HCIL(NGH)-ENV-F-088-417

HEIDELBERGCEMENT

Diamond Cements
Prop: HeidelbergCement India Limited
CIN: L26942HR1958FLC042301

Village and P. O. Narsingarh
District Damoh, M.P. 470 675, India
Phone +91-07601-241301, 02 & 05
Fax +91-07601-241235
Website: www.mycemco.com

The Member Secretary
M.P. Pollution Control Board
E-5, Arera Colony
Paryawaran Parisar
Bhopal (MP) 462 016

May 27, 2020

SUB: Environment Statement Report (Form -V) of Diamond Cements Clinkerisation Unit (Prop: HeidelbergCement India Limited), Narsingarh, Damoh, M.P.

Dear Sir,

Please find enclosed herewith the Environment Statement Report (Form V) of Diamond Cements Clinkerisation Unit (Prop: HeidelbergCement India Limited), Narsingarh, Damoh, M.P.for 2019-20.

This is for your kind perusals please.

Thanking you,

Yours faithfully

For Diamond Cements
(Prop: HeidelbergCement India Ltd)

Sanjeev Kumar Gupta
Head Works- Damoh
Sr. Vice President

Encl : as above.

CC : Zonal Office (Central)
Central Pollution Control Board
3rd Floor, Sahkar Bhawan,
North TT Nagar, Bhopal (MP) 462 003

CC : The Regional Officer
MP Pollution Control Board
Deen Dayal Nagar, Housing Board Colony
Sagar (MP)

CC: Office copy

HEIDELBERGCEMENT

ENVIRONMENT STATEMENT REPORT

(Form-V)

[Year 2019 - 2020]

REPORT BY

HEIDELBERGCEMENT

DIAMOND CEMENTS
(Prop. HeidelbergCement India Ltd.)
Clinkerisation Unit
P.O. NARSINGARH
DIST. DAMOH (M.P.) - 470675

HEIDELBERGCEMENT

DIAMOND CEMENTS - Clinkerisation Unit

(Prop. HeidelbergCement India Ltd.)
P.O. NARSINGARH
DIST. DAMOH (M.P.) - 470675

(For the Financial year ending 31st March 2020)

CONTENTS

ANNEXURES

AWARENESS

mycem HEIDELBERGCEMENT

INTEGRATED MANAGEMENT SYSTEM POLICY

We, at Heidelberg Cement India Limited are fully committed towards customer satisfaction, environmental protection, providing healthy & safe work environment to all concerned and our endeavour is to:

- Produce cement much better than the applicable standards to satisfy the customer needs.
- Comply with all applicable legal, social and other requirements.
- Involve and train human resource to upgrade their skills in all areas including safety.
- Regularly set and review objectives and targets for continual improvement in quality, productivity, work environment and health & safety performance.
- Prevention of pollution.
- Prevention in occupational injuries and ill health.

This policy has been communicated to all the employees and is also available to the public and interested parties on demand.

-sd-

Date: 15th April 2013

CEO & Managing Director

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 cherish nature, but decrease or destroys, he will find that his own life and that of his children is in jeopardy.

In the words of our late Prime Minister, Mrs. Indira Gandhi "It is said that, in country after country, progress should become synonymous with an assault on nature.....the higher standard of living must be achieved without alienating our people from their heritage and without despoiling of its beauty, freshness and purity essential to our lives."

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.

ENVIRONMENTAL STATEMENT REPORT

[FORM-V]

(See rule 14)

PART-A

(i)	Name and address of the owner/occupier of the industry, operation or process	:	DIAMOND CEMENTS - Clinkerisation Unit (Prop. HeidelbergCement India Ltd.) P.O. NARSINGARH DIST. DAMOH (M.P.) – 470 675
(ii)	Industry category	:	LARGE SCALE
(iii)	Production capacity	:	3.1 Million Ton/Annum
(iv)	Year of establishment	:	Line – I 1982 Line – II 1988 Line – III 2013
(v)	Date of the last Environmental statement submitted:		19.09.2019

