

Chettinad Cement/Ariyalur/Environmental Statement/Captive Power Plant/2017/239

28th 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” for the year 2016-17 under Environment (Protection) Rules, 1986– Captive Power Plant of Chettinad Cement Corporation Private Limited located at Keelapaluvur Village, Ariyalur Taluk & District, Tamilnadu

We submit herewith the “**Environmental Statement**” in the prescribed format (**Form V**) for the year 2016-17 under Environment (Protection) Rules, 1986 pertaining to our Captive Power Plant located at Keelapaluvur Village, Ariyalur Taluk & District, Tamilnadu.

Kindly acknowledge the receipt of the same.

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



M.Sundaramoorthy
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

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. : **M Sundaramoorthy**
Joint President (Works)
Chettinad Cement Corporation Private Limited
Captive Power Plant
Keelapaluvur Village,
Ariyalur Taluk & District
Tamilnadu
Pincode : 621 707
- (ii) Industry category :
Primary (STC Code) : Red Large
Secondary (SIC Code)
- (iii) Production Capacity : 45 mega watt of Power
- (iv) Year of Establishment : 2009
- (v) Date of Last Environment Statement submitted : 27th Sep, 2016

PART – B**Water and Raw Material Consumption****(i) Water Consumption (m³/day)**

Process	:	200.2
Cooling	:	36.4
Domestic	:	3.9

Name of the Product	Process Water Consumption (m ³) per MW of Product Output	
	During the Previous Financial Year (2015-16)	During the Current Financial Year (2016-17)
Power	0.285	0.548

(ii) Raw Material/Fuel Consumption

Name of the Raw Material/Fuel		Name of the Product	Consumption of Raw Material/Fuel (metric ton) per mw of Output	
			During the Previous Financial Year (2015-16)	During the Current Financial Year (2016- 17)
1	Imported coal	Power	0.456	0.408
	Others		0.064	0.141
	Total Fuel		0.520	0.549

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)	Concentration of Pollutant in Discharges (Mass/volume) mg/litre except pH	Percentage of Variation from prescribed Standard with reasons
(a) Water			
pH	Not Applicable	7.63	Less than Standard
TSS	0.28	12.2	Compared to Standard less by 89 %
TDS	22.26	987.4	Compared to Standard less by 58 %
BOD	0.27	12.20	Compared to Standard less by 63 %
COD	2.88	127.8	Compared to Standard less by 54 %
Pollutant	Quantity of Pollutant Discharged (mass/day) (kg/day)	Concentration of Pollutant in Discharges (Mass/volume) mg/Nm ³	Percentage of Variation from prescribed Standard with reasons
(b) Air			
PM	240.74	22.29	Compared to Standard less by 55 %

PART – D

Hazardous Wastes

[As specified under Hazardous and Other Wastes (Management and Transboundary 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)	1.2	1.5
(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 Bottom Ash (Generated Quantity)	3375	267
(b)	From Pollution Control Facilities- Generated Fly Ash from ESP (Generated Quantity) STP common to Cement Plant & Captive Power Plant. Waste details reported in the Environmental Statement of Cement Plant	37499	29696
(c)	1. Quantity recycled or re-utilized within the unit		
	a. Bottom Ash	3375	267
	b. Fly Ash	37499	29696
	2. Sold		
	a. Bottom Ash	NIL	NIL
	b. Fly Ash	NIL	NIL
	3. Disposed		
	a. Bottom Ash	NIL	NIL
	b. 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
A. Hazardous Waste				
1	Used / Spent Oil (Category No.5.1)	Opening Stock (as on 01.04.2016) : 0.4 tons Generation (Apr'16-Mar'17) : 1.5 tons Consumption (Apr'16-Mar'17) : 1.9 tons Closing Stock (as on 31.03.2017) : NIL	Liquid containing 6000-8000 kcal/Kg of GCV and Less than 5ppm of Cd+Cr+Ni	1.9 tons used for lubrication purpose in conveyor & other motors, within the Plant
B. Solid Waste				
1	Bottom Ash	Opening Stock (as on 01.04.2016) : NIL Generation (Apr'16-Mar'17) : 267 tons Consumption In Cement Plant (Apr'16-Mar'17) : 267 tons Closing Stock (as on 31.03.2017) : NIL	Solid SiO ₂ : 25-35%, Fe ₂ O ₃ : 2-3% LOI : 10-15% K ₂ O+ Na ₂ O : <1%	100% reused within the premises as replacement of boiler bed materials and as sand for masonry works
2	Fly Ash	Opening Stock (as on 01.04.2016) : NIL Generation (Apr'16-Mar'17) : 29696 tons Consumption In Cement Plant (Apr'16-Mar'17) : 29696 tons Closing Stock (as on 31.03.2017) : NIL	Solid SiO ₂ : 70-80%, Fe ₂ O ₃ : 2-5 % LOI : 4 -6 % Al ₂ O ₃ : 18-30%	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 water consumption during 2016-17 was 0.66 m³ per mw compared to the prescribed norm of 3.5 m³ 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 8.0 lakhs for Air Pollution Control Measures like replacement of bag filters
- Rs 3.5 lakhs for Water Pollution Control Measures
- Rs 2.2 lakhs for other measures like plantation of saplings

PART – I

Any other particulars for improving the quality of environment

- Proper maintenance of Pollution Control Equipment including ETP and STP ensured for effective and efficient operation of the same. Maintenance Cost of Pollution Control Equipment during 2016-17 was Rs.13.4 Lakhs
- Environmental Monitoring carried out to assess the effectiveness of Pollution Control Measures and initiate required action, if any required. Environmental Monitoring Cost during 2016-17 was Rs.1.8 Lakhs

Place : Ariyalur

Date : 28th Sep, 2017

(Signature of the Authorised Person)

Name : M.Sundaramoorthy

Designation : Joint President (Works)