

CE/ EHS/ TNPCB / 09 2023

21<sup>st</sup> September 2023

To

The District Environmental Engineer  
Tamil Nadu Pollution Control Board,  
77A, South Avenue Road,  
Ambattur Industrial Estate,  
Chennai - 600058

Dear Sir,


**Sub: Environmental Statement for financial year ending 31.03.2023 - Submission - Reg**

As per the requirement of Environment Protection Rules, 1986. We hereby furnish three copies of Environment statement in Form V for the period of 2022 -2023 ending March - 2023.

Thanking Yous

Yours faithfully

For Coromandel International Ltd,

  
**S. Ramesh**

Sr. General Manager - Manufacturing

Cc to:

1. The Joint Chief Environmental Engineer (M)  
Tamil Nadu Pollution Control Board,  
First floor, 950/1, Poonamallee High Road  
Arumbakkam, Chennai - 600106.
2. The Member Secretary  
Tamil Nadu Pollution Control Board  
76, Mount Road,  
Chennai - 600032



  
22/9/23

CE/ EHS/ TNPCB / 09 2023

21<sup>st</sup> September 2023

To

The District Environmental Engineer  
Tamil Nadu Pollution Control Board,  
77A, South Avenue Road,  
Ambattur Industrial Estate,  
Chennai - 600058

Dear Sir,

**Sub: Environmental Statement for financial year ending 31.03.2023 - Submission - Reg**

As per the requirement of Environment Protection Rules, 1986. We hereby furnish three copies of Environment statement in Form V for the period of 2022 -2023 ending March - 2023.

Thanking You

Yours faithfully

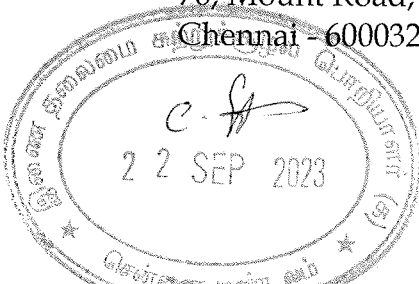
For Coromandel International Ltd,

  
**S. Ramesh**

Sr. General Manager - Manufacturing

Cc to:

1. The Joint Chief Environmental Engineer (M)  
Tamil Nadu Pollution Control Board,  
First floor, 950/1, Poonamallee High Road  
Arumbakkam, Chennai - 600106.
2. The Member Secretary  
Tamil Nadu Pollution Control Board  
76, Mount Road,  
Chennai - 600032



# Coromandel International Limited, Ennore

## FORM-V

Environmental Statement for Financial Year Ending 31<sup>st</sup> March-2023

### PART-A

- |      |   |  |
|------|---|--|
| I.   | Name & address of the owner/occupier of the industry operation or process | Mr. S. SANKARASUBRAMANIAN<br>Executive Director<br>Coromandel International Ltd,<br>Compound Fertilisers Factory,<br>Ennore Express Highway,<br>Ennore, Chennai 600057.                          |
| II.  | Industry Category   | Primary - 2800<br>Secondary - 2874   |
| III. | Production Capacity   | Ammonium Phosphate<br>Potash Sulphate            3, 00,000 TPA<br><br>Phosphoric Acid            66,000 TPA<br>Sulphuric Acid            2, 58,000 TPA<br>Gypsum (By-product):    41,000 T/Month |
| IV.  | Year of Establishment   | 1963   |
| V.   | Date of last Environmental statement Submitted                            | 23rd August 2022   |

# Coromandel International Limited, Ennore

## PART-B

### WATER & RAW MATERIAL CONSUMPTION:

#### (1) Water Consumption (m<sup>3</sup>/Day)

Process : 1134.87

Domestic : 30.97

Cooling : 808.98

Sl. No	Name of the Products	Process Water Consumption per unit of product output (Kiloliter/Ton of product)	
		During the Previous financial year (2021 -22)	During the current financial year (2022-23)
1	Ammonium Phosphate Sulphate (Grade 16:20)	2.750	5.170
2	Ammonium Phosphate Sulphate (Grade 15:15)	0	4.710

\*Specific Water consumption was raised due to low final product (Fertilizer) production and High Acid Production

#### (2) Raw Material Consumption:

Sl. No	Name of the Raw Materials	Name of Products	Consumption of raw material per unit (Ton/ Ton of product)	
			During the Previous Financial year (2021-22)	During the Current Financial year (2022-23)
1	Ammonia	Ammonium Phosphate Potash Sulphate 16:20 15:15	0.1977 0	0.1977 0.179
	Sulphuric Acid	16:20 15:15	0.398 0	0.398 0.330
	Phosphoric Acid	16:20 15:15	0.203 0	0.203 0.155
2	Rock Phosphate	Phosphoric Acid	3.250	3.093
	Sulphuric Acid		2.897	2.725
3	Sulphur	Sulphuric Acid	0.327	0.327

