UTCL/BLCW/ENV/ES/46/2023-24

Date -27/09/2024

To,

The Member Secretary
M.P. Pollution Control Board,
Paryavaran Parisar,
E-5, Arera Colony
Bhopal (M.P.) – 462016

Sub: Submission of Environment Statement report for the FY 2023-24 under the Environment (Protection) Act 1986 of Ultratech Cement Ltd-Unit -Bela Cement Works (Clinker- 2.38 MMTPA, Cement- 2.5 MMTPA CPP 28 MW, DG Set -2x6 MW)

Ref: - Consent No: AWH-56039 Vide Outward No:115677 Dated 02/06/2022

Dear Sir,

With reference to Subject mentioned above, Pl. find herewith enclosed environment Statement report for FY 2023-24 i.e., **(Apr-23 to Mar-24)** as per environment protection Act 1986 of Ultratech Cement Ltd. Unit- Bela Cement Works. **(Clinker- 2.38 MMTPA, Cement- 2.5 MMTPA, CPP- 28 MW, DG Set -2x6 MW).**

Submitted for your Kind information and record Pl.

Thanking you.

For Ultratech Cement Ltd.
(Unit-Bela Cement Works)

BELA CEMENT WORKS ULTRATECH CEMENT LTD. REWA (M.P.)

Rana Dey
(Joint Executive President & Unit Head)

Copy to:

1. The Regional Officer, MPPCB, Deputy Director General of Forests (C), MOEF&CC, Integrated Regional Office, E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal – 462016 (M.P.)
2. The Regional Officer, M.P. Pollution Control Board HIG: 190-191, Nehru Nagar, Rewa (M.P)
3. The RD, CPCB Regional Office, Paryawaran Parisar, E-5, Arera Colony Bhopal – 462 016 (M.P.)

UltraTech Cement Limited
(Unit : Bela Cement Works)
Post Office : Jaypee Puram, Distt. Rewa, (M.P.) - 486 450
T : +91 7662 409301, 229286-87 | W : www.ultratechcement.com
Registered Office : 'B' Wing, Ahura Centre, 2nd Floor, Mahakali Caves Road, Andheri (East), Mumbai - 400 093
T : +91 22 6691 7800 | CIN : L26940MH2000PLC128420

"ENVIRONMENTAL STATEMENT REPORT"

CEMENT PLANT, CPP & DGS

FOR THE PERIOD OF

APRIL 2023 TO MARCH 2024

ULTRATECH CEMENT LIMITED, UNIT: BELA CEMENT WORKS,
JP PURAM, DIST. REWA (M.P.)

UltraTech Cement Limited

Unit: Bela Cement Works

Introduction:

About UltraTech Cement Limited

UltraTech Cement Limited is the largest cement company in India and among the leading producers of cement globally. It is also the country's largest manufacturer of white cement and Ready-Mix Concrete.

The Company has consolidated capacity of 154.86 Million Tonnes Per Annum (MTPA)) of grey cement. UltraTech has 24 integrated manufacturing units, 29 grinding units, one clinkerisation unit and 8 bulk packaging terminals. UltraTech has a network of over one lakh channel partners across the country and has a market reach of more than 80% across India. In the white cement segment, UltraTech goes to market under the brand name of Birla White. It has one white cement unit and one wall care putty unit, with a current capacity of 1.98 MTPA. UltraTech has over 307 ready mix concrete (RMC) plants in 134 cities across India. It also has a slew of specialty concretes that meet specific needs of discerning customers. Our Building Products business is an innovation hub that offers an array of scientifically engineered products to cater to new-age constructions. UltraTech pioneered the UltraTech Building Solutions (UBS) concept to provide individual home builders with a one-stop-shop solution for building their homes. Today, UBS is the largest single brand retail chain with over 2500 stores across India.

UltraTech is a founding member of Global Cement and Concrete Association (GCCA). It is a signatory to the GCCA Climate Ambition 2050, a sectoral aspiration to deliver carbon neutral concrete by 2050. UltraTech has adopted new age tools like Science Based Target Initiative, Internal Carbon Price and Energy Productivity as part of its efforts to accelerate adoption of low carbon technologies and processes across its value chain and thus reduce carbon footprint over the life cycle. UltraTech is the first company in India and the second company in Asia to issue dollar-based sustainability linked bonds. As part of its CSR, UltraTech reaches out to nearly 2.1 million beneficiaries in over 500 villages across India covering areas of education, healthcare, sustainable livelihoods, community infrastructure and social causes.

Unit-Bela Cement Limited

Bela Cement Works is located near Madheypur village in Huzur Tehsil, Rewa district of Madhya Pradesh state at an aerial distance of about 15 km North-West of Rewa Town. Geographically, it is located at latitude 24033'47'' North and longitude 81011'41'' East.

The cement production process is based on dry process. Present production capacity of plant is 2.50 million tonne Cement per Annum.

