

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



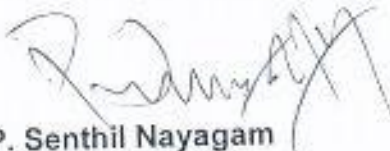
Respected Sir,

Sub: Environmental Statement for the year 2025 -2026 for Greenstar Fertilizers Limited Plants

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

Thanking you,

For "Greenstar Fertilizers Limited"


P. Senthil Nayagam
Technical Director



- 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.



Greenstar Fertilizers Limited

CIN : U24100TN2010PLC077127
REGD OFFICE : "SPIC HOUSE", No. 88, Mount Road, Guindy, Chennai - 600 032, Tamilnadu, India.
FACTORY : Muthiahpuram Post, Tuticorin - 628 005, Tamilnadu, India.
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Greenstar

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 : P. Senthil Nayagam
Technical Director,
SPIC nagar
Tuticorin,628005.
M/s Greenstar Fertilizers Limited,
SPIC Nagar, Tuticorin - 628 005.
- ii) Industry Category : Red
Primary SIC No.2800
(Chemicals and allied products)

Secondary SIC No. 2874
(Phosphatic Fertilizers)
- iii) Production Capacity (Reassessed capacity by MoEF)
- | | | |
|--------------------------------|---|-------------------|
| a) Di-Ammonium Phosphate (DAP) | : | 9,00,000 MT/annum |
| b) Aluminium Fluoride | : | 10,000 MT/annum |
| c) Single Super Phosphate/GSSP | : | 350 MT/day |
- iv) Year of establishment : Sulphuric Acid Plant :1975
Phosphoric Acid Plant:1976
DAP Plant Train I:1977
DAP Plant Train II: 1983
Aluminium Fluoride Plant : 1987
SSP : 2010
GSSP: 2023
- v) Date of the last environmental report submitted : 29.05.2025

PART – B**Water and Raw Material Consumption**

i)	Water consumption	:	Average M ³ /Day (Actual)
	Cooling	:	1572.0
	Process	:	169
	Domestic	:	146.0

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.	DAP I	0.34	0.29
2.	DAP II	0.34	0.29
3.	Aluminium Fluoride	6.5	6.2
4.	SSP/GSSP	0.20	0.17

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.	Sulphur	Sulphuric Acid	0.332	0.332
2.	Rock Phosphate	Phosphoric Acid	3.37	3.32
3.	Aluminium Hydroxide	AlF ₃	1.382	1.224
4.	Rock Phosphate	SSP/GSSP	0.589	0.560

PART - C
Pollution Generated
 (Parameters as specified in the consent issued)

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	<u>WATER:</u>		No Effluent Generation	
II	<u>AIR:</u>			
1)	Sulphuric Acid Plant: SO ₂	250.29 Kg/day	214.33 mg/Nm ³	No deviation from prescribed standards. The Sulphuric Acid plant is converted to DCDA Process.
	Acid Mist	5.498 Kg/day	4.71 mg/Nm ³	No deviation from prescribed standards
3)	Phosphoric Acid Plant:			
	Fluoride -TCA III	5.92 Kg/day	1.50 mg/Nm ³	No deviation from prescribed standards
	Fluoride HH Off Gas Stack	2.65 Kg/day	1.98 mg/Nm ³	No deviation from prescribed standards
	RG Mill Particulate matter	16.5Kg/day	38.08 mg/Nm ³	No deviation from prescribed standards
4)	DAP I Plants:			
	Particulate Matter	202.37 Kg/day	28.58 mg/Nm ³	No deviation from prescribed standards
	Fluoride	2.531 Kg/day	0.36 mg/Nm ³	No deviation from prescribed standards
	Ammonia	183.490 Kg/day	25.92 mg/Nm ³	No deviation from prescribed standards
5)	DAP II Plants:			
	Particulate Matter	210.01 Kg/day	39.42 mg/Nm ³	No deviation from prescribed standards
	Fluoride	4.529 Kg/day	0.85 mg/Nm ³	No deviation from prescribed standards
	Ammonia	214.896 Kg/day	40.33mg/Nm ³	No deviation from prescribed standards

	AIF3 Plant Particulate Matter	3.90 Kg/day	40.67 mg/Nm ³	No deviation from prescribed standards
	SO ₂	1 Kg/day	48.08 mg/Nm ³	No deviation from prescribed standards
6)	SSP Particulate Matter	15.30 Kg/day	42.50 mg/Nm ³	No deviation from prescribed standards
	Fluoride	0.264 Kg/day	0.73 mg/Nm ³	No deviation from prescribed standards
7)	GSSP Particulate Matter	74.52 Kg/day	34.50 mg/Nm ³	No deviation from prescribed standards
8)	Rock Unloading Plant Particulate Matter	54.36 Kg/day	25.17 mg/Nm ³	No deviation from prescribed standards

