

UTCL/SCW-3.03/2023-24/

Date: 01.09.2023

The Member Secretary, **Gujarat Pollution Control Board** Paryavaran Bhavan, Sector-10A, Gandhinagar - 382010 (Gujarat).

Subj.: Submission of Environment Statement Report Form-V for the financial year 2022-23 (Cement Plant, GPCB ID No. 27774)

Dear Sir,

This is with reference to above subject, we are submitting here with Environment Statement Report for the financial year 2022-23 for our UltraTech Cement Limited (Unit: Sewagram Cement Works-Cement Plant, GPCB ID No. 27774).

Hope you will find same in order.

Thanking You.

Yours Faithfully,

For UltraTech Cement Limited (Unit: Sewagram Cement Works)

Naveen Chandra Kukreti **Unit Head** 

Enclosed: Environment Statement Report (Form-V): 2022-2023

Copy to:

Regional Officer, Gujarat Pollution Control Board Katira Complex, Sanskar Nagar, Bhuj (Gujarat).



**UltraTech Cement Limited** (Unit: Sewagram Cement Works)

GSTIN: 24AAACL6442L1ZG | Corporate Identification Number (CIN): L26940MH2000PLC128420

Factory: Village Vayor, Taluka Abdasa, Distt.: Kutch, Gujarat - 370 655 | Tel.: +91-2831-279200 | Fax: +91-2831-279279 Mumbai Office: Ultratech Cement Limited. 'A' Wing, 1st Floor, Ahura Centre, Mahakali Caves Road, Andheri (E), Mumbai - 400 093

Tel.: 022-66917400 | Fax: 022-28244960 / 70

Registered Office: Ultratech Cement Limited, 'B' Wing, 2nd Floor, Ahura Centre, Mahakali Caves Road, Andheri (E), Mumbai - 400 093 | Tel.: 022-66917800





# **UltraTech Cement Limited**

(Unit: Sewagram Cement Works)



## **Environment Statement**

Financial Year: 2022-23

UltraTech Cement Limited
(Unit: Sewagram Cement Works)
Vill. Vayor, Tal. Abdasa, Distt. Kutch (Gujarat)

#### <u>UltraTech Cement Ltd: The Engineer's Choice: Building Solutions Powerhouse</u>

UltraTech Cement Limited is the cement flagship company of the Aditya Birla Group. A USD 7.9 billion building solutions powerhouse, UltraTech is the largest manufacturer of grey cement and ready-mix concrete (RMC) in India. It is also one of the leading players in the white cement segment in India. It is the third largest cement producer in the world, excluding China. UltraTech is the only cement company globally (outside of China) to have 100+ MTPA of cement manufacturing capacity in a single country. The Company's business operations span UAE, Bahrain, Sri Lanka and India.

UltraTech has a consolidated capacity of 137.85 Million Tonnes Per Annum (MTPA) of grey cement. UltraTech has 23 integrated manufacturing units, 29 grinding units, one Clinkerization unit and 8 Bulk Packaging Terminals. In the white cement segment, UltraTech goes to market under the brand name of Birla White. It has one White Cement unit and three Wall Care putty unit, with a current capacity of 1.98 MTPA. With 230+Ready Mix Concrete (RMC) plants in 100+ cities, UltraTech is the largest manufacturer of concrete in India. It also has a slew of speciality concretes that meet specific needs of discerning customers. The Building Products business is an innovation hub that offers an array of scientifically engineered products to cater to new-age constructions.

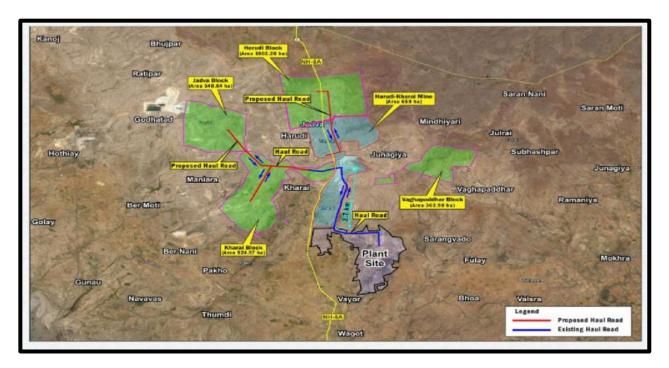
UltraTech pioneered the UltraTech Building Solutions (UBS) concept to provide individual home builders with a one-stop-shop solution for building their homes. This is the first pan-India multi-category retail chain catering to the needs of individual home builders (IHBs). The purpose of this initiative is to engage with home builders at all stages of the construction cycle, empower them with quality construction products and services, and assist in the completion of their dream homes.

