ADITYA BIRLA

UltraTech

UTCL/RDCW
18th Sep, 2024

The District Environmental Engineer
Tamilnadu Pollution Control Board
No.4/326, Trichy Main Road,
Nearby RTO Office,
Keelapazhur Post,
Ariyalur Taluk,
Ariyalur District.

Sir,

Sub: Submission of Environmental Statement for Cement plant '**Form - V**" – Reg

Dear Sir,

Please find enclosed herewith the "FORM – V" Environmental Statement of Cement Plant for the year 2023 – 24.

This is for your kind perusal.

Thanking You,

Yours faithfully,

For UltraTech Cement Limited
Unit: Reddipalayam Cement Works

K.Karunakara Rao
Unit Head.

cc.
The Joint Chief Environmental Engineer,
Tamil Nadu Pollution Control Board,
Trichy

The Regional Director
MoEFCC, Chennai

ULTRATECH CEMENT LTD. ARIYALUR 621 731 REDDIPALAYAM CEMENT WORKS

UltraTech Cement Limited
Unit: Reddipalayam Cement Works

Environment Statement for the Year 2023 - 24

FORM – V

Environment Statement for the financial year ending with 31st March 2024

PART – A

1	Name & address of the owner/ occupier of the industry, operation or process	Karunakara Rao Karanam Unit Head UltraTech Cement Limited-Cement Plant Reddipalayam cement works Ariyalur district. Tamil Nadu Pin Code : 621731
2	Industry Category	Red
3	Production Capacity- Units	133335 Tons/Month (1.6 million tons per annum)
4	Year of establishment	April 2000
5	Date of last environmental statement	21.09.2023

PART – B

1	**Water Consumption m^3/day process**			
	Plant Process / Cooling			m^3/day
	Plant Domestic		66.47	m^3/day
	Name of Products		**Water consumption per unit of products**	
	Cement		During the current financial year 2022-23	During the current financial year 2023-24
			48.91	59.41
			Litres/ ton of Cement	Litres/ ton of Cement
2	**Raw Material Consumption**		**Consumption Per unit of output**	
	Name of Raw Materials	Name of Products	During the current financial year 2022-23 MT/MT	During the current financial year 2023-24 MT/MT
a	Lime stone	Clinker	1.375	1.343
b	Clay	Clinker	0.021	0.0067
c	Additives	Clinker	0.130	0.158
d	Coal	Clinker	0.102	0.075
e	Gypsum	Cement	0.041	0.041
f	Fly ash	Cement	0.322	0.348

ULTRATECH CEMENT LTD. ARIYALUR 621 731 CEMENT WORKS

PART – C
Pollution Generated

	Pollutants	Quality Parameters (Conc. mg/Nm^3)	Quantity of pollution Generated (Ton/Yr)	Percentage of variation from prescribed standards with reasons. 30 mg/Nm^3
a. Water	Zero Water Discharge	0.0	0.0	0.0
b. Air				
Raw mill/Kiln	SPM	15.4	30.9	48.59 % less
Cooler	SPM	21.5	21.2	28.17 % less
Coal mill	SPM	15.4	9.5	48.69 % less
Cement mill	SPM	21.0	7.3	30.02 % less

PART – D

[as specified under Hazardous Wastes (Management & Handling) Rules, 1989]

	Hazardous Wastes Total Quantity (in KL)	During the current financial year 2022-23	During the current financial year 2023-24
a. From Process	Used Oil (KL)	0.49	1.0063
b. From Pollution Control Facilities	Nil	Nil	Nil

PART – E
Solid Wastes

	Total Quantity (Tonne)	During the current financial year 2022-23	During the current financial year 2023-24
a. From process		Nil	Nil
b. Quantity recycled or reutilized			
Used Oil	MT	0.49	1.0063
Solid			
Metal scrap	MT	839.16	679.05
Burst Bags	MT	16.92	18.05
Refractory	MT	193.69	128.60
Rubber wastes	MT	51.03	48.44
Cable wastes	MT	4.37	1.76
Other scrap	MT	69.20	129.43
Disposed to Recyclers			
Medical Waste (incinerable)	MT	0.01	0.015
Empty Barrel	MT	0	0
E-waste	MT	2.97	8.98
Batteries	MT	0.76	0.95

PART – F

Please specify the characteristics (in terms of concentration and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Hazardous Waste		
	Quantity (KL)	Mode of Disposal
Used oil	1.0063	Used for lubrication purpose of chain conveyors, bucket elevators, deep pan conveyors, coal & limestone reclaimer which ultimately gets dried-up.
Solid Waste		
	Quantity (MT)	Mode of Disposal
Fly Ash	4620.5 MT	Used in Cement Manufacturing (PPC)

PART – G

Impact of pollution control measures on conservation of natural resources and consequently on the cost of production

As our pollution control equipments are working with 99.9 % efficiency, maximum amount of emissions is recycled thus conserving raw material and reducing dust emission.

