HCIL(NGH)-ENV-F-089-418

M.P. Pollution Control Board

The Member Secretary

E-5, Arera Colonv

Paryawaran Parisar

Bhopal (MP) 462 016

#### 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

May 27, 2020

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

Dear Sir.

Please find enclosed herewith the Environment Statement Report (Form V) of Diamond Cements-Grinding Unit (Prop: HeidelbergCement India Limited), Imlai, 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 3<sup>rd</sup> 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: V. P. (Technical) – Imlai: For kind information and record please.

CC: Office copy

# **ENVIRONMENT STATEMENT REPORT**

(Form-V)

[Year 2019 - 2020]

**REPORT BY** 

# HEIDELBERGCEMENT

DIAMOND CEMENTS
(Prop. HeidelbergCement India Ltd.)
Grinding Unit-Imlai
P.O. Imlai
DIST. DAMOH (M.P.) - 470661



DIAMOND CEMENTS - Grinding Unit (Prop. HeidelbergCement India Ltd.) P.O. Imlai, DIST. DAMOH (M.P.) – 470661

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#### 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 poliution.
- · 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 - Grinding Unit (Prop. HeidelbergCement India Ltd.)

P.O. Imlai

DIST. DAMOH (M.P.) - 470 661

(ii) Industry category

LARGE SCALE

(iii) Production capacity

2.5 Million Ton/Annum and

D.G. Set- 2 x 1000 KVA

(iv) Year of establishment

Line - I 1983

Line - II 1993 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 }-97.3 Cooling } -Domestic }-85.5

	Process water consumption per unit of products output			
Name of products	During the previous financial year	During the current financial year		
	(1)	(2)		
Cement	0.0202 KL/MT	0.0122 KL/MT		
D.G. set- (2 x 1000 KVA)	N.A	N.A		

#### (ii) Raw material consumption

Name of raw	Name of products	Consumption of raw material per unit of output		
materials	Name of products	During the previous financial year (%)	During the current financial year (%)	
Clinker		62.00	62.0	
Gypsum	Portland Pozzolana Cement	3.19	3.08	
Pozzolana		34.81	34.92	
Diesel	D.G. set- (2 x 1000 KVA)	N.A.	0.0008 KL/KWH	

#### **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 ]

		Total Quantity (kg) disposed		
Hazardous Wastes		During the Previous Financial year (MT)	During the Current Financial year (MT)	
(1) 5 5	(a) Spent/ Used Oil (Category 5.1)	1.24	0.21	
(a) From Process	(b) Residue containing waste oil (Category 5.2)	4.54	4.96	
(b) From Pollution control Facilities	N.A.	N.A.	N.A.	

<sup>\*</sup> Hazardous waste is not generated from Grinding 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 recycler.

PART-E Solid Wastes

	Total Quantity (So	lid 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 to year (MT)		
(a) *From Plant & Mines	From Plant & Mines 0 1.32		

<sup>\*</sup> 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.

#### **PART-G**

Impact of pollution abatement measures taken on conservation of natural resources and on the cost of production. Pollution control measure have already been taken at all the point of source emission and fugitive emission. This resulted good saving in total cement produced.

#### **PART-H**

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

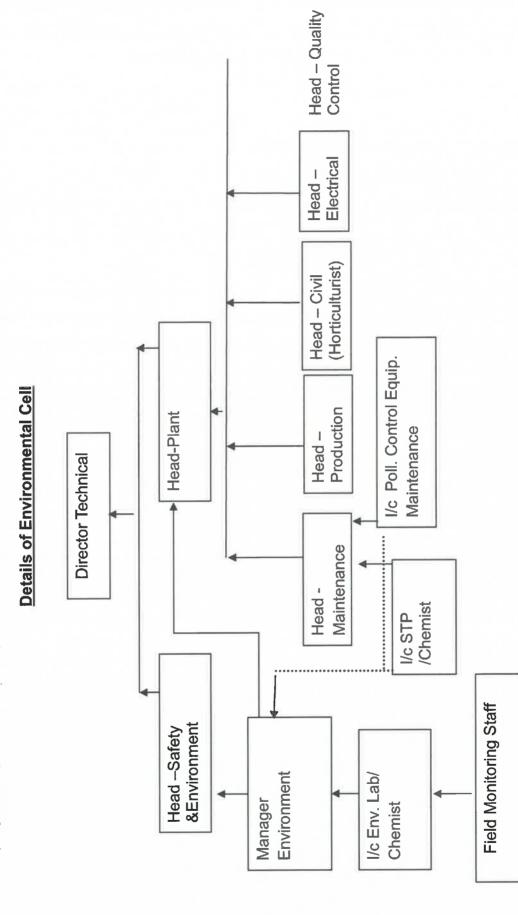
Continuous efforts are always being made to maintain the environment clean and dust free and we have done upgradation of the existing pollution control system and also adequate quantity of Pollution Control Equipment i.e. Bag Houses, Dust Collectors, Dust Suppression System, Water Sprinkler, STP, Green Belt Development. Exist in the Grinding Unit Imlai. List of Pollution Control Devices given in Annexure-5