"FORM – V"

(See rule 14)

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING THE 31st MARCH 2024

PART – A

(I)	Name & Address of the Owner / Occupier of the Industry Operation or Process	**Sri Rana Dey** **Jt. Executive President & Unit Head** Bela Cement Works (A Unit of UltraTech Cement Limited) Medheyapur, JP Puram - 486 450 Rewa (M.P.)
(II)	Industry category Primary (STC CODE) Secondary (SIC CODE)	Red category and large Industry
(III)	Production capacity	Cement - 2.5 MTPA CPP – 28 MW DG – 2x6 MW WHRS – 13 MW
(IV)	Year of establishment	Cement - Year 1996 CPP – Year 2004 DG1- Year in 1995 & DG-2 in 1998 WHRS – Year 2020
(V)	Date of last environmental statement submitted	26th September, 2023

PART – B Water & Raw Material Consumption

A. Water consumption - m3/d (Cement Plant, CPP, WHRS & DG Sets)

- Process – 1053.95
- Cooling - 440.09
- Domestic and Others – 610.556

Name of the product	Total Water consumption per unit of product output (m^3/MT of Cement)	
	During the current financial year (2022-23)	During the current financial year (2023-24)
Cement & electricity (CPP, WHRS)	0.221	0.311

B. Raw material consumption

Name of the raw material	Name of product	Consumption of raw material per unit product output (MT/MT of Cement)	
		During the financial year (2022-23)	During the current financial year (2023-24)
Limestone	Cement	1.313	2.427
Laterite+High Grade Laterite		0.041	0.107
Coal		0.065	0.154
Pet coke		0.034	0.015
Gypsum		0.015	0.038
Fly ash		0.142	0.318
Red Mud		0.036	0.037
Name of the raw material	**Electricity (TPP) (KWH)**	**Consumption of raw material per unit product output (MT/KWH) During the financial year (2022-23)**	**Consumption of raw material per unit product output (MT/KWH)**
Coal (TPP) 28 MW		0.00092	0.00099

Non-Hazardous Waste consumption details	
Name of waste	Quantity (in MT)
	2023-24
Plastic waste	59
Bio briquette and Other waste	425
Carbon Black	144

Total Cement Production (MT)

Name of product	During financial year (2022-23)	During current financial year (2023-24)
Cement (MT)	2158320	2156065
Clinker (MT)	2002282	1775895.90
Total Power Generation (KWH)		
Electricity (CPP) KWH	11567492	104113000
WHRS (13 MW)	53750500	51599800
DG SET (2X6 MW)	NIL	NIL

PART - C

Pollutant Discharged To Environment / Unit of Output

S. No.	Pollutants	Quantity of pollutants discharged (Mass / day) (Tons/day)	Concentrations of pollutants in discharged (Mass / Volume) ($mg/Nm^{3)}$	Percentage of variation from prescribed standard with reasons
(a)	**Water (STP)**			

S.No.	Parameters	Unit	Avg.	Limits as per MPPCB	% Variation
1	pH	-	7.6	6.5 – 9.0	-15.55
2	TSS	mg/l	6.1	<100	-93.9
3	BOD	mg/l	11.8	<30	-60.6
4	COD	mg/l	36.1	<250	-85.6
5	Oil & Grease	mg/l	BDL(DL0.4)	<10	-96.0
6	Faecal Colifor m	MPN/100 ml	152.0	<1000	-84.8

Water (ETP)

S.No.	Parameter	Unit	Avg.	Limits as per (MPPCB)	% Variation
1	pH (at 25 °C)	-	7.8	5.5 – 9.0	**-13.33**
2	Total Dissolved Solids @180ºC	mg/l	578.8	<2100	**-72.4**

		3	TSS @105ºC	mg/l	19.1	<100	-80.9
		4	BOD (3 days at 27°C)	mg/l	9.6	<30	-68.0
		5	Chemical Oxygen Demand	mg/l	30.0	<250	-88.0
		6	Oil & Grease	mg/l	BDL(DL0.4)	<10	-96.0
		7	Chloride	mg/l	34.7	<1000	-96.53
(i)	**Domestic**	Zero discharge is maintained. Treated domestic water is being used in horticulture and plant process					
(ii)	**Industrial**	As cement manufacturing processes is dry, therefore no effluent generated from the processes, the only water requirement is for cooling which is also met through recycling 100% used water. Zero discharge is maintained					
(b)	**Air**						
	Ambient SPM & gaseous parameters are within limit and report is attached as **Annexure- I**						
	Point Source Emission						
	Kiln & Raw Mill Stack (Bag House)	0.2295			20.4		26.72
	Coal Mill Stack (Bag House)	0.0500			15.9		42.36
	Cooler Stack (ESP)	0.1729			21.7		20.67
	Cement Mill-I Stack (Bag House)	0.0199			15.4		37.69
	Cement Mill-II Stack (Bag House)	0.0207			15.5		33.49
	TPP Stack (Boiler)	0.1838			36.3		26.81

