

Chettinad Cement/Ariyalur/Environmental Statement/Cement Plant/2021 -22/ 254

26th Sep , 2022

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

Respected Sir,

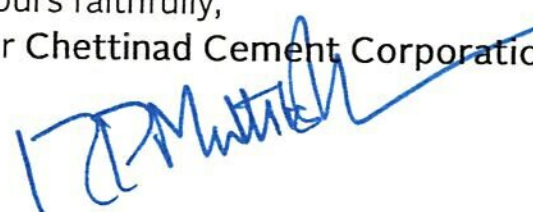
Sub : Submission of Environmental Statement in “Form V” under Environment (Protection) Rules,1986 for the year 2021-22 - Chettinad Cement Corporation Private Limited, Cement Plant, Keelapalur, Ariyalur District, Tamilnadu

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 2021-22.

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
Cement Plant
Keelapalur
Ariyalur District
Tamilnadu
Pincode : 621 707
- (ii) Industry category :
Primary (STC Code) : Red Large
Secondary (SIC Code) : 1007- Cement
- (iii) Production Capacity : 5.5 million tons per annum (mtpa)
- (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	:	105
Cooling	:	43
Domestic	:	301

Name of the Product	Process water consumption (m ³) per unit (metric ton) of Product Output	
	During the Previous Financial Year (2020-2021)	During the Current Financial Year (2021-2022)
Cement	0.016	0.027

(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 (2020-2021)	During the Current Financial Year (2021- 2022)
(1)	Lime stone	Clinker	1.465	1.463
(2)	Clay		Nil	Nil
(3)	Feldspar		Nil	Nil
(4)	Bauxite/Laterite		0.034	0.029
(5)	Fuel –Total		0.101	0.110
	Split up: Imported coal		0.101	0.077
	Indian Coal		0.0	0.0
	Petcoke		0.014	0.033
(5)	Gypsum	Cement	0.042	0.032
(6)	Fly Ash		0.427	0.446
(7)	Slag		0.221	0.221

Alternate Fuels & Raw Materials :

Hazardous Waste		Total Quantity Co processed in MT	
		During the Previous Financial Year (2020-2021)	During the Current Financial Year (2021- 2022)
(a)	Chemical sludge from Waste Water Treatment (category : 35.3)	961.759	4262.836
(b)	Concentration or Evaporation Residue (category : 37.3)	422.422	568.952
	Other Wastes		
(a)	MSW, Colony RDF & Plastic Wastes from ULBs	250.624	315.207
(b)	Non Hazardous wastes [Emery sheet wastes & Paper waste]	108.508	535.935

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	2.62	20.3	Compared to Norm Less by 39.6 %
BOD	0.71	5.5	Compared to Norm Less by 72.8 %
COD	4.15	32.1	Compared to Norm Less by 83.0 %

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	343	27	Compared to Norm Less by 11.2 %
SO ₂	7	1	Compared to Norm less by 99.4%
NOx	6197	482	Compared to Norm Less by 39.8 %

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 (2020-2021)	During the Current Financial Year (2021- 2022)
(a)	From Process Used Oil (Category No 5.1)	1.4	NIL
(b)	From Pollution Control Facilities	NIL	Nil

PART – E

Solid Wastes

Solid Waste		Total Quantity (Kg)	
		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 STP Sludge.	1300	1042
(c)	1. Quantity recycled or re-utilized within the unit STP Sludge.	1300	1042
	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	Characteristics	Disposal Practice Adopted
(1)	Hazardous Waste Used / Spent Oil (Category No.5.1)	Opening Stock (01.04.2021) : Nil tons Generation (Apr'21-Mar'22) : Nil tons Disposal/Consumption (Apr'21-Mar'22) : Nil tons Closing Stock (31.03.2022) : Nil 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 STP Sludge	Opening Stock (01.04.2021) : Nil tons Generation (Apr'21-Mar'22) : 1.042 tons Disposal/Consumption (Apr'21-Mar'21) : 1.042 tons Closing Stock2 (31.03.2022) : 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 5682.985 ton of Alternative Fuel & Raw materials (Hazardous and Other wastes) consumed for the year 2021-22.
- ETP sludge Consumption increased from 961.759 Ton to 4262.836 Ton
- Around 8043 Ton of Captive power plant Fly ash reused in the cement plant.
- Green Belt Development area covered 33.02% (28.8 hectares @ 60281 trees) in the total plant area.
- Specific water conservation 0.027 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 2022-23

- Rs. 100 Lakhs for Air Pollution Control Measures which will include replacement of Bag Filters, ESP Maintenance, Concrete Road repairs and maintenance etc.,
- Rs 15.0 Lakhs for Water Pollution Control Measures which include replacement of equipments, spares and maintenance etc.
- Rs 12 Lakhs for other Environmental Protection Measures like plantation of saplings, road sweeping, Horticulture, Gardening, maintaining rainwater harvesting structures etc.,

PART – I

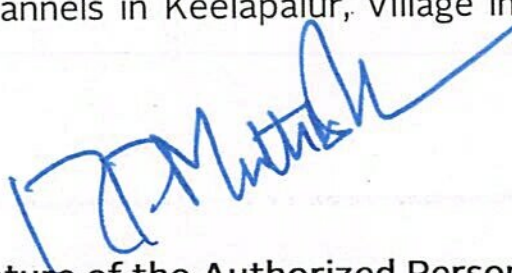
Any other particulars for improving the quality of environment

- ❖ Routine & Proper maintenance of Pollution Control Equipments including ETP and STP ensured for effective and efficient operation of the same. Maintenance Cost of Pollution Control Equipment during 2021-22 was Rs. 139.8 Lakhs.
- ❖ Environmental Monitoring carried out to assess the effectiveness of Pollution Control Measures which costs during 2021-22 was Rs. 20.4 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 celebrated World Environment day on 05.06.2021 theme “Ecosystem Restoration” by planting saplings and created awareness among employees.
- ❖ We created awareness among school children, villages and employees about the “Ban Plastic” awareness program and displayed awareness board in the plant area.

- ❖ 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.
- ❖ We donated saplings 300 nos. to Papanachery village and 300 nos. to Keelapalur village Panchayat President in Ariyalur district.
- ❖ Desilting activity carried out in the Storm water channels in Keelapalur, Village in Ariyalur District.

Place : Keelapalur

Date : 26.09.2022


[Signature of the Authorized Person]

Name : R. P. Muthiah

Designation : Vice President [Works]