Chettinad cement

Chettinad Cement/Ariyalur/Environmental Statement/CPP /2020-21/ 243

23rd Sep, 2021

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 2020-21– Chettinad Cement Corporation Private Limited- Captive Power Plant, Ariyalur Works, Keelapaluvur(PO), 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 2020-2021.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully,
for **Chettinad Cement Corporation Private Limited**

A. Amalraj
Joint 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

Chettinad Cement Corporation Private Limited
Ariyalur Trichy Road, Keelapalur Post,
Ariyalur Dist - 621707, Tamilnadu, India.
T + 91 4329 250009
F + 91 4329 250011, 250013

CIN : U93090TN1962PTC004947
Regd.Office : Chettinad Towers,
603, Anna Salai, Chennai - 600 006.
T + 91 44 2829 2727, 42951800 (100 lines)
F + 91 44 2829 1558

E : ariyalur@chettinadcement.com
www.chettinad.com

FORM - V

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

Environmental Statement for the Financial Year ending the 31st March 2021

PART – A

(i)	Name and address of the owner / occupier of the industry operation or process.	:	**A. Amalraj** **Joint President (Works)** Chettinad Cement Corporation Private Limited, Captive Power Plant Keelapaluvur Village, Ariyalur District Tamilnadu Pincode : 621 707
(ii)	Industry category Primary (STC Code) Secondary (SIC Code)	:	Red Large
(iii)	Production Capacity	:	45 MW
(iv)	Year of Establishment	:	2009
(v)	Date of Last Environment Statement submitted	:	15.09.2020

PART – B

Water and Raw Material Consumption

(i) Water Consumption (m^3/day)

Process	:	116.0
Cooling	:	30.0
Domestic	:	3.0

Name of the Product	Process water consumption (m^3) per MW of Product Output	
	During the Previous Financial Year (2019-2020)	During the Current Financial Year (2020-2021)
Power	0.372	0.325

(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 (2019-2020)	During the Current Financial Year (2020-2021)
(1)	Fuel –Total	Power	0.597	0.560
	Split up: Imported coal		0.417	0.488
	Indian Coal		0.0	0.0
	Others [Lignite]		0.180	0.072

Note : Alternate Fuels & Raw Materials : No consumption

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	7.9	Less than Norm
TDS	35.49	1493	Compared to Norm Less by 28.9 %
TSS	0.25	10	Compared to Norm Less by 89.7 %
BOD	0.04	2	Compared to Norm Less by 94.1 %
COD	0.8	34	Compared to Norm Less by 86.5 %
Chloride	7.6	320	Compared to Norm Less by 68.0%
Sulphate	5.64	237	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	145	17.7	Compared to Norm Less by 64.6 %
SO_2	2586	316.4	Compared to Norm Less by 47.3 %
NOx	1960	239.8	Compared to Norm Less by 46.7 %

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 (2019-2020)	During the Current Financial Year (2020-2021)
(a)	From Process Used Oil (Category No 5.1)	1.08	0.2
(b)	From Pollution Control Facilities	NIL	NIL

PART – E

Solid Wastes

Solid Waste		Total Quantity in metric tons	
		During the Previous Financial Year (2019-2020)	During the Current Financial Year (2020-2021)
(a)	From Process:	NIL	NIL
(b)	From Pollution Control Facilities- Generated a. STP Sludge	Nil	Nil

Solid Waste		Total Quantity in metric tons	
		During the Previous Financial Year (2019-2020)	During the Current Financial Year (2020-2021)
	b. Fly Ash c. Bottom Ash	6594.12 606.7	5353 492
(c)	1. Quantity recycled or re-utilized within the unit a. STP Sludge b. Fly Ash c. Bottom Ash	Nil 6594.12 606.7	Nil 5353 492
	2. Sold a. STP Sludge b. Fly Ash c. Bottom Ash	NIL NIL NIL	NIL NIL NIL
	3. Disposed a. STP Sludge b. Fly Ash c. Bottom Ash	NIL NIL NIL	NIL 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 (01.04.2020) : 0.00 Tons Generation (Apr'20-Mar'21) : 0.2 Tons **Disposal/ Consumption** (Apr'20-Mar'21) : 0.2 Tons Closing Stock (31.03.2021) : 0.00 Tons	Waster Oil containing 6000-8000 kcal/Kg of GCV and Less than 5ppm of Cd+Cr+Ni	0.2 tons sent to the authorised recycler

Name of the Waste		Quantity	Characteristics	Disposal Practice Adopted
(2)	**Solid Waste** Fly Ash	Opening Stock (01.04.2020) : Nil Generation (Apr'20-Mar'21) : 5353 tons Consumption In Cement Plant (Apr'20-Mar'21) : 5353 tons Closing Stock (31.03.2021) : Nil	Solid Containing Sio_2 : 70-80%, Fe_2O_3 : 2-5 % LOI : 4 -6 % Al_2O_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) : 492 tons Consumption In Cement Plant (Apr'20-Mar'21) : 492 tons Closing Stock (31.03.2021) : NIL	Solid, Its contains Sio_2 : 25-35%, Fe_2O_3: 2-3% LOI : 10-15% K_2O+Na_2O: <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 from 0.372 tons to 0.325 tons per mw of Power Generation.
- Around 5353 Ton of Captive power plant Fly ash reused in the cement plant.

PART – H

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

Investment Proposal for Environmental Protection for the year 2021 22

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/STP to ensure effective and efficient operation of the same, costing Rs.37.4 Lakhs

b. Environmental Monitoring costing Rs 1.5 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 05.06.2020 theme "Air Pollution" by planting saplings and created awareness among our 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 celebrated World Ozone day on 16.09.2020 theme "Ozone for life, 35 years of ozone layer protection" by taking pledge and created awareness among our employees.

Place : Keelapalur
Date : 23.09.2021

(Signature of the Authorised Person)
Name : A. Amalraj
Designation : Joint President (Works)