UltraTech is a founding member of Global Cement and Concrete Association (GCCA). It is a signatory to the GCCA Climate Ambition 2050 and has committed to the Net Zero Concrete Roadmap announced by GCCA. UltraTech is focused on accelerating the decarbonisation of its operations. It has adopted new age tools like the Science Based Targets Initiative (SBTi) and Internal Carbon Price as well as set ambitious environmental targets through both EP100 and RE100. UltraTech is the first company in India and the second company in Asia to issue dollar-based sustainability linked bonds.

UltraTech works to actively contribute to the social and economic development of the communities in which it operates in. The Company's social initiatives focus on education, healthcare, sustainable livelihoods, community infrastructure and social causes. UltraTech reaches out to more than 1.6 million beneficiaries in over 507 villages in 16 states across India.

#### **Sewagram Cement Works**

Sewagram Cement Works is a unit of M/s UltraTech Cement Limited located at Vill. – Vayor, Taluka – Abdasa, Distt. – Kutch (Gujarat). The unit produces Grey Cement and Clinker, having a cement production capacity of 5.0 MTPA. It is state of the art modern technology plant with two separate production lines named Line-1 and Line-2. Sewagram Cement Works has it captive power plant with capacity of 55 MW for uninterrupted power supply. Company has two limestone mines lease area 659 ha and 2831 ha with production capacity of 1.505 MTPA and 6.8 MTPA respectively & total of 8.3 MTPA. Also for meeting the requirements of Laterite & Clay, company is having Laterite mines of 400 ha with a capacity of 36000 MTPA and Clay Mines of 432.30 ha with a capacity of 1692000 MTPA. Sewagram Cement Works has its own Desalination plant to meet the requirement of water for plant, colony, mines etc. and has captive Jetty with capacity of 2.5 MTPA. SCW is an ISO 9001: 2015, ISO 14001:2015, OHSAS 18001:2007, ISO 27001:2013 and ISO 50001:2011 accredited Company and follow the WCM Excellence Model in all of its processes. Our Quality Control LAB also certified with NABL ISO17025.The plant also has an environmental cell which monitors air and water quality, audits, and conducts Environmental studies of mines and nearby villages, The Unit has taken several initiatives towards Sustainability and bio-diversity conservation; including green belt development, water Conservation & adoption of green energy a 5MW solar plant installed in 2018.



#### Communication:

Road Link: - Located by the side of State Highway (NH – 8A Extn.) connecting Naliya to Narayan Sarovar.

Rail Link: - Nearest railway station is Bhuj Railway Station at a distance of about 130 km from plant site by road.

Air Link: - The nearest Bhuj airport is about 130 km. from the site by road.

## Environmental Statement for the Period of 1st April 2022 to 31st March 2023

## $\underline{\mathsf{PART}} - \mathsf{A}$

(i)	Name & Address of the Owner / Occupier of the Industry Operation or Process	Mr. Naveen Chandra Kukreti (Unit Head) UltraTech Cement Limited (Unit: Sewagram Cement Works) Village - Vayor, Taluka - Abdasa Kutch -Bhuj (Gujarat) Pin–370511
(ii)	Industry Category Primary – (STC Code) Secondary – (SIC Code)	Cement Manufacturing
(iii)	Production Capacity	5.0 MMTPA Cement (OPC & PPC) 4.0 MMTPA Clinker
(iv)	Year of Establishment	Year 2009
(v)	Date of last Environmental Statement Submitted	20.09.2022

## PART - B

## Water & Raw Material Consumption

## (i) Water Consumption m³/Day

Process : Not Applicable (as plant is based on dry process technology)

Cooling : 464 m³/day

Domestic : 872 m³/day

Name of the Product	Process water consumption per unit of product output	
	During the Previous Financial Year	During the Current Financial Year
Clinker & Cement	0.085	0.073

