HEIDELBERGCEMENT

HCIL:UPPCB:2022/116

The Regional Officer,
U.P. Pollution Control Board
U.P. Avas Vikas Parishad
Talpura Yojna
Kanpur Road, Jhansi (UP)

HeidelbergCement India Limited
CIN: L26942HR1958PLC042301
Village Madora, P.O. Baratha Kalan,
District Jhansi,
Uttar Pradesh 284121
Phone +91-510-2750548, 49
Fax +91-510-2750544
Website: www.mycemco.com

17th Sep'2022

Sub: Submission of Environmental Audit Statement (Form – V) FY 2021-22 of M/s Diamond Cement(Prop: HeidelbergCement India Ltd) Grinding Unit, Jhansi

Dear Sir,

We are herewith submitting the Environmental Audit Statement (Form-V) of M/s Diamond Cement(Prop: HeidelbergCement Indi Ltd) for the financial year 2021-22 in Form-V.

This is submitted for your kind reference and record please.

Kindly acknowledge receipt of the same.

We hope you would find our submissions in order.

Thanking you,

Yours faithfully,

For Diamond Cement,

(Prop: HeidelbergCement India Ltd),

Manoj Vaish

Sr. General Manager(Production & Env.)

Encl:a/a

MEMBER SECRETARY
U P PLLOTION CONTROL BOARD
TC-12 V, VIBHUTI KHAND
GOMTI NAGAR, LUCNOW(UP)

29/9/22
क्षेत्रीय कार्यालय
उ0प्र0 प्रदूषण नियंत्रण बोर्ड
झाँसी

O/C

HEIDELBERGCEMENT

ENVIRONMENT STATEMENT REPORT

(Form-V)

[Year 2021 - 2022]

REPORT BY

HEIDELBERGCEMENT

DIAMOND CEMENT
(Prop. HeidelbergCement India Ltd.)
Grinding Unit
Jhansi Kanpur Road
Village- Madora
Distt.-Jhansi (U.P.) - 284121

HEIDELBERGCEMENT

DIAMOND CEMENTS - Grinding Unit

(Prop. HeidelbergCement India Ltd.)
Jhansi Kanpur Road
Village-Madora
DIST. JHANSI (U.P.) -

(For the Financial year ending 31st March 2022)

CONTENTS

ANNEXURES

HEIDELBERGCEMENT	INTEGRATED MANAGEMENT SYSTEM POLICY

Integrated Management Syster

We, at Heidelberg Cement are fully committed towar environmental protection, providing healthy & safe w conservation, and social responsibility to all concerned and ther

- Produce quality cements that exceed statutory standard and promote use of environment friendly construction p
- Deploy energy efficient & eco-friendly technologies, pr for energy efficiency and performance improvement.
- Contain pollution with increased emphasis on repair, rec
- Proactively address water sustainability issues by minimi
- Maintain desired water quality during processes and disc
- Comply with all applicable legal, social, energy efficienc other stake holder's obligations.
- Conform to the requirements related to Corporate Social Principles and Guidelines.
- Train human capital with a view to upgrade their skills in
- Regularly set and review objectives and targets for contir of quality, productivity, work environment, health & performance and evaluating voluntary initiatives for soci
- Ensure availability of necessary resources and releva Objectives and Targets.
- Prevent occupational injuries and ill health, by elimin OH&S risks.
- Promote consultative management practices by involvin

INTRODUCTION

Man is a part of nature, and not separate or independent; at the same time, man is unique in the influence he has over nature. Man derives all his food, clothing, shelter, and other amenities from nature. In that process, if he does not take care to protect and cheris nature, but decrease or destroys, he will find that his own life and that of his children is n jeopardy.

The environment is now catch for all, the industry, the government, the people. Hence, it is joint responsibility to protect, preserve the environment and avoid the perishing the natural treasures. At this critical junction of time and efforts, the Indian industry has fulfilled its commitment in maintaining the environmental integrity.

HeidelbergCement India limited is committed to excel Environmental Sustainability by putting all engineering the best efforts to prevent environmental degradation, minimize the waste generation, resource conservation and reutilization of waste.

The next few pages of this Environment Statement Report (ESR) of HeidelbergCement India Limited is based on factual data and verified record, will present a picture of more optimism for environmental care than ever before.

PART A, B & C

HEIDELBERGCEMENT

ENVIRONMENTAL STATEMENT REPORT

[FORM-V]

(See rule 14)

PART-A

(i)	Name and address of the Owner/occupier of the industry, Operation or process	:	Mr. Vimal Jain (Technical Director) DIAMOND CEMENT (Prop:HeidelbergCement India Limited) Jhansi-Kanpur Road Vill: Madora
(ii)	Industry category	:	Heavy
(iii)	Production capacity	:	3.25 Million Ton/Annum
(iv)	Year of establishment	:	Cement Mill – 1 1989 Cement Mill-2 2013
(v)	Date of the last Environmental statement submitted:		14.09.2021

PART-B

Water and Raw Material Consumption

(I) Water consumption M3
Process} 39939 (April -21 to March – 22)
Cooling} -
Domestic } 32368