PART-B

Water and Raw Material Consumption

(I) Water consumption m3/d
Process} -691
Cooling} -
Domestic} -2454

Name of products	Process water consumption per unit of products output	
	During the previous financial year	During the current financial year
	(1)	(2)
(1) Clinker	0.0503 KL/MT	0.0664 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 (%)
Lime Stone	Clinker	147.74	147.50
Additives		2.33	2.84
Coal/Pet coke		11.27	11.73

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	Please see Annexure-3		
(b) Air	Please see Annexure-1 & Annexure-2		

PART-D
Hazardous Wastes

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

Hazardous Wastes		Total Quantity disposed	
		During the Previous Financial year (MT)	During the Current Financial year (MT)
(a) From Process	(a) Spent/ Used Oil (Category 5.1)	7.09	3.578
	(b) Residue containing waste oil (Category 5.2)	11.49	13.870
(b) From Pollution control Facilities	N.A.	N.A.	N.A.

* Hazardous waste is not generated from Clinkerisation process. However, this waste is being generated from industrial related activity i.e. hydraulic movement of machines, oiling/ greasing etc. which is being sold to registered to recycler.

PART-E
Solid Wastes

	Total Quantity (Solid waste) disposed	
	During the previous financial year (%)	During the current financial year (%)
(a) From process	N.A.	N.A.
(b) From pollution control facility	N.A.	N.A.
(c) Quantity recycled or re-utilized	N.A.	N.A.
	Total Quantity (E- waste) disposed	
	During the previous financial year (MT)	During the current financial year (MT)
(a) *From Plant & Mines	0	1.32

* E-waste disposed in 2019-20 have included Clinker plant, Grinding unit & Mines

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

We have separate storage yard for Hazardous waste as well as different type of waste.

Hazardous waste Storage Yard for Category 5.1 & 5.2 at Clinkerisation Unit - Narsingarh

Separate Storage yard for different type of waste such as filter bag, Glass, Used Batteries, E-waste, Turning Metals etc

PART-G

Impact of pollution abatement measures taken on conservation of natural resources and on the cost of production.

Pollution control measures have already been taken at all the point of source emission and fugitive emission. This resulted good saving in total consumption of calcined dust, total cement produced and total coal consumed.

PART-H

Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution.	Continuous efforts are always being made to maintain the environment clean Environment. Adequate quantity of Pollution Control Equipment i.e. RABH (Reverse Air Bag House), Hybrid Filter (Combination of ESP and Bag House), ESP, Bag House, Dust Collectors, Dust Suppression System, Water Sprinkler, STP, Green Belt Development are available for proper pollution control. List of Pollution Control Devices given in **Annexure -5**.

