

Ref: S&E/E.8-1/26

Date: 2nd June 2026

The Member-Secretary
Tamilnadu Pollution Control Board
76, Mount Road
Guindy
Chennai – 600 032.



Dear Sir,

Sub: Environmental Statement for the year 2025-2026 for SPIC Fertilizer Plant.

We are pleased to submit the Environmental Statement in Form-V pertaining to our SPIC Fertilizer plants at Tuticorin for the year ending 31st March 2026.

Thanking you,

For "Southern Petrochemical Industries Corporation Limited",

11.06.26
2/6/26
S.S Mani Vannan
General Manager

- cc.: 1. The District Environmental Engineer
Tamilnadu Pollution Control Board
C7 & C9, SIPCOT Industrial Complex
Meelavittan
TUTICORIN – 628 008.
2. The Joint Chief Environmental Engineer
Tamilnadu Pollution Control Board
30/2, Sidco Industrial Estate, Pettai
Tirunelveli – 627 010.



SPIC

ENVIRONMENT (PROTECTION) ACT 1986

ENVIRONMENT (PROTECTION) SECOND AMENDMENT RULES,
1992FORM-V

(See Rule 14)

Environmental statement for the financial year
Ending 31st March, 2026PART-A

- | | | | |
|------|--|---|--|
| i) | Name and address of the owner / occupier of the industry, operation or process | : | S.S. Mani Vannan
SPIC Limited
88, Mount Road, Chennai – 600 032.
M/s Southern Petrochemical Industries Corporation Limited,
SPIC Nagar, Tuticorin 628 005. |
| ii) | Industry Category | : | Red
Primary SIC No.2800
(Chemicals and allied products)

Secondary SIC No.2873
(Nitrogenous Fertilizers) |
| iii) | Production Capacity | : | |
| | a) Urea(Neem coated) | : | 7,59,200 MT/annum |
| iv) | Year of establishment | : | 1969 |
| v) | Date of the last environmental report submitted | : | 29.05.2025 |

Water and Raw Material Consumption

i) Water consumption		Average M ³ /Day (Actual)	
	Cooling	:	8355
	Process	:	1253
	Domestic	:	248
	Gardening	:	202
Sl. No.	Name of Products	Water Consumption per unit of products (M ³ /MT)	
		During the previous Financial year 2024-2025	During the current Financial year 2025-2026
1.	Urea	4.63	4.86

ii) Raw Material consumption

Sl. No.	Name of the Raw Material	Name of the Product	Consumption of raw material per unit of output	
			During the previous Financial year 2024-2025	During the current Financial year 2025-2026
1.	Naphtha	Ammonia	NIL	NIL
2.	Natural Gas (Kscm/MT)	Ammonia	1.0	0.95

PART - C

Pollution Generated

(Parameters as specified in the consent issued) whom so ever

Sl. No.	Pollutants	Quantity of Pollutants discharged mass/day	Concentration of pollutants discharged in mass/volume	Percentage of variation from prescribed standards with reasons
I	WATER:			
	pH	--	7.1- 8.2	All parameters are well within the prescribed standards
	AN	1.14 Kg/day	17.83 mg/l	
	TKN	0.74 Kg/day	11.5 mg/l	
II	AIR:			
1)	Urea Prilling Tower			No deviation from prescribed standards
	Particulate Matter	537.3 Kg/day	40.3 mg/ Nm ³	
2)	Reformer Flue gas			No deviation from prescribed standards
	NOx	89.88 Kg/day	25 mg/ Nm ³	
3)	GT HRSG			No deviation from prescribed standards
	NOx	154.2 Kg/day	55.1mg/ Nm ³	
	SO ₂	19.0 Kg/day	6.8 mg/ Nm ³	No deviation from prescribed standards

Effluent disposal to sea 64.20 M³/ Day (Only 248 days during the year)

PART - D
(Hazardous Wastes)

(as specified under Hazardous Wastes (Management and Handling) Rules, 1989)

