpt, 345/2pt, 348/ 2A1pt, 2A2, 2Bpt, 2C1, 2C2, 347/ 1Bpt, 2Bpt, 351/ 1A1, 1A2,1A3,1B, 2, 3, 4A, 4B, 4C, 352/ 1, 2Apt, 2B1, 2B2, 3pt, 4, 339/ 4pt, 340/ 1Apt, 2pt, 353/ 1, 2, 3A,3B, 4A,4B, 5A, 5B, 5Cpt, 5Dpt, 354/ 1,2, 355,358, 350/ 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I of Magajanapakkam Village, Cheyyar Taluk, Thiruvannamalai District, Tamil Nadu <u>Coordinates:</u> Latitude: 12°42'28.74"N Longitude: 79°39'13.35"E | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. | Cost of Project | Rs. 1137.34 Crores | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. | Product details | <table border="1"> <thead> <tr> <th>S.No.</th> <th>Products/Intermediates</th> <th>Unit</th> <th>Qty/Annum</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Water Based Paints (including Distemper & colorants)</td> <td>KL</td> <td>5,00,000</td> </tr> <tr> <td>2.</td> <td>Solvent Based Paints (Including Wood Finish)</td> <td>KL</td> <td>1,00,000</td> </tr> <tr> <td>3.</td> <td>Intermediate – Emulsion</td> <td>KL</td> <td>1,80,000</td> </tr> <tr> <td>4.</td> <td>Intermediate - Resins</td> <td>KL</td> <td>70,000</td> </tr> <tr> <td>5.</td> <td>Thinners</td> <td>KL</td> <td>25,000</td> </tr> <tr> <td></td> <td>Total</td> <td>KL</td> <td>8,75,000</td> </tr> </tbody> </table> | S.No. | Products/Intermediates | Unit | Qty/Annum | 1. | Water Based Paints (including Distemper & colorants) | KL | 5,00,000 | 2. | Solvent Based Paints (Including Wood Finish) | KL | 1,00,000 | 3. | Intermediate – Emulsion | KL | 1,80,000 | 4. | Intermediate - Resins | KL | 70,000 | 5. | Thinners | KL | 25,000 | | Total | KL | 8,75,000 |
| S.No. | Products/Intermediates | Unit | Qty/Annum | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. | Water Based Paints (including Distemper & colorants) | KL | 5,00,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. | Solvent Based Paints (Including Wood Finish) | KL | 1,00,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. | Intermediate – Emulsion | KL | 1,80,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. | Intermediate - Resins | KL | 70,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. | Thinners | KL | 25,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total | KL | 8,75,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | |


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8. Requirement of raw materials:

| Sr. No | Raw materials | Proposed Quantity (TPA /KLPA) | Storage mode | Specific hazard | Sourcing | Mode of Transport |
|--------|---|-------------------------------|---------------------|--|---------------------------------|---|
| 1. | Pigments such as Rutile (TiO ₂) various grades, Redoxide, etc. | 115000 | Silos /Hoppers | Non-flammable | Indian Domestic Market / Import | Truck (By Road) / Ship |
| 2. | Extenders such as China clay, Calcium carbonate, Silica, Marble powder, Dolomite, etc. | 230000 | Silos /Hoppers | Non-flammable | Indian Domestic Market / Import | Truck / Bulk Containers (By Road) /Ship |
| 3. | Polyols such as Phthalic anhydride, Pentaerythritol, Maleic anhydride, benzoic acid, sodium bicarbonate, etc. | 12000 | Silos /Hoppers/Bags | Low Flammability Moderate Health Hazard | Indian Domestic Market | Tanker /Truck (By Road) |
| 4. | Colored pigments such as Blue, Green, yellow oxide, carbon black, etc. | 7200 | Bags | Non-flammable | Indian Domestic Market / Import | Truck (By Road) /Ship |
| 5. | Additives such as Natrosol, Di-ammonium phosphate, sodium benzoate, Hydroxy ethyl cellulose, etc. | 35000 | Bags | Flammable Moderate Health Hazard | Indian Domestic Market / Import | Trucks (By Road) /Ship |
| 6. | Solvents such as Mineral turpentine, Xylene, Dipentine, MCEE 10, Solvent | 58120 | Tanks | Flammable | Indian Domestic Market | Tanker / Truck (By Road) |

9.41
Rajeswari P
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|-----|--|-------|--------|---|---|---|
| | MPA etc. | | | | / Import | /Ship |
| 7. | Driers and additives such as Calcium octoate, Cobalt octoate, Ropaque, Soya fatty acid, Indofil etc. | 70200 | Tanks | Flammable Moderate Health Hazard | Indian Domes tic Market / Import | Tanker / Truck (By Road) / Ship |
| 8. | Monomers such as Methyl Methacrylate, 2-Ethyl hexyl acrylate, Butyl acrylate, Styrene, etc. | 75000 | Tanks | Flammable Severe Health Hazard | Import | Ship / Tanker Truck (By Road) |
| 9. | Oils such as Raw linseed oil, Castor oil, Soyabean oil, etc. | 20000 | Tanks | No Specific Hazard | Indian Domes tic Market | Tanker/ Truck (By Road) |
| 10. | Polyols such as Propylene glycol, Liquor ammonia, Texanol, etc. | 11000 | Tanks | Flammable Moderate Health Hazard | Indian Domes tic Market / Import | Tanker/ Truck (By Road) |
| 11. | Additives/Biocides such as Nipacide, Dapro, Neopon, Thorew paste, etc. | 14000 | Barrel | Non- Flammable Toxic | Indian Domes tic Market / Import | Truck (By Road) |
| 12 | Pigments such as Yellow fine paste, Blue fine paste, Red fine paste, etc. | 4000 | Barrel | Non- Flammable | Indian Domes tic Market / Import | Truck (By Road) / Ship |
| 13 | Additives such as Morpholene, Benzyl alcohol, Glycerine, etc. | 4000 | Barrel | Flammable Moderate Health Hazard | Indian Domes tic Market | Truck (By Road) |

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9.

Manufacturing Process:

Following types of paints and resin (raw material) shall be manufactured in the proposed unit:

- Paints (water based & solvent based)
- Resins & water based polymers (Emulsions)
- Thinners

WATER BASED PAINTS

The Water based paints manufacturing process consists mainly of dispersion of Pigments (mainly TiO₂) and extenders (eg. Talc, CaCO₃, clay, etc.) in water under vigorous agitation in High Speed Disperser (HSD). The slurry is diluted by adding emulsion, water & thickeners to get the required physical parameters. The final paint is filled in containers and dispatched. The process steps consist of:

Dispersion: Pigments powders are wetted with optimum quantity of water along with wetting agents. This is done in the equipment called High Speed Disperser (HSD).

Mixing & Testing: Slurry is transferred to Mixing vessel. The slurry is thinned by adding emulsion, thickener and water as per the recipe, to get desirable physical properties.

Filling and Packing: Filling is carried out in Bulk packs (10, 20L) or small packs (1, 4L). Automatic filling machines are used for filling the final product. Small packs containers are packed in cartons. Packed containers / cartons are sent for storage and onward dispatch.

SOLVENT BASED PAINTS

Solvent based decorative paints, also called as enamels are made by dispersing pigments and extenders in a base of resins (acting as binders). It is diluted to the required viscosity and various physical and application properties are adjusted by special additives. Basic process consists of:

Premixing: Pigment powders are wetted with optimum quantity of resins / solvents. This is done in high speed dispensers.