Name of products	Process water consumption per unit of products output	
	During the previous financial year(FY2020-21)	During the current financial year(FY2021-22)
	(1)	(2)
(1) Water	0.0129 KL/MT	0.0143 KL/MT

(ii) Raw material consumption

* Name of raw materials	Name of products	Consumption of raw material per unit of output	
		During the previous financial year (%)	During the current financial year (%)
Fly Ash	Portland Pozzolna Cement	34.90	34.93
Gypsum		3.02	3.01
Clinker		62.08	62.06

PART-C

Pollution discharged to environment/unit of output
(Parameters as specified in the consent issued)

(i) Pollutants	Quantity of pollution discharged (mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	As the plant is being operated on dry process technology, no liquid effluent is generated from the cement plant process. Domestic waste water generated form residential colony is treated in STP and treated water is used in green area development. Report of treated waste water of STP I attached as **Annexure-3**		
(b) Air	Please refer **Annexure-1**(Stack emission monitoring) & **Annexure-2**(Ambient air quality monitoring)		

PART-D
Hazardous Wastes

[as specified under Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008]

Hazardous Wastes		Total Quantity (kg)	
		During the Previous Financial year (MT)	During the Current Financial year (MT)
(a) From Process	(a) Spent/ Used Oil (Category 5.1) (Including TPP)	4.41	5.0
	(b) Residue containing waste oil (Category 5.2) Including(TPP)	1.80	2.34
(b) From Pollution control Facilities	Nil.	Nil	Nil

* The above Hazardous Waste is not being generated from process, However this is generated from hydraulic machineries, gear oil, lubrication of machines and its related activities, which is being sold to registered to recycler

PART-E
Solid Wastes

	Total Quantity	
	During the previous financial year (%)	During the current financial year (%)
(a) From process	No waste is generated in the manufacturing process	No waste is generated in the manufacturing process
(b) From pollution control facility	Wastes (Dust collected from the pollution control devices are recycled/reutilized in the process	Wastes (Dust collected from the pollution control devices are recycled/reutilized in the process
(c) Quantity recycled or re-utilized(sold to third patry recycler)	100% (i) Sold: Nil (ii) Disposed: Nil	100% (i) Sold: Nil (ii) Disposed: Nil

PART-F

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

Hazardous waste: Only used oil/waste grease are generated from plant as hazardous waste. Hazardous waste i.e. oil is drained from machineries/equipment of the different sections of plant.It is collected in empty MS drums and stored at hazardous waste storage. We have obtained permission from UPPCB for generation, utilization, storage & disposal.

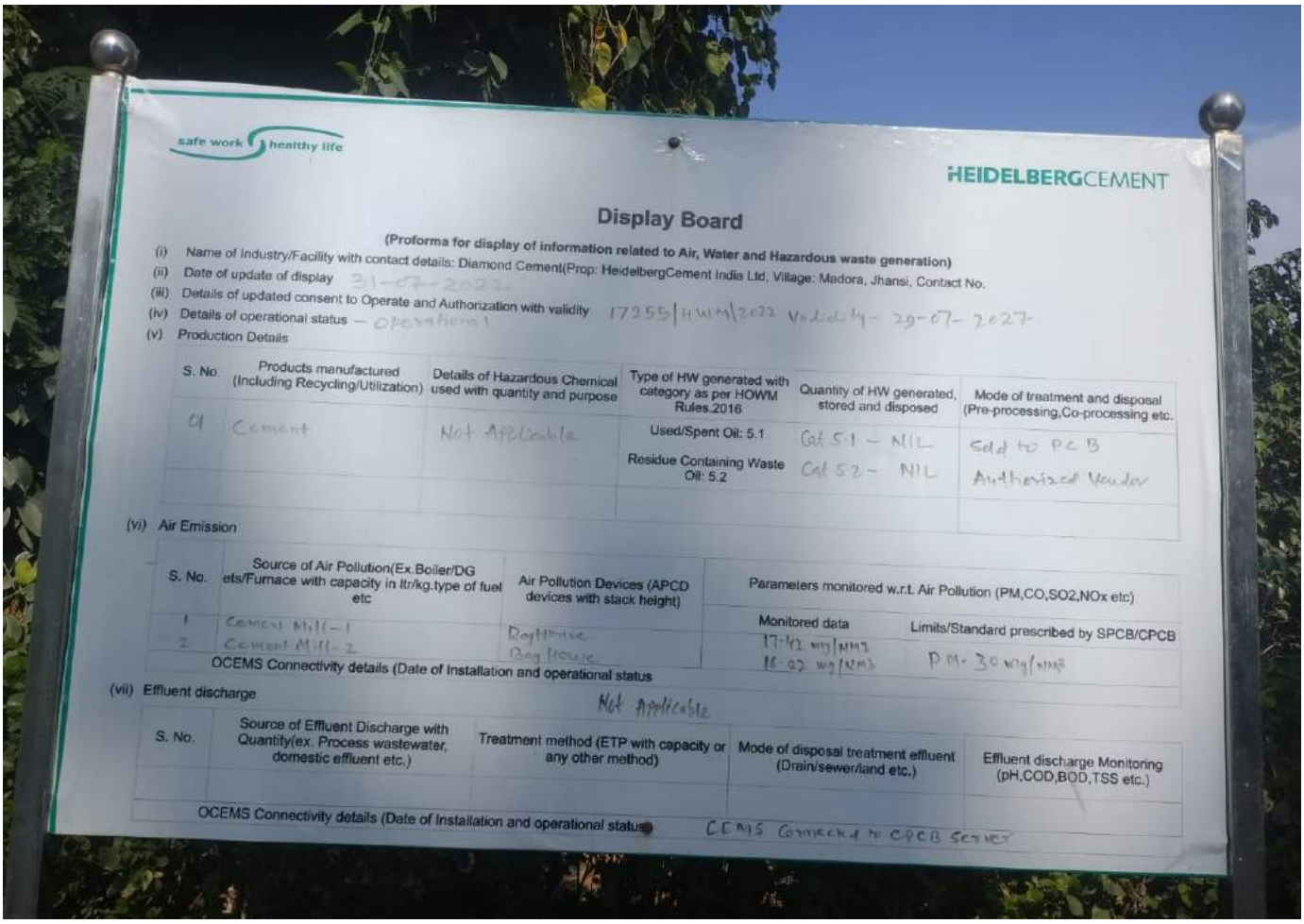
Solid waste: Dust collected in pollution control equipment is recycled back in cement manufacturing process. Sewage treatment plant sludge is used as manure in gardening.Hence, there is no solid waste generated during the process of cement manufacturing process.

