









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

25<sup>th</sup> 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, Captive Power Plant, Puliyur Village, Karur Taluk & District, Tamilnadu

We submit herewith the "Environmental Statement" pertaining to our Captive Power 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.

Kumararajah Muthiah Nagar Puliyur Cement Factory Karur Dist 639 114, Tamilnadu, India. T +91 4324 250644, 251354, 251355 F + 91 4324 251320, 250584 E puliyur@chettinadcement.com CIN: U93090TN1962PLC004947

#### **Head Office:**

4th Floor, Rani Seethai Hall Building 603, Anna Salai, Chennai 600 006 T +91 44 2829 2727, 4214 9955 E info@chettinadcement.com F +94 44 28291558 www.chettinadcement.com

### 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

A.Amalraj

Senior Vice President (Works)

**Chettinad Cement Corporation Private** 

Limited

Captive Power Plant

Puliyur Village

Karur Taluk & District

Tamilnadu

Pincode: 639 114

(ii) Industry category

process.

Primary (STC Code)

Secondary (SIC Code)

Red Large

1048- Thermal Power plant

**Production Capacity** (iii)

15 MW

Year of Establishment (iv)

2007

Date of Last Environment Statement: 26<sup>th</sup> Sep 2016 (v)

submitted

PART - B

# **Water and Raw Material Consumption**

Water Consumption (m<sup>3</sup>/day)

**Process** 

59.5

Cooling

9.5

Domestic

2.0

	Process Water Consumption (m³) per unit (mw) of Product Output		
Name of the Product	During the Previous Financial Year (2015-16)	During the Current Financial Year (2016-17)	
Power	0.186	0.236	

# (ii) Raw Material Consumption

Name of the Raw		Consumption of Raw Mar per unit (mw	
Material	Name of the Product	During the Previous Financial Year (2015-16)	During the Current Financial Year (2016- 17)
Imported Coal		0.489	0.275
Others	Power	0.051	0.234
Total Fuel		0.540	0.510

PART - C

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

Pollutant	Quantity of Pollutant Discharged (kg/day)	Concentrations of Pollutant in Discharges (Mass/volume) mg/litre except for pH	Percentage of Variation from prescribed Standards with reasons
(a) Water indemni	fication		
рН	Not Applicable	7.67	Less than Norm
TDS	6.88	1056.2	Compared to Standard less by 52 %
TSS	0.21	31.8	Compared to Standard less by 63 %
BOD	0.08	12.1	Compared to Standard less by 58 %
COD	0.35	54.2	Compared to Standard less by 79 %
Quantity of Pollutant pollutant Discharged (mass/day) (kg/day)		Concentration of Pollutant in Discharges (Mass/volume) - mg/Nm <sup>3</sup>	Percentage of Variation from prescribed Standards with reasons
(b) Air			
PM	80.29	23.2	Compared to Standard less by 54 %

## PART - D

# **Hazardous Wastes**

[As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016]

		Total Quantity Generated in metric tons		
	Hazardous Waste	During the Previous Financial Year (2015-16)	During the Current Financial Year (2016- 17)	
(a)	From Process Used Oil (category No.5.1)	NIL	0.120	
(b)	From Pollution Control Facilities	NIL	NIL	

PART – E Solid Wastes

Total Quantity in metric tons		
During the Previous Financial Year (2015-16)	During the Current Financial Year (2016- 17)	
1146	106	
9510	9993	
	During the Previous Financial Year (2015-16)  1146	

Solid Waste		Total Quantity in metric tons		
		During the Previous Financial Year (2015-16)	During the Current Financial Year (2016- 17)	
(c)	Quantity recycled or re- utilized within the unit			
	i) Bottom Ash	1146	106	
	ii) Fly Ash	9510	9993	
	Sold	***		
	i) Bottom Ash	NIL	NIL	
	ii) Fly Ash	NIL	NIL	
	Disposed			
	i) Bottom Ash	NIL	NIL	
	ii) Fly 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		
Α.						
1 B. 9	Used Oil (category No.5.1)	Opening stock (as on 01.04.2016) : Nil Generation (Apr'16 – Mar'17) : 0.120 tons Consumption (Apr'16-Mar'17) : 0.120 tons Closing stock (as on 31.03.2017) : NIL	GCV: 6000-8000 kcal/Kg Cd+Cr +Ni: <5ppm	0.120 tons used for lubrication purpose in conveyor & other motors, within the Plant		
1	Bottom	Opening stock (as on 01.04.2016): NIL Generation (Apr'16 – Mar'17): 106 tons Consumption (Apr'16-Mar'17): 106 tons Closing stock (as on 31.03.2016): NIL	Solid Sio <sub>2</sub> : 70-80%, Fe <sub>2</sub> O <sub>3</sub> : 2-5 % LOI : 4-6 % Al <sub>2</sub> O <sub>3</sub> : 18-30%	100% reused within the premises as replacement of boiler bed materials and as sand for masonry works and road laying works		

Name of the Waste	Quantity	Characteristics	Disposal Practice Adopted
2 Fly Ash	Opening stock (01.04.2016) : NIL Generation (Apr'16 – Mar'17) : 9993 tons Consumption (Apr'16-Mar'17) : 9993 tons Closing stock (as on 31.03.2016) : NIL	Solid $Sio_2$ : 25-35%, $Fe_2O_3$ : 2-3% LOI: 10-15% $K_2O+Na_2O$ : <1%	100 % of Fly ash is used in our Cement Plant located within the same premises for Cement production.

### PART - G

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

- Specific raw water consumption during 2016 -17 was 0.28 m³/mw compared to the prescribed Standard of 3.5 m³/mw
- Reduction in specific consumption of coal from 0.540 to 0.510 tons per mw

### PART - H

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

Investment Proposal for Environmental Production for the year 2017-18

- Rs 8.5 lakhs for Air Pollution Control Measures
- Rs 1.5 lakhs for Water Pollution Control Measures

### 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. 2.0 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 6.5 Lakhs.
- 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: 25<sup>th</sup> Sep, 2017

(Signature of the Authorized Person)

Name

: A.Amalraj.

Designation: Senior Vice President (Works)