Grinding: The slurry is ground in high speed grinding mills to achieve the desired particle size, which is at micron levels.

Blending: Adjustments with remaining resins, solvents, additives etc. to achieve desired physical properties like viscosity, sp. gravity, drying properties, etc. Dry film properties like elasticity, strength, scratch resistance, etc. also adjusted.

Tinting: Tinting is done by adding various strainers / pigment concentrates to bring the product to the desired shade.


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Filtration: Final product is filtered through fine filters before filling in specified containers.

Filling: Final product is filled in required pack sizes, carbonized, palletized and sent to warehouse for storage and dispatch.

ALKYD RESIN

Synthetic resins of alkyd type are manufactured by chemical reactions of polyol, oil and polyacid in presence of catalyst and certain additives in thermic fluid heated reaction vessel.

The reaction is monitored by checking temperature, viscosity, acid value and percent solids.

Time required for reaction varies from 18 hrs. to 48 hrs.

This is followed by thinning in blender with solvents to the desired percentage solids and filtration take place in a plate type pressure filter and after filtration the product is pumped into storage tanks.

ACRYLIC RESINS

Synthetic resins of acrylic type are manufactured by chemical reactions of individual monomer particles in solvent media in presence of catalyst at elevated temperatures in steam heated reaction vessel.

The reaction is monitored by checking constant flow rates of monomer and catalyst solutions and reactor temperatures. Time required for reaction varies from 8-12 hrs.

Usually these resins don't require thinning, but if small adjustment need to be done for viscosity and solids, is done by adding solvent in reactor/blender and the adjusted material is filtered on a depth filter and after filtration the product is pumped into either storage tanks or filled in barrels.

EMULSION

Emulsion is basically manufactured through a polymerization of monomers at low temperatures in the water as media. Following steps are involved in manufacturing process:

Water and surfactants are taken to the reactor and heated to specified temperature.

On achieving desired temperature, initiator catalyst is added. The temperature of the contents is controlled to 75-85 Deg. C.

Monomers are added continuously to the reactor under continuous stirring.

On completion of monomer addition, digestion catalyst is added to the reactor.

Rajeshwari P
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SEIAA-TN

9.46

The reactor is maintained at around 80°C for specified time to ensure complete polymerization.

Typical monomers are Methyl Methacrylate, 2-Ethyl Hydroxy Acrylate, Hydroxy Ethyl Metha acrylate (imported), Butyl Acrylate, Vinyl Acetate, Styrene, etc. There is no generation of by-product. The emulsion is diluted with water, filtered and stored in tanks.

This is used as intermediate for manufacturing of water-based paints.

THINNERS MANUFACTURING PROCESS

Basic process consists of

- **Mixing:** 2 - 3 type of solvents as per formulation is mixed in mixer to make the uniform mixture.
- **Filtration:** The mixed solvent is filtered through fine filters before filling in specified containers.
- **Filling:** Final product is filled in required pack sizes, carbonized, palletized and sent to warehouse for storage and dispatch.
- Thinner is mixture of different solvent. The operation is closed loop system. There is no loss in the process.

10. Area of the Site (in Sq.m)

| S. No | Land use | Area (Sq. m) | Area (acre) |
|-------|------------------------|---------------|---------------|
| 1 | Factory area | 215980.71 | 53.43 |
| 2 | Roads & pavements | 46539 | 11.5 |
| 3 | Parking area | 28328 | 7 |
| 4 | Greenbelt | 157018.29 | 38.74 |
| | Total land area | 447866 | 110.67 |

11. Water Requirement

| S.No | Description | Water Consumption KLD | Losses KLD | Wastewater Generation KLD | Reused In Process KLD | Recycled Water KLD | Effluent Treatment and Disposal Facility | Re-use / Recycle | Remarks |
|------|----------------------|-----------------------|------------|---------------------------|-----------------------|--------------------|--|------------------|---------------------|
| 1 | Domestic requirement | 27 | 1 | 26 | 0 | 26 | STP | Green belt | 30 KLD - STP Design |

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| | | | | | | | | | |
|---|--|------|-----|-----|-----|-----|-----------------------------|-------------------------------|--|
| 2 | Process | 702 | 0 | 10 | 4 | 6 | ZLD (ETP- RO- MEE) | Process / Utilitie s | Design Capaci ties ETP - 150 KLD RO- 240 KLD MEE - 25 KLD |
| 3 | Wash Water (Process) | 110 | 0 | 110 | 90 | 20 | | | |
| 4 | Wash Water (Others) | 3 | 2 | 1 | 0 | 1 | | | |
| 5 | Cooling tower | 220 | 197 | 23 | 0 | 23 | | | |
| 6 | Boiler | 40 | 5 | 35 | 34 | 1 | | | |
| 7 | Scrubber | 5 | 2 | 3 | 0 | 3 | | | |
| 8 | WTP | - | - | 90 | 0 | 90 | | | |
| 9 | Green belt | 146 | - | - | - | - | | | |
| | Total Water Consumpti on | 1253 | 207 | 298 | 128 | 170 | - | - | - |
| | Recycled Water from RO and MEE | 143 | | | | | - | - | - |
| | Fresh Water Consumpti on (Cheyyar SIPCOT 1200 KLD) | 1110 | | | | | | | |

Construction Phase: During Construction phase of the proposed project, the fresh water requirement will be 105 KLD. Water will be sourced from SIPCOT. Mobile STP (~3x30KLD) are proposed and 80 KLD of treated sewage will be used for green belt development during construction phase and dust suppression. Total water requirement during construction phase will be 185 KLD.

Operation Phase: The total water requirement is estimated to be 1253 KLD out of which,

Raj Swami P.
MEMBER SECRETARY
SEIAA-TN

fresh water requirement will be 1110 KLD and remaining 143 KLD will be met from treated wastewater.

For the operation phase 1200 KLD of fresh water requirement will be met from SIPCOT.

12.

Waste Water Generation, Treatment & Disposal

| S. No | Waste | Total (KLD) | Method of Disposal |
|---------------------------|----------|-------------|--|
| Construction Phase | | | |
| 1 | Sewage | 81 | Mobile STPs (~3x30KLD) will be provided and treated sewage will be used for green belt development. |
| Operation Phase | | | |
| 1 | Sewage | 26 | Treated in 30 KLD STP and the treated sewage will be used for greenbelt development. |
| 2 | Effluent | 144 | Treated in 150 KLD ETP followed by RO-240 KLD, MEE – 25 KLD. RO permeate will be used for utilities & process. |

ETP Capacity-150KLD

- Equalization Tank
- Flax Mixer
- Flocculator
- Primary Clarifier
- Aeration Tank -I
- Secondary Clarifier
- Aeration Tank -II
- Final Clarifier
- Intermediate Collection Tank
- Pressure Sand Filter
- Activated Carbon Filter
- Final Treated water Tank
- Sludge Collection Sump
- Filter Press

13.