Details given in Part –D. Hazardous waste is being sold to registered recycler.

We have separate storage yard for Hazardous waste.

Hazardous waste Storage Yard for Category 5.1 & 5.2 at Grinding Unit-Jhansi

Hazardous Waste Display Borad at Factory Main Gate



safe work healthy life

HEIDELBERGCEMENT

Display Board

(Proforma for display of information related to Air, Water and Hazardous waste generation)

(i) Name of Industry/Facility with contact details: Diamond Cement(Prop: HeidelbergCement India Ltd, Village: Madora, Jhansi, Contact No.

(ii) Date of update of display 31-07-2022

(iii) Details of updated consent to Operate and Authorization with validity 17255/HWM/2022 Valid upto 29-07-2027

(iv) Details of operational status – Operational

(v) Production Details

S. No.	Products manufactured (Including Recycling/Utilization)	Details of Hazardous Chemical used with quantity and purpose	Type of HW generated with category as per HOWM Rules.2016	Quantity of HW generated, stored and disposed	Mode of treatment and disposal (Pre-processing,Co-processing etc.
01	Cement	Not Applicable	Used/Spent Oil: 5.1	Cat 5.1 – NIL	Sold to PCB
			Residue Containing Waste Oil: 5.2	Cat 5.2 – NIL	Authorized Vendor

(vi) Air Emission

S. No.	Source of Air Pollution(Ex.Boiler/DG ets/Furnace with capacity in ltr/kg.type of fuel etc	Air Pollution Devices (APCD devices with stack height)	Parameters monitored w.r.t. Air Pollution (PM,CO,SO2,NOx etc)	
			Monitored data	Limits/Standard prescribed by SPCB/CPCB
1	Cement Mill-1	Bag House	17.42 mg/NM3	PM- 30 mg/NM3
2	Cement Mill-2	Bag House	18.92 mg/NM3	

OCEMS Connectivity details (Date of Installation and operational status

(vii) Effluent discharge Not Applicable

S. No.	Source of Effluent Discharge with Quantity(ex. Process wastewater, domestic effluent etc.)	Treatment method (ETP with capacity or any other method)	Mode of disposal treatment effluent (Drain/sewer/land etc.)	Effluent discharge Monitoring (pH,COD,BOD,TSS etc.)

OCEMS Connectivity details (Date of Installation and operational status CEMS Connected to CPCB Server

PART- G

IMPACT OF THE POLLUTION ABATMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES ON THE COST OF PRODUCTION.
Following measures have been adopted for abatement of pollution, conservation of natural resources.

Air quality monitoring and Preservations:

1. We have installed continuous emission monitoring system in both stacks and data is being transmitted to online server of CPCB & SPCB. The emission level from the stack of cement mills is being maintained < 30 mg/NM3.**Annex-1&4**
2. We are monitoring the fugitive emission in plant premises through NABL accredit lab and report is being sent to board on quarterly basis.
3. There are four Ambient Air Quality Monitoring Stations established in the premises for PM10, PM2.5, SO2 and NOX for regular monitoring and analysis. All four CAAQMS are connected to CPCB.**Annex-2&5**
4. **Scheduled maintenance and monitoring of Air Pollution Control Devices:**
   (i) We have installed 51 Bag Filters/Bag House at all transfer points i.e. Material Transfer Points, Cement Mill Section, Cement Silo, Vents of Hoppers, Bucket Elevator, Silo, covered belt conveyors etc
   (ii) All the Pollution control devices have been maintained by concern department as per maintenance scheduled
5. **The list of major Pollution Control Devices Installed are as under:**