PART – D Hazardous Waste

As specified under Hazardous waste (Management, Handling & Tran boundary Movement) Rules, 2016

Hazardous waste		Total quantity (Kgs)	
		During the previous financial year (2022-23)	During the current financial year (2023-24)
(a)	From process Used oil – 5.1	**38470**	**11130**
(b)	Empty Drum (33.1)	10970	Nil
(C)	Wastes or residues containing oil (I-Cat. 5.2)	1690	4680
(b)	From pollution control facilities.	Nil	Nil

PART – E

Solid Wastes

Solid waste		Total quantity	
		During the previous financial year (2022-23)	During the current financial year (2023-24)
(a)	From process	No solid waste is generated from the cement manufacturing process.	No solid waste is generated from the cement manufacturing process.
(b)	From pollution control facilities	**Air –** The dust collected from the pollution control equipment is being 100% recycled back into the process system.	**Air –** The dust collected from the pollution control equipment is being 100% recycled back into the process system.
		Water – 3.5 MT sludge generated from the STP and 100% utilized as manure.	**Water –** 4.0 MT sludge generated from the STP and 100% utilized as manure.
(c)	(i) Qty. Recycled or reused within the unit.	All the collected swept waste is reused in the process.	All the collected swept waste is reused in the process.
	(ii) Sold	Nil	Nil
	(iii) Disposed	Nil	Nil

PART – F

PLEASE SPECIFY THE CHARACTERISATIONS (IN TERMS OF COMPOSITION AND QUANTUM) OF HAZARDOUS AS WELL AS SOLID WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THESE CATEGORIES OF WASTES

Hazardous waste: All the used oil, waste oil, used grease generated from the different sections of plant is being collected in empty drums and barrels and then sent to Hazardous waste storage site for the proper storage. The store department all collected hazardous waste is being sold out to authorized recyclers as per Hazardous Waste Management, Handling & Transboundary Movement Rule, 2016.

(Hazardous Waste Storage)

We have analyzed all hazardous waste material from the NABL Certified lab before the disposal. The characteristics of Hazardous waste material are attached below: -

J.M. ENVIROLAB PVT. LTD.

30 years of success

Approved from MoEF&CC & Certified - ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

TEST REPORT

Name and address of unit:	M/s. UltraTech Cement Limited (Unit- Bela Cement Works) Jaypee Puram PO Jaypee Puram, Rewa, Madhya Pradesh- 486450	Report No.:	JMF/O/230725001/N
		Reporting Date:	28/07/2023
		Analysis Completion Date:	28/07/2023
		Analysis Start Date:	25/07/2023
Sample Description:	Used Oil	Receipt Date:	25/07/2023
Sampling Location :	Cement Plant	Sampling Date	24/07/2023
Sample Collected by:	JMELPL TEAM	Sampling Type:	Grab
Contact Person:	Mr. Chandrakant Tiwari	Packing Status :	Temporary Sealed

TEST RESULTS

S. No.	Parameter	Protocol	Result	Unit	Limits
1.	Polychlorinated biphenyls (PCBs)	As Per CPCB Guidelines	BDL (DL 2.0)	ppm	<2.0
2.	Lead	As Per CPCB Guidelines	17.36	ppm	100
3.	Arsenic	As Per CPCB Guidelines	0.59	ppm	5
4.	Cadmium + Nickel + Chromium	As Per CPCB Guidelines	23.68	ppm	500
5.	Poly Aromatic Hydrocarbon (PAH)	As Per CPCB Guidelines	0.36	%	6

Note- Limit as per Schedule V [see Rules 3(36) and 3(39)] Part A

End of Report

Srishti Mehta	Abhishek Tiwari	Rajk…
Tested by	Checked by	Authorized Signatory

Note:
1. This test report has been at your request and test results pertain to the tested sample received.
2. This reports is for your reference only and not to be used for any legal purpose.
3. Any discrepancy in the test report or any remarks regarding the test results shall be brought to our knowledge within 7 days of the issue of this report.
4. [illegible]
5. The sample will be destroyed after retention time unless otherwise specified specially.
6. Endorsement of the product tested by the laboratory is neither inferred nor implied.
7. Report shall not be reproduced except in full without approval of the laboratory.
8. All disputes are subject to exclusive jurisdiction of Jaipur court only.

Reg. Office & Lab.
424, Ground Floor, Udyog Vihar,
Phase-IV, Gurugram-122015 (Haryana)
E-mail: jmenvirolab@hotmail.com | www.jmenvironet.org

Corporate Office
Emaar Digital Greens, Tower-B, Unit No.1517,
Golf Course Ext. Road, Sector-61,
Gurugram-122011(Haryana)

PART – G

IMPACT OF THE POLLUTION ABATEMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION

Following measures have been adopted for abatement of pollution & conservation of natural resources: -

1. Conservation of limestone

a) Utilization of Fly ash for the manufacturing of Cement

We have used fly ash up to 33.95% (306740 MT) of total Portland Pozzolana Cement manufactured, which directly reduces the raising of limestone from mines.