Solid Waste Generation

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| S. No | Waste type | Total (kg/day) | Method of disposal | |
|--|---|----------------|--|---|
| Construction Phase | | | | |
| 1 | Organic | 540 | Will be composted at site in Organic Waste Converter and used as manure for green belt development during construction stage | |
| 2 | Inorganic | 360 | Segregated and disposed through TNPCB authorized recyclers | |
| | Total | 900 | | |
| Operation Phase | | | | |
| 1 | Organic | 162 | Will be composted at site in Organic Waste Converter and used as manure for green belt development | |
| 2 | Inorganic | 108 | Segregated and disposed through TNPCB authorized recyclers | |
| | Total | 270 | | |
| other non hazardous wastes and disposal | | | | |
| S. No. | Non-Hazardous Waste Type | Unit | Quantity per Annum | Disposal |
| 1. | Paper Waste | MT | 3100 | Disposed through SPCB authorized recyclers |
| 2. | Plastic Waste | MT | 1150 | Disposed through SPCB authorized recyclers |
| 3. | Metal Waste | MT | 500 | Disposed through SPCB authorized recyclers |
| 4. | Plastic RM containers | Nos. | 89000 | Sent to suppliers / SPCB authorized recyclers |
| 5. | Metal RM containers | Nos. | 21000 | Sent to suppliers / SPCB authorized recyclers |
| 6. | Powder Waste | MT | 530 | Sent to suppliers / SPCB authorized recyclers |
| 7. | Wooden Waste | MT | 2900 | Will be sent to SPCB authorized recyclers |
| 8. | Miscellaneous (cartons/sample Tins/Cans) | MT | 500 | Sent to suppliers / recyclers |
| 14. | Hazardous waste generation and management: | | | |


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| S. No | Waste Description | Schedule as per Hazardous waste Rules 2016 | Sources of Generation | HW Generation quantity | Unit | Disposal Method |
|-------|---|--|--|------------------------|----------|--|
| 1 | Contaminated oil with wash water & sludge | 3.1 | All Tanks (other than water) bottom sludge | 15 | MT/Annum | Will be sent to TSDF/ Co-processing based on the calorific value |
| 2 | Sludge and filters contaminated with oil | 3.3 | Soil contaminated with any material (RM / Intermediate / Product) Vermiculite / adsorbent contaminated with any material (RM / Intermediate / Product) Engineering Consumables (such as oil-filters) contaminated with any material/Filters RH | 15 | MT/Annum | Will be sent to TSDF/ Co-processing based on the calorific value |
| 3 | Used / Spent Oil | 5.1 | Used / overflow Thermopack oil Used oil such as hydraulic testing oil, transformer oil/DG Oil | 50 | MT/Annum | Sent to TNPCB authorized recycler |
| 4 | Discarded Asbestos | 15.2 | Discarded Asbestos Sheets, Discarded Asbestos Panels, Used Asbestos Gaskets /cuttings | 2 | MT/Annum | Disposal at TSDF |
| 5 | Contaminated aromatic, | 20.1 | Waste solvent | 170 | MT/Annum | Sent to TNPCB authorized |


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 SEIAA-TN

| | | | | | | |
|---|--|------|--|-----|-----------|--|
| | aliphatic or naphthenic solvents, may or may not be fit for reuse | | | | | recyclers/ TSDF/ Co-processing based on the calorific value |
| 6 | Distillation Residues | 20.3 | Distillation Residue | 95 | MT/An num | Sent to TSDF/ Co-processing based on the calorific value |
| 7 | Process Waste, Sludge & Residue from production & industrial use of paint, pigments, varnishes, inks | 21.1 | Waste powder Test samples of RM, and paint waste/sludge, Gelled paint / paint with excess bacterial growth / paint lumps), Scrappings of dried paint Spilled RM, Paper / paper cups / PPEs contaminated with Raw Materials/ Finished Goods SS / Heliflex / PVC / CI /Cement / HDPE / Rubber pipe contaminated with RM / FG | 120 | MT/An num | Sent to TNPCB to authorized recycler/ TSDF/ Co-processing based on the calorific value |
| 8 | Wastes or residues such as filter aid | 23.1 | Discarded Resin / emulsion / polymer Resin /emulsion / polymer test samples Scrappings of Resin /emulsion / polymer Gelled particles / flakes of resin / emulsion /polymer By product salts contaminated with resin , Spilled resin/ | 90 | MT/An num | Will be sent to TSDF/ Co-processing/ SPCB authorized recycler based on the calorific value |

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| | | | | | | |
|----|--|------|---|-------|-----------------|---|
| | | | emulsion/ polymer material and water contaminated Resin from Dust Collector. Used dicamol, Arbocel, celite , cuno / filter, Filter Bags, Waste filter cloth | | | |
| 9 | Chemical containing residue arising from decontamination | 34.1 | Leftover material from RM container (Barrel / Carboy / Drum / Tote) | 25 | MT/An num | Sent to TSDF/ Co-processing based on the calorific value |
| 10 | Discarded containers / barrels /liners contaminated with hazardous wastes / chemicals (Liners) | 33.1 | All containers for RM, Intermediates, Consumables(MS / HDPE/) Metal & Plastic Packing Materials | 120 | MT/An num | Sent to TSDF/ Co-processing/ TNPCB authorized recycler based on the calorific value |
| 11 | Discarded containers / barrels /liners contaminated with hazardous wastes / chemicals (Barrels / Carboys / Drums / Totes/IBC's) | 33.1 | Contaminated Liners and bags (plastic / paper), except those of extenders | 80000 | Numbe rs/annu m | Sent to Authorized recyclers |


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| | | | | | | |
|----|--|---------|--|-----|----------------|--|
| 12 | Flue gas cleaning residue | 35.1 | Soot / carbon black | 10 | MT/An num | Sent to TSDF/ Co-processing based on the calorific value |
| 13 | Spent Ion Exchange Resin containing toxic metals | 35.2 | Resin beads | 20 | MT/An num | Sent to TSDF/ Co-processing |
| 14 | Chemical sludge from waste-water treatment | 35.3 | Gutter / drain sludge Effluent collection pit sludge Equalization tank / guard pond sludge Primary Treatment tank / Thickener Sludge, Centrifuged sludge Chemical salts from MEE | 200 | MT/An num | Sent to TSDF/ Co-processing based on the calorific value |
| 15 | Oil and Grease skimming residue | 35.4 | Floating oil from ETP/STP | 20 | MT/An num | Sent to TNPCB authorised recyclers |
| 16 | Lead Acid Batteries | Class A | Used /Waste lead acid batteries | 500 | Numbers/ Annum | sent back to suppliers/Author ized recycler |
| 17 | Spent Carbon | 36.2 | Used carbon granules from common scrubbers & STP/ETP | 10 | MT/An num | Return to supplier for regeneration/ Co-processing |

15. **Power requirement D.G. set with Capacity**

| Details | Capacity | Nos. | Source |
|---------------------------|----------|------|----------|
| Construction Phase | | | |
| Power Requirement | 750 kVA | 1 | TANGEDCO |
| Power backup | 500 | 2 | DG Sets |
| HSD | 100 LPH | - | HPCL/ |

Rejeswari P
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SEIAA-TN

| | requirement | | | BPCL/IOCL |
|-----|---|---|---|---------------------|
| | Operation Phase | | | |
| | Power Requirement | 8200 kVA | - | TANGEDCO |
| | Power backup | 3 x 2000 kVA 1X750 KVA | 4 | Generator Sets |
| | HSD/LPG for DGs | 1600 LPD | - | HPCL/ BPCL/ IOCL |
| | HSD/LPG for Boilers (4 x2 TPH+ 0.5 TPH) (of the 4x2 TPH boilers, 3 will be in operation 1 will be standby) | 2000 LPD | 4 | HPCL/ BPCL/IOCL |
| | HSD/LPG for Thermo packs (4x20 Lakh Kcal/Hr) (3 working + 1 standby) | 1800 LPD | 4 | HPCL/ BPCL/IOCL |
| 16. | TOR Issued & Public Hearing Details | Auto ToR generated on 23.06.2021 Public hearing conducted by TNPCB on 28.04.2022 Vide Lr.No.F-PH 22/DEE/TNPCB/TVM/2022 dated: 30.04.2022 | | |
| 17. | Man power Requirement | Construction Phase: 2000 Nos Operation Phase: 600 Nos | | |
| 18. | EMP Cost | Capital Cost- Rs. 48.1 Crores Recurring cost- Rs.2.76 Crores | | |
| 19. | CER activity | Revised CER Rs. 12.89 crore as per SEAC minutes. | | |

Rajeswari P
MEMBER SECRETARY
SEIAA-TN

341

20.

