









Chettinad Cement / Karikkali / Captive Power Plant / Environmental Statement / 2018 16th July, 2018

The Member Secretary,

Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai – 600 032.

Respected Sir,

Sub • : Submission of Environmental Statement in "Form V" for the year 2017-18 under Environment (Protection) Rules, 1986 – Captive Power Plant of Chettinad Cement Corporation Private Limited, located at Karikkali & Dholipatti villages, Vedasandur Taulk, Dindigul District, Tamilnadu.

We herewith submit the "Environmental Statement" in the pertaining (Form V) for the year 2017-2018 under Environment (Protection) Rules, 1986 pertaining to our Captive Power Plant located at Karikkali & Dholipatti Villages, Vedasandur Taulk, Dindigul District, Tamilnadu.

Kindly acknowledge the receipt of the same.

mano

Thanking you,

Yours faithfully,

for CHETTINAD CEMENT CORPORATION PRIVATE LIMITED,

M.U.SUBRAMANEYAN

JOINT PRESIDENT (WORKS)

Copy to:

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

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 2018

PART - A

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

Joint President (Works) Captive Power Plant

Chettinad cement corporation Private Ltd., Rani Meyyammai Nagar, karikkali Post, Vedasandur Taluk, Dindigul District Tamilnadu, Pin code - 624 703

(ii) **Industry category**

Primary (STC Code)

: Red Large

Secondary (SIC Code)

: 1048 - Thermal Power Plant

Production Capacity

: 78 Mega Watt / hour

(iv) Year of Establishment

: 2004

Date of Last Environment statement : 28th Sep, 2017 (v)

submitted

PART - B

Water and Raw Material Consumption

(i) Water Consumption - m³/day

Process

171

Cooling

51

Domestic

07

Name of the Product	Process water consumption (m³) per unit (mega watt) of Product (Power Generation) output		
Name of the Product	During the Previous Financial Year 2016-2017	During the Current Financial Year 2017-2018	
Power	ENT CORPA	0.440	

(ii) Raw Material / Fuel Consumption:

Name of the raw materials		Name of the Products	Consumption of raw material / Fuel (metric tons) per unit (mega watt) of Product (Power Generation) output		
			During the Previous Financial Year 2016-2017	During the Current Financial Year 2017-2018	
(1)	Imported coal	Power	0.346	0.549	
(2)	Indian Coal		0.000	0.000	
(3)	Others		0.158	0.021	
Total			0.505	0.569	

PART – C
Pollution Discharged to Environment / unit of output
(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (kgs/day)	Concentrations of pollutants in discharges (Mass/volume) mg/litre expect pH	Percentage of variation from prescribed standards with reasons
(a) Water		S. C. Manual	
рН	Not Applicable	7.39	Maintain within Norms
TDS	90.23	752	Compared to Norm Less by 90 %
TSS	0.40	3.3	Compared to Norm Less by 99 %
BOD	0.89	7.4	Compared to Norm Less by 93 %
COD	7.65	63.7	Compared to Norm Less by 93 %
Pollutants	Quantity of Pollutants discharged (kgs/day)	Concentrations of pollutants in discharges (Mass/volume) mg/Nm³	Percentage of variation from prescribed standards with reasons
(b) Air			
PM	99.1	27.9	Compared to Norm Less by 44 %
SO2	-	506.7	Compared to Norm Less by 16 %
NOX	- (241)	216.2	Compared to Norm Less by 28 %

PART - D

HAZARDOUS WASTES

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

Hazardous Wastes		Total Quantity Generated in KL		
		During the Previous Financial Year 2016-2017	During the Current Financial Year 2017- 2018	
(a)	From Process Used Oil (category No.5.1)	0.95	2.85	
(b)	From pollution control facilities None	NIL	NIL	

PART - E

SOLID WASTES

		Total Quantity in metric ton		
Solid Wastes		During the Previous Financial Year 2016-2017	During the Current Financial Year 2017- 2018	
(a)	From Process – Bottom ash (Generated Quantity)	2631	880	
(b)	From pollution control facilities ESP - Fly ash (Generated Quantity) (Common STP for Cement Plant and Captive Power Plant. Details of STP Sludge generated furnished in the Cement Plant Environmental Statement)	26348	20018	
(c)	Quantity recycled or re-utilized within the unit a. Bottom ash b. Fly ash	2631 26348	880 20018	
	2. Sold a. Bottom ash b. Fly ash	NIL NIL	NIL NIL	
	3. Disposed a. Bottom ash b. Fly ash	CORPA 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

Nar	Name of the Wastes Quantity		Characteristics	Disposal Practice Adopted	
Α	Hazardous Waste				
(1)	Used / Spent Oil (Category No.5.1)	Opening stock (as on 01.04.2017): NIL Generation (Apr'17 -Mar'18): 2.85 KL Consumption (Apr'17-Mar'18): 2.85 KL Closing stock (as on 31.03.2018): NIL	Liquid, GCV:6000-8000kcal/kg Cd+Cr+Ni : <5ppm PAHs : 1-10% Flash point : 55°c	2.85 KL used for lubrication purpose in conveyor & other motors, within the Plant	
В	Solid Waste				
(1)	Bottom Ash	Opening stock (as on 01.04.2017): NIL Generation (Apr'17 – Mar'18): 880 tons Consumption (Apr'17-Mar'18): 880 tons Closing stock (as on 31.03.2018): NIL	Solid, $Sio_2: 70-80\%$, $Fe_2O_3: 2-5\%$ LOI : $4-6\%$ $AI_2O_3: 18-30\%$	100% reused within the premises as replacement of Boiler bed materials partially and used as sand for masonry works	
(2)	Fly Ash	Opening stock (as on 01.04.2017): NIL Generation (Apr'17 -Mar'18): 20018 tons Consumption (Apr'17-Mar'18): 20018 tons Closing stock (as on 31.03.2018): NIL	Solid, Sio ₂ : 25-35%, Fe ₂ O ₃ : 2-3% LOI : 10-15% K ₂ O+Na ₂ O : <1%	100 % 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

Impact on Natural resources by implementation of conservation measures

- Specific raw water consumption during 2017 -18 was 0.60 m³/mw compared to the prescribed Standard of 3.0 m³/mw
- Specific fuel consumption achieved less than 0.60 tons/mw

PART - H

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

Investment Proposal for the year 2018-19

- Rs.6.0 Lakhs for Air Pollution Control Measures which will include replacement of Bag Filters, ESP Maintenance etc...
- Rs 0.8 Lakhs for Water Pollution Control Measure (upgradation of ETP)
- Rs 0.5 Lakhs for other Environmental Protection Measures like plantation of saplings, providing additional rainwater harvesting structures etc.,

PART - I

Any other particulars for improving the quality of environment

- Proper maintenance of Pollution Control Equipment including ETP and STP are ensured for effective and efficient operation of the same. Maintenance Cost of Pollution Control Equipment during 2017-18 was Rs 4.25 Lakhs.
- Environmental Monitoring is ensured to assess the effectiveness of Pollution Control Measures and initiate required action, if any required. Environmental Monitoring Cost during 2017-18 was Rs.16.75 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 operation are carried out in compliance with international standards.

Place: Karikkali

Date: 16th July, 2018

(Signature of the Authorised Person)

Name : M.U.SUBRAMANEYAN

Designation: JOINT PRESIDENT (WORKS)