2. Conservation of Mineral Gypsum Utilization of Chemical Gypsum

We have used fertilizer industry by-product which is waste in nature and its chemical properties are as good as gypsum. 51.97% Chemical gypsum (16943 MT) was used for cement manufacturing process (Total – 32598 MT overall gypsum).

3. **Conservation of Coal –**

We have used refinery industry by-product which is waste in nature and its calorific value are as good as coal. Petcock (140245 MT) was used in place of coal for making of clinker and save natural resource of coal.

To conserve natural resources like coal and reduce our carbon footprint, we are actively integrating green power solutions into our operations. One of the key initiatives is the utilization of Waste Heat Recovery Systems (WHRS), which capture and reuse heat generated from our processes to produce energy. This not only reduces the reliance on coal but also enhances energy efficiency.

In addition, we are harnessing solar power, a clean and renewable energy source, to further reduce dependency on non-renewable resources. By adopting these sustainable practices, we are committed to preserving the environment and promoting responsible energy consumption for a greener future.

- **Utilization of WHRS – 11 MW**
- **Utilization of Solar Power- 5 MW**

4. Conservation of Water- a. Rain Harvesting Pits

We have constructed 12 rainwater harvesting pits within the plant premises, with a combined capacity of 687,853 cubic meters per annum. Additionally, a recharge pit with a capacity of 6,000 cubic meters is currently under construction.

Capacity of recharge pits as mentioned below-

Sr. No.	Pit name	Clogging Coefficient (lps)	No. of Days Rain Availability	Volume (m^3)	Recharge from Well
1	RWH Pit No. 1	1.33	70	86.4	8043.84
2	RWH Pit No. 2	1.33	70	86.4	8043.84
3	RWH Pit No. 3	1.33	70	86.4	8043.84
4	RWH Pit No. 4	1.33	70	86.4	8043.84
5	RWH Pit No. 5	1.33	70	86.4	8043.84
6	RWH Pit No. 6	1.33	70	86.4	8043.84
7	RWH Pit No. 7	1.33	70	86.4	8043.84
8	RWH Pit No. 8	1.33	70	86.4	8043.84
9	RWH Pit No. 9	1.33	70	86.4	8043.84
10	RWH Pit No. 10	1.33	70	86.4	8043.84
11	RWH Pit No. 11	1.33	70	86.4	8043.84
12	RWH Pit No. 12	1.33	70	86.4	8043.84
Total Total Volume of water storage					96526.08

RWH Pit No. 1

RWH Pit No. 2

RWH Pit No. 3

RWH Pit No. 4 | RWH Pit No. 5 | RWH Pit No. 6

RWH Pit No. 7 | RWH Pit No. 8 | RWH Pit No. 9

RWH Pit No. 10 | RWH Pit No. 11 | RWH Pit No. 12

b. Roof top Rain water harvesting in office building and township- Details of roof top water harvesting as mentioned below-

S.No.	Location	Harvesting Quantity (m3)
1	Office Complex Building	498
2		498
3	Quarter E-Type (Township)	201
4		201
Water Recharged through Roof top - C		1397

c. Pond- The plant management has adopted 3 ponds. Details of the pond has been depicted below,

Baijnath Village Pond

Madheypur Village Pond

Hinauti Village Pond

Sr.N.	Locations	Avg. water spread Area (sq.m.)	Factor	(Area* Factor) = A	A*365 = B	Water Conservation Quantity (B*0.6) (kL/annum)
1	Baijnath Village Pond	1350	0.00144	1.94	709.56	426
2	Madheypur Village Pond	10948	0.00144	15.77	5754.27	3453
3	Hinauti Village Pond	37654	0.00144	54.22	19790.94	11875
Water Recharged through pond – B						15753

PART – H

ADDITONAL MEASURES / INVESTMENT PROPOSALS FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT POLLUTION, PREVENTION OF POLLUTION

Additional measures taken for environmental protection are as under.

Plantation in and around the plant area

We have a dedicated team of skilled horticulturists for the afforestation and greenery development program at our plant and mines under the supervision of senior experienced person. In addition to the horticulture department, Environment Cell also does the plantation activity.

Particulars	Plantation during the year 2022-23	Plantation during the year 2023-24
Plant & Township area	4420	1600

Year Wise Tree plantation details are as under.