Air Pollution Control Measures for fuel emissions:

| S.No | Source | Fuel type | Stack details | |
|------|-----------------------|-----------|---------------|----------------|
| | | | No.of stacks | Height AGL (m) |
| 1 | DG 3 x 2000 KVA | HSD | 3 | 30 |
| 2 | DG 1 x 750 kVA | HSD | 1 | 30 |
| 3 | Boiler 4 x 2000 kg/kr | HSD/LPG | 4 | 30 |
| 4 | Boiler 500 kg/kr | HSD/LPG | 1 | 30 |
| 5 | TP 4x 20 kcal/hr | HSD/LPG | 4 | 30 |

Emissions from Production and control measures

| S.No | Source | APC measure | No of Vents | Flue gas flow rate (m ³ /hr) | VOC Emissions PPM | Stack height proposed AGL (m) |
|------|---------------------|---|-------------|---|-------------------|-------------------------------|
| 1 | Water Base Block | Counter Current wet Scrubbers | 2 | 1000- 1500 | <0.5 | Stack of 3 m above roof |
| 2 | Solvent paint block | 2 stage Activated Carbon scrubbers | 2 | 1000-1500 | <0.5 | Stack of 3 m above roof |
| 3 | Emulsion Block | Counter Current wet Scrubbers/ 2 stage Activated Carbon scrubbers | 2 | 700-1000 | <0.5 | Stack of 3 m above roof |
| 4 | Resin Block | Vent condenser followed by 2 stage Activated Carbon bed/ caustic scrubber | 2 | 700-1000 | <0.5 | Stack of 3 m above roof |

PM Emissions and control measures


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 SEIAA-TN

| S.No | Source | PM Emissions (mg/Nm ³) | No. Of vents | Control measures |
|------|------------------------|--|--------------|--------------------------------|
| 1. | Dust collectors | 35-45 | 101 Nos | Bag filter /Reverse jet filter |
| 21. | Project Cost | Rs.1137.34 Crores | | |
| 22. | Green Belt Development | 157018.29 Sq.m (38.74 Acres, 35 % of total area) | | |

Affidavit

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

I, Mr. Kathiresan. D, Senior General Manager and Authorized Signatory, representing M/s. Grasim Industries Limited, having registered office at Birlagram ,Nagda ,Ujjain ,Madhya Pradesh India , 456331, for the proposed "Integrated paints manufacturing industry with a total capacity of 8,75,000 KL/Annum" in S.F.Nos. 285/1, 2, 3, 4, 5, 6, 7, 292/1, 2, 294/1, 2, 3, 4, 295/1, 2A, 2B, 2C, 3, 296/ 1A, 1B,1C, 2A, 2B, 2C, 3, 297/ 1pt, 2A, 2Bpt, 2Cpt, 2Dpt, 3Apt, 3Bpt, 299, 300pt, 334, 335/ 1, 2A, 2B, 3A, 3B, 4A, 4B, 336, 359/1A, 1B, 2, 3, 339/ 4pt, 340/ 1Apt, 2pt, 345/2pt , 347/ 1Bpt, 2Bpt, 348/ 2A1pt, 2A2, 2Bpt, 2C1, 2C2, 350/ 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 351/ 1A1, 1A2,1A3,1B, 2, 3, 4A, 4B, 4C, 352/ 1, 2Apt, 2B1, 2B2, 3pt, 4, 353/ 1, 2, 3A, 3B, 4A, 4B, 5A, 5B, 5C, 5D, 354/1, 2, 355, 358, at Magajanampakkam village, Cheyyar Taluk, Thiruvannamalai District-631 701,at SIPCOT Industrial Park, Cheyyar hereby take oath and state as under in this affidavit:

- I. We hereby commit that the total freshwater requirement of 1200 KLD for the proposed project will be meet by SIPCOT as per agreement executed
- II. Roof top rainwater collection reservoir as well as storm water reservoir are considered for the proposed project and the storage capacity of both the reservoirs are less than 15-20 days of the water requirement
- III. Organic waste generation from the industry will be composted by Organic waste Converter and inorganic wastes will be sent to TNPCB authorized recyclers.
- IV. Hazardous waste generated within their premises will be managed as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- V. STP of 30 KLD is proposed to treat the sewage generated from the industry and the treated sewage will be reused for green belt/process/utilities within the site.

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- VI. ETP of 150 KLD followed by RO, and MEE is planned for the proposed integrated paint manufacturing plant with production capacity of 8,75,000 KL/Annum and Zero Liquid Discharge (ZLD) system will be maintained for the project.
- VII. Total green belt area of 38.74 Acres which is 35 % will be proposed for the project.
- VIII. Capital cost for EMP is INR. 38.2 Crores. Details of capital and recurring cost are given below:

| S.No | Components | Capital cost (INR crores) | Recurring cost (INR crores) FY24-25 | Recurring cost (INR crores) FY25-26 | Recurring cost (INR crores) FY26-27 |
|------|--|---------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 | Air Pollution control (Scrubbers, Vent condensers, Dust collectors, stacks, Ventilation, CEMS) | 10 | 0.3 | 0.3 | 0.3 |
| 2 | Water pollution control (STP, ZLD ETP with CEMS) | 11 | 1.2 | 1.6 | 2 |
| 3 | Hazardous waste management inclusive of solvent recovery plant | 4.5 | 0.7 | 0.7 | 0.7 |
| 4 | Green belt development | 3.5 | 0.3 | 0.3 | 0.3 |
| 5 | Storm water drainage | 4 | 0.1 | 0.1 | 0.1 |
| 6 | Rainwater harvesting | 3.5 | 0.1 | 0.1 | 0.1 |
| 7 | Noise Pollution (Acoustic Chambers / Dampeners) | 0.3 | 0.02 | 0.02 | 0.02 |
| 8 | Water Conservation Measures (/ Wash Water Recycling/ Low Flow Fixtures/Flow Meters) | 1.1 | 0.02 | 0.04 | 0.08 |
| 9 | Energy Efficient Lighting Fixtures | 0.3 | 0.02 | 0.05 | 0.05 |
| | Total | 38.2 | 2.76 | 3.21 | 3.65 |

- IX. As per Office Memorandum dated 1st May, 2018 from MoEF&CC, CER activities proposed for the project are given below.

| S.No | Activity | Year wise expenditure Plan (INR crores) | | |
|------|-------------------------------------|---|-----------|-----------|
| | | 2022-2023 | 2023-2024 | 2024-2025 |
| 1 | Guindy Children's' park development | 10.0 | - | - |

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SEIAA-TN

| | | | | |
|---|--|--------------|-------------|-------------|
| 2 | Vocational Training like Two Wheeler Repairing, Mobile Repairing, Beautician Course, A/C Repair, Tailoring Course) | 0.2 | 0.2 | - |
| 3 | Strengthening the Primary Health Centres with adequate medical equipment, | 0.1 | 0.1 | - |
| 4 | Women Economic Empowerment Initiatives: Donation of Tailoring Machines, Tools for Handicraft & Beautician Kit, Formation of Self Help Group for Women Empowerment, Skill Development in Partnership with Approved National Skill Development Center Institution etc. | 0.1 | 0.3 | - |
| 5 | Creating a Model School in the Taluk | 0.05 | 0.05 | 0.5 |
| 6 | Renovation of Anganwadi Centres with Washroom facilities | - | - | 0.3 |
| 7 | Hygienic Drinking Water through Installation of Reverse Osmosis Plant, | 0.2 | 0.36 | - |
| 8 | Greenery Development in Open Space Reserve (OSR) Land | - | - | 0.1 |
| 9 | Desilting and deepening of nearby village Lakes/ponds | - | - | 0.33 |
| | Total | 10.65 | 1.01 | 1.23 |
| | Grand total | 12.89 | | |

Declaration

I, Mr. Kathiresan.D, do hereby declare that the statement made by me under para (I) to (X) are true and correct to the best of my knowledge and belief. Nothing is false and nothing is concealed in it.

