









Chettinad Cement/Puliyur/Environmental Statement/Cement Plant/2017

25th Sep, 2017

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 2016-17 - Chettinad Cement Corporation Private Limited, Cement Plant, Puliyur Village, Karur Taluk & District, Tamilnadu

We submit herewith the "Environmental Statement" pertaining to our Cement Plant in the prescribed format (Form V) under Environment (Protection) Rules, 1986 for the year 2016-17.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully,

for Chettinad Cement Corporation Private Limited

A.Amalraj

Senior Vice President (Works)

Copy to:

- 1. Scientist 'E' & In-charge , CPCB, Bangalore
- 2. Director, Regional Office, MoEF & CC, Chennai
- 3. JCEE, TNPCB, Salem
- 4. DEE, TNPCB, Karur

Chettinad Cement Corporation Private Limited.

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FORM - V

(Rule 14 of Environment (Protection) Rules, 1986)

Environmental Statement for the Financial Year ending the 31st March 2017

PART - A

(i) Name and address of the owner / : occupier of the industry operation or process.

A.Amalraj

Senior Vice President (Works)

Chettinad Cement Corporation Private Limited

Cement Plant Puliyur Village

Karur Taluk & District

Tamilnadu

Pincode: 639 114

(ii) Industry category

Primary (STC Code) Secondary (SIC Code)

Red Large 1026- Cement

(iii) **Production Capacity**

: 1.7 million tons per annum (mtpa)

(iv) Year of Establishment : 1969

Date of Last Environment Statement: 26th Sep 2016 (v)

submitted

PART - B

Water and Raw Material Consumption

Water Consumption (m3/day)

Process

: 248.3

Cooling

: 335.7

Domestic

: 332.4

Name of the Product Cement	Process water consumption (m³) per unit (metric ton) of Product Output		
	During the Previous Financial Year (2015-16)	During the Current Financial Year (2016-17)	
	0.083	0.076	

(ii) Raw Material Consumption

		Name of the Product	Consumption of Raw Material (metric ton) per unit	
			During the Previous Financial Year (2015-16) 1.019	During the Current Financial Year (2016- 17) 1.055
2.	Bauxite		0.044	0.039
3. Iron Ore			0.013	0.011
4.	Imported Coal		0.083	0.056
	Indian Coal	Cement	0.005	0.000
	Others		0.005	0.031
	Waste (Plastic Waste)		0.001	0.000
	Total Fuel		0.094	0.087
5.	Gypsum		0.074	0.076
6.	Fly Ash		0.247	0.251
7.	Slag		0.455	0.468

Alternate Fuels & Raw Materials (AFR)

	Hazardous Waste	Name of the Product	Consumption of AFR (metric ton) per unit (metric ton) of Output		
			During the Previous Financial Year (2015-16)	During the Current Financial Year (2016- 17)	
1	Chemical Sludge from Waste Water Treatment (Textile industry) (Category No 35.3)	Cement	0.00211	0.00054	

PART – C

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

Pollutant	Quantity of Pollutant Discharged (kg/day)	Concentration of Pollutant in Discharges (Mass/volume) mg/litre except for pH	Percentage of Variation from prescribed Standards with reasons
(a) Water			
рН	Not Applicable	7.69	Less than Norm
TSS	5.93	20.8	Compared to Standard less by 34 %
BOD	3.45	12.1	Compared to Standard less by 43 %

Pollutant	Quantity of Pollutant Discharged (kg/day)	Concentrations of Pollutants in Discharges (Mass/volume) mg/Nm³	Percentage of variation from prescribed standards with reasons
(b) Air			
PM	474.06	22.5	Compared to Standard less by 25 %
SO ₂		21.8	Compared to Standard less by 78%
NOx		113.7	Compared to Standard less by 86 %

Compared to allowed Pollution Load of 0.125 kg of PM per ton of Clinker , actual load was 0.067 kg per of PM per ton of Clinker, which was less by 46 %

PART - D

Hazardous Wastes

(As specified under [Hazardous Wastes & Other waste (Management, Handling and Transboundry, Movement) Rules, 2016]

	Hazardous Waste	Total Quantity Generated in metric ton		
		During the Previous Financial Year (2015-16)	During the Current Financial Year (2016- 17)	
(a)	From Process Used Oil (Category No 5.1)	5.544	4.872	
(b)	From Pollution Control Facilities	NIL	NIL	

PART - E

Solid Wastes

Solid Waste		Total Quantity in metric ton		
		During the Previous Financial Year (2015-16)	During the Current Financial Year (2016- 17)	
(a)	From Process	NIL	NIL	
(b)	From Pollution Control Facilities - STP Sludge Generated	1.435	1.445	
(c)	Quantity recycled or re-utilized within the Unit (STP Sludge)	1.435	1.445	
	Sold(STP Sludge)	NIL	NIL	
	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		of the Wastes Quantity Characteristics		Disposal Practice Adopted	
A. I	lazardous Waste				
1	Used / Spent Oil (Category No.5.1)	Opening Stock (as on 01.04.2016): 5.544 tons Generation (Apr'16-Mar'17): 4.872 tons Consumption (Apr'16-Mar'17): Nil Disposal to Dealer: 10.416 tons Closing Stock (as on 31.03.2017): Nil	Waste Oil containing 6000-8000 kcal/Kg of GCV and less than 5 ppm of Cd+Cr+Ni	10.416 tons sold to Authorized Recycler.	
2	2 Chemical Sludge Opening Stock from Waste Water Treatment (as on 31.03.2017): Nil Opening Stock (as on 01.04.2016): NIL Quantity Received		CaO : $20-35\%$ Fe_2O_3 : $10-20\%$ SiO_2 : $1-5\%$ Moisture: $20-30\%$	Co-processed in the Kiln.	

Name of the Wastes		Quantity	Characteristics	Disposal Practice Adopted
B. S	olid Waste			
1	STP Sludge	Opening Stock (01.04.2016) : NIL Generation (Apr'16-Mar'17) : 1.445 ton Consumption in Cement Plant (Apr'16-Mar'17) : 1.445 tons Closing Stock (31.03.2016) : NIL		1.445 tons of dried Sludge used as manure for Greenbelt Development

PART-G

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

Reduction in specific consumption of water from 0.304 m³ to 0.289 m³ per ton of Cement

PART - H

Additional measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution Investment Proposal for Environmental Production

Investment Proposal for environmental protection for the year 2017-18

- Rs 68.0 lakhs for Air Pollution Control Measures which will include replacement of bag filters, ESP Maintenance etc.,
- Rs 16.0 lakhs for other measures, like plantation of saplings, strengthening rainwater harvesting structure etc.,

PART - I

Any other particulars for improving the quality of environment

- Proper maintenance of Pollution Control Equipment including ETP and STP is ensured for effective and efficient operation of the same. Maintenance Cost of Pollution Control Equipment during 2016-17 was Rs 41.52 Lakhs
- Environmental Monitoring is ensured to assess the effectiveness of Pollution Control Measures and initiate required action, if any required. Environmental Monitoring Cost during 2016-17 was Rs.5.5 Lakhs
- So far around 23584 trees planted covering 11.1 hectares

 Quality Management System (ISO 9001), Environmental Management System (ISO14001), Occupational Health & Safety Management System (IS 18001) and Energy Management System (ISO 50001) are in place to ensure that all operations are carried out in compliance with international standards.

Place : Puliyur

Date: 25th Sep, 2017

(Signature of the Authorized Person)

Name : A .Amalraj

Designation :Senior Vice President (Works)

