

Chettinad Cement/Ariyalur/Environmental Statement/CPP /2023-24/ 154

25th Sep, 2024

To
The Member Secretary,
Tamil Nadu Pollution Control Board
76, Anna Salai, Guindy
Chennai – 600 032.

Respected Sir,

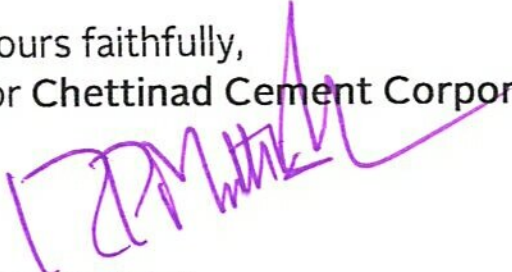
Sub : Submission of Environmental Statement in “Form V” under Environment (Protection) Rules, 1986 for the year 2023-24 - Chettinad Cement Corporation Private Limited, Captive Power Plant, Keelapalur, Ariyalur District, Tamilnadu

We herewith submit the “Environmental Statement” pertaining to our Chettinad Cement Corporation Private Limited - Captive Power Plant, in the prescribed format (Form V) under Environment (Protection) Rules, 1986 for the year 2023-2024.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully,
for Chettinad Cement Corporation Private Limited



R.P. Muthiah
Vice President [Works]

Copy to :

1. Regional Director CPCB, Chennai
2. Dy. Director General of Forest, IRO, MoEF & CC, Chennai
3. JCEE, TNPCB, Trichy
4. DEE, TNPCB, Ariyalur

FORM - V

(See rule 14 of Environment (Protection) Rules, 1986)

Environmental Statement for the Financial Year ending the 31st March 2024

PART – A

- (i) Name and address of the owner / occupier of the industry operation or process. : R. P. Muthiah,
Vice President [Works]
Chettinad Cement Corporation Private Limited,
Captive Power Plant
Keelapaluvur Village,
Ariyalur District
Tamilnadu
Pincode : 621 707
- (ii) Industry category
Primary (STC Code) : Red Large
Secondary (SIC Code) : 1048-Thermal Power Plant
- (iii) Production Capacity : 45 MW
- (iv) Year of Establishment : 2009
- (v) Date of Last Environment Statement submitted : 27.09.2023

PART – B

Water and Raw Material Consumption

(i) Water Consumption (m³/day)

Process : 67
Cooling : 37
Domestic : 3

Name of the Product	Process water consumption (m ³) per MW of Product Output	
	During the Previous Financial Year (2022-2023)	During the Current Financial Year (2023-2024)
Power	0.194	0.162

(ii) Raw Material Consumption

Name of the Raw Material	Name of the Product	Consumption of Raw Material (metric ton) per mw of Output	
		During the Previous Financial Year (2022-2023)	During the Current Financial Year (2023-2024)
(1) Fuel –Total	Power	0.597	0.586
Split up:			
Imported coal		0.501	0.580
Indian Coal		0.0	0.0
Others [Lignite]		0.072	0.0
AFR Fuel		0.024	0.006

Alternate Fuels & Raw Materials :

Alternate Fuel	Total Quantity in MT	
	During the Previous Financial Year (2022-2023)	During the Current Financial Year (2023- 2024)
(a) Rice Husk	3357	898

PART – C

Pollution Discharged to Environment / Unit of output (Parameter as specified in the Consent issued)

Pollutant	Quantity of Pollutant Discharged (mass/day) (kg/day)	Concentrations of Pollutants in Discharges (Mass/volume) Mg/litre except pH	Percentage of variation from prescribed standards with reasons
(a) Water			
pH	Not Applicable	7.8	Less than Norm
TDS	28.50	1369	Compared to Norm Less by 34.8 %
TSS	0.37	18	Compared to Norm Less by 84.5 %
BOD	0.13	8	Compared to Norm Less by 89.4 %
COD	0.85	41	Compared to Norm Less by 83.7 %
Chloride	8.62	414	Compared to Norm Less by 58.6%
Sulphate	5.31	255	Compared to Norm Less by 74.5 %

Pollutant	Quantity of Pollutant Discharged (mass/day) (kg/day)	Concentrations of Pollutants in Discharges (Mass/volume) mg/Nm ³	Percentage of variation from prescribed standards with reasons
(b) Air			
PM	211	21.2	Compared to Norm Less by 57.6 %
SO ₂	2565	257.2	Compared to Norm Less by 57.1 %
NO _x	1418	142.2	Compared to Norm Less by 68.4 %

PART – D

Hazardous Wastes

(As specified under [Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2016])

Hazardous Waste		Total Quantity Generated in MT	
		During the Previous Financial Year (2022-2023)	During the Current Financial Year (2023-2024)
(a)	From Process Used Oil (Category No 5.1)	1.34	0.0
(b)	From Pollution Control Facilities	NIL	NIL