S. No.	Location of PCM	PCM
1	Wagon Tippler	Bag House
2	Cement Mill-2	Bag House
3	Cement Mill-1	Bag House
4	Belt conveyor of Wagon Tippler	Bag filter
5	Wagon Tippler belt conveyor transfer point	Bag filter
6	Clinker stock pile top	Bag filter
7	Gypsum Crusher	Bag filter
8	Gypsum Crusher discharge belt	Bag filter
9	Gypsum Crusher discharge belt transfer point	Bag filter
10	Gypsum Hopper	Bag filter
11	Clinker transport belt-10	Bag filter
12	Clinker transport belt-20	Bag filter
13	Clinker transport belt-30	Bag filter
14	Pan conveyor discharge	Bag filter
15	Clinker hopper top	Bag filter
16	Fly Ash silo top	Bag filter
17	Fly ash silo extraction	Bag filter

18	Fly ash silo elevator discharge(Near Silo)	Bag filter
19	Fly ash silo elevator(Near mill building)	Bag filter
20	Fly ash Elevator discharge	Bag filter
21	Weigh feeder discharge	Bag filter
22	Mill feed belt	Bag filter
23	Recirculation circuit	Bag filter
24	Fly ash Bin top	Bag filter
25	Fly ash bin discharge	Bag filter
26	Bag House air slide	Bag filter
27	Cement Silo-1 extraction	Bag filter
28	Cement Silo feed elevator	Bag filter
29	Cement Silo-2 extraction	Bag filter
30	Cement Silo-1 top	Bag filter
31	Cement Silo-2 top	Bag filter
32	Packer-1 Elevator	Bag filter
33	Packer-2 Elevator	Bag filter
34	Packing plant Packer-1	Bag filter
35	Packing plant Packer-2	Bag filter
36	Packer-1 air slide & Bin	Bag filter
37	Packer-2 air slide & Bin	Bag filter
38	Packing Plant packer-3	Bag filter
39	Packing Plant packer-4	Bag filter
40	Packer-3 air slide & Bin	Bag filter
41	Packer-3 air slide & Bin	Bag filter
42	Cement Silo-3	Bag filter
43	Cement Silo-3	Bag filter
44	Hopper feed belt transfer point of Cement Mill-1	Bag filter
45	Cement Mill Separator	Bag filter
46	Hopper top of Cement Mill-1	Bag filter
47	Truck Tippler	Bag filter
48	Fly Ash Silo	Bag filter
49	Cement Mill-1 Roller press	Bag filter
50	Separator venting	Bag filter
51	Ball Mill silo feed bucket elevator	Bag filter

6. **Storage of Raw materials:**

(i) All the raw materials are being stored in covered yard. Cement stored in RCC Silos and Fly Ash stored in closed Silos and Stock Piles. **Annexure- 7**

(ii) Closed Clinker Stock Pile System has been installed.**Annexure-8**

(iii) Fly ash coming in closed bulkers and Pneumatic system has been installed for Fly ash unloading. **Annexure – 9**

7. **Concreting of Kachha Road/Floor and Sweeping of Roads**

Maximum roads of plant and colony have been concreted/paved and plantation is being done side by side of roads for the beautification. Development of plantation & greenery along the road.**Annexure-10**
Plant/Colony roads is being cleaned by Road sweeping machines on regular basis. **Annexure-11**

8. **Water quality monitoring and preservation:**

No effluent water is being generated during plant process only domestic waste water is being generated from the plant and colony which is being treated in Sewage Treatment plant (STP). The treated Sewage water quality is being checked by NABL accredit lab and its data is being submitted to PCB on quarterly basis.
Ground water quality is monitored by NABL accredit lab before and after Monsoon.

There is no waste water generation from the process. Industrial water for external cooling is being re-circulated after cooling. All Motors and Pumps are totally enclosed fan cooled type.

- **Use of STP treated water for green area development:**

  We have installed 125 KLD sewage treatment plant and domestic sewage is being treated in STP. The total quantity of treated water is being used in gardening/green area development and water sprinkling on roads. **Annexure-12**

- **Rain Water Harvesting system Installed for Water Augmentation**

  We have installed Roof top Rain Water harvesting System at our Factory/Colony Premises.**Annexure-13**

Noise Monitoring and Prevention:

The Ambient Noise level is being carried out regularly and levels are within the limit and enclosure is Provided at relevant places and PPEs are provided to the concern work man. Noise level monitoring results**(Annexure-6)**

Energy Conservation Measures:

(i) Installed Solar power operated Lightings have been installed in Common area lighting, Street lights and water heaters.
(ii) We have replaced all conventional lights with LED lights in offices. And residential and also provided light motion sensors in offices and motion sensor bulbs in offices.
(iii) Utilization of renewable energy at near by villages. Encourage & motivate local community and near by villagers for the use of RE Power & Installed,

a. 50 nos Solar Street Lights at nearby village.
b. PV solar panels in four school & a community center at nearby villages (Total Capacity – 11 KW). **Annexure-13**

(iv) HC India Jhansi has executed a LTOA (Long term open access) Power Purchase Agreement to purchase of 15MW DC (10.6 MW AC) solar Power for Jhansi Plant and drawl of solar power commenced from 20.04.2022. (22000 MWh Per Annum).