Appraisal by SEAC:-

Proposed Integrated Paint manufacturing Industry with a total capacity of 8,75,000 KL/Annum by M/s.Grasim Industries Limited at Plot No. A3/1, A4/2 Sipcot Industrial Park & S.F.Nos. 285/1, 2, 3, 4, 5, 6, 7, 292/1, 2, 294/1, 2, 3, 4, 295/1, 2A, 2B, 2C, 3, 296/2Bpt, 2C pt , 3 pt, 297/ 1pt, 2Apt, 2B pt, 2C pt, 2D pt, 3A pt, 3Bpt, 296/ 1A, 1B,1C, 2A, 2Bpt, 2Cpt, 3pt, 297/ 1pt, 2Apt, 2Bpt, 299, 300pt, 334, 335/ 1, 2A, 2B, 3A, 3B, 4A, 4B, 336, 359/1A, 1B, 2, 3, 353/5Bpt, 5Cpt, 5Dpt, 345/2pt, 348/ 2A1pt, 2A2, 2Bpt, 2C1, 2C2, 347/ 1Bpt, 2Bpt, 351/ 1A1, 1A2,1A3,1B,


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SEIAA-TN

4.4

2, 3, 4A, 4B, 4C, 352/ 1, 2Apt, 2B1, 2B2, 3pt, 4, 339/ 4pt, 340/ 1Apt, 2pt, 353/ 1, 2, 3A,3B, 4A,4B, 5A, 5B, 5Cpt, 5Dpt, 354/ 1,2, 355,358, 350/ 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I of Magajanapakkam Village, Cheyyar Taluk, Thiruvannamalai District, Tamil Nadu- For Environmental Clearance.

(SIA/TN/IND2/66529/2021, dated: 11.08.2021).

The proposal was earlier placed for appraisal in 215th, 233rd, 234th, 241st meetings of SEAC held on 29.06.2021, 21.9.2021, 22.09.2021, 03.11.2021. The details of the project furnished by the proponent are given in the website (parivesh.nic. in).

Based on the above, the proposal was placed in 449th, 473rd, 477th, and 484th meetings of SEIAA, the details of which can be seen in Parivesh portal.

The project is an Integrated Decorative Paints Manufacturing Industry located at Plot Nos. A3/1 (49.77 Acres), A4/2 (60.90 Acres) over an extent of 110.67 Acres, SIPCOT industrial park, Phase-II, Magajanapakkam Village, Cheyyar Taluk, Thiruvannamalai District, Tamil Nadu.

The proposal was placed for appraisal in 246th meeting of SEAC held on 17.02.2022. **A technical expert with Chemical Engineering background from Anna University was invited to this SEAC meeting as a special Invitee for this project discussion.**

Based on the presentation and document furnished by the project proponent SEAC noted that,


- i. Proposed industry falls under “Red category”
- ii. The Auto Terms of Reference is prescribed with public consultation through (Parivesh) online dated 23.06.2021.
- iii. The administrative Sanction order for expansion of Cheyyar industrial complex by SIPCOT (931.41 ha) was issued vide G.O.Ms.No.281 Dt: 05.12.2007. Further, the Environmental Clearance was issued by MoEF & CC Dt: 30.09.2016 for the development of SIPCOT Industrial Park over an area 931.015 ha for in-housing following industry categories only such as item No. 3 (a) - Metallurgical industries (ferrous & non-ferrous) & item No.5(k) - Induction/Arc/Cupola Furnace of TPH or more. The present proposal of the is for industry category item No. 5 (h) - integrated paint industry at the above said SIPCOT, Cheyyar which was not covered under Environmental Clearance issued to SIPCOT, Cheyyar Dt: 30.09.2016.
- iv. Further according to para 3 (xxxiv) of the Environmental Clearance issued by MoEF & CC Dt: 30.09.2016, “the responses/commitments made to the issues raised during public hearing shall be complied with in letter and spirit.” It is seen from the records that


MEMBER SECRETARY
SEIAA-TN

SIPCOT has given a commitment that “individual industries has to conduct public hearing separately if they do not fall within the scope of ToR issued by EAC for the Park”

Considering the above points and after detailed deliberations, SEAC decided that the project proponent shall conduct public consultation as already prescribed in ToR and shall submit a fresh EIA study report including the following details,

1. The project proponent shall furnish detailed baseline monitoring data with prediction of quality parameters through modeling the surface water bodies & ground water quality data, ambient/stack air quality data with regard to point/fugitive sources emission & VOCs, ambient noise level and Traffic within 5 km radius of the proposed project site.
2. Details on requirement of raw materials (binders, solvents, pigments, additives, resin, driers etc.) their source and storage at the plant.
3. Whether any of the material content lead, if so details thereof.
4. Details on solvent management including loss accounting.
5. Details on composition, generation and utilization of waste from the plant-left out raw materials, paint sludge, filter cartridges, off-specification paint, etc.,
6. Existing ambient air quality for expected emissions (VOCs, pigment dust, etc.) from paint industry.
7. Cumulative assessment of the impacts from the industries within the 3 km radius and the EMP needs to be worked out based on the findings.
8. The proponent shall carry out cumulative impact assessment study for air pollution, water pollution, and noise pollution in the proposed site needs to be carried out considering nearby water bodies and habitations, and EMP needs to be worked out mitigation measures for the same based on the findings of the study.
9. The project proponent shall furnish emergency evacuation & preparedness plan, safety planning study for the worst-case scenario (untoward accidents) considering storage, management (Manufacturing practices) & handling/maintenance of based on MSDS of solvents, products, raw materials, hazardous waste etc & spill over management.
10. Details of sequence of process diagram of each process.
11. Details of stoichiometric analysis, reaction and mass balance of all the products, and the assessment of air pollutants along with its quantity per batch.
12. The project proponent shall submit the expected characteristics of the effluent generated during


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SEIAA-TN

the processes and the design of the Effluent treatment plant based on those characteristics. The proponent shall furnish the design details of Effluent Treatment Plant (ETP) with the detailed process descriptions.

13. The proponent shall submit the proposal for treatment of sewage and design of the STP.
14. Detailed plan on the protection for the existing water bodies within the premise needs to be worked out and included in the EIA/EMP report.
15. The details about occupational health & safety measures as per OSHA guidelines.
16. The proponent shall furnish details of safety measures proposed for all the process area and fuel/solvent/hazardous waste storage areas.
17. The proponent may assess the risk based on the guidelines of MoEF&CC for Integrated Paint Industry.
18. The Environmental Management Plan (EMP) for the proposed project shall be revised considering the above points and same shall be submitted.