PART – E

Solid Wastes

Solid Waste		Total Quantity in metric tons	
		During the Previous Financial Year (2022-2023)	During the Current Financial Year (2023-2024)
(a)	From Process:	NIL	NIL
(b)	From Pollution Control Facilities- Generated		
	a. STP Sludge	Nil	
	b. Fly Ash	9621.32	
	c. Bottom Ash	192.49	
(c)	1. Quantity recycled or re-utilized within the unit		
	a. STP Sludge	Nil	
	b. Fly Ash	9621.32	
	c. Bottom Ash	192.49	
	2. Sold		
	a. STP Sludge	NIL	NIL
	b. Fly Ash	NIL	NIL
	c. Bottom Ash	NIL	NIL
	3. Disposed		
	a. STP Sludge	NIL	NIL
	b. Fly Ash	NIL	NIL
	c. Bottom Ash	NIL	NIL

PART – F

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

Name of the Waste		Quantity	Characteristics	Disposal Practice Adopted
(1)	Hazardous Waste Used / Spent Oil (Category No.5.1)	Opening Stock (01.04.2023) : 0.0 Tons Generation (Apr'23-Mar'24): 0.0 Tons Disposal/ Consumption (Apr'23-Mar'24): 0.0 Tons Closing Stock (31.03.2024) : 0.0 Tons	Waster Oil containing 6000-8000 kcal/Kg of GCV and Less than 5ppm of Cd+Cr+Ni	NIL
(2)	Solid Waste Fly Ash	Opening Stock (01.04.2023) : Nil Generation (Apr'23-Mar'24): 9621.32 tons Consumption In Cement Plant (Apr'23-Mar'24): 9621.32 tons Closing Stock (31.03.2024) : Nil	Solid Containing SiO ₂ : 70-80%, Fe ₂ O ₃ : 2-5 % LOI : 4 -6 % Al ₂ O ₃ : 18-30%	100 % of Fly ash is used in our Cement plant located within the same premises for cement production
(3)	Solid Waste Bottom Ash	Opening Stock (01.04.2023) : NIL Generation (Apr'23-Mar'24): 192.49 tons Consumption In Cement Plant (Apr'23-Mar'24): 192.49 tons Closing Stock (31.03.2024) : NIL	Solid, Its contains SiO ₂ : 25-35%, Fe ₂ O ₃ : 2-3% LOI : 10-15% K ₂ O+Na ₂ O: <1%	100% reused within the premises (replacement of Boiler bed materials, used as sand for masonry works)

PART – G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production

- Specific water consumption reduced from 0.282 tons to 0.194 tons per mw of Power Generation.
- 9621.32 Ton of Captive power plant Fly ash reused in the cement plant.
- 898 MT of Rice Husk used as Alternate fuels in the Boiler.

PART – H

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

Investment Proposal for Environmental Protection for the year 2024-25

- Rs. 15.0 Lakhs for Air Pollution Control Measures which will include replacement of Bag Filters & ESP Maintenance etc.,
- Rs 3.0 Lakhs for Water Pollution Control Measures which include replacement of equipments, spares and maintenance etc.

PART – I

Any other particulars for improving the quality of environment

- ❖ Maintenance of Pollution Control Equipment/ETP to ensure effective and efficient operation of the same, costing Rs. 5.8 Lakhs
- ❖ Environmental Monitoring costing Rs 5.52 Lakhs to assess the effectiveness of Pollution Control Measures and initiate required action, if any required.
- ❖ Quality Management System (ISO 9001), Environmental Management System (ISO 14001) and Occupational Health & Safety Management System (ISO 45001) are in place to ensure that all operations are carried out in compliance with international standards.
- ❖ We created awareness among our employees by giving “Life Style for Environment” on the topic of “Ban Plastic” in the plant area on 23.05.2023
- ❖ We celebrated World Environment day-2023 on 05.06.2023 theme “Beat Plastic Pollution” by planting saplings and created awareness among employees.
- ❖ Tree sapling plantation done in our unit by District Forest Officer, Green Tamil Nadu Mission to celebrate Former Chief Minister Century Event on 03.08.2023
- ❖ We celebrated International Day of Clean Air for Blue Skies - 2023 on 07.09.2023 theme “Together for Clean Air” by planting saplings and created awareness among employees.
- ❖ We Celebrated World Ozone Day-2023 on 16.09.2023, theme “Montreal Protocol: fixing the ozone layer and reducing climate change, by planting saplings and created awareness among employees.

- ❖ Deepavali Awareness on Air & Noise Pollution caused by Bursting of Crackers – 2023 given to our Colony residents and Employees on 09.11.2023 as per the “Compliance of Hon’ble Supreme Court Order dt. 23.10.208 in W.P.(C) No. 728 of 2015”
- ❖ National Energy Conservation day 2023 celebrated on 14.12.2023 by planting saplings in the plant premises and created awareness among the employees.
- ❖ National Safety Week - 2024 celebrated on 15.03.2024 by planting saplings in the plant premises and created awareness among the employees.

Place : Keelapalur
Date : 26.09.2024

(Signature of the Authorised Person)

Name : R.P. Muthiah

Designation : Vice President (Works)

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