(v) The expected CO2 Savings on consumption of electricity would be ~400,000 tonnes over the life span of contract. This Power Purchase Agreement is another step for HC India on the way to achieving carbon neutrality.

(vi)

Extensive Plantation in and around the plant & colony:

We have planted trees in and around plant & colony to develop more green area. Total area covered from green area up to 31st Mar22 is >40%. Some of the photographs of green area are attached.**Annexure-14**

PART-H

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

Continuous efforts are always being made to maintain the environment clean and dust free and we have done up gradation of the existing pollution control system and also adequate quantity of Pollution Control Equipment.

a. A dense Green Belt is already exists in the premises. However, we are developing regularly more Green Belt area in and around the Cement Plant as per the guidelines of CPCB
b. We have installed four number of CAAQMS(Continuous ambient air quality monitoring stations) to monitor ambient air quality, all CAAQMS are connected to CPCB server.**Annexure-5**
c. We have installed 2 no's of CEMS(Continuous Emission Monitoring System) in process stacks and both the CEMS are connected to CPCB server 24X7.**Annexure-1&4**
d. HC India Jhansi has executed a LTOA (Long term open access) Power Purchase Agreement to purchase of 15MW DC (10.6 MW AC) solar Power for Jhansi Plant and drawl of solar power commenced from 20.04.2022. (22000 MWh Per Annum).
e. The expected CO2 Savings on consumption of electricity would be ~400,000 tonnes over the life span of contract. This Power Purchase Agreement is another step for HC India on the way to achieving carbon neutrality.
f. Maximize the dispatches through Rail.

g. More than 34 % of total Raw material is being used Fly ash in Manufacturing. Of PPC. Maximum utilization of Fly ash approx.. 34.90%(BIS max limit is 35%)
h. World environment day celebrated on 5th June every year to create environment awareness among the employees.
i. Some of the activity related to reduce GHG emissions are as following:
   i. Maximum Transportation of Raw materials and products by Railway
   ii. Replacing of Ordinary Lights with LED Lights
   iii. Purchasing of energy efficient Equipment only
   iv. Optimization of power consumption by optimizing the process

EXPENDITURE ON ENVIRONMENT MANAGEMENT INCURRED IN 2021-22

S. NO.	DETAILS	COST RS. LAKHS (APPROX)
1.	Stack and Ambient Air Quality Monitoring	6.13
2.	Operation and maintenance of Sewage treatment plant	16.25
3.	Green belt Development and maintenance	22.92
4.	House Keeping Expanses	17.47
5.	Maintenance of Air Pollution Control Devices	6
6	Operation & Maintenance of Municipal Solid waste	11.18
7	Road Sweeping (Mechanized)	19.12
8	Operation & Maintenance of CEMS & AAQMS	4.14
9	Two New CAAQMS	148.4
10	Rain water system Installation	3.39
	Total	**255**

PROPOSED EXPENDITURE ON ENVIRONMENT MANAGEMENT (FOR 2022-22)

S. NO.	DETAILS	COST RS. LAKHS (APPROX)
1.	Stack and Ambient Air Quality Monitoring	7.0
2.	Operation and maintenance of Sewage treatment plant	17
3.	Green belt Development and maintenance	23
4.	House Keeping Expanses	18
5.	Operation & Maintenance of Municipal Solid waste	6.0
6.	Maintenance of Air Pollution Control Devices	100
7	Operation and Maintenance of CEMS & AAQMS	18
8	Road sweeping (Mechanized)	5.0
	Total	**194**

HEIDELBERGCEMENT

ANNEXURE-1

Stack Emission results of Grinding Unit - Jhansi

Month	Cement Mill-1 (mg/nm3	Cement Mill-2 (mg/nm3)
Apr-21	17.54	15.65
May-21	17.00	15.75
Jun-21	16.62	14.32
Jul-21	17.58	16.18
Aug-21	15.99	15.99
Sep-21	16.58	15.11
Oct-21	15.83	14.92
Nov-21	15.36	14.92
Dec-21	14.98	14.81
Jan-22	15.04	14.23
Feb-22	14.93	14.69
Mar-22	14.89	15.08

Environmental and Technical Research Centre
Office & Laboratory :2/261, Vishwas Khand, Gomti Nagar,
Lucknow:226010 (UP), NBAL Accredited Laboratory

HEIDELBERGCEMENT

ANNEXURE-2

M/s Diamond Cement (Prop. HeidelbergCement India Limited)
Grinding Unit-Jhansi(UP)
Ambient Air Quality Report (Monthly Average)