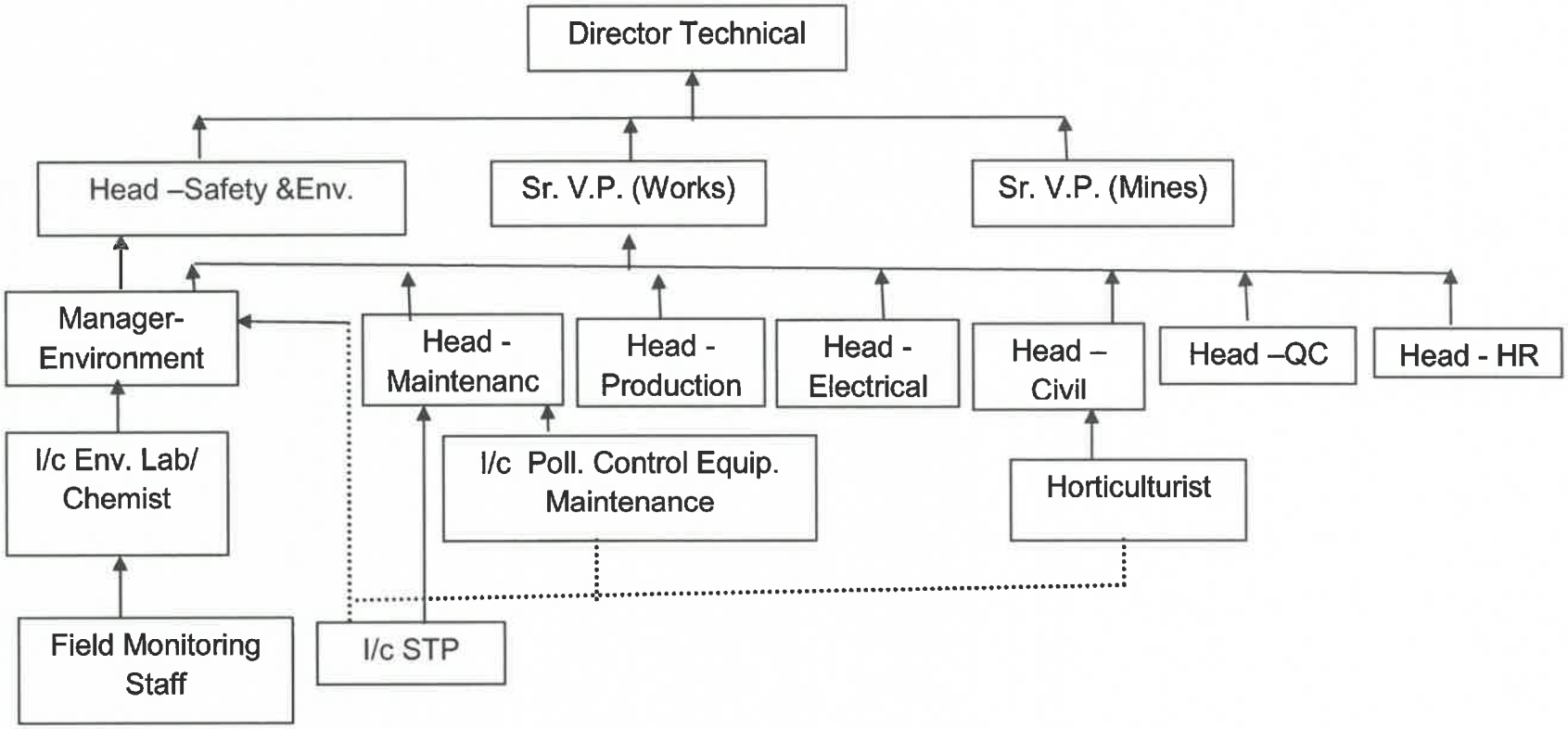
EXPENDITURE ON ENVIRONMENT MANAGEMENT IN2019-20& PROPOSED FOR 2020-21

S. No.	Details	Expence during 2019-20 in Rs. Lakhs	Expence proposed for 2020-21 in Rs. Lakhs (approx)
1	Stack and Ambient Air Quality Monitoring (Including Clinkerisation Unit Narsingarh, Lime Stone Mines Narsingarh & Lime Stone Mines Patharia)	**37.56**	**35.0**
2	Operation and maintenance of Sewage treatment plant	**16.25**	**18.0**
3	Continuous Ambient Air Quality Monitoring Station (CAAQMS) & Continuous Emission Monitoring System (CEMS)	**12.8**	**15.0**
4	Green belt Development and maintenance	**67.26**	**71.0**
5	House Keeping Expanses	**29.52**	**31.0**
6	Awareness Program including Observing Environment Day/Ozone Day (Common for Clinkerisation unit, Grinding unit & mines)	**0.3**	**0.3**
7	Maintenance of Air Pollution Control Devices	**146.33**	**125.0**
8	Road Sweeping (manual) and through Auto sweeper	**20**	**37.0**
9	Maintenance of Rain water harvesting & construction of new RWHS	**1.4**	**1.4**
10	Municipal Waste Management System	**15.37**	**17.0**
11	Cost of Electricity consumed by Pollution control devices (Approx.)	**640.9**	**587.0**
12	Recurring cost of SNCR (Cost of Ammonium hydroxide)	**32.24**	**50.0**

Part – I

(Any other particular in respect of environmental protection and abatement of pollution)