## Coromandel International Limited, Ennore

### PART-C

#### Pollutants Discharged to Environment

##### (a) Water: Multi- Effect Desalination Reject

Pollution	Quantity of Pollutants discharged. (kg/day)	Concentration of Pollutants discharged (mg/litre)	Percentage of variation from prescribed standards with reason
Phosphates (P)	1.0	<u>1.11</u>	Not specified
Fluoride	0.1	0.11	Well within the limit
Ammonical Nitrogen	3.0	3.34	Well within the limit
BOD	5	5.56	Well within the limit
COD	44.66	49.69	Well within the limit
*Sulphate as SO <sub>4</sub>	2250	2503.43	Well within the limit

\* Due to the high range of Sulphate in Influent itself.

##### (b) Air:

Pollution	Quantity of Pollutants discharged. (kg/day)	Concentration of Pollutants discharged. (mg/m <sup>3</sup> )	Percentage of variation from prescribed standards with reason
SAP 1 - Sulphur dioxide	157.64	<u>205.25</u>	Well within the limit
SAP 2 - Sulphur dioxide	244.95	307.23	Well within the limit
SAP 1 - Acid Mist	8.58	73.06	Well within the limit
SAP 2 - Acid Mist	11.23	68.26	Well within the limit
PAP - Total Fluoride	0.99	4.0	Well within the limit
PAP - SPM	4.45	18	Well within the limit
APS - SPM	157.48	118	Well within the limit
APS - Ammonia	46.71	35	Well within the limit
APS - Total Fluoride	1.74	1.3	Well within the limit

# Coromandel International Limited, Ennore

## PART-D

### HAZARDOUS WASTES

{As specified under Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.}

**(a) From Process:**

Hazardous Waste	Total Quantity	
	During the Previous financial year (2021-22)	During the Current financial year (2022-23)
Spent catalyst. Vanadium Pent oxide (MT)	8.370	7.810
Used Oil (Liters)	4680	6000

**(b) From Pollution Control facilities:**

Hazardous Waste	Total Quantity (kg)	
	During the previous financial year (2021-22)	During the current Financial year (2022-23)
-	-	-

## PART - E

### SOLID WASTES

	Total Quantity (kg)	
	During the previous financial year (2021-22)	During the current financial year (2022-23)
(a) From Process	-	-
(b) From Pollution Control Facility	-	-
(c)		
1. Quantity Recycled or re-utilized within the unit Total Sulphur - Presence in the wastes (Sulphur Slag)	116.51 MT	114.48 MT
2. Sold		
3. Disposed/ Reused in Fertilizer plant as a Filler	152.56 MT	86.65MT

## Coromandel International Limited, Ennore

### PART-F

#### Characteristics of Solid Waste:

Plastic Wastes	9.8 Tons	Send to Recyclers
Metal Wastes	367.46 Tons	Sent to authorized recyclers
Rubber Wastes	0 Tons	Send to Recyclers
Aluminum Wastes	5.65 Tons	Send to Recyclers
Electrical waste (Waste cables)	2.22 Tons	Send to authorized recyclers
Stainless Steel Wastes	0 Tons	Send to Recyclers

### PART-G

#### Impact of Pollution Abatement Measures taken on conservation of natural resources and on the cost of production:

Solar power utilization for lighting purpose – 8 KVA

### PART- H

#### Additional Pollution Abatement measures:

1. To ensure the efficiency and performance of scrubbers, technical third parties were engaged in Air Pollution Control Device (APCD) Efficiency Study and based on the report outcome it is confirmed that scrubber efficiencies met the design efficiency.
2. Water Audit & Water Management study conducted through technical third parties based on the report outcome to identify the gaps and reduced the water consumption.
3. ISO 50001:2015 Energy Management System (EnMS) implemented and certified by third party.
4. Existing Sewage Treatment Plant completely revamped, and additionally Tertiary treatment (PSF& ACF) installed and improved the treated water quality.
5. As per CPCB revised guidelines for OCEMS, AAQ Weather Monitoring Station is replaced with advanced technology.
6. As per CPCB revised guidelines for OCEMS, data transmission to CPCB and SPCB methodology architecture revamped, and cloud data storage facility enabled.
7. As per CPCB Emission Regulations Part-3 guidelines all stack platform for monitoring revamped to 360°

## Coromandel International Limited, Ennore

8. Environmental Management System ISO 14001:2015 periodical audit completed successfully.
9. A Part of greenery development in Ammonia Terminal for additionally 1000Nos. plantation done as per Kurunkadugal scheme.
10. Plant premises and approach road area around 15,000 Sq. m greenery development.
11. Spent catalyst was completely disposed to TNWML as per HW Authorization.
12. Sulphuric acid circulation tank, gas ducts and acid line replacement to avoid the leakages during operation.

.....