Now, the PP has furnished the above said details and this proposal was again placed in 273rd SEAC meeting held on 14.5.2022. Based on the documents along with public hearing report and EIA study report, SEAC decided to **recommend the proposal for the grant of Environmental Clearance**, subject to the standard conditions & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions.

1. The project proponent shall provide the green belt area not less than 38.74% of the land area all along the periphery of the unit and maximum green belt shall be maintained in the down wind direction as reported. Selection of plant species shall be as per the Appendix.
2. The project proponent shall operate and maintain the sewage treatment plant of capacity 30KLD and Effluent treatment plant of capacity 150 KLD with ZLD effectively to meet out the standards prescribed by the CPCB/TNPCB.
3. Necessary permission letter for the supply of water shall be obtained from the competent authority before obtaining CTO from TNPCB.
4. The effluent generated from the process should be treated through the STP & ETP to achieve the discharge standards prescribed by the CPCB/TNPCB.
5. The proponent shall ensure the zero-liquid discharge.
6. The proponent shall provide adequate air-pollution control measures for the process area.
7. The proponent should continuously monitor the VOC and ensure that VOC levels are within permissible limits.


MEMBER SECRETARY
SEIAA-TN

8. The proponent shall obtain and maintain valid safety licenses for the concerned department for boiler, solvent/fuel/raw material storage areas etc.
9. The proponent shall ensure that the area earmarked for the boiler, further the proponent may submit the safety measures on the same to TNPCB before obtaining CTO.
10. The proponent shall strictly follow the norms and guidelines mentioned in the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, for the handling and disposal of hazardous waste to be generated.
11. The proponent shall periodically conduct and submit fire safety study, emergency evacuation plan, risk assessment study, occupational health safety study for the worst case scenario in regard to existing safety measures/standard operating procedures adopted for the process/equipment/utilities for operation & maintenance and the storage areas of products, raw materials, solvent, fuel, etc. in the different operating zones of the plant at least once in a year to regularly identify safety fragile areas within the plant which requires regular monitoring and the proponent shall submit the same along with timeline for implementation of the said recommendations to the concerned departments.
12. A detail report on the safety measure and health aspects including periodical audiometry, pulmonary lung function etc. test reports once in a year for all the workers shall be submitted to TNPCB.
13. As the plant operation involves the sensitive processing, the medical officer and the supporting staff involved in the health centre activities shall be trained in occupational health surveillance (OHS) aspects through the outsourced training from the experts available in the field of OHS for ensuring the health standard of persons employed.
14. The PP shall install online monitoring system at the point of exit of rainwater overflow from the site in to the lake to ensure the quality of water meets the standards set by TNPCB.
15. The PP shall endeavour to provide employment to local population, including providing vocational training/skill upgradation wherever necessary.
16. The PP shall adhere latest discharge standards as per Notification No. GSR 1241(E) Dt. 28.12.2018.
17. As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020, the proponent shall adhere the EMP as committed.
18. As accepted by the PP the CER cost is Rs. 12.89 crore and the amount shall be spent for activities as per the schedule.


MEMBER SECRETARY
SEIAA-TN

| S.No | Activity | Year wise expenditure Plan (INR crores) | | |
|------|--|---|--------------|-----------|
| | | 2022-2023 | 2023-2024 | 2024-2025 |
| 1 | Guindy Children's Park development | 10.0 | - | - |
| 2 | Vocational Training like Two Wheeler Repairing, Mobile Repairing, Beautician Course, A/C Repair, Tailoring Course) | 0.2 | 0.2 | - |
| 3 | Strengthening the Primary Health Centres with adequate medical equipment, | 0.1 | 0.1 | - |
| 4 | Women Economic Empowerment Initiatives: Donation of Tailoring Machines, Tools for Handicraft & Beautician Kit, Formation of Self Help Group for Women Empowerment, Skill Development in Partnership with Approved National Skill Development Center Institution etc. | 0.1 | 0.3 | - |
| 5 | Creating a Model School in the Taluk | 0.05 | 0.05 | 0.05 |
| 6 | Renovation of Anganwadi Centres with Washroom facilities | - | - | 0.3 |
| 7 | Hygienic Drinking Water through Installation of Reverse Osmosis Plant, | 0.2 | 0.36 | - |
| 8 | Greenery Development in Open Space Reserve (OSR) Land | - | - | 0.1 |
| 9 | Desilting and deepening of nearby village Lakes/ponds | - | - | 0.33 |
| | Total | 10.65 | 1.01 | 1.23 |
| | | | 12.89 | |

Appendix -I
List of Native Trees Suggested for Planting


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1. *Aeglemarmelos*–Vilvam
2. *Adenaantherapavonina*-Manjadi
3. *Albizialebeck*–Vaagai
4. *Albiziaamara*-Usil
5. *Bauhinia purpurea* - Mantharai
6. *Bauhinia racemosa* - Aathi
7. *Bauhinia tomentosa*–Iruvathi
8. *Buchananiaaillaris*-Kattuma
9. *Borassusflabellifer*- Panai
10. *Buteamonosperma* - Murukkamaram
11. *Bobaxceiba*– Ilavu, Sevvilavu
12. *Calophyllum* - Punnai
13. *Cassia fistula*- Sarakondrai
14. *Cassia roxburghii*- Sengondrai
15. *Chloroxylonsweitenia* - Purasamaram
16. *Cochlospermumreligiosum*– Kongu, Manjalllavu
17. *Cordiadichotoma*– Mookuchalimaram
18. *Cretevaadansonii*–Mavalingum
19. *Dilleniaindica*– Uva, Uzha
20. *Dilleniapentagyna*– SiruUva, Sitruzha
21. *Diospyrosebenum*- Karungali
22. *Diospyroschloroxylon*– Vaganai
23. *Ficusamplissima*– Kalltchi
24. *Hibiscus tiliaceous*–Aatrupoovarasu
25. *Hardwickiabinata*– Aacha
26. *Holopteliaintegrifolia*-Aayili
27. *Lanneacoromandelica* - Odhiam
28. *Lagerstroemia speciosa* - Poo Marudhu
29. *Lepisanthustetraphylla*- Neikottaimaram
30. *Limoniaacidissima* - Vila maram
31. *Litseaglutinosa*–Pisinpattai
32. *Madhucalongifolia* - Illuppai
33. *Manilkarahexandra*–UlakkaiPaalai
34. *Mimusopselengi* - Magizhamaram
35. *Mitragynaparvifolia* - Kadambu
36. *Morindapubescens*–Nuna
37. *Morindacitrifolia*– VellaiNuna
38. *Phoenix sylvestre*-Eachai
39. *Pongamiapinnata*–Pungam
40. *Premnamollissima*– Munnai
41. *Premnaserratifolia*– Narumunnai
42. *Premnatomentosa*-PurangaiNaari, PudangaNaari
43. *Prosopiscinerea* - Vannimaram
44. *Pterocarpusmarsupium* - Vengai
45. *Pterospermumcanescens*–Vennangu, Tada
46. *Pterospermumxylocarpum* - Polavu
47. *Puthranjivaroxburghii*–Puthranjivi