Details of Environmental Cell



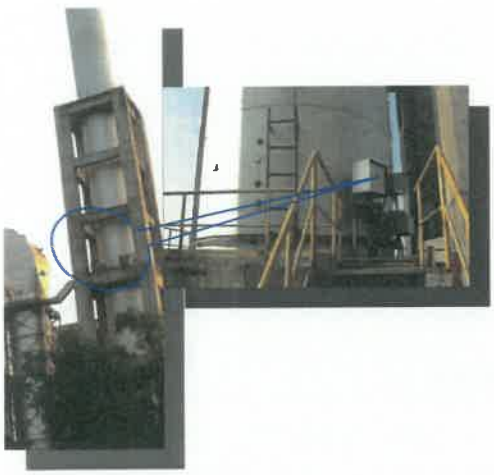
Facilites available in Environment Laboratory at Diamond Cements (Prop. HeidelbergCement India Ltd.)

(Env. Lab is common For Clinkerization unit, Grinding unit & Mines)

Sl. No.	Instrument Name	Quantity
1	Work table & Chair	1 set
2	Respirable Dust Sampler (R.D.S.)	4
3	Fine Dust Sampler	4
4	Stack Monitoring Kit	1
5	NOx assembly	1
6	Digital Barometer	1
7	Noise Meter	1
8	Personal Sampler	2
9	Spectrophotometer	1
10	Weighing Balance	1
11	Kit (EC & Temp.)	1
12	pH Meter	1
13	Oven	1
14	Water Bath	1
15	Desiccator	1
16	Hot Plat	1
17	Refrigerator	1
18	Computers	1
19	Online Monitoring System	
A	CAAQMS	3
B	CEMS-Gaseous	3
C	CEMS-PM	9
20	Chemicals, Glasswares and Consumables	-

Environmental Laboratory at Diamond Cements (Prop. HeidelbergCement India Ltd.)

Continuous Ambient Air Quality Monitoring stations at HCIL, Narsingarh (02 Nos Locations)



Installation of Continuous Stack emission Monitoring stations

ANNEXURE-1

Stack emission results of Clinkerisation Unit - Narsingarh

Month	Kiln/Raw Mill No- 1	Kiln/Raw Mill No- 2	Kiln/Raw Mill No- 3	Cooler No- 1	Cooler No- 2	Cooler No- 3	Coal Mill No. 1	Coal Mill No. 2	Coal Mill No. 3	Crusher
Apr-19	**	19.2	24.5	**	25.6	23.1	**	12.2	18.0	12.9
May-19	22.0	24.4	23.8	25.7	21.5	27.2	19.7	15.3	18.8	16.6
Jun-19	20.0	22.1	24.8	21.4	23.8	26.2	15.5	13.3	17.3	18.3
Jul-19	16.5	18.5	25.7	15.8	17.7	23.0	12.8	14.2	20.3	19.2
Aug-19	22.6	17.3	21.0	12.8	14.4	15.6	19.4	10.6	13.2	13.1
Sep-19	**	18.2	21.4	**	17.5	14.2	**	12.1	12.5	19.2
Oct-19	**	18.3	17.1	**	14.8	21.2	**	12.3	15.1	18.2
Nov-19	11.5	17.1	25.8	21.4	16.1	13.5	16.8	15.1	14.3	19.4
Dec-19	14.5	18.2	21.7	24.9	15.4	14.1	19.9	16.4	17.7	13.4
Jan-20	**	20.3	11.2	**	21.1	10.8	**	14.6	13.8	16.0
Feb-20	**	19.3	16.3	**	18.2	15.3	**	12.0	20.3	17.8
Mar-20	11	10.9	15.2	9.4	14.9	13.3	12.6	14.3	21.2	18.3

** Plant was under planned shutdown, Hence Stack Monitoring could not be conducted.

MonitoredbyEcomen Laboratories (P) Ltd.
(An approved Laboratory from Ministry of Environment, Forest and Climate Change)
Flat No.5-8, 2nd Floor, Arif Chamber V, Sector H, Aliganj, Lucknow - 226 024

ANNEXURE-2

M/s Diamond Cements (Prop. HeidelbergCement India Limited)

CLINKERISATION UNIT NARSINGHAR

Ambient Air Quality Report (Monthly Average)