PART- D
(Hazardous Wastes)

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

Sl. No.	Hazardous Wastes	Total Quantity (MT)		Characteristics	Closing Stock & Mode of collection/ Treatment & Disposal
		Quantity generated during 2024 -2025	Quantity generated during 2025 -2026		
1.	Solid spent Catalyst: (Sulphuric Acid Plant)				
	HW Category 17.2 Sulphuric Acid Plant Converter Catalyst	Nil	41.200	V ₂ O ₅ - 3% w/w	Nil

2.	HW Category 17.1 Process acidic residue, filter cake, dust	25.35	24.09	Solid	Nil
3.	Used or Spent oil HW Category : 5.1	2.60	2.92	Oil	2.500
4.	Empty barrels/containers/lin ers contaminated with hazardous chemicals /wastes HW Category : 33.1	28.386	16.8	Solid	28.492

HW Category 35.3-Chemical sludge from waste water treatment of M/s. SPIC of quantity 26.93 MT is reused in DAP plants as fillers.

PART - E

BY PRODUCT

S.No	BY PRODUCT	Total quantity (MT)	
		Generated during the previous financial year 2024 - 2025	Generated during the current financial year 2025 -2026
1.	From Process: Phosphogypsum generated from Phosphoric Acid Plant	1256460	1296360
	Gypsum Sold	867485.15	722514.45
2.	From Process: Silica generated from Aluminium Fluoride Plant and Phosphoric acid	3293.935	2542
	Silica sold	3064.69	3321.27
<u>SOLID WASTE : Nil</u>			

PART - F

Please specify characterization (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: 1459.** Hazardous waste authorization also obtained from TNPCB. Generated Hazardous waste is being disposed to authorized recyclers or to authorized TSDF.

PART - G

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

Greenstar Fertilizers Limited firmly believes that industrial productivity and environmental protection are to co-exist. With the strong environmental concern and commitment, Greenstar Fertilizers Limited 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 vicinity. We have implemented several measures for waste minimization / pollution prevention.

1. SA plant stack SO₂ online continuous monitoring is done and transmitted to care air centre, TNPCB from May 2013. DAP I and II Plants Ammonia analyzers were lined up to care air centre from February 2016.
2. Startup scrubber commissioned and lined up with SO₂ Stack to reduce SO₂ emission to environment.
3. Major part of treated effluent from SPIC is reused in Greenstar Plant to conserve raw water.
4. Ambient HF was monitored through online analyzer and the connectivity was lined up to IEMS, TNPCB from August 2018.
5. HF Analyzers were installed in DAP and PA Plant Stacks and Data is being transmitted to IEMS, TNPCB since December 2019.
6. Installed Remote calibration facility for SA plant SO₂ Analyzer from July 2020 onwards.
7. We have obtained ISO 45001 and ISO 14001.
8. PM analyzers were installed in RG Mill Stack and Data is being transmitted to Care air Centre, TNPCB since November 2020.
9. HF analyzer was installed in SSP plant stack and Data is being transmitted to Care air Centre, TNPCB since February 2021.
10. PM analyzers were installed in DAP- I, DAP- II and SSP Plant Stacks and Data is being transmitted to Care air Centre, TNPCB since January 2021.
11. HF analyser was installed in DAP II plant and data is being transmitted to Care air Centre, TNPCB since 21.10.2021.
12. 1762 MT of Plastic Waste was recycled through Resustainability Recycling Pvt.Ltd as part of EPR Obligation for 2025-26. Out of which 1045 MT Cat - II , 697 MT for End Of Life and 12 MT Cat - II , 8 MT for recycling.
13. AIF3 plant effluents are reused in DAP plants for scrubbing.
14. 70% of captive solar power production is used in Greenstar Fertilizers Limited.
15. Dilution air was hooked up in sulphuric acid plant to improve SO₂ conversion thus reducing stack loss.
16. PM analyser was installed in GSSP plant at the cost of Rs.4.95 Lakhs and data is being transmitted to Care Air Centre, TNPCB since 5.02.2024
17. STP Continuous effluent monitoring system was installed at the cost of Rs.17 lakhs and data is being transmitted to WQW TNPCB since 20.10.2023
18. All Emission monitoring analysers were validated by third party NABL accredited lab.

