

### **Chemplast Sanmar Limited**

Karaikal Plant:
Melavanjore Village T R Pattinam Panchayat
Nagore 611 002 India
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www.chemplastsanmar.com
cIN L24230TN1985PLC011637

CSL/KKL/EN/F5/2025/SEP/491 23 SEP 2025 PVC Division

The Member Secretary
Puducherry Pollution Control Committee (PPCC)
3<sup>rd</sup> Floor, PHB Building, Anna Nagar
Puducherry - 605005

Through: The Regional Office, PPCC, Karaikal

Respected Sir,

<u>Subject:</u> Submission of Form - V [Environment Statement] for the year 2024-25 \_reg. <u>Reference:</u> Environment Protection Rules, 1986 (Rule 14)

With reference to the above-mentioned, we would like to submit the Form-V [Environment Statement] for the financial year ending on 31 MARCH 2025 for your perusal.

Request you to kindly accept the same and acknowledge the receipt.

Thanking you,

For Chemplast Sanmar Limited,

S.Mathivanan

Senior Vice President - Operations

Enclosure:

Form - V [Environment Statement] for the year 2024-25



Regd Office: 9 Cathedral Road Chennai 600 086 India



# FORM V (See Rule 14)

Environmental Statement for the financial year ending on 31<sup>st</sup> March on or before 30<sup>th</sup> of September every year.

#### Part A

(i) Name & address of the owner/occupier of the industry operation or process	S.Mathivanan Senior Vice President - Operations Chemplast Sanmar Limited, PVC Division No.:315, Melavanjore Village T.R. Pattinam Panchayat Nagore Post - 611002 Karaikal Region, U.T. of Puducherry	
(ii) Industry category Primary – (STC Code) Secondary – (STC Code)	RED Category Large Scale Industry	
(iii) Production capacity - Units	<ul> <li>Caustic Soda (Including Caustic Soda Flakes - 19,162.5 TPA) - 54,750 TPA</li> <li>Chlorine Gas - 48,181 TPA</li> <li>Hydrogen Gas - 1,387 TPA</li> <li>Hydrochloric Acid - 16,425 TPA</li> <li>Sodium Hypo Chlorite - 10,950 TPA</li> <li>Ethylene di chloride - 84,000 TPA</li> <li>Natural Gas Based Power Generation (with standby engine) - 8.5 MW</li> </ul>	
(iv) Year of establishment	Plant commissioned in AUGUST 1997	
(v) Date of the last environmental statement submitted	12 SEPTEMBER 2024	

# Part B Water and Raw Materials Consumption

1. Water consumption - m³/d Process - 447.81 Cooling - 815.43 Domestic - 14.02

Nature of Products	Process water consumption per unit of product output (m³)	
	During the previous financial year (1)	During the current financial year (2)
(1) Sodium Hydroxide	5.787	5.166
(2) Hydro Choric Acid	0.869	0.868
(3) Sodium Hypo Chlorite	1.1	1.1

# 2. Raw material consumption

Name of raw materials	ne of raw materials UOM Name of		Consumption of raw	material per unit
	products	products	During the previous financial year	During the current financial year
(1) Salt	MT	Sodium Hydroxide	1.605	1.723
(2) Power (KWH) - including Auxiliary Power	KWH	Sodium Hydroxide	2,705	2,705
(3) Soda Ash	MT	Sodium Hydroxide	0.011	0.011
(4) BaCl <sub>2</sub>	MT	Sodium Hydroxide	0.015	0.011
(5) H <sub>2</sub> SO <sub>4</sub>	MT	Sodium Hydroxide	0.02	0.024

Part C
Pollution discharged to environment/unit of output

(Parameter as specified in the consent issued)

Pollution	Quantity of pollutants	Concentration of pollutants in	Percentage of variation
	discharged	discharges	from prescribed standards
	(mass/day)	(mass/volume)	with reasons
(a) Water	No effluent discharged	+	-
(b) Air	Ambient Air Quality monitoring (24 Hrs.)	Chlorine: BDL(DL 1.0) μg/m <sup>3</sup> Acid Mist: BDL(DL 1.0) μg/m <sup>3</sup> PM <sub>10</sub> : 69.48 μg/m <sup>3</sup> SO <sub>2</sub> : 8.16 μg/m <sup>3</sup> NO <sub>2</sub> : 18.78 μg/m <sup>3</sup>	No variation, values are within prescribed standards

## Part D Hazardous Wastes

(as specified under The Hazardous & Other Waste [Management & Transboundary

Movement Rules, 2016)

Hazardous Waste		Total Quantity (MT)		
		During the previous	During the current	
	5	financial year	financial year	
(a)	7			
ш	5.1 of Schedule 1 - Used or spent oil	15.988	6.355	
н	5.2 of Schedule 1- Waste/residue containing oil	0.525	0.6	
ш	16.3 of Schedule 1 - Brine sludge	2,748.02	2,989.01	
	33.1 of Schedule 1 - Empty barrels/ containers contaminated with hazardous chemicals/wastes	2.315	3.04	
(h)	From pollution control facilities	-	- /2/	

### Part E Solid Wastes

Solid Wastes	Total quantity (MT)		
	During the previous financial year	During the current financial year	
(a) From process		-	
(b) From pollution control facility		-	
(c) [1] Quantity recycled or reutilized with in the unit			
[2] Sold			
[3] Disposed		-	

#### Part F

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both the categories of wastes