Month: April 19

AAQMS	$PM_{2.5}$ ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)	CO ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_2 ($\mu g/m^3$)
Near Hospital	39.16	56.06	225	6.17	7.47
Near Gate of Mine Pit No.1	45.99	69.78	223	7.25	7.93
Near STP Area	42.83	66.76	248	7.70	8.59
Near Worker Colony	41.08	59.26	225	6.44	7.57

Month: May 2019

AAQMS	$PM_{2.5}$ ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)	CO ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_2 ($\mu g/m^3$)
Near Hospital	40.81	57.91	463	6.23	9.87
Near Gate of Mine Pit No.1	48.04	71.73	487	7.56	10.46
Near STP Area	46.13	64.79	533	8.32	9.80
Near Worker Colony	43.14	62.72	507	6.08	9.20

Month: June 2019

AAQMS	$PM_{2.5}$ ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)	CO ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)	NO_2 ($\mu g/m^3$)
Near Hospital	42.89	59.76	510	6.81	9.83
Near Gate of Mine Pit No.1	46.88	69.87	540	8.29	11.02
Near STP Area	44.86	66.76	537	8.81	10.44
Near Worker Colony	41.96	58.23	493	7.24	10.13

Month: July 2019

AAQMS	$PM_{2.5}$ (µg/m³)	PM_{10} (µg/m³)	CO (µg/m³)	SO_2 (µg/m³)	NO_2 (µg/m³)
Near Hospital	19.1	48.1	387	5.9	7.9
Near Gate of Mine Pit No.1	25.6	54.2	370	7.6	8.9
Near STP Area	21.8	51.9	397	6.7	9.1
Near Worker Colony	20.1	50.3	387	6.6	9.5

Month: August 2019

AAQMS	$PM_{2.5}$ (µg/m³)	PM_{10} (µg/m³)	CO (µg/m³)	SO_2 (µg/m³)	NO_2 (µg/m³)
Near Hospital	14.60	31.91	313	8.33	11.90
Near Gate of Mine Pit No.1	18.40	32.50	335	9.61	11.44
Near STP Area	15.10	29.17	325	8.21	12.38
Near Worker Colony	12.90	27.80	319	8.11	12.73

Month: September 2019

AAQMS	$PM_{2.5}$ (µg/m³)	PM_{10} (µg/m³)	CO (µg/m³)	SO_2 (µg/m³)	NO_2 (µg/m³)
Near Hospital	13.60	24.20	357	11.40	12.35
Near Gate of Mine Pit No.1	14.80	25.40	353	11.23	12.44
Near STP Area	15.40	23.90	367	11.94	13.26
Near Worker Colony	12.90	22.70	353	10.12	11.79

Month: October 2019

AAQMS	$PM_{2.5}$ (µg/m³)	PM_{10} (µg/m³)	CO (µg/m³)	SO_2 (µg/m³)	NO_x (µg/m³)
Near Hospital	18.10	35.57	337	9.10	10.74
Near Gate of Mine Pit No.1	21.60	37.56	360	8.66	12.13
Near STP Area	22.60	38.19	348	7.50	11.51
Near Worker Colony	20.24	36.10	347	7.49	11.78

Month: November 2019

AAQMS	$PM_{2.5}$ (µg/m³)	PM_{10} (µg/m³)	CO (µg/m³)	SO_2 (µg/m³)	NO_2 (µg/m³)
Near Hospital	20.13	48.81	343	9.19	12.50
Near Gate of Mine Pit No.1	23.51	49.28	367	10.37	13.87
Near STP Area	26.24	51.02	371	11.11	13.6
Near Worker Colony	22.21	50.27	357	9.36	11.79

Month: December 2019

AAQMS	$PM_{2.5}$ (µg/m³)	PM_{10} (µg/m³)	CO (µg/m³)	SO_2 (µg/m³)	NO_2 (µg/m³)
Near Hospital	34.01	50.32	363	10.56	14.36
Near Gate of Mine Pit No.1	27.14	55.14	410	11.30	12.73
Near STP Area	28.91	57.71	380	10.14	13.78
Near Worker Colony	34.88	52.21	357	9.56	15.24