19. Ambient and stack survey analysis carried out in all the plants through NABL accredited lab.
20. New Ammonia Add-on HF analyzer was installed at the cost of Rs. 22 Lakhs in DAP plants.
21. No Increase In Pollution Load study was carried out by NABET accredited party.
22. All the analyzers were regularly maintained at the cost of Rs.5.41 lakhs.
23. Renovation of dedusting system in rock handling area at the cost of Rs. 1.96 Crores. New PM analyser was installed in dedusting system at the cost of Rs.4 Lakhs.
24. Establishment of new metered pumping system from DAP plant and canteen sewage sump to STP ensuring proper sewage management.
25. An ambient air quality has been monitored online and it has been displayed at the factory gate entrance area which shows the pollutant data for the general public. An amount of ₹ 4.6 lakhs was incurred towards the procurement of an LED display board for public dissemination of Continuous Emission Monitoring System (CEMS) data and ambient air quality parameters.
26. An amount of Rs. 5.11 lakhs has been invested in establishing connectivity to the OCEMS news portal through IoT devices.

5) Overall cost towards APC measures and statutory requirements towards environment protection was Rs 143.65 Lakhs. The break-up details is given:

		<u>Rs. in Lakhs</u>
Direct	Chemicals for APC Measures	72.60
Indirect	Salary and Statutory Fees	71.05
Total Cost of chemicals and statutory requirements		143.65

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

1. We are maintaining the green belt more than 34.73% of all over area inside factory and nearby township. Totally 501 trees have been planted in the year 2025-2026.
2. We have incorporated the dry mode of gypsum conveying system instead of gypsum slurry mode to impervious gypsum dyke.
3. As per CPCB guidelines, Gypsum pond is converted into impervious lined pond at cost of 12crores.
4. Installed Natural Gas in DAP and Alf3 plant furnaces which lowers carbon footprint.
5. We have increased stack height in HH off gas section in Phosphoric acid plant by 6 meters to enhance dispersion of plume.
6. Bag filters have provided in rock unloading dedusting area in place of dry cyclones .

PART – I Miscellaneous

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. 501 trees were planted during the year 2025-2026.

WORLD ENVIRONMENT DAY CELEBRATIONS:

2. 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:

3. World Environment day was celebrated on June 5th and 60 saplings were planted and about 501 trees were planted during the year 2025-2026.
4. World Ozone Day was celebrated on September 16th and 25 tree saplings were planted around premises.
5. Regular refresher training programme is conducted for employees on Safety and Environment. "Environment management in Greenstar Fertilizers Limited" is one of the topic in the above training Programme.
6. Monitoring of stack emission and ambient air and water quality is being done regularly.
7. Maintenance department is carrying out regular checking and scheduled maintenance of all the pollution control devices.
8. Production & Administration departments taking care of housekeeping.
9. Dedicated Horticulture section is taking care of tree plantation and green belt development. Every year we are growing new trees.
10. Part of treated effluent water generated from SPIC Ltd., is being used for Green Belt development inside the Factory premises.
11. Environment Monitoring were carried out around the Phosphogypsum stack by CVR labs and the reports were submitted to TNPCB.

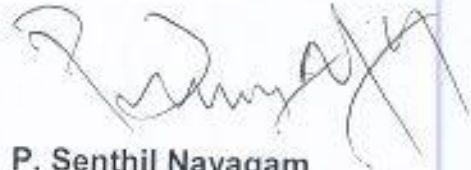
12. 1230 Conventional Bulbs were replaced with LED bulbs across factory premises at the cost of Rs. 15.86 Lakhs as a part of energy reduction.
13. We have developed Miyawaki Forest by planting 500 saplings in land allocated by District authorities in Tuticorin.
14. Provision of a flow meter in the dryer cyclonic scrubber pump discharge line to ensure scrubbing flow monitoring, optimize scrubbing efficiency, and minimize environmental impact
15. Awareness created among school children and employees requesting to adopt "Mission LiFE" action points in their day to day life.

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

DAP plants:

- Installation of inclined venturi optimizes gas velocity and turbulence, leading to improved particulate and ammonia removal efficiency in the scrubber system.
- Implementing a dual pipe reactor technology improves heat transfer and material processing, resulting in decreased fuel requirements for the drying process.
- Installation of new dryer venturi scrubber with cyclonic column reduces ammonia slip in stack release.
- Upgradation of Sprayers in Fume Scrubber Cyclonic Column in DAP Plants improves scrubbing efficiency.
- Addition of new cooler cyclone and fan improves product recovery and reduces the dust emission.

Signature :



Name and address of the person
submitting the Environmental
statement report

P. Senthil Nayagam
Technical Director

On behalf of
Name and Address of the Unit

M/s Greenstar Fertilizers Limited
SPIC Nagar, Tuticorin 628 005.