## (ii) Raw Material Consumption

Name of the	Name of	Consumption of Raw material per unit product output	
Raw materials	Products	During the Previous Financial Year	During the Current Financial Year
Limestone		1.18	1.24
Laterite	-	0.01	0.01
Bauxite	Climbra.	0.00	0.00
Clay	. Clinker	0.26	0.18
Silica Sand	-	0.04	0.00
Coal	-	0.13	0.10
Gypsum	Cement	0.04	0.03
Fly Ash	Cement	0.15	0.13

## PART - C

## Pollutants Discharged to Environment / Unit of Output

(Parameters as specified in the consent issued)

(1) Pollu	utants		Results (Annual Avg.)	Percentage of variation from prescribed standards with reasons.		
a) Water (Se	a) Water (Sewage)					
рН			7.30	Sewage is being treated in the STP so		
Biologica	l Oxygen Demand		23.20 mg/l	measured values observed lower than the		
Suspende	ed Solids		67.80 mg/l			
Fecal Col	cal Coliforms		26 MPN /100 ml	prescribed limit.		
			b) Air (Stack Emission)			
		PM	21 mg/Nm³			
	Raw Mill & Kiln	SO <sub>2</sub>	151 mg/Nm³			
		NOx	603 mg/Nm <sup>3</sup>			
Unit-1	Coal Mill	PM	15 mg/Nm³			
Onit-1	Alkali bypass	PM	13 mg/Nm³			
	Clinker Cooler	PM	8 mg/Nm <sup>3</sup>			
	Cement Mill-1	PM	17 mg/Nm <sup>3</sup>	Appropriate pollution control equipment		
	Cement Mill-2	PM	15 mg/Nm³	have been provided so measured values		
		PM	18 mg/Nm <sup>3</sup>	observed lower than the prescribed limit.		
	Raw Mill & Kiln	SO <sub>2</sub>	155 mg/Nm <sup>3</sup>			
		NOx	583 mg/Nm <sup>3</sup>			
Unit-2	Coal Mill	PM	16 mg/Nm <sup>3</sup>			
	Alkali bypass	PM	14 mg/Nm³			
	Clinker Cooler	PM	13 mg/Nm³			
	Cement Mill-3	PM	22 mg/Nm <sup>3</sup>			

## PART – D

## **HAZARDOUS WASTES**

		Total Quantity (KL/MT)		
На	azardous Wastes	During the previous	During the current	
		financial year	financial year	
(a)	From Process	• Used Oil-(5.1) – 34.821	• Used Oil-(5.1) – 6.20	
		• Waste Oil (5.2)— NIL	• Waste Oil (5.2)- 41.12	
		Cathode residues including pot lining	Cathode residues including pot	
		wastes-(11. 2)- NIL	lining wastes-(11. 2)- NIL	
		Chemical sludge from waste water	Chemical sludge from waste water	
	treatment (Chemical Gypsum (35.3)-9315.620		treatment (Chemical Gypsum	
		Iron Sludge (26.1)- NIL	(35.3)- 183.67	
			• Iron Sludge (26.1)- NIL	
(b)	From pollution	Not Applicable		
(b)	control facilities	ivot Applicable		

## PART – E

## Solid Wastes

		Total Quantity		
Description		During the Previous During the Current		
		Financial Year	Financial Year	
(a)	From Process	No solid waste is generated f	rom the cement manufacturing process.	
(b)	From Pollution Control	All waste material collected	from pollution control facilities is recycled in	
	facilities	the process.		
(c)	(1) Qty. recycled or reused	Solid wastes generated from process operations is especially through		
	Within the unit.	spillage or emissions of the v	various raw materials or the finished product	
		i.e. cement. This spilled mate	rial is being recycled into the process. Hence,	
		there is no solid waste {	generated during the process of cement	
		manufacturing.		
	(2) Sold	Not Applicable		
	(3) Disposed	Not Applicable		

**Environment Statement: FY 2022-23** 

#### PART – F

Please specify the characterizations (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

<u>Hazardous waste</u>: Used & Waste oil generated from the different sections of plant is being collected in empty drums/ barrels and sent to store department for proper handling and storage. The store department stores all the collected hazardous waste at specified location as per Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and finally it is being sold out to authorized recyclers/vendors.

**Solid waste:** Solid wastes generated from process operations is especially through spillage or emissions of the various raw materials or the finished product i.e. cement. This spilled material is being recycled into the process. Hence, there is no solid waste generated during the process of cement manufacturing.