Month: January 2020

AAQMS	$PM_{2.5}$ (µg/m³)	PM_{10} (µg/m³)	CO (µg/m³)	SO_2 (µg/m³)	NO_2 (µg/m³)
Near Hospital	39.30	54.54	380	12.19	13.66
Near Gate of Mine Pit No.1	33.53	58.35	427	13.02	15.69
Near STP Area	31.78	62.54	397	11.30	16.17
Near Worker Colony	40.10	56.89	367	10.27	14.44

Month: February 2020

AAQMS	$PM_{2.5}$ (µg/m³)	PM_{10} (µg/m³)	CO (µg/m³)	SO_2 (µg/m³)	NO_2 (µg/m³)
Near Hospital	35.09	50.30	397	10.64	12.17
Near Gate of Mine Pit No.1	39.17	51.79	437	11.30	14.70
Near STP Area	33.09	60.37	407	10.32	14.61
Near Worker Colony	38.60	54.02	387	9.80	13.53

Month: March 2020

AAQMS	$PM_{2.5}$ (µg/m³)	PM_{10} (µg/m³)	CO (µg/m³)	SO_2 (µg/m³)	NO_2 (µg/m³)
Near Hospital	32.03	48.11	407	10.17	12.99
Near Gate of Mine Pit No.1	36.19	53.51	430	9.91	15.37
Near STP Area	30.36	57.48	417	10.00	13.77
Near Worker Colony	35.91	50.81	438	10.24	12.10

Monitored by Ecomen Laboratories (P) Ltd.
(An approved Laboratory from Ministry of Environment, Forest and Climate Change)
Flat No.5-8, 2nd Floor, Arif Chamber V, Sector H, Aliganj, Lucknow - 226 024

ANNEXURE-3

M/s Diamond Cement (Prop. HeidelbergCement India Limited)
CLINKERISATION UNIT NARSINGARH
Results of Treated Sewage Water

S. No.	Parameters	22.04.2019	25.05.2019	22.06.2019	26.07.2019	26.08.2019	25.09.2019	22.10.2019	27.11.2019	27.12.2019	25.01.2020	26.02.2020	14.03.2020
		STP Outlet	STP Outlet	STP Outlet	STP Outlet	STP Outlet	STP Outlet	STP Outlet	STP Outlet	STP Outlet	STP Outlet	STP Outlet	STP Outlet
1	pH	7.30	7.20	7.50	7.40	7.21	7.25	7.25	7.28	7.40	7.50	7.55	7.60
2	TSS	8.0	7.8	8.0	8.5	7.9	7.5	7.1	8.3	8.0	7.4	7.7	6.8
3	TDS	295.8	300.2	280.6	285.4	271.7	325.2	280.0	273.1	280.5	259.7	249.3	235.6
4	BOD	7.9	8.1	8.3	8.1	7.6	7.1	7.5	7.2	8.1	7.5	6.8	7.9
5	COD	12.8	13.4	15.2	15.0	14.5	14.8	14.2	13.8	15.0	13.4	15.2	14.1
6	Oil & Grease	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
7	Sodium Adsorption Ratio (SAR)	1.3	1.5	1.2	1.3	1.2	1.0	1.2	1.3	1.4	1.6	1.4	1.2

Note:All parameters are in mg/l except pH
BDL- Below Detection Limit

Monitored by Ecomen Laboratories (P) Ltd.
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Flat No.5-8, 2nd Floor, Arif Chamber V, Sector H, Aliganj, Lucknow - 226 024

ANNEXURE-4

M/s Diamond Cements (Prop. HeidelbergCement India Limited)
CLINKERISATION UNIT NARSINGARH

