



Chettinad Cement/Ariyalur/Environmental Statement/CPP /2021-22/ 235

26th Sep, 2022

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

Respected Sir,

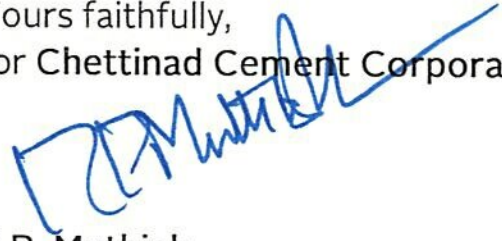
Sub : Submission of Environmental Statement in "Form V" under Environment (Protection) Rules, 1986 for the year 2021-22 - Chettinad Cement Corporation Private Limited, Captive Power Plant, Keelapalur, Ariyalur District, Tamilnadu

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 2021-2022.

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. Scientist 'E' & In-charge , CPCB, Bangalore
2. Director, Regional Office, 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 2022

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 : Red Large
Primary (STC Code)
Secondary (SIC Code)
- (iii) Production Capacity : 45 MW
- (iv) Year of Establishment : 2009
- (v) Date of Last Environment Statement submitted : 23.09.2021

PART - B

Water and Raw Material Consumption

(i) Water Consumption (m³/day)

Process	:	106
Cooling	:	34
Domestic	:	3

Name of the Product	Process water consumption (m ³) per MW of Product Output	
	During the Previous Financial Year (2020-2021)	During the Current Financial Year (2021-2022)
Power	0.325	0.282

(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 (2020-2021)	During the Current Financial Year (2021-2022)
(1) Fuel -Total	Power	0.560	0.634
Split up: Imported coal		0.488	0.189
Indian Coal		0.0	0.0
Others [Lignite]		0.072	0.444

Alternate Fuels & Raw Materials :

Alternate Fuel	Total Quantity in MT	
	During the Previous Financial Year (2020-2021)	During the Current Financial Year (2021-2022)
(a) Rice Husk	0.0	240.639

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	7.44	Less than Norm
TDS	34.1	1483	Compared to Norm Less by 28.9 %
TSS	0.32	14	Compared to Norm Less by 89.7 %
BOD	0.07	3	Compared to Norm Less by 94.1 %

COD	0.54	23	Compared to Norm Less by 86.5 %
Chloride	8.51	368	Compared to Norm Less by 68.0%
Sulphate	6.41	277	Compared to Norm Less by 76.3 %

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	160	23.4	Compared to Norm Less by 53.3 %
SO ₂	2440	357.1	Compared to Norm Less by 40.5 %
NOx	1623	237.5	Compared to Norm Less by 47.2 %

PART – D

Hazardous Wastes

(As specified under [Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008])

Hazardous Waste		Total Quantity Generated in MT	
		During the Previous Financial Year (2020-2021)	During the Current Financial Year (2021-2022)
(a)	From Process Used Oil (Category No 5.1)	0.2	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 (2020-2021)	During the Current Financial Year (2021-2022)
(a)	From Process:	NIL	NIL
(b)	From Pollution Control Facilities- Generated	Nil	Nil
	a. STP Sludge	5353	8043
	b. Fly Ash	492	740
	c. Bottom Ash		
(c)	1. Quantity recycled or re-utilized within the unit	Nil	Nil
	a. STP Sludge	5353	8043
	b. Fly Ash	492	740
	c. Bottom Ash		
	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 (01.04.2021) : 0.00 Tons Generation (Apr'21-Mar'22): 0.0 Tons Disposal/ Consumption (Apr'21-Mar'22): 0.0 Tons Closing Stock (31.03.2022) : 0.00 Tons	Waster Oil containing 6000-8000 kcal/Kg of GCV and Less than 5ppm of Cd+Cr+Ni	If Spent oil is generated it will be sent to PCB authorised recycler.
(2)	Solid Waste Fly Ash	Opening Stock (01.04.2021) : Nil Generation (Apr'21-Mar'22): 8043 tons Consumption In Cement Plant (Apr'21-Mar'22): 8043 tons Closing Stock (31.03.2022) : 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 (01.04.2020) : NIL Generation (Apr'20-Mar'21): 740 tons Consumption In Cement Plant (Apr'20-Mar'21): 740 tons Closing Stock (31.03.2021) : 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 0.325 tons to 0.282 tons per mw of Power Generation.
- 8043 Ton of Captive power plant Fly ash reused in the cement plant.
- 240.639 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 2022-23

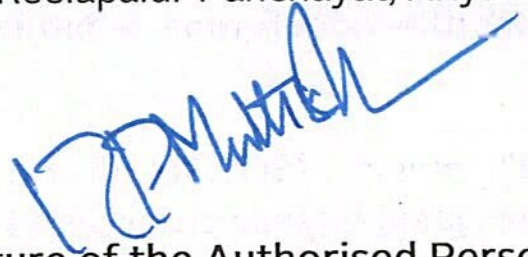
- a. Air Pollution Control Measures costing Rs 10.0 lakhs
 - Replacement of Bag Filters & ESP Maintenance
- b. Water Pollution Control Measures costing Rs 5.0 lakhs
- c. Other Measures costing Rs 2.0 lakhs
 - Plantation of saplings

PART – I

Any other particulars for improving the quality of environment

- a. Maintenance of Pollution Control Equipment/ETP to ensure effective and efficient operation of the same, costing Rs.2.58 Lakhs
- b. Environmental Monitoring costing Rs 4.05 Lakhs to assess the effectiveness of Pollution Control Measures and initiate required action, if any required.
- c. 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.
- d. We celebrated World Environment day on 05.06.2021 theme "Ecosystem Restoration" by planting saplings and created awareness among employees.
- e. We created awareness among school children, villages and employees about the "Ban Plastic" awareness program and displayed awareness board in the plant area.
- f. We handed over waste collection cement tank along with Solid Waste segregation materials like tricycle & Waste bins 20 nos. to the nearby village under "Swachhata Hi Seva" programme to Gandhi Nagar Village, Keelapalur Panchayat, Ariyalur District.

Place : Keelapalur
Date : 26.09.2022


(Signature of the Authorised Person)

Name : R.P. Muthiah

Designation : Vice President (Works)