- Hazardous Waste 5.1 of Schedule 1 Used or spent oil is generally oily in nature and disposed to authorised recycling facility M/s. Atlas Corporation located at Karur District, Tamil Nadu
- Hazardous Waste 5.2 of Schedule 1 Waste/residue containing oil contains used cotton cloths/wastes/rags/used PPEs etc. and are disposed to authorised pre-processing facility M/s. Arunachalaa Enterprises located at Pudukkottai District, Tamil Nadu
- Hazardous Waste 16.3 of Schedule 1 Brine sludge is disposed of to the Treatment, Storage and Disposal Facility (TSDF) operated by M/s. Kalyana Karnataka Waste Management Project Private Limited [Earlier: M/s. Mother Earth Environ Tech Private Limited] located at Yadigir District, Karnataka. Composition of Brine Sludge is as follows,

Barium Sulphate - 34.63 %
Calcium Carbonate - 05.06 %
Magnesium Hydroxide - 03.58 %
Sodium Chloride - 12.02 %
Moisture - 34.63 %

• IR - Remaining

Hazardous Waste 33.1 of Schedule 1 - Empty barrels/containers contaminated with hazardous chemicals/wastes is solid in nature and disposed to authorised recycling facility M/s. Atlas Corporation located at Karur District, Tamil Nadu

#### Part G

# Impact of pollution abatement measures taken on conversion of natural Resources and on the cost of production

- Waste Heat Recovery Boiler in our Captive Power Plant I caters to our plant's steam requirement. By this, the exit of Flue Gas (Hot Gas) from the power plant to the atmosphere is avoided and procurement of LSHS Fuel (Fossil Fuels) & running of regular Boiler is reduced
- Natural Gas is used as fuel in our Captive Power Plant I, and we are utilizing the Flue Gas coming out of our Power plant to run the Waste Heat Recovery Boiler
- Waste Chlorine absorption system with Caustic circulation converts waste Chlorine gas into Sodium Hypo Chlorite, a value-added product. Hydrochloric Acid tail gas absorption system converts the HCl tail gas to dilute HCl, and is used for captive purposes

- RO rejects, Cooling water blow downs, Acidic waste water from ION Exchange Column and Other alkaline effluents are recycled into the system for conserving water
- Hydrogen, a clean fuel, is utilized in our Caustic Fusion plant
- Some of the Energy savings for the year are as follows,
  - We have saved 1,58,421.53 KWh of Electrical Energy by converting the existing Sodium Vapor Lamp & Mercury Vapor Lamp into LED fittings, by installing Energy Efficient Motors (IE-3) in place of Conventional Motors & by installation of VFDs
  - We have made 99,761.146 GJ of Energy Savings by Waste Heat Recovery Boiler based Steam generation in our Captive Power Plant I
  - Around 25,828.43 GJ of Energy saved by usage of Hydrogen, a clean fuel in our Caustic Fusion unit

#### Part H

# Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution

- Spent Rs. 1.6 Lakhs towards Integrated Management System Certification & for the procurement of required Certificates to fulfill Extended Producers Responsibility (EPR) Obligation
- Rs. 13.37 Lakhs have been spent towards Gardening & Green Belt Development measures
- Around Rs. 0.37 Lakhs paid for obtaining Public Liability Insurance
- Rs. 4.79 Lakhs spent on Environmental Monitoring which was done monthly by the approved external agency
- Expenditure on Operation & Maintenance of STP and Purchase of water treatment chemicals for ETP/ZLD was around Rs. 39.97 Lakhs
- Around Rs. 105.15 Lakhs was spent on Waste handling, storage, transportation & disposal
- Procurement, maintenance and calibration of Online Monitoring Sensors/Devices was done at a cost of Rs. 4.13 Lakhs
- Spent Rs. 1.07 Lakhs for other Environment improvement activities

#### Part I

## Any other particulars for improving the quality of the environment

- World Environment Day was celebrated on 05 JUN 2024 with pledge taking & tree sapling plantation. Employees, Contract persons and their family members participated in various competition and prizes were distributed to the winners
- Updated Oil Spill Contingency Plan (OSCP) of our Marine Terminal Facility (MTF) submitted to Indian Coast Guard Station (ICGS), Karaikal on 27 JUN 2024 (via letter dated 25 JUN 2024)
- Integrated Management System (IMS) First Surveillance Audit completed by the M/s. Bureau Veritas (India) Private Limited on 30-31 JUL 24. No Non-Compliance was raised by the Auditing team
- Central Pollution Control Board's (CPCB) EPR Obligation on Plastic Packing was fulfilled FY 2023-24 through the procurement of required Certificates on the EPR Portal and by filing the Annual Report on 30 AUG 2024
- One of our employees participated in the Technical Seminar (dated 16 SEP 2024) for the World Ozone Day-2024 on the title "Montreal Protocol: Advancing Climate Action" organized by Puducherry Pollution Control Committee (PPCC)
- Yearly Environmental Surveillance Study completed by external agency M/s. SMS Labs Services Private Limited, Chennai between 26-28 DEC 24

- Two of our employees participated in IMO OPRC (Oil Pollution Preparedness, Response & Co-operation) Level-1 Course conducted by Indian Coast Guard/ICG Pollution Response Team/ PRT (East), Chennai from 17-21 FEB 2025
- Our company's Sustainability Report FY 2024-2025 has been successfully approved in accordance with GRI Standards
- Environmental Monitoring was done monthly by external agency M/s. Interstellar Testing Center, Chennai FY 2024-25
- Corporate audits were carried out regularly with respect to Environmental Compliance and findings are closed appropriately
- Green belt development is carried out on a regular basis and existing green cover is maintained with dedicated manpower

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