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

Location→	Nr. Hospital		Nr. Gate of Mine Pit No-1		Nr. STP Area		Nr. Worker Colony	
Month↓	Day	Night	Day	Night	Day	Night	Day	Night
Apr-19	52.0	42.2	65.3	57.0	66.0	59.8	56.2	43.0
May-19	54.0	41.0	67.8	57.0	67.5	60.2	55.0	43.2
Jun-19	52.1	40	65.3	59.4	66.6	61.3	54.0	42.0
Jul-19	50.3	41.3	62.4	58.4	65.8	60.2	52.0	43.0
Aug-19	52.4	43.1	64.8	59.9	68.3	61.2	54.8	44.7
Sep-19	53.0	42.2	66.3	58.3	67.5	62.6	54.9	43.9
Oct-19	51.5	41.3	65.67	57.1	68.4	60.3	53.2	42.4
Nov-19	51.2	42.5	62.5	56.7	65.6	58.2	51.4	44.5
Dec-19	50.0	42.0	60.3	55.5	62.5	57.2	49.0	40.1
Jan-20	49.3	42.5	62.6	56.7	60.2	58.1	51.5	44.2
Feb-20	56.3	43.5	65.2	60.3	63.4	59.4	52.1	43.2
Mar-20	54.2	44.5	64.5	58.8	61.8	58.7	51.9	42.2

Monitored by Ecomen Laboratories (P) Ltd.
(An approved Laboratory from Ministry of Environment, Forest and Climate Change)
Flat No.5-8, 2nd Floor, ArifChamber V, Sector H, Aliganj, Lucknow - 226 024

ANNEXURE-5

Details of Pollution Control Measures installed at various locations
Diamond Cement, Damoh (M.P.)
Details of Pollution Control Equipment - Line1 & Line 2

S.No.	Location of PCM	PCM
1	Lime stone crusher	Bag filter
2	Belt conveyor of lime stone crusher	Bag filter
3	Coal mill -1	Bag house
4	Coal mill -2	Bag house
5	Raw mill / kiln-1	Hybrid filter (esp+bag house)
6	Raw mill / kiln-2	Hybrid filter (esp+bag house)
7	Clinker cooler line-1	ESP
8	Clinker cooler line-2	ESP
9	Lime stone crusher (BC-7 TO BC-8)	Bag filter
10	Lime stone crusher (BC-8 TO BC-11/ BC -8A)	Bag filter
11	Coal crusher	Bag filter
12	Pan conveyor to clinker silo (top of PC -5 area)	Bag filter
13	Top of clinker silo (DBC 5/6)	Bag filter
14	Raw mill-1 hopper	Bag filter
15	Raw mill-2 hopper	Bag filter
16	Laterite crusher	Bag filter
17	Top of coal silo line – I	Bag filter
18	Top of coal silo line – II	Bag filter
19	Top of petro coke silo line – II	Bag filter
20	Kiln feed line – I	Bag filter
21	Kiln feed line – II	Bag filter
22	Ph air lift line – I	Bag filter
23	Top of raw mill silo 1 of line – I	Bag filter
24	Top of raw mill silo 2 of line – I	Bag filter
25	Top of raw mill silo of line – II	Bag filter
26	Rotor of lime stone crusher	Water spray system
27	Belt conveyor (BC-7) of lime stone crusher	Water spray system
28	Transfer tower belt conveyor of laterite area	Water spray system
29	Top of the clinker stock pile no.1	Bag filter
30	Top of the clinker stock pile no.2	Bag filter
31	Clinker loading in to the rope way	Bag filter
32	Lime stone discharge point in to belt conveyor (bc-18) coming from roller press	Water spray system
33	Roller press	Bag Filter
34	Coal yard	Water sprinkler
35	Coal handling circuit (from bc-28 to crusher no. 2)	Dust suppression system
36	Clinker silo	Telescopic chute along with dust collector
37	Pan conveyor to clinker silo (top of pc -5 area for dbc 1,2,5)	Bag filter
38	Old Coal Crusher	Bag Filter
39	Sewage treatment plant for domestic sewage	Sewage treatment plant(600 KLD)
40	Green belt development in the premises	Green belt development

