IS / ISO 9001 BIS QMS | IS / ISO 14001 BIS EMS | IS 18001 BIS OHSMS | IS / ISO 50001 BIS EnMS

Chettinad cement

Chettinad Cement, KW / Power Plant / Environmental Statement / 2020-2021/EHS-266
28th Sep, 2021

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

Respected Sir,

Sub : Submission of **"Environmental Statement - Form V"** for the year 2020-2021 under Environment (Protection) Rules, 1986 for our **Captive Power Plant** – Reg.

* * * * * * * * *

With reference to the above subject, the **"Environmental Statement – Form V"** has been submitted here for the year **2020-2021** under Environment (Protection) Rules, 1986 for our **Captive Power Plant – 78MW** which is situated at Karikkali Village, Guziliamparai Taluk, Dindigul District, Tamilnadu - 624703.

Kindly acknowledge the receipt of the same please.

Thanking you,

Yours faithfully,
for CHETTINAD CEMENT CORPORATION PRIVATE LIMITED,

V.KRISHNAN
JOINT PRESIDENT [WORKS]

CHETTINAD CEMENT CORPN.PVT.LTD. KARIKKALI 624703

Copy to :

1. The Regional Director, CPCB, Bangalore
2. The Director, Regional Office, MoEF & CC, Chennai
3. The Joint Chief Environmental Engineer (M), TNPCB, Madurai
4. The District Environmental Engineer, 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 2021

PART – A

(i) **Name and address of the owner / occupier of the industry operation or process.** : V.KRISHNAN,
Joint President [Works]
Captive Power Plant
Chettinad cement corporation Private Ltd.,
Rani Meyyammai Nagar, karikkali Post ,
Guziliamarai Taluk, Dindigul District
Tamilnadu, Pin code - 624 703

(ii) **Industry category**

Primary (STC Code) : Red Large

Secondary (SIC Code) : 1048 - Thermal Power Plant

(iii) **Production Capacity** : 78 Mega Watt / hour

(iv) **Year of Establishment** : 2004

(v) **Date of Last Environment statement submitted** : 30th June, 2020

PART – B

Water and Raw Material Consumption

(i) Water Consumption - m^3/day

Process : 124

Cooling : 47

Domestic : 06

Name of the Product	Process water consumption (m^3) per unit (mega watt) of Product (Power Generation) output	
	During the Previous Financial Year 2019-2020	During the Current Financial Year 2020-2021
Power	0.455	0.227

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(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 2019-2020	During the Current Financial Year 2020-2021
(1)	Imported coal	Power	0.171	0.020
(2)	Indian Coal		0.307	0.529
(3)	Lignite		0.061	0.000
Total			0.539	0.549

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)	Percentage of variation from prescribed standards with reasons
(a) Water - Tread Trade Effluent : 136 m3/day (Permitted quantity : 452 m3/day)			
pH	Not Applicable	7.79	Maintained with in norm 5.5 – 9.0
TDS	99.67	731	65% lesser compare with norm 2100 mg/l
TSS	1.74	12.8	87% lesser compare with norm 100 mg/l
BOD	1.64	12.0	60% lesser compare with norm 30 mg/l
COD	11.19	82.0	67% lesser compare with norm 250 mg/l
Chloride	7.31	53.6	95% lesser Compare with norm 1000 mg/l
Sulphate	38.66	283.3	72% lesser Compare with norm 1000 mg/l
Oil & Grease	0.16	1.1	89% lesser Compare with norm 10 mg/l
(b) Air – Stack Emission			
PM	101	28.3	43% lesser compare with norm 50mg/Nm3
SO2	-	420	30% lesser compare with norm 600 mg/Nm3
NOX	-	212	53% lesser compare with norm 450 mg/Nm3

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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 2019-2020	During the Current Financial Year 2020- 2021
(a)	From Process Used Oil (category No.5.1)	0.88	0.810
(b)	From pollution control facilities None	NIL	NIL

PART – E

SOLID WASTES

Solid Wastes		Total Quantity in metric ton	
		During the Previous Financial Year 2019-2020	During the Current Financial Year 2020- 2021
(a)	From Process – Bottom ash (Generated Quantity)	20	34
(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)	6658	11279
(c)	1. Quantity recycled or re-utilized within the unit a. Bottom ash b. Fly ash	20 6658	34 11279
	2. Sold a. Bottom ash b. Fly ash	NIL NIL	NIL NIL
	3. Disposed a. Bottom ash b. Fly ash	NIL NIL	NIL NIL

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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

Sl. No	Name of the Wastes	Quantity in tons / Annum				Characteristics	Disposal Practice Adopted
		Opening Balance as on 01.04.20	Generation For the year 2020-21	Disposed for the year 2020-21	Closing Stock as on 31.03.21		
A	**Hazardous Waste**						
(1)	Used / Spent Oil (Category No.5.1)	0.000	0.810	0.810	0.000	Liquid (Oily), Cd+Cr+Ni : <5ppm PAHs : 1-10% Flash point : 55°c	0.810 KL send to TNPCB authorized agency. M/s.Sri Balaji Industries, Coimbatore
B	**Other Waste - Non Hazardous Waste**						
(1)	Bottom Ash	0.000	33.837	33.837	0.000	Solid, Sio_2 : 70-80%, Fe_2O_3 : 4-6% LOI : <1 % Al_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	0.000	11279	11279	0.000	Solid, Sio_2 : 25-35%, Fe_2O_3 : 2-3% LOI : 10-20% K_2O+Na_2O:<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

- The Specific raw water consumption was achieved 0.325 m^3/mw which was below the prescribed limit of 3.5 m^3/mw.
- 46392 m3 of Tread Effluent water effectively used for Dust suppression system in coal and Ash Handling area and Cement Plant Mill's Spray.
- Green Belt Development area covered 33.25% of total plant area, So far, the total number of tree planted 3303 nos its coved 2.7 hectares @ 1223 trees / hectares and over all plant survival rate was 87%.
- 100% generated fly ash was sent to cement plant for PPC cement Production.
- 100% generated bottom ash was effectively used for in-house civil construction activities.

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PART – H

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

Investment Proposal for the year 2021-22

- Rs.10 Lakhs for Air Pollution Control Measures which will include replacement of Bag Filters, ESP Maintenance etc.., and Monitoring.
- Rs.1.0 Lakh for Water Pollution Control Measure (ETP Operation & Maintenance)
- 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 was ensured for effective and efficient operation of the same. Maintenance Cost of Pollution Control Equipment during 2020-21 was Rs 8.9 Lakhs.
- Environmental Monitoring are being ensured to assess the effectiveness of Pollution Control Measures to initiate the effective action, if any required. Environmental Monitoring Cost during 2020-21 was Rs.6.15 Lakhs.
- Quality Management System as per IS/ISO 9001:2015, Environmental Management System as per IS/ISO14001:2015, Occupational Health & Safety Management System as per IS/ISO 45001:2018 and Energy Management System as per IS/ISO 50001:2018 are in place to ensure that all operation are carried out in compliance with international standards.

Place : Karikkali

Date : 28th September, 2021

(Signature of the Authorized Person)

Name : **V.KRISHNAN**

Designation : **JOINT PRESIDENT [WORKS]**

CHETTINAD CEMENT CORPN.PVT.LTD. KARIKKALI 624703