S.No.	Period (Year)	Cement Plant and Township area	
		No. Of tree Planted	Total Area Covered (ha.)
1	Up to 31.03.2017	56629	22.65
2	2017- 18	110	0.04
3	2018- 19	120	0.05
4	2019-20	300	0.12
5	2020-21	7145	2.86
6	2021-22	4500	1.80
7	2022-23	4420	2.10
8	2023-24	1600	0.38
Total		74824	30.00
Total Area Covered: 30.00 Hac. i.e. 33.9 % area covered as greenbelt in Cement Plant			

Few photographs of plant's plantation-

PART – I

OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

Following measures have been taken to reduce emission level and maintain good

1.Installation LS Stacker Reclaimer shed. A closed shed has been provided for the limestone stacker reclaimer equipment and crushed limestone storage to effectively control fugitive dust emissions. This enclosure minimizes the dispersion of dust particles into the surrounding environment, ensuring compliance with air quality standards. Additionally, it enhances operational efficiency by protecting the equipment from weather-related issues and reducing the need for frequent maintenance.

2. Energy measuring device has been installed.
3. Installation of NEW CAAQMS (Continuous Ambient Air Quality monitoring system
4. Installation of New LED (Online display board) for display of emission parameters for public awareness.
5. Additional hopper for storage of raw material.
6. Concreting work has been done to reduce fugitive dust emission

Environment Expenditure: - Expenses related to environment protection measures for the period from April, 2023 to March,2024 are as

Environment Expenditure for the period from Apr'23 to March'24		
S. No.	**Particulars**	**Expenditure in Lakhs**
A	**Recurring Cost**	
1	Air Pollution Control Devices - Power consumption cost (Bag filters and ESPs)	915.989
2	Air Pollution Control maintenance (Bag House, Bag Filter and ESP)	29.86

3	Greenbelt development	7
4	Environmental Monitoring	12
5	Annual Maintenance of CEMS & CAAQMS	11.7
6	Road Concreting	250
7	STP Operational Cost	3.5
	Subtotal (A)	**1230.049**
B	**Environmental Projects (CAPEX)**	
1	Clinker wagon loading hopper	85.2
2	Installation of New Online Monitoring System (CAAQMS)	40
3	Projects Related to Environment protection expenses	2043.09
	Subtotal (B)	**2168.29**
	Grand Total(B)	**3398.34**

Good Housekeeping Practices

1. **ShubhMuhurat-** Bela Cement Works has implemented a new initiative to maintain high standards of housekeeping across the plant premises. As part of this initiative, every employee, from top management to staff and workers, actively participates in basic site upkeep. This daily activity takes place from 8:35 AM to 9:30 AM, fostering a culture of collective responsibility and ensuring a clean, safe, and well-maintained work environment for everyone.

Other Initiatives to control air pollution:

1. **Lime stone Stacker/ Reclaimer Shed**- A closed shed has been provided for the limestone stacker reclaimer equipment and crushed limestone storage to effectively control fugitive dust emissions. This enclosure minimizes the dispersion of dust particles into the surrounding environment, ensuring compliance with air quality standards. Additionally, it enhances operational efficiency by protecting the equipment from weather-related issues and reducing the need for frequent maintenance.

2. **Truck Mounted Industrial Vacuum Machine-** Bela Cement Works has deployed a truck-mounted industrial vacuum machine to effectively clean dust from various floors without dispersing it over nearby equipment and machinery. Accumulated dust in the cement mill area is a significant concern, not only for the environment but also for the stability and safety of the structure. To address this, the hose pipe of the truck-mounted vacuum machine is capable of reaching distances of up to 50-80 meters, ensuring comprehensive cleaning coverage in hard-to-reach areas and enhancing overall site safety

3. Mobile road sweeping machine is being deployed followed by water tanker to minimized fugitive dust emission while movement of heavy vehicle on road.

4. Water spaying arrangement at raw material: Water spraying arrangement has been provided at Raw coal yard to prevent fugitive dust emission.

5. Coal unloading by Wagon Tippler attached with mist type of water spraying system.

6. Fly Ash unloading by pneumatic conveying system – We have pneumatic conveying system for transportation of fly ash generated from our captive power plant and 100% fly ash is being utilized for manufacturing of cement.

7. Automatic Cement Bulk Loading System installed with adequate capacity of bag filters which is being control fugitive dust emission while loading cement in bulkers.

8. Internal roads are concreted to minimized fugitive dust emission while movement of heavy vehicles.

Water Management:

We have latest and advanced technology-based Sewage Treatment Plant which comprises of following:

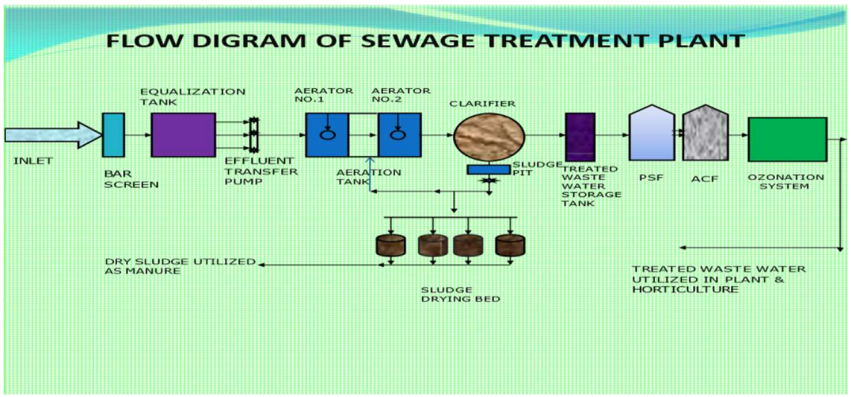
a. Collection tanks
b. Aerator blowers
c. Aeration Tanks

d. Clarifiers
e. Pressure Sand Filter
f. Activated Carbon Filter
g. Ozonation

The capacity of Treatment Plant is 600 KL per day. The STP is upgraded from secondary treatment to tertiary treatment system by installing activated carbon filter, precip-sand filter & ozonator.

STP at Site

The generated sewage from different parts of colony is collected in raw sewage tank at STP where blowing is being done for homogenization of raw sewage water. This homogenized sewage water comes to aeration tank for sufficient aeration of sewage water and then conveyed to clarifier where suspended particle is being separated from raw sewage through mechanical clarification system. After that clarified water collected in intermediate holding tank and sludge settled at the bottom of clarifier is transported to sludge drying beds. Now the water from the intermediate tank is passed through pressure sand filter and then activated carbon filter and ultimately collected in the final holding tank where ozonation is being done. 100% of tertiary treated water is being used in the cement manufacturing process & horticulture activities.



The treated waste water analysis report of Sewage treatment Plant for the period from April, 2023 to March, 2024 is as under.

S.No.	Parameters	Unit	Results			Limits as per MPPCB
			Min	Max	Avg.	
1	pH	-	7.41	7.89	7.6	6.5 – 9.0
2	TSS	mg/l	3.9	9	6.1	<100
3	BOD	mg/l	8	15	11.8	<30
4	COD	mg/l	25	42	36.1	<250
5	Oil & Grease	mg/l	BDL(DL1.0)	BDL(DL1.0)	BDL(DL1.0)	<10
6	Faecal Coliform	MPN/100 ml	104	165	152	<1000

Noise Management:

Noise levels are being controlled through acoustic hoods, silencers, enclosures i.e., installed silencers in blower, silencer in compressor and all cooling fans attached with silencer at clinker cooler area. The noise level has been come down up to 7.0% in impulsive noise monitoring. A. cylindrical drum size silencer is hooked after cooling fan and exist Ambient Air to reduce machine impulsive noise.

The regular checking/maintenance of machineries are being done to reduce/control noise generation from the sources. All the personal protective equipment's (i.e. earplug/ear muffs etc) have been provided to the all workers/employees. The Noise levels at 4 locations along with the ambient air quality is being monitored in-house on monthly basis and on quarterly basis by MPPCB, Rewa.

Ambient Noise level monitoring data (Period: April,2023 to March,2024)

Ambient Noise level					
Period : April,2023 to March,2024					
S.N.	Locations	Latitude & Longitude	Noise level dB(A)		
			day time		
			Avg.	Min	Max
1	Madheypur Village	N 24^{0}32.207'&E 081^{0}09.576'	53.7	53	54.5
2	Sonara Village (HEW)	N 24^{0}31.569 & E 081^{0}09.738''	53.7	52	54.7
3	Ganga Dwar	N 24^{0}31.995'& E 081^{0}10.442'	53.9	53	54.8
4	BLCW Medical Centre	N 24^{0}31.530' E 081^{0}10.125'	50.2	47	54.8
5	BLCW Residential Colony	N 24^{0}31.533' & E 081010.051'	53.7	53	54.4

S.N.	Locations	Latitude & Longitude	Noise level dB(A)		
			Night time		
			Avg.	Min	Max
1	Madheypur Village	N 24^{0}32.207'&E 081^{0}09.576'	43.5	41	44.9
2	Sonara Village (HEW)	N 24^{0}31.569 & E 081^{0}09.738''	43.7	42	44.6
3	Ganga Dwar	N 24^{0}31.995'& E 081^{0}10.442'	43.7	43	44.7
4	BLCW Medical Centre	N 24^{0}31.530' E 081^{0}10.125'	40.4	38	44.1
5	BLCW Residential Colony	N 24^{0}31.533' & E 081010.051'	43.8	43	44.7

ENVIRONMENT MANAGEMENT CELL:

In order to maintain the environmental quality within the standards, regular monitoring of various environmental components is being done. Bela Cement Works have a full-fledged Environmental Management Cell (EMC) reporting directly to Unit Head. The EMC team is being taking care of pollution monitoring aspects and implementation of control measures as per the stipulated conditions in the Consent Orders or Authorization issued by the various statutory bodies i.e. State Pollution Control Board, Central Pollution Control Board, Ministry of Environment & Forest, Central Ground Water Authority etc. A team of qualified and efficient engineers with technical staff has deputed for maintenance, up keeping and monitoring the pollution control equipment.