#### 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. <u>Conservation of limestone</u>: Limestone is being used for the manufacturing of cement by the proper blending of different grade of limestone for preparation of proper raw mix design which can be produced a good quality of cement. The raw mix design has been prepared in such a way that it reduces the limestone stone saturation factor by which substantial quality of limestone has been conserved. By reduction of consumption of limestone in cement manufacturing process it also leads to the reduce the consumption of fossil fuel and it ultimately reduce the quantity of generation of different pollutants like SPM, SO<sub>2</sub>, NOx and Fugitive emission from various stages of handling of limestone (Surface mining to grinding stages). Substantial quantity of electrical and thermal energy has been also saved.

#### 2. Use of STP treated water for the plant purpose.

We have latest and advance technology based Sewage Treatment Plant which comprises the following:

- 1. Collection of sewage tank
- 2. Aerator blower
- 3. Aeration Tanks
- 4. Clarifiers
- 5. Pressure Sand Filter
- 6. Activated Carbon Filter
- 7. Sludge cake formation

The capacity of sewage treatment plant is 750 KL per day. The sewage collected from the different part of colony and plant is being collected in raw sewage tank where air blowing is being done for homogenization of raw sewage water. Then this homogenized sewage water comes to Aeration tank for sufficient aeration of sewage and then conveyed to clarifier where the suspended particle is being settle through mechanical clarification system. After this 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. The total quantity of tertiary treated water is being used in gardening and vegetable producing.

#### 3. Green Belt Development/plantation in and around the plant area & in Colony

Green belt development/plantation at our plant and in colony is a continuous activity taken care by horticulture team following the CPCB Guidelines. During FY 22-2023 total 1960 Nos. of saplings where planted & it is a continuous activity. Regular maintenance of all plantation has been carried out during the year.

#### 4. Good house keeping

Following measures have been taken to minimize fugitive dust emissions-

- a. All the material transfer points are provided with the bag filters and are in operation.
- b. Clinker and cement is being stored in the covered shed and silos.
- c. Road sweeping done regularly.
- d. All the unpaved roads of plant and colony have been concreted and plantation has been done along roadside.
- e. Development of plantation and greenery along the road and unused areas

## 5. Scheduled maintenance and monitoring of Pollution Control Devices.

All the Pollution Control Devices have been maintained as per scheduled maintenance by dedicated environmental management team which is comprises of mechanical, electrical and environment engineers. And monitoring of all these have been done regularly as per CPCB & GPCB Norms.

## A. The list of major Pollution Control Devices installed as under:

<u>Air Monitoring Equipment</u>: Monthly Environment Monitoring is carried by Authorised laboratory.

Sr. No.	Equipment	Make	Quantity (Nos.)
1	On- Line Monitoring System for Stack	Sick Mac / Siemens	12
2	On- Line Monitoring System for Ambient	Environment S A	02
3.	Respirable dust sampler	Envirotech Pvt. Ltd.	08
4.	Stack Monitoring Kit	Vayubodhan Pvt. Ltd.	02
5.	Personal Sampler	Envirotech Pvt. Ltd.	04
6.	Noise level meter	Envirotech Pvt. Ltd.	01
7.	Portable DG set	Honda	01

#### **Pollution Control Measures:**

Air Pollution Control Equipment

S. No.	Unit	Pollution Control Equipment
01	Raw Mill / Kiln Exit Stack(SP – I & II)	RABH (Reverse Air Bag House)
02	Coal Mill Stack(SP – I & II)	Bag House
03	Alkali bypass Stack (SP – I & II)	RABH (Reverse Air Bag House)
04	Clinker Cooler Stack (SP – I & II)	ESP
05	Cement Mill Stack (SP – I)	Bag House
06	Cement Mill Stack (SP – II)	Bag House
07	Roller Press Stack	Bag House
08	CPP Stack	ESP
09	Packer Stack – 1,2,3 &4	Bag Filter

Bag filters installed at various transfer points:

S. No.	Location	Status
01.	Limestone Handling & Storage	In Operation
02.	At the Transfer tower	In Operation
03.	Clay, Laterite Crushing & storage	In Operation
04.	Raw material hopper	In Operation
05.	At the Transfer tower	In Operation
06.	Raw Mill	In Operation
07.	Surge Bin	In Operation
08	Reverse Air Bag House (Raw Mill)	In Operation
09.	Raw material storage (Between CF Silo & Preheater)	In Operation
10.	CF Silo Top	In Operation
11.	Preheater & Kiln	In Operation
12	Reverse Air Bag House (alkali Bypass)	In Operation
13	ESP (Grate Cooler)	In Operation
14.	Clinker manufacturing(Cooler)	In Operation
15.	Clinker Storage (Top)	In Operation
16.	At Transfer tower	In Operation
17.	Gypsum Handling & Storage	In Operation
18.	Clinker & Gypsum Hopper in Cement mill (Top)	In Operation
19.	Cement Mill Feed	In Operation
20.	Cement Mill ESP Side	In Operation
21	Cement Mill Separator venting	In Operation
22	Cement Mill Reject Belt	In Operation
23	ESP (Cement Mill)	In Operation
24	Cement Mill Steel Silo	In Operation
25	De-dusting of Air slide (Below Steel Silo)	In Operation
26	Cement Mill Packer 1	In Operation
27	Cement Mill Packer 2	In Operation
28	Coal Mill	In Operation
29	Bag House (Coal Mill)	In Operation
30	Fine Coal (Calciner)	In Operation
31	Fine Coal (Kiln)	In Operation
32	Coal Dump Hopper	In Operation
33	At the Transfer Tower	In Operation
34	Raw Coal hopper Top	In Operation
35	At the Transfer Tower	In Operation
36	Coal Extraction & Coal Firing	In Operation
37	At Transfer tower	In Operation
38	Captive Power Plant Transfer Tower-1	In Operation
39	Transfer Tower-2	In Operation
40	Limestone Transfer Point	In Operation
41	Coal Transfer Point	In Operation
42	ESP (CPP)	In Operation
43	Air Breather	In Operation
44.	Cement silo top	In Operation
45.	Cement Silo -1	In Operation
46.	Cement Silo -2	In Operation
47.	Clinker silos	In Operation

#### PART - H

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

- The water from STP is being used for watering the plantation.
- Green Belt area is being developed in Plant Area, Mines, Residential Colony & Jetty area.
- Continuous Emission Monitoring System (CEMS) provided in stacks for 24X7 Monitoring
- Covered conveyor belt for transportation of limestone from mines to pile area.
- Water sprinklers are installed at various locations to control the generation of fugitive dust emission.
- Good housekeeping practices is being adopted to control the pollution. All the shop floors and equipment areas are cleaned properly at regular intervals to maintain the good health and hygiene conditions.
- All the internal roads are being made pucca for avoiding the generation of fugitive dust from the vehicular movements within cement plant.
- Roof Rain Water Harvesting System has been installed in township shopping complex building having capacity of 200270 Ltrs. During last monsoon collected about 200 KL rainwater and used for various requirements.
- Collected about 1 million ltrs. of rainwater in our mines pit. The collected rainwater has been used for colony drinking purpose which ultimately reduced our dependency on Captive Desalination Plant and also helped to recharge ground water through nature percolation.
- The water from neutralization pit is being used for watering the plantation as well as to sprinkle on the roads for controlling the fugitive dust emissions due to vehicular activities.
- During the FY 2022-23 100% of TPP fly ash was used in cement manufacturing process, reducing the adverse impact on the environment.
- We have installed solar plant of 5 MW which helps us in utilization of Renewable Energy.
- Usage of plastic bags in residential colony is completely banned and the use of jute/cloth bags for daily needs is being promoted in colony residents.



#### PART - I

#### Any other particular for improving the quality of environment.

- As the cement plant site falls in drought area in Kutch District, hence we are not using ground water for drinking purpose or other plant activities. We have setup desalination plant, raw water take from sea and after treatment producing sweet water to fulfill our requirements of plant activities.
- Deepning of ponds in nearby areas was done thorugh CSR activity, which helped to maximize the rainwater storage capacity and also for ground water augmentation.
- We have constructed a wind barricading wall (nearly 100 mtrs. In length) in clinker storage area for minimizing the fugitive dust emissions due to high wind speed.
- Reward & Recognition is given at all levels for promoting Environment Awareness.
- Various competitons for staff, workmen, women & kids are regularly organized for Environment Awareness.
- Various Plantation drives are organised involving people of all age groups to improve the greenbelt.