Member Secretary
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48. *Salvadorapersica*– Ugaamaram
49. *Sapindusemarginatus*- Manipungan, Soapukai
50. *Saracaasoca* - Asoca
51. *Streblusasper*- Pirayamaram
52. *Strychnosnuxvomica*–Yetti
53. *Strychnospotatorum* - TherthangKottai
54. *Syzygiumcumini* - Naval
55. *Terminaliabellerica*- Thandri
56. *Terminalia arjuna*- Venmarudhu
57. *Toona ciliate* – Sandhanavembu
58. *Thespesiapopulnea*- Puvarasu
59. *Walsuratrifoliata*–valsura
60. *Wrightiatinctoria*- Vep

Discussion by SEIAA and the Remarks:-

The proposal was placed in the 518th SEIAA meeting held on 06.06.2022. The Authority after detailed discussions accepted the recommendation of SEAC and decided to grant Environmental Clearance subject to the conditions as recommended by SEAC & normal condition in addition to the following conditions:

1. The proponent shall ensure that no treated or untreated trade effluent/sewage shall be discharged outside the premises under any circumstances
2. The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.
3. The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.
4. The proponent shall ensure that the all activities of EMP shall be completed before obtaining CTO from TNPCB.
5. Raw material procured and product produced should be lead free, as committed.
6. Industry shall provide ETP/APC measures as committed.
7. Industry shall operate ETP, STP & APC measures and to provide appropriate monitoring mechanism to ensure continuous operation.
8. The proponent shall ensure the zero-liquid discharge.
9. The project proponent, their activities should not cause harm to the natural vegetation/water bodies and other natural resources.


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SEIAA-TN

10. The project proponent shall ensure the activities should not cause any damage to the soil and natural seed banks.
11. The project proponent shall provide medical facilities, possibly with a medical officer in the project site for continuous monitoring the health of construction workers during COVID and Post - COVID period.
12. The proponent shall strictly follow the norms and guidelines mentioned in the Hazardous waste (Management) Rules, 2016 for the handling and disposal of Hazardous waste to be generated.
13. As the plant operation involves the sensitive processing, the medical officer and the supporting staff involved in the health centre activities shall be trained in occupational health surveillance (OHS) aspects through the outsourced training from the experts available in the field of OHS for ensuring the health standard of persons employed.
14. Necessary permission letter for the supply of water shall be obtained from the competent authority before obtaining consent from TNPCB.

Validity:

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

(A) Statutory compliance

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


MEMBER SECRETARY
SEIAA-TN

- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- vi. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989

(B) Air quality monitoring and preservation:

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.


MEMBER SECRETARY
SEIAA-TN

- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with

(C) Water quality monitoring and preservation:

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

(D) Noise monitoring and prevention:

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

Rejeswari.P
MEMBER SECRETARY
SEIAA-TN

- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

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

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

(F) Corporate Environment Responsibility:

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1stMay 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating

Rejeshwari P
MEMBER SECRETARY
SEIAA-TN

procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other 5 purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

(G) Waste management:

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

Air Environment

Rajeswari J
MEMBER SECRETARY
SEIAA-TN

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1. Stack emission levels should be stringent than the existing standards in terms of the identified critical pollutants.
2. CEMS may be installed in all large/medium red category industries (air polluting) and connected to SPCB and CPCB server.
3. Effective fugitive emission control measures should be imposed in the process, transportation, packing etc.
4. Transportation of materials by rail/ conveyor belt, wherever feasible.
5. Encourage use of cleaner fuels (pet coke/ furnace oil/ LSHS may be avoided).
6. Best Available Technology may be used. For example; usage of EAF/SAF/ IF in place of Cupola furnace. Usage of Supercritical technology in place of sub-critical technology.
7. Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever feasible.
8. Stipulation of greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc.
9. Assessment of carrying capacity of transportation load on roads inside the industrial premises.

Water Environment

1. Reuse/recycle of treated wastewater, wherever feasible.
2. Continuous monitoring of effluent quality/quantity in large and medium Red Category Industries (water polluting).
3. A detailed water harvesting plan may be submitted by the project proponent
4. Zero liquid discharge wherever techno - economically feasible.

Land Environment

1. Increase of green belt cover by 40% of the total land area beyond the permissible requirement of 33%, wherever, feasible for new projects.
2. Stipulation of greenbelt outside the project premises such as avenue plantation, plantation in vacant areas, social forestry, etc.
3. Dumping of waste (fly ash, slag, red mud, etc.) may be permitted only at designated locations approved by SPCBs/ PCCs.
4. More stringent norms for management of hazardous waste. The waste generated should be preferably utilized in co processing.


MEMBER SECRETARY
SEIAA-TN

5. Monitoring of compliance of EC conditions may be submitted with third party audit every year.
6. The % of the CER may be at least 1.5 times the slabs given in the OM dated 01.05.2018 for SPA and 2 times for CPA in case of Environmental Clearance.

(H) SPECIFIC CONDITIONS:

- (i) It is mandatory for the project proponent to furnish to the SEIAA, Half yearly compliance report in hard and soft copies on 1st June and 1st December of each calendar year in respect of the conditions stipulated in the prior Environmental clearance issued.
- (ii) "Consent for Establishment" shall be obtained from Tamil Nadu Pollution Control Board and a copy of the same shall be furnished to the SEIAA, Tamil Nadu before start of project construction activity at the site.
- (iii) "Consent to Operate" should be obtained from the Tamil Nadu pollution Control Board before the start of the operation of the project and copy shall be submitted to the SEIAA-TN.
- (iv) The implementation of Environmental Management Plan in regard to treatment and disposal of sewage & Effluent, Solid waste Management, Hazardous - Waste Management, and CSR Activities should be carried out, as proposed and committed. Regular monitoring should be carried out during operation phases.
- (v) The residue collected from the evaporator shall be documented by maintaining proper register and it should be made available at the time of inspection.
- (vi) Adequate dust extraction system such as Ducting with dust extracting arrangement wherever required shall be established to achieve Occupational –health standards and ambient air quality standards.
- (vii) The proponent shall carryout best housekeeping practices as spillage management for handling and maintenance of raw materials and products inside the unit premises.
- (viii) Nature of chemicals Handled, the Do and Don'ts shall be displayed at all vital locations as laid down in MSDS.
- (ix) The proponent shall ensure that the quantity of Hazardous Waste handed over to the TSDF shall match with the quantity generated.
- (x) The proponent shall provide a separate closed area earmarked for storing solid waste including Hazardous Waste as proposed.
- (xi) The proponent shall dispose Hazardous Waste generated as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Spent oil from D.G sets


MEMBER SECRETARY
SEIAA-TN

should be stored in HDPE drums in an isolated covered facility and disposed off through TNPCB registered recyclers.

- (xii) The Plastic wastes shall be segregated and disposed as per the provisions of Plastic Waste (Management & Handling) Rules 2016.
- (xiii) The e - waste generated should be collected and disposed to a nearby authorized e-waste centre as per e waste (Management & Handling), Rules 2016 as amended.
- (xiv) The Municipal solid waste generated shall be collected, segregated and disposed as per Solid Waste Management Rules, 2016.
- (xv) The industry shall conduct air sampling at least once in six months for the general core parameters (PM₁₀, PM_{2.5}, SO_x, NO_x) through TNPCB/NABL Accredited Laboratory and maintain records of the same and it should be made available at the time of inspection.
- (xvi) Regular monitoring on the air quality, water quality and noise on the selected locations in and around the project site as mentioned in the EMP report for creating base line data shall be continued and records shall be maintained.
- (xvii) A separate environment and safety management cell with qualified staff shall be set up before establishment of the facility and shall be retained throughout the lifetime of the industry, for implementation of the stipulated environmental safeguards.
- (xviii) The Green belt area already developed within the project area shall be properly maintained.
- (xix) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xx) The industry shall promote tree plantation to neutralize their carbon foot print. The industry shall engage regularly in afforestation programme.
- (xxi) The proponent shall ensure effective risk management strategy regarding confined space management to avoid risk while handling raw materials, products in the process area and storage.
- (xxii) The energy sources for lighting purposes shall preferably be LED based.
- (xxiii) The industry shall conduct air sampling at least twice in a week (104 times in a year), as stipulated under EP Act 1986.
- (xxiv) Risk cum disaster management plan should be in placed in the industry premises at all time.