OBJECTIVES OF ENVIRONMENT CELL:

- Monitoring of stacks, ambient air quality, fugitive emission, noise, water, testing waste water quality.
- Compliance of conditions given in various statutory clearances and conducting different studies related with Environment
- Preparation and submission of Environment Statement, monthly, quarterly, half yearly monitoring report & yearly return.
- Compliance of other regulatory requirements
- Implement water conservation and harvesting initiates.
- Development of environmental awareness among the plant person as well as at surrounding schools & villages.
- Highlighting major environmental activities to external agencies
- Ensure Implementations of newly notified guidelines.

➢ **KEY ACTIVITIES OF ENVIRONMENT CELL**

- Development of Environmental Feed Back & Reporting and reviewing system, where information flows from bottom to top.
- Monitoring / Measurement of various parameters like Air, Water and Noise etc.
- Inspection of bag filters installed at transfer points.
- Full scale treatment of sewage and management of treated sewage and check the treated waste water quality of STP performance.
- Arrange for repairs and maintenance of pollution monitoring and control systems.

- Co-ordination with various departments for effective implementation of pollution control measures to ensure statutory compliance.
- Organize testing of Water, Hazardous waste from external agencies to ensure compliance.
- Calibration of monitoring equipment.
- We have an organizational structure for Environment Management to carry out implementation of Environment measures envisaged at site in enclosed guidance of Corporate Environment Head and under direct supervision of Unit Head

Corporate Environment policy and organization is as under:

ADITYA BIRLA

UltraTech

Corporate Environment Policy

UltraTech Cement Ltd. has always been conscious about the impact of our activities in spheres of employee welfare measures, social and community initiatives and environment sustainability. This environmental policy represents our general position on environmental issues, the policies and practices we apply in conducting our business. We make continuous efforts to be compliant with all applicable local environmental laws and regulations.

We will proactively commit towards:

1. Conducting all operations in accordance to new and recent environmental and statutory laws and regulations.
2. Efficient and sustainable extraction and utilization of natural resources.
3. Adoption and application of state of the art technology to minimize environmental impacts of our operation.
4. Waste minimization through focus on end-of-life management by incorporating waste to energy/fuel systems through safe and approved methods and ensuring to become Plastic Positive.
5. Influence our suppliers to adopt practices for resource conservation and waste reduction.
6. Limiting the dependency on coal-based power by increasing the share of renewable energy and Waste Heat Recover Systems (WHRS).
7. Make continuous efforts to minimize fresh water consumption by increased use of harvested/ recycled water in our operations across all UTCL units and contributing towards becoming Water Positive.
8. Implement and continually improve the Environmental Management System across all our operations.
9. Monitor and report the environmental performance of all our units through regular inspections and audits for corrective actions and continual improvement.
10. Reporting of compliances and non-compliances to the concerned regulatory authorities and other stakeholders with measures to address non-compliances on priority

Kailash Jhanwar
Managing Director

November 2020

For the effective implementation of the environment policy, we shall:

a) Set objective-targets, develop, implement and maintain management standards and systems, and go beyond compliance of the relevant industry standards, legal and other requirements.
b) Commit to monitoring resource consumption on a regular basis and seek opportunities to reduce use of materials, energy, waste etc. through efficiency measures wherever possible.
c) Develop and propagate environmental awareness amongst employees and other stakeholders including surrounding communities.
d) Undertake the review of the Environmental Policy and Environmental Management Plan periodically.
e) Communicate the environmental commitment and performance of the organization to our stakeholders.
f) Abide to follow the Environment Policy through a robust Organizational Structure, given as follows:

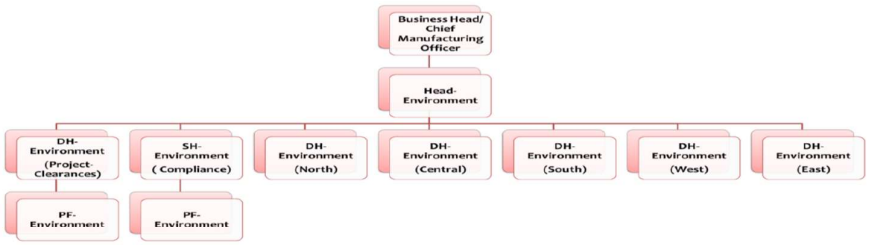


Figure 1: Hierarchical System to address Environmental Issues

We, hereby declare that we are responsible and accountable for the deployment of this policy. We shall remain committed at all times for its effective implementation.