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Apr2021

Location	PM10(µg/m3)	PM2.5(µg/m3)	CO(µg/m3)	SO2(µg/m3)	NOx(µg/m3)
Near ADM building	89.5	49.49	0.52	14.52	19.48
Near Khatibaba Temple	81.5	45.83	0.49	12.39	19.15
Behind New Weigh bridge	94.5	55.25	0.55	15.02	23.12
Near 132 Kv switch yard	86.4	51.04	0.53	13.98	21.49

Location	Ozone (µg/m3)	Ammonia (µg/m3)	Lead (µg/m3)	Benzene (µg/m3)	Benzo(a) Pyrene (ng/m3)	Arsenic (ng/m3)	Nickel (ng/m3)
Near ADM building	BDL	11.96	BDL	BDL	BDL	BDL	BDL
Near Khatibaba Temple	BDL	12.36	BDL	BDL	BDL	BDL	BDL
Behind New Weigh bridge	BDL	13.59	BDL	BDL	BDL	BDL	BDL
Near 132 Kv switch yard	BDL	13.61	BDL	BDL	BDL	BDL	BDL

HEIDELBERGCEMENT

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

June2021

Location	PM10(µg/m3)	PM2.5(µg/m3)	CO(µg/m3)	SO2(µg/m3)	NOx(µg/m3)
Near ADM building	82.40	43.89	0.50	13.14	19.86
Near Khatibaba Temple	88.60	46.28	0.50	12.46	19.13
Behind New Weigh bridge	91.80	51.86	0.52	13.52	21.66
Near 132 Kv switch yard	88.60	51.53	0.53	14.11	21.23

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

July2021

Location	PM10(µg/m3)	PM2.5(µg/m3)	CO(µg/m3)	SO2(µg/m3)	NOx(µg/m3)
Near ADM building	80.50	44.60	0.48	12.86	18.45
Near Khatibaba Temple	83.40	49.76	0.51	13.02	19.56
Behind New Weigh bridge	90.50	53.89	0.55	14.15	22.69
Near 132 Kv switch yard	89.90	52.34	0.50	13.52	20.16

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Aug2021

Location	PM10(µg/m3)	PM2.5(µg/m3)	CO(µg/m3)	SO2(µg/m3)	NOx(µg/m3)
Near ADM building	88.50	41.15	0.49	12.35	18.55
Near Khatibaba Temple	81.20	48.66	0.54	12.85	20.39
Behind New Weigh bridge	88.50	49.58	0.53	13.95	21.39
Near 132 Kv switch yard	90.30	51.40	0.55	14.02	22.42

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Sep2021

Location	PM10(µg/m3)	PM2.5(µg/m3)	CO(µg/m3)	SO2(µg/m3)	NOx(µg/m3)
Near ADM building	85.20	42.36	0.50	12.98	19.36
Near Khatibaba Temple	86.30	50.14	0.48	13.22	18.82
Behind New Weigh bridge	91.16	53.26	0.55	14.25	22.15
Near 132 Kv switch yard	89.40	52.69	0.51	13.96	21.06

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Oct2021

Location	PM10(µg/m3)	PM2.5(µg/m3)	CO(µg/m3)	SO2(µg/m3)	NOx(µg/m3)
Near ADM building	82.30	44.87	0.52	13.12	20.14
Near Khatibaba Temple	80.50	43.60	0.50	12.08	19.65
Behind New Weigh bridge	89.60	53.91	0.54	14.39	21.05
Near 132 Kv switch yard	89.80	51.55	0.54	14.12	20.78

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Nov2021

Location	PM10(µg/m3)	PM2.5(µg/m3)	CO(mg/m3)	SO2(µg/m3)	NOx(µg/m3)
Near ADM building	82.50	48.38	0.50	13.98	19.25
Near Khatibaba Temple	84.30	46.98	0.53	12.58	18.42
Behind New Weigh bridge	91.60	52.05	0.55	15.12	22.48
Near 132 Kv switch yard	88.40	50.44	0.51	14.63	20.06

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Dec2021

Location	PM10(µg/m3)	PM2.5(µg/m3)	CO(mg/m3)	SO2(µg/m3)	NOx(µg/m3)
Near ADM building	80.90	49.99	0.51	13.85	20.01
Near Khatibaba Temple	85.20	45.26	0.51	12.53	15.49
Behind New Weigh bridge	86.40	53.62	0.58	14.26	23.15
Near 132 Kv switch yard	89.30	50.84	0.54	14.22	20.55

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Jan2022

Location	PM10(µg/m3)	PM2.5(µg/m3)	CO(mg/m3)	SO2(µg/m3)	NOx(µg/m3)
Near ADM building	81.60	50.05	0.54	13.02	19.36
Near Khatibaba Temple	82.90	49.16	0.52	12.87	16.68
Behind New Weigh bridge	90.20	54.05	0.57	15.26	24.12
Near 132 Kv switch yard	88.30	52.14	0.55	13.98	20.55