MEMBER SECRETARY
SEIAA-TN

- (xxv) Water conservation scheme including rain water harvesting measures to augment ground water resources shall be implemented so as to collect and reuse the entire rainwater harvested as a supplement to fresh water.
- (xxvi) The natural drainage pattern in the project area shall be maintained and storm water drain along the boundary and appropriate places shall be provided considering the Catchment area and maximum intensity of rainfall to collect runoff water/rain water for proper disposal to avoid flooding around the premises.
- (xxvii) The Environmental Clearance is issued without prejudice to any order that may be passed by the Hon'ble NGT/ Honb'le High Court of Madras.
- (xxviii) All the assurances given in EIA and EMP shall be adhered strictly.
- (xxix) Detail study shall be carried out by engaging accredited agencies / reputed institutions for Risk management and detailed Disaster management plan prepared for compliance.
- (xxx) Sufficient funds should be provided for Disaster management.
- (xxxi) The Project Proponent shall provide disinfection by UV system for the sewage treatment plant for treating the sewage before applying on land for gardening.
- (xxxii) The project proponent shall provide sufficient ventilation (air circulation) in the hazardous waste storage yard where the hazardous waste like spent carbon, Chemical sludge, used or spent oil are being kept.
- (xxxiii) The Project Proponent shall carry out safety audit in the different operating zones of the plant at least once in a year and the same shall be considered as base for reviewing the unsafe conditions during the plant safety meeting.
- (xxxiv) The Project Proponent shall prepare a code of practice for safe operation for educating the safety standards to the work force deployed in the plant through appropriate training by the concerned experts.
- (xxxv) As the plant operation involves the sensitive processing, the medical officer and the supporting staff involved in the health centre activities shall be trained in occupational health surveillance (OHS) aspects through the outsourced training from the experts available in the field of OHS for ensuring the health standard of persons employed.
- (xxxvi) The Activity of the industry should not impact on agricultural, irrigation system and mangroves surrounding the area.

Rajeswari.P
MEMBER SECRETARY
SEIAA-TN

- (xxxvii) The EMP cost and operation and maintenance cost shall be deposited in a nationalized bank by opening separate account and the head wise expenses statement shall be submitted to TNPCB with a copy to SEIAA annually.
- (xxxviii) There should be no threat to Bio diversity due to the operation of the industry.
- (xxxix) The flora & fauna present in and around the project site should be get affected due to the activity as reported.
- (xl) The Project Proponent has to provide rain water harvesting collection tank capacity with Recharging pit in order to recover and reuse the rain water during normal rains.
- (xli) The operation of the activity should not impact on the soil, micro flora & Fauna present in and around the project site.
- (xlii) The project proponent shall carry out risk assessment process for all the operations involved in the plant and a suitable risk management plan showing the contours of sensitive zones should be prepared.
- (xliii) The project proponent shall take up better housekeeping measures including scraps disposal and up keeping the machineries, pipes, etc.
- (xliv) The proponent should continuously monitor the VOC and ensure that VOC levels are within permissible limits.

(I) GENERAL CONDITIONS:-

- i. This Environmental Clearance shall not be cited to relax any other rules applicable to this project.
- ii. The Project Proponent should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the Environmental Clearance informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with TNPCB.
- iii. A copy of the Environmental Clearance shall be sent by the project proponent to concerned local body and local NGO, if any from whom suggestions/representatives, if any were received while processing the proposal.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The Environmental Clearance shall also be put on the website of the company.


MEMBER SECRETARY
SEIAA-TN

- vi. No expansion or modernization in the project shall be carried out without prior approval of the SEIAA-TN. In case of any deviations or alterations in the project proposal from those submitted to this Authority for clearance, a fresh reference shall be made to the SEIAA-TN to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- vii. All the environmental protection measures and safeguards as recommended in the EIA report shall be complied with.
- viii. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- ix. The implementation of the project vis-à-vis environmental action plans shall be monitored by the Regional office of MoEF& CC at Chennai, TNPCB and CPCB. A six monthly compliance status report shall be submitted to monitoring agencies regularly.
- x. Data on ambient air, stack and fugitive emissions shall be regularly submitted online to the Regional office of MoEF & CC, GOI, at Chennai, TNPCB and Central Pollution Control Board as well as hard copy once in six months and display data on RSPM, SO₂ and NO_x outside the premises at the appropriate place for the general public.
- xi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xii. Proper house-keeping and cleanliness must be maintained within and outside the plant.
- xiii. Occupational health surveillance programme shall be undertaken as regular exercise for all the employees, especially for those engaged in handling hazardous substances. The first aid facilities in the occupational health centre shall be strengthened and the medical records of each employee should be maintained separately.
- xiv. The overall noise levels in and around the plant area shall be kept well within the standards prescribed for by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75dBA (day time) and 70 dBA (night time).
- xv. A separate Environmental Management Cell equipped with full fledged laboratory facilities to carry out the various Environmental Management and Monitoring functions shall be set up under the control of a Senior Executive.


MEMBER SECRETARY
SEIAA-TN

- xvi. The requisite amount earmarked towards capital cost and recurring cost/annum for implementing pollution control measures shall be used judiciously to implement the Environment Management Plan as furnished in the EIA report. The funds so provided shall not be diverted for any other purposes.
- xvii. The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF & CC, GOI at Chennai, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; RSPM, SO₂, 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.
- xviii. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.
- xix. Environmental Clearance is being issued without prejudice to the action initiated under Environment (Protection) Act, 1986 or any court case pending or any other court order shall prevail.
- xx. The SEIAA, TN may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- xxi. The SEIAA/SEAC or any Competent Authority may suitably add any further condition(s) on receiving reports from the project authority. The above condition shall be monitored by the Regional Office of MoEF located at Chennai.
- xxii. The SEIAA, TN may revoke or suspend the Environmental clearance, if implementation of any of the above conditions is not satisfactory.
- xxiii. The SEIAA, TN may cancel the environmental clearance granted to this project under the provisions of EIA Notification, 2006, if, at any stage of the validity of this environmental clearance, if it is found or if it comes to the knowledge of this SEIAA, TN that the project proponent has deliberately concealed and/or submitted false or misleading information or inadequate data for obtaining the environmental clearance.

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MEMBER SECRETARY
SEIAA-TN
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- 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.


MEMBER SECRETARY
SEIAA-TN

Copy to:

1. The Additional Chief Secretary to Government, Environment & Forests Dept, Govt. of Tamil Nadu, Fort St. George, Chennai - 9.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD Cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
3. The Member Secretary, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai - 600 032.
4. The APCCF (C), Regional Office, Ministry of Environment & Forest (SZ), Chennai - 34
5. Monitoring Cell, I A Division, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, New Delhi - 110 003.
6. The District Collector, Thiruvannamalai District.
7. Stock File.