Details of Pollution Control Equipment – New Line no.-3

S. No	Location of air pollution control equipment (main equipment/ transfer point)	Type of air pollution control equipment (bag house/ dust collector)
1	Kiln/ raw mill filter & dust transport	Reverse air bag house
2	Clinker cooler	Electrostatic precipitator
3	Coal mill	Jet pulse collector
4	Sec Lime Stone crusher	Dust collector
5	Additives crushing and transport	Dust collector
6	Limestone transport to storage	Dust collector
7	Limestone transport to storage	Dust collector
8	Bf250 limestone transport to storage	Dust collector
9	Bf320 limestone transport to storage	Dust collector
10	Bf430 limestone storage	Dust collector
11	Bf470 limestone storage	Dust collector
12	Bf620 limestone storage	Dust collector
13	Bf670 limestone storage	Dust collector
14	Bf060 coal crushing and transport	Dust collector
15	Bf090 coal crushing and transport	Dust collector
16	Bf160 coal crushing and transport	Dust collector
17	Bf220 coal crushing and transport	Dust collector
18	Bf420 coal storage & transport	Dust collector
19	Bf470 coal storage & transport	Dust collector
20	Bf520 coal storage & transport	Dust collector
21	Bf560 coal storage & transport	Dust collector
22	Bf620 coal storage & transport	Dust collector
23	Bf650 coal storage & transport	Dust collector
24	Bf175 raw mill feed	Dust collector
25	Bf275 raw mill feed	Dust collector
26	Bf375 raw mill feed	Dust collector
28	Bf475 raw mill feed	Dust collector
29	Bf020 raw mill building	Dust collector
30	Bf290 raw mill building	Dust collector
31	Bf530 raw mill building	Dust collector
32	Bf640 raw mill filter & dust transport	Dust collector
33	Bf035 blending silo	Dust collector
34	Bf065 blending silo top	Dust collector
35	Bf240 kiln feed	Dust collector
38	Bf700 kiln feed, preheater top	Dust collector
39	Bf710 kiln feed, preheater top	Dust collector
40	Bf720 kiln feed, preheater top	Dust collector
41	Bf620 clinker cooler	Dust collector
42	Bf050 coal mill	Dust collector
43	Bf190 coal dosing and firing system	Dust collector
44	Bf290 coal dosing and firing system	Dust collector
45	Bf210 clinker transport,silo top	Dust collector
46	Bf131 loading spout	Dust collector
47	Bf132 loading spout	Dust collector
48	Bf133 loading spout	Dust collector
50	Bf134 loading spout	Dust collector
51	Bf135 loading spout	Dust collector
52	Bf136 loading spout	Dust collector
53	Bf137 loading spout	Dust collector
54	Bf450 clinker transport, off spec silo top	Dust collector

ANNEXURE – 6

Year wise plantation at Clinkerisation Unit Narsingarh

Year	Plantation at Narsinghgarh
1983	150000
1984	20200
1985	38630
1986	69924
1987	42488
1988	64056
1989	40123
1990	102550
1991	24136
1992	68071
1993	48259
1994	27102
1995	25020
1996	23127
1997	39100
1998	19536
1999	15580
2000	6465
2001	13132
2002	9650
2003	25252
2004	11261
2005	8300
2006	7770
2007	12510
2008	3339
2009	5200
2010	3500
2011	6500
2012	10700
2013	8145
2014	5507
2015	4728
2016	4617
2018	5505
2019	4856
Total	**980514**

Total area of Clinkerisation Unit: 191.77 Ha
Total area of Green Belt Development: 74.635
% of green belt development: 38.92%

Types of Species planted:

Seesham, Teak, Parasonia, Subabool, Gulmohar, Neem, Bamboo, Aam, Guava, Jamun, Jack fruit, Citrus spp., Ashok Pendula, Bottle Palm, Thuja, Pipal, Bargad, Eucalyptus Satparni, Amala, Rubber Plant, etc.

Observing the World Environment Day 2019

Lighting the lamp by Sr. V.P. (Works):
Sh. Sanjeev Kr. Gupta

Speech on Environment Conservation by Sr. V.P. (Works):
Sh. Sanjeev Kr. Gupta

Prize Distribution

Group Photography of the winners

Launching of "Bird Album" by Mrs. Aarti Singh

Mass Plantation