Kailash Jhanwar
Managing Director

November 2020

Corporate Environment Policy

Environment Cell			
TECHNICAL STAFF			
1.	Name	:	Dr. K. V. Reddy
	Designation		Joint President & Corporate Head (Environment)
	Qualifications		M. Sc. & PhD
2	Name		Mr. Rana Dey
	Designation	:	Joint Executive President & Unit Head
	Qualifications	:	B. Tech & MBA (Chemical Engineering)
3.	Name	:	Mr. Sivakumar Rajagopal
	Designation	:	Vice President (FH-Technical &CPP)
	Qualifications	:	B. E. (Mechanical)
4.	Name	:	Dr. Ratnesh Srivastava
	Designation	:	Dy. General Manager & Zonal Head (Environment)
	Qualifications	:	M. Sc. & PhD (Environment)
5.	Name	:	Ms. Vandana Sharma
	Designation	:	Assistant Manager & SH – (Environment)
	Qualification	:	B.Tech, M. Tech & PGDSEM (Sustainability & Environment)
6	Name	:	Mr. Ankit Pandey
	Designation	:	Officer (Environment)
	Qualification	:	M.Sc. – (Environmental Science)

Form-V/ ESR- BELA CEMENT WORKS (CEMENT PLANT, CPP & DGs) FY 2023-24

Annexure-1

Ambient Air Quality Monitoring Report
AAQMR, Period: April,2023 to March 2024

Month	AAQMS-1 Sonara Village (HEW)					AAQMS-2 Madheypur Village					AAQMS-3 Ganga Dwar					AAQMS-4 Near Yamuna Dwar				
	in microgram/m^3				mg/m^3	in microgram/m^3				mg/m^3	in microgram/m^3				mg/m^3	in microgram/m^3				
	PM-10	PM-2.5	SO2	NOx	CO	PM-10	PM-2.5	SO2	NOx	CO	PM-10	PM-2.5	SO2	NOx	CO	PM-10	PM-2.5	SO2	NOx	CO
Apr-23	72.2	38.4	14.5	17.5	0.72	75.4	38.4	14	17.5	0.79	81.6	38.6	13	16.6	0.76	73.1	41.5	16	15.4	0.71
May-23	70.7	36.4	14.3	16.1	0.75	71.2	37.9	13.9	18	0.8	77.7	39.2	13.5	15.9	0.74	70	40.7	15.8	16.1	0.74
Jun-23	69	34.1	12.9	14.8	0.69	69.8	36.7	13.7	16.8	0.78	75.1	38.3	12.4	13.8	0.75	69.1	37.9	14.1	15.7	0.69
Jul-23	68.3	37.1	14.6	15.1	0.71	70.2	36.7	15.3	15.3	0.76	71.7	36.7	13.2	14.6	0.7	68.1	39	13.5	16.3	0.7
Aug-23	66.4	35.1	13.3	16	0.69	66.2	33.3	13.5	14.6	0.74	66.4	35.8	11	15.6	0.7	66.8	38.9	12.8	17.3	0.71
Sep-23	64.9	32.8	12.3	15.2	0.67	65.4	30.6	13.3	15	0.68	65.7	34.5	11.1	14.8	0.69	65.5	36.3	12.2	15.8	0.69
Oct-23	65.9	33.9	13.9	14.2	0.66	64.5	31.9	12.9	14.5	0.71	67.6	35.7	12.3	14.6	0.72	67.2	35.3	13	13.5	0.71
Nov-23	68.1	36.1	13.1	13.3	0.7	67.2	33.1	13.1	14.6	0.73	68.4	33.6	10.6	14	0.74	70.2	34.9	14.9	14.1	0.69
Dec-23	65.5	34.7	13.8	12.8	0.71	68.9	32.6	12.9	14.9	0.69	69	32	11.1	12.9	0.75	69.8	33.9	13.6	15	0.72
Jan-24	66.9	35	12.3	13.6	0.72	67.3	33.1	11.9	14.5	0.71	70.3	31.5	10.8	12.4	0.73	70.2	34.8	12.8	14.2	0.75
Feb-24	67.8	34.2	13	12.7	0.7	66.6	32.7	12.1	12.9	0.69	71.3	32.4	11	13.4	0.76	69.9	35.5	11.8	13.6	0.71
Mar-24	68.6	33.6	13.7	13	0.75	69.6	35.9	11.3	13.1	0.72	72.3	31.1	8.9	13.5	0.73	72.4	34.7	10.9	13.1	0.73
Average	67.86	35.12	13.48	14.53	0.71	68.53	34.41	13.16	15.14	0.73	71.43	34.95	11.58	14.34	0.73	69.36	36.95	13.45	15.01	0.71
Minimum	64.90	32.80	12.30	12.70	0.66	64.50	30.60	11.30	12.90	0.68	65.70	31.10	8.90	12.40	0.69	65.50	33.90	10.90	13.10	0.69
Maximum	72.20	38.40	14.60	17.50	0.75	75.40	38.40	15.30	18.00	0.80	81.60	39.20	13.50	16.60	0.76	73.10	41.50	16.00	17.30	0.75