Sl. No.	Hazardous Wastes	Total Quantity (MT)			Closing Stock & Mode of collection/ Treatment & Disposal
		Quantity generated during 2024 - 25	Quantity generated during 2025 - 26	Characteristics	
1)	Liquid Used Oil:				
a)	HW category 3.3 Sludge and filters contaminated with oil	Not generated	Not generated	Semi- solid	Nil
b)	HW Category 5.1 Used or Spent Oil	14.25 KL	29.31 KL	Oil	17.340 KL Spent oil collected in drums, sealed and kept for disposal.
2)	Solid Spent Catalyst : (Nitrogenous Fertilizer Plant)				
a)	HW Category 18.1 (Co and Mo catalyst)	10.682 MT	Not generated	Cobalt content: 3.5% w/w Molybdenum 6.0% w/w	Nil
b)	HW Category 18.1 Spent catalyst (LT vessel - Zn-Cu catalyst)	Not generated	Not generated	Zinc content : 35 % w/w Copper : 29.0% w/w	Nil
c)	HW Category 18.1 Spent catalyst (Zinc oxide Catalyst)	Not generated	Not generated	Zinc content : 7 % w/w	Nil
d)	HW Category 18.1 Spent catalyst (Methanator - Nickel catalyst)	Not generated	3.256 MT	Nickel content: 10 to 20 % w/w	Nil
e)	HW Category 18.1 Spent catalyst (Primary and Secondary Reformer - Nickel catalyst)	Not generated	Not generated	Nickel content: 10 to 20 % w/w	Nil
f)	HW Category 18.1 Spent catalyst (Converter Iron catalyst)	Not generated	Not generated	Fe content: 86%	Nil
e)	HW Category 18.1 Spent catalyst (Cu promoted iron catalyst)	Not generated	Not generated	Copper content: 29% w/w and Iron content - 86% w/w	Nil
3)	HW Category 33.1 Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	12.192 MT	3.691 MT	Barrels contaminated with hazardous chemicals /wastes	1.971 MT collected and kept for disposal

4)	HW Category 35.3- Chemical sludge from waste water treatment	51.58 MT	26.93 MT	Calcium carbonate sludge	26.93 MT is utilized in M.s Greenstar fertilizer limited as filler in DAP.
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PART - E**BY PRODUCT**

Sl.No.		Total Quantity (MT)	
		Generated During the previous financial year (2024 - 2025)	Generated During the current financial year (2025 - 2026)
1)	NIL	NIL	NIL
	<u>SOLID WASTES</u>		
1)	NIL	NIL	NIL

PART - F

Please specify characterisation (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

As specified in PART D and PART E:

We have become a member of **Industrial Waste Management Association- membership No: 1458**. The spent catalyst are sent to them for Landfill after treatment.(LAT)

PART - G

Impact of the pollution control measures on conservation of natural resources and on the cost of production:

SPIC firmly believes that industrial productivity and environmental protection are to co-exist. With the strong environmental concern and commitment, SPIC has taken great strides in prevention of pollution and protection of the precious environment. The various pollution control and monitoring measures have been helpful to bring about an overall improvement of the quality of water, air and land in the nearby environment. We have implemented several measures for waste minimization / pollution prevention.

1. Online monitoring of Ammonia and Particulate matter is done in Urea Prilling tower with

- investment of about Rs.40 lakhs and data transmitted to Care Air Centre, TNPCB from 29th March 2018.
2. Effluent Quality Monitoring System – Water Quality Watch software was installed with a cost of around Rs. 2 lakhs.
 3. Online monitoring of TSS in Integrated Effluent Treatment plant has been installed with an investment of about Rs 2.5 lakhs and connected to WQW from 07.02.20.
 4. Online monitoring of Ammonia plant – Reformer Flue gas stack NO₂ analyser was installed with an investment of about Rs. 1 lakhs, SO₂ analyzer at a cost of Rs.30 lakhs.Connected to Air Center from 09.12.19.
 5. Effluent Quality monitoring station was commissioned and uploaded to CPCB and TNPCB. (pH and sea flow were uploaded from 30.06.15 and AN from 13.10.2015)
 6. Ammonia Plant reformer stack flue gas online monitoring is done and transmitted to Care Air Center, TNPCB from June 2015.
 7. AAQ monitoring Station was commissioned and uploaded to Care Air Centre, TNPCB on 30.10.2015.
 8. Treated effluent is reused in M/s Greenstar Fertilizers Limited extensively.
 9. The Eco club in Spic nagar School is patronized by SPIC and many awareness programmes on Environment protection were conducted.
 10. We have obtained ISO 45001 and ISO 14001 certification .
 11. Natural gas has been used as fuel and feedstock for production of Ammonia since March 2021 and substantial reduction of SO₂ and NO_x has been achieved.
 12. We have stopped two numbers of fuel oil fired boilers after Ammonia plant modernization during the year since the steam requirement is met through waste heat recovery from process.
 13. Online SO₂ and NO_x Analysers for Boilers stack has been installed at the cost of Rs. 17.7 lakhs.
 14. Online monitoring of Ammonia plant – GT HRSG SO₂ NO_x analysers were installed with an investment of about Rs. 80 lakhs and connected to are Air Center from 10.05.2022.
 15. Effluent generated from urea is collected in collection pit and is utilized in process.
 16. 1798 MT of Plastic Waste was recycled through PRO as part of EPR Obligation. Out of which 1079 Cat - II is for End Of Life and 719 Cat – II for Recycling.
 17. Out of 22.7 MW generation of captive solar power production, 30% is used in SPIC.
 18. Electromagnetic flow meter was installed at Sea disposal line in IETP at a cost of Rs. 1.6 lakhs.
 19. We have also installed online effluent monitoring system at STP for the parameters pH.

