

Chettinad Cement/Ariyalur/Environmental Statement/Cement Plant/2023 -24/ 153

25th Sep, 2024

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

Respected Sir,

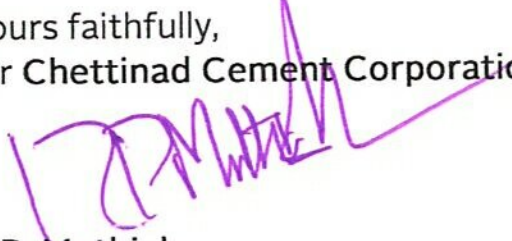
Sub : Submission of Environmental Statement in “Form V” under Environment (Protection) Rules, 1986 for the year 2023-24 - Chettinad Cement Corporation Private Limited, Cement Plant, Keelapalur, Ariyalur District, Tamilnadu

We herewith submit the “Environmental Statement” pertaining to our Cement Plant in the prescribed format (Form V) under Environment (Protection) Rules, 1986 for the year 2023-24.

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
Cement Plant
Keelapalur
Ariyalur District
Tamilnadu
Pincode : 621 707
- (ii) Industry category :
Primary (STC Code) : Red Large
Secondary (SIC Code) : 1026- Cement
- (iii) Production Capacity : 5.5 million tons per annum (mtpa)
- (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	:	395
Cooling	:	43
Domestic	:	195

Name of the Product	Process water consumption (m ³) per unit (metric ton) of Product Output	
	During the Previous Financial Year (2022-2023)	During the Current Financial Year (2023-2024)
Cement	0.046	0.067

(ii) Raw Material Consumption

Name of the Raw Material		Name of the Product	Consumption of Raw Material (metric ton) per unit (metric ton) of Output	
			During the Previous Financial Year (2022-2023)	During the Current Financial Year (2023- 2024)
(1)	Lime stone	Clinker	1.096	0.888
(2)	Clay		Nil	Nil
(3)	Feldspar		Nil	Nil
(4)	Laterite		0.021	0.013
(5)	Fuel –Total		0.053	0.054
	Split up: Imported coal		0.038	0.039
	Indian Coal		0.0	0.0
	Indian Petcoke		0.029	0.031
	Imported Petcoke		0.011	0.005
(5)	Gypsum	Cement	0.034	0.034
(6)	Fly Ash		0.122	0.116
(7)	Slag		0.050	0.002

Alternate Fuels & Raw Materials :

Hazardous Waste		Total Quantity Co processed in MT	
		During the Previous Financial Year (2022- 2023)	During the Current Financial Year (2023- 2024)
(a)	Hazardous Waste	9325.353	10788.96
(b)	Non Hazardous wastes	1218.954	3090.09
(c)	MSW, Colony RDF & Plastic Wastes from ULBs	4529.873	12469.654

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	Not Applicable	Less than Norm
TSS	2.34	18.0	Compared to Norm Less by 40.2 %
BOD	1.49	11.4	Compared to Norm Less by 43.1 %
COD	7.64	58.6	Compared to Norm Less by 76.6 %

Pollutant	Quantity of Pollutant Discharged (mass/day) (kg/day)	Concentrations of Pollutants in Ambient Air (Mass/volume) mg/Nm ³	Percentage of variation from prescribed standards with reasons
(b) Air			
PM	330	24	Compared to Norm Less by 19.6 %
SO ₂	44	3	Compared to Norm less by 96.7%
NOx	7711	564	Compared to Norm Less by 29.4 %

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)	4.5	1.2
(b)	From Pollution Control Facilities	NIL	NIL

PART – E

Solid Wastes

Solid Waste		Total Quantity (Kg)	
		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 STP Sludge.	960	855
(c)	1. Quantity recycled or re-utilized within the unit STP Sludge.	960	855
	2. Sold STP Sludge.	NIL	NIL
	3. Disposed STP Sludge.	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 Wastes		Quantity	Characteristic s	Disposal Practice Adopted
(1)	Hazardous Waste Used / Spent Oil (Category No.5.1)	Opening Stock (01.04.2023) : Nil tons Generation (Apr'23-Mar'24) : 1.2 tons Disposal/ Consumption (Apr'23-Mar'24) : Nil tons Closing Stock (31.03.2024) : Nil tons	Waster Oil containing 6000-8000 kcal/Kg of GCV and Less than 5ppm of Cd+Cr+Ni	Spent oil 1.2 MT generated & sent to PCB authorized recycler.
(2)	Solid Waste STP Sludge	Opening Stock (01.04.2023) : Nil tons Generation (Apr'23-Mar'24): 855 tons Disposal/ Consumption (Apr'23-Mar'24): 855 tons Closing Stock2 (31.03.2024) : Nil tons	Organic matter containing Nitrogen 4%, Phosphorous 0.6%, Potassium 0.5%	Dried sludge used as manure for Green Belt Development

PART – G

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

- Around 26348.704 ton of Alternative Fuel & Raw materials (Hazardous and Other wastes) consumed for the year 2023-24.
- Out of Total 26348.704 Ton AFR materials, 12469.654 Ton of MSW, RDF, MLP & PW has been utilized.
- ETP sludge Consumption increased from 7952.551 Ton to 8543.817 Ton
- Around 9621.320 Ton of Captive power plant Fly ash reused in the cement plant.
- Green Belt Development area covered 33.42% (29.14 hectares @ 61200 trees) in the total plant area.
- Specific water consumption 0.067 m³/ton of product.

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. 100 Lakhs for Air Pollution Control Measures which will include replacement of Bag Filters, ESP Maintenance, Concrete Road repairs and maintenance etc.,
- Rs 40.0 Lakhs for Water Pollution Control Measures which include replacement of equipments, spares and maintenance etc.
- Rs 5.0 Lakhs for other Environmental Protection Measures like plantation of saplings, road sweeping, Horticulture, Gardening, maintaining rainwater harvesting structures etc.,
- AFR Operation and Handling Costs of Rs. 200 Lakhs

PART – I

Any other particulars for improving the quality of environment

- ❖ Routine & Proper maintenance of Pollution Control Equipments including STP ensured for effective and efficient operation of the same. Maintenance Cost of Pollution Control Equipment during 2023-24 was Rs. 129 Lakhs.
- ❖ Environmental Monitoring carried out to assess the effectiveness of Pollution Control Measures which costs during 2023-24 was Rs. 21.07 Lakhs
- ❖ AFR materials Receipt, unloading, Handling charges for the year 2023-24 was Rs. 256.3 Lakhs.

- ❖ Quality Management System (ISO 9001), Environmental Management System (ISO 14001), Occupational Health & Safety Management System (ISO 45001) and Energy Management System (ISO 50001) 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.
- ❖ 2 nos. of Kurunkadugal Development completed 1) 1000 nos. of Saplings in 6.0 Acres in our Karuppur Keelapalur LS Mines and 2) with 1000 nos. of saplings in 6.0 Acres in our Arungal LS mines
- ❖ We have contributed Rs. 12.58 Lakhs for various CSR activities during the FY 2023-24
- ❖ We have handed over Rs. 7.0 Lakhs to DFO, Ariyalur for the Karaivetti Bird Sanctuary infrastructure development in an Environmental perspective through CER Activities FY 2023-24
- ❖ We have contributed Rs. 4.3 Lakhs to Alagappa School, Keelapalur & Thirumanur PHC for Infrastructure development of their premises for the FY 2023-24

Place : Keelapalur

Date : 25.09.2024

[Signature of the Authorized Person]

Name : R. P. Muthiah

Designation : Vice President [Works]

guk