HEIDELBERGCEMENT

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Feb2022

Location	PM10(µg/m3)	PM2.5(µg/m3)	CO(mg/m3)	SO2(µg/m3)	NOx(µg/m3)
Near ADM building	80.90	50.63	0.52	13.43	20.23
Near Khatibaba Temple	85.40	50.04	0.50	12.58	19.86
Behind New Weigh bridge	89.50	52.19	0.55	14.86	25.44
Near 132 Kv switch yard	86.60	51.26	0.56	13.55	20.53

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Mar2022

Location	PM10(µg/m3)	PM2.5(µg/m3)	CO(mg/m3)	SO2(µg/m3)	NOx(µg/m3)
Near ADM building	76.40	47.76	0.50	13.36	19.68
Near Khatibaba Temple	81.20	49.67	0.51	12.08	20.24
Behind New Weigh bridge	92.40	55.28	0.58	15.49	24.12
Near 132 Kv switch yard	69.50	42.25	0.49	12.14	18.69

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ANNEXURE-3

M/s Diamond Cement (Prop. HeidelbergCement India Limited)
Grinding Unit-Jhansi (UP)

Results of Treated Sewage Water

Note: All parameters are in mg/l except pH

S. No.	Parameters	17-04-21	18-06-21	21-07-21	29-08-21	30-09-21	14-10-21	13-11-21	29-12-21	25-01-22	23-02-22	29-03-22
		STP Outlet	**STP Outlet**	**STP Outlet**	**STP Outlet**	**STP Outlet**	**STP Outlet**	**STP Outlet**	**STP Outlet**	**STP Outlet**	**STP Outlet**	**STP Outlet**
1	pH	7.8	8.1	8.0	7.9	7.8	7.8	7.8	7.9	7.8	7.50	7.80
2	TSS	14.9	9.50	7.80	10.70	12.20	BDL	8.60	BDL	BDL	16.70	BDL
3	BOD	8.20	4.8	8.20	2.40	1.20	1.20	1.20	5.30	3.20	7.60	1.6
4	COD	24.0	16.0	24.0	16.0	4.0	4.0	4.0	16.48	12.0	29.12	8.0
5	Oil & Grease	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	Fecal Coliform	-	-	-	14.0	9.20	12.0	14.0	8.80	4.50	6.80	6.80

ND- Not Detectable

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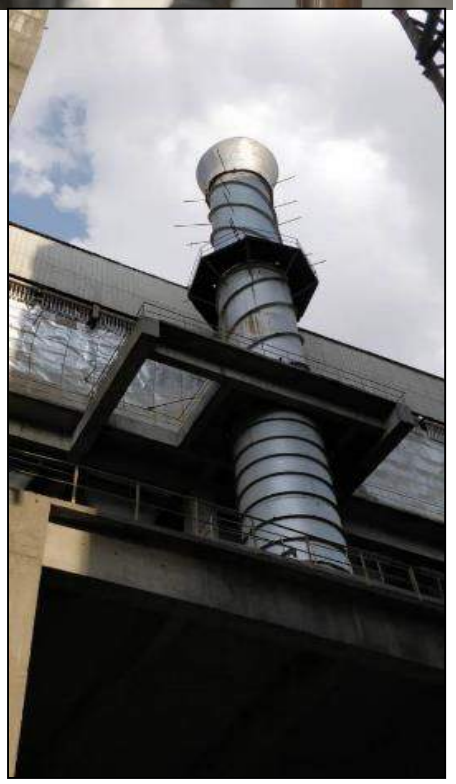
Lucknow:226010 (UP), NBAL Accredited Laboratory

Annexure-4

CEMS in Ball Mill Bag House Stack

CEMS in VRM Bag House Stack



VRM Bag House Stack

Ball Mill Bag House Stack

HEIDELBERGCEMENT

Annexure: 5

Continuous Ambient Air Quality Monitoring Stations

CAAQMS-1

CAAQMS-2

CAAQMS-3

CAAQMS-4

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Annexure: 6

M/s Diamond Cements (Prop. HeidelbergCement India Limited)
Grinding Unit-Jhansi(UP)

AMBIENT NOISE LEVEL [Leq Value in dB(A)]

Location→	Nr Khatibaba Temple		132 kva switch yard		Admin area		Nr. Worker Colony	
Month↓	Day	Night	Day	Night	Day	Night	Day	Night
Apr-21	54.2	51.4	64.8	51.2	50.3	38.6	53.7	44.1
May-21	Lock Down							
Jun-21	55	50.5	65.2	52.8	49.9	39.8	54.6	44.6
Jul-21	54.76	50.13	62.13	52.89	51.68	40.85	54.05	45.12
Aug-21	54.70	49.90	64.20	51.80	50.20	40.10	55.0	44.90
Sep-21	55.01	49.82	61.85	50.12	50.69	40.17	54.69	44.53
Oct-21	54.16	49.96	62.14	50.26	50.13	41.03	55.03	44.57
Nov-21	55.13	50.68	63.59	51.46	50.32	40.82	54.98	45.23
Dec-21	54.76	49.82	62.15	50.86	50.89	41.03	58.14	49.68
Jan-22	55.02	51.86	63.48	51.24	51.23	40.15	56.88	50.12
Feb-22	55.6	49.4	64.8	52.4	52.2	41.3	55.7	49.5
Mar-22	55.6	50.2	63.8	51.6	51.3	43.8	54.2	48.5