## Competition for School Children # World Environment Day 2023



# Ensuring No Plastic Bottles in our Offices from this World Environment Day 2023



Greenbelt is being developing in and around plant and residential colonies. So far more than 122 ha. area converted as green belt & plantation details is as given below:

	Plantation Summary		
Sr. No.	YEAR	Nos. of Sapling Planted	
1	2008-14	52515	
2	2015-16	13375	
3	2016-17	12130	
4	2017-18	4255	
5	2018-19	1040	
6	2019-20	2000	
7	2020-21	1400	
8	2021-22	2000	
9	2022-23	1960	
	Total	88675	

CSR expenditure during the financial year ending 31st March, 2023			
	Description Amount in Lacs		
Sector - 1	Promotion of Education	17.58	
Sector - 2	Health Program	21.82	
Sector - 3	Sustainable livelihood	11.99	
Sector - 4	Infrastructure Development	4.96	
Sector - 5	Social Empowerment and welfare	0.60	
Sector - 6	Others (including building up of CSR capacities	4.84	
Grand Total		61.79	





**UltraTech Cement Limited (Unit – Sewagram Cement Works)** 

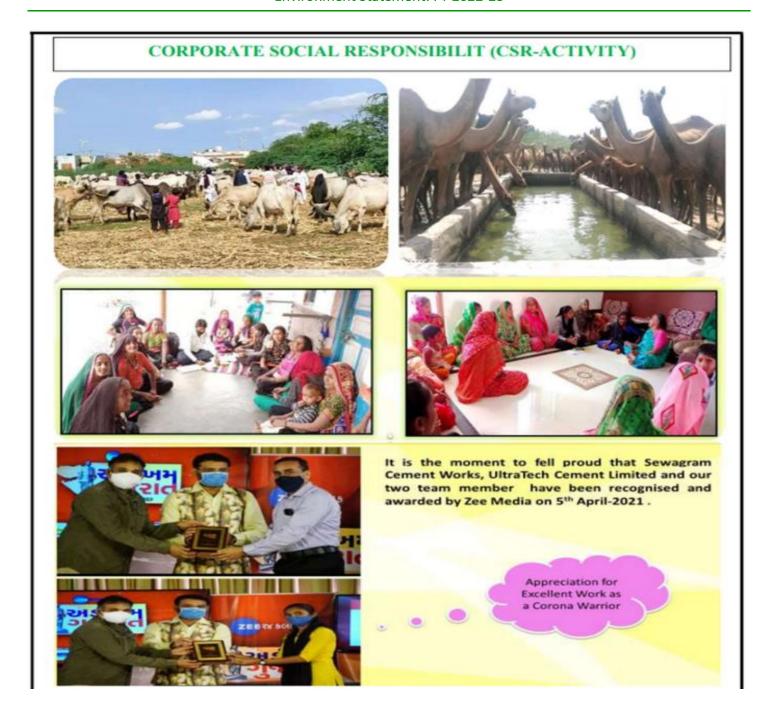
Details of activities / initiatives undertaken for protection of environment and total amount spent thereon during the financial year ending 31<sup>st</sup> March, 2023: - Recurring Expenditure: **2022-23**:

Sr. No.	Activity/Equipment	Plant Cost Incurred in 2022-23 Rs. (Lacs)
1	Air pollution Control Equipment (RABH, ESP & BF) including Power cost of APCEs (Plant)	2695.26
2	Air pollution Control Equipment (RABH, ESP & BF) including Power of ESP Maintenance Details (TPP)	33.34
3	Water Sprinkling on roads (Dedicated Water Tankers)	9.10
4	Road Sweeping & housekeeping at (Cement Plant)	13.49
5	Road Sweeping & housekeeping at (CPP)	0.41
6	Horticulture, greenbelt development	48.44
7	OCEMS&CAAQMS (Plant)	14.09
8	OCEMS&CAAQMS (CPP)	3.20
9	Environment Monitoring (Cement Plant & CPP & Desalination Plant)	17.43
10	Environment Monitoring (All Mines + Marine Ecology Study)	18.93
11	STP operation and maintenance	29.70
12	Consultancy charge+ CCA Renewal & Environment Audit Report- Plant-CPP-Desalination Plant.	18.16
13	GPCB Analysis Charges (Lab Charges)	0.74
	Total	2902.29



With the Winners of Environment Awareness Competitions at School





For UltraTech Cement Ltd.

(Unit: Sewagram Cement Works)