Fly ash is being procured from surrounding Power Plants and used in the manufacturing of PPC, thus utilizing waste and conserving limestone.

200 KLD & 300 KLD STP is installed for treatment of Sewage generated by Plant & Colony premises. Treated water is being used for greenbelt development, thus conserving fresh water.

Alternate fuel co-processed during 2023-24:

Obtained permission from TNPCB & CPCB for co-processing various Hazardous & Non – hazardous waste like Process waste, Process residue, Spent Solvent, ETP / Chemical Sludge, Paint Sludge, Off Specification product, Plastic Waste, Carbon Powder, Tyre chips, Spent carbon, Bio solids, FMCG etc.

Sl. No.	**Hazardous Wastes**	**H. Waste Category**	**Quantity (MT)**	**Source**
1	Paint sludge	21.1	966.51	Automobile industries
2	Oily cotton wastes	5.2	523.16	Automobile industries
3	Waste Residue	23.1	2.41	Automobile industries
4	Spent carbon	28.3	26.77	Tyre pyrolysis unit
5	pH waste liquid	20.2	0.15	Pharma industries
Sl. No.	**Non-Hazardous Wastes**		**Quantity (MT)**	**Source**
1	Carbon powder	---	10857.97	Tyre pyrolysis units
2	MSWRDF	---	3494.35	Municipalities
3	Fiber waste	---	24.32	Railways
4	Plastic wastes	---	7624.43	Footwear industries

5	Footwear wastes	---	0.75	Footwear industries
6	FMCG wastes	---	695.13	FMCG Industries
7	Rubber waste	---	412.3	Rubber industries
8	Raw wood	---	66.72	Agro industries
9	Wood Chips	---	4855.73	Agro industries
10	Wooden Dust	---	262.93	Agro industries
11	MSWRDFMLP	---	3110.79	Biomining
12	Mango seed	---	5.01	Agro industries
13	Coconut shell	---	0.76	Agro industries
14	Palm seed	---	1.32	Agro industries
15	Turmeric waste	---	0.57	Agro industries
16	Rice husk / DORB	---	10866.41	Agro industries
17	Cashew nut shells	---	3.9	Agro industries
18	Coir pith waste	---	2113.28	Agro industries
19	Coffee husk	---	7.42	Agro industries
20	Ground nut husk	---	7.23	Agro industries
21	Colony MSW	---	38.38	Own waste
22	Waste fuel tyres	---	186.16	Tyre industries

PART – H

Additional investment proposal for environmental protection including abatement of pollution.

1. Clarifier has been installed near captive power plant for processing of mines water which aided in reducing the specific water consumption of power plant from 4.2 to 3.5 m^3/MW and reject water generation by 68.4 %.
2. AFR usage in calciner was increased from 25 % to 27 % TSR by installing venturi in Kiln riser duct.
3. Installation of Iteca graphite seal at kiln inlet assisted in reducing false air thereby reduction in thermal energy. A drop of 0.171 m^3/sec was observed.
4. A total of 26,420 sapling plantation were done at plant, colony and mines for the betterment of greenbelt.
5. World environment day was celebrated by organizing a green walk from plant without disturbing the regular traffic and distributing Manjapai to employee and nearby villagers.

PART – I

Any other particulates in respect of environment protection and abatement of pollution.

1. Almost all roads have been concretized and efforts are being made to concretize remaining roads.
2. Vacuum road sweeper are being used for cleaning internal roads.
3. CEMS for parameters PM, SO_2 & NO_x was installed for the stack attached to Raw Mill/ Kiln, Cooler, Coal Mill, cement Mill and the data generated from all the monitoring systems is being uploaded to CPCB server.
4. Dust collection and extraction systems (Bag filters) and covered conveyor belts to control fugitive dust emissions have already been provided at all the transfer points.
5. Fugitive emissions from raw material storage yards, loading and unloading operations are controlled by providing bag filters and water sprinkling systems etc.
6. Clinker, Cement and Raw meal silos are provided. Fly ash is directly transported to the silo pneumatically.

7. Greenbelt has been developed in 37% which is more than 33% of the land acquired, complying the statutory requirement. Planning for further green belt development.
8. World Class Manufacturing (WCM) is used as a tool for better housekeeping, good maintenance practice and assist in control of pollution. Task force for Energy conservation and Waste water utilization is also formed by the management for conservation of natural resources.
9. As part of Corporate Social responsibility, the Group company has become signatory to Cement Sustainability Initiative (CSI) under World Business Council for Sustainable development for CO_2 emission monitoring and reduction.