TSS,flow, BOD and COD at a cost of Rs 23 Lakhs.

20. All Emission monitoring analysers were validated by third party NABL accredited lab.
21. Ambient and stack survey analysis carried out in all the plants through NABL accredited lab.
22. No Increase In Pollution Load study was carried out by NABET accredited party.
23. An online display of ambient air quality has been operational at the factory gate entrance area since 2015, displaying pollutant data to the general public. A new LED display board was procured and installed for public dissemination of Continuous Emission Monitoring System (CEMS) data and ambient air quality parameters, at a cost of ₹5.1 lakhs.
24. An amount of Rs. 2.99 lakhs has been invested in establishing connectivity to the OCEMS news portal through IoT devices.

Overall cost towards effluent treatment and statutory requirement was Rs. 380.90 lakhs. The break-up details is given:

Effluent Treatment Cost and Statutory requirement for Environment :		Rs.in Lakhs
Direct	Power for IETP	48.01
	Chemicals for IETP	197.75
Indirect	Salary and Statutory Fees	135.14
Total Cost of ETP and Statutory requirement		Rs. 380.90 Lakhs

PART - H

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

We are maintaining the green belt (more than 40.62 % of all over area.) 398 saplings have been planted during 2025-2026.

1. It is proposed to modernize Urea plant .The total amount of water utilised by the M/s SPIC Ltd. from TWAD will be reduced after proposed modernization. New process water recovery plant which recovers 750 KLD water and reuse as boiler feed in Ammonia plant.
2. Proposed modernisation involves a modernised ZLD plant, which will stop 600 KLD of marine disposal and reuse of 2,055KLD treated water in M/s Greenstar Fertilizers Ltd.
3. Treated effluent supply to M/s Greenstar Fertilizers Limited will be increased by 41%.
4. The total project cost for the modernization of urea plant is estimated to be 452 Crores.
5. The proposed CO2 Capture System will capture 98% of the CO2 through an advanced solvent carbon capture (ASCC) technology from flue gas sources.
6. New process water recovery plant which recovers 750 KLD water and reuse as boiler feed in Ammonia plant.

PART - IMiscellaneous

Any other particulars in respect of environment protection and abatement of pollution till March 2026.

1. Green Belt Development Programme is continuously carried out to improve the quality of the environment.
2. WORLD ENVIRONMENT DAY CELEBRATIONS:

Environment Quiz, Environment Day Pledge was conducted on World Environment Day 2025 theme given by UNEP. "Ending Plastic Pollution" was circulated in intranet for the benefit of employees and also distributed Manjal Pai (cloth bags) to promote the Tamil Nadu Government's "Meendum Manjal Pai" initiative. A special memento—a mobile stand crafted from discarded T-shirts—was presented to all participants, reinforcing the message of upcycling and sustainability.

Plantation of New Saplings:

World Environment day was celebrated on June 5th and 60 saplings were planted and about 398 trees were planted during the year 2025-2026.

3. World Earth Day was celebrated on April 22nd and 25 tree saplings were planted on that day. World Ozone Day was celebrated on September 16th and 25 tree saplings were planted around premises.
4. Regular refresher training programme is conducted for employees on Safety and Environment. "Environment management in SPIC" is one of the topics in the above training Programme.
5. Monitoring of stack emission and ambient air and water quality is being done regularly.
6. Maintenance department is carrying out regular checking and scheduled maintenance of all the pollution control devices.
7. Production & Administration departments taking care of housekeeping.
8. Dedicated Horticulture section is taking care of tree plantation and green belt development. Every year we are growing new trees.
9. 1107 Conventional Bulbs were replaced with LED bulbs across factory premises at the cost of Rs. 8.82 Lakhs as a part of energy reduction.
10. We have developed Miyawaki Forest by planting 500 saplings in land allocated by District authorities in Tuticorin.
11. Awareness created among school children and employees requesting to adopt "Mission LIFE" action points in their day to day life.
12. Energy optimization initiative involving installation of an additional intercooler to reduce power consumption

Signature :



Name and address of the person submitting the Environmental Statement Report :

S.S. Mani Vannan
General Manager

On behalf of
Name and Address of the Unit

M/s Southern Petrochemical Industries Corporation Limited,
SPIC Nagar,
Tuticorin 628 005.