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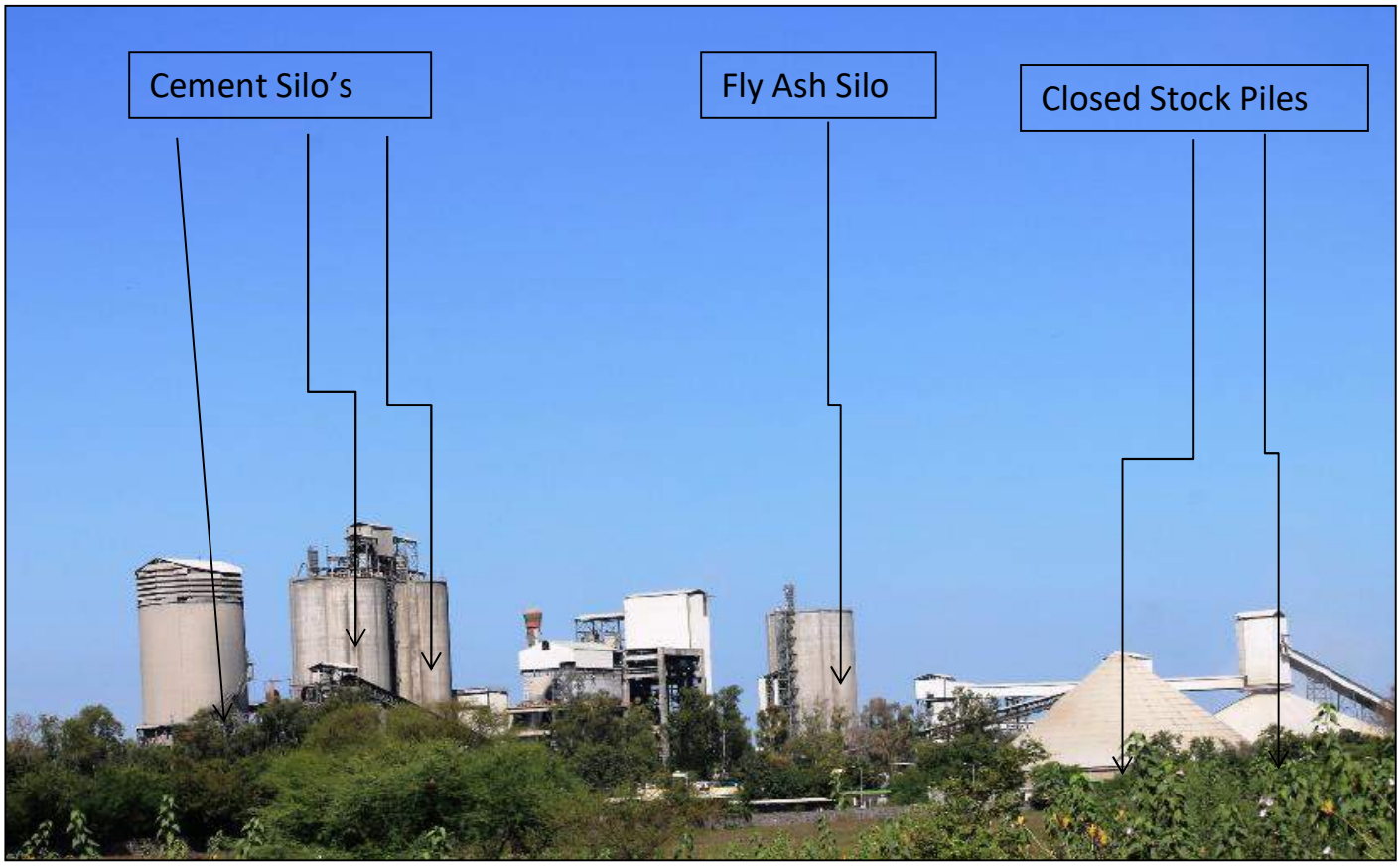
Annexure:7



Annexure-8

Annexure-9: Pneumatic Fly Ash Unloading

Annexure-10 : Concreted Road Inside Plant

Annexure-11

Annexure-12: Sewage Treatment Plant

Annexure-13: Roof Top Rain Water Harvesting

Pipe Lines Laying

Filtration Filters

Drainage valve

HEIDELBERGCEMENT

WORLD ENVIRONMENT DAY CELEBRATION:2021

NEEM TREE PLANTATION

PLANT HEAD SPEECH ON ECOSYSYTEM RESTORATION

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Annexure-14

Green Area Development

Gree Area in the Colony Area

BIODIVERSITY

- Jhansi Unit, home for many beautiful distinct species.
- Some of the birds seen in the campus are:
  - Grey Hornbill
  - Black Drongo
  - Little Egret
  - White Throated Kingfisher
  - Oriental Magpie Robin
  - Golden Oriole