# EXPENDITURE ON ENVIRONMENT MANAGEMENT INCURRED IN 2019-20 AND PROPOSED FOR 2020-21

S. N.	DETAILS	COST RS. LAKHS (APPROX) IN 2019-20	COST RS. LAKHS (APPROX) PROPOSED FOR 2020-21
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	11.06	11.0
3	Continuous Ambient Air Quality Monitoring Station (CAAQMS) & Continuous Emission Monitoring System (CEMS)	8.74	10.0
4	Green belt Development and maintenance	29.47	30.0
5	House Keeping Expanses	25.82	25.0
6	Awareness Program including Observing Environment Day/Ozone Day (Common for Clinkerisation unit, Grinding unit & mines)	0.30	0.30
7	Maintenance of Air Pollution Control Devices	25.96	25.0
8	Road Sweeping (manual) and through Auto sweeper	19.11	19.0
9	Maintenance of Rain water harvesting & construction of new RWHS	3.65	5.0
10	Municipal Waste Management System	3.47	3.5
11	Cost of Electricity consumed by Pollution control devices (Approx.)	74.90	77.0

Part - I

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



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

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

SI. 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		
Α	CAAQMS	3	
В	CEMS-Gaseous	3	
С	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 Grinding unit, Imlai

Month	Cement Mill No-1	Cement Mill No-2	Cement Mill No-3	Packing Plant No-3
Apr-19	11.1	14.6	17.4	21.7
May-19	12.9	11.9	**	21.1
Jun-19	12.2	14.2	**	19.8
Jul-19	12.7	10.1	**	21.6
Aug-19	15.3	10.8	**	22.6
Sep-19	11.3	10.6	16.1	16.1
Oct-19	13.2	14.6	11.2	24.3
Nov-19	12.4	10.3	7.6	23.2
Dec-19	13.3	9.1	12.1	20.4
Jan-20	15.2	12.8	17.0	24.5
Feb-20	11.5	13.7	8.6	21.6
Mar-20	10.4	16.5	8.2	22.6

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-2**

# M/s Diamond Cements (Prop. HeidelbergCement India Limited) Grinding Unit - Imlai

Grinding Unit - Imlai Ambient Air Quality Report (Monthly Average)

Month: April 2019

AAQMS	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	PM <sub>10</sub> (μg/m <sup>3</sup> )	CO (µg/m³)	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
Near Admin Bld	38.01	57.93	258	7.63	8.98
Near Water Storage tank (behind D.G. set)	43.89	62.05	232	8.39	9.52
Near Railway Siding	41.05	63.49	275	8.03	9.55
Near Worker Colony	37.19	51.83	218	7.53	9.31

Month: May 2019

AAQMS	PM <sub>2.5</sub> (μg/m³)	PM <sub>10</sub> (μg/m <sup>3</sup> )	CO (µg/m³)	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )
Near Admin Bld	38.93	60.01	500	9.04	10.58
Near Water Storage tank (behind D.G. set)	47.02	69.19	533	9.06	10.65
Near Railway Siding	45.10	67.20	547	9.68	10.67
Near Worker Colony	40.12	55.09	540	8.64	10.15

Month: June 2019

AAQMS	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	PM <sub>10</sub> (μg/m <sup>3</sup> )	CO (µg/m³)	SO <sub>2</sub> (µg/m³)	NO <sub>2</sub> (μg/m <sup>3</sup> )
Near Admin Bld	41.06	55.84	533	8.33	9.97
Near Water Storage tank (behind D.G. set)	49.05	72.18	560	9.43	11.52
Near Railway Siding	44.00	65.21	547	10.39	11.59
Near Worker Colony	36.11	57.14	483	8.76	10.77

Month: July 2019

AAQMS	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	PM <sub>10</sub> (μg/m <sup>3</sup> )	CO (µg/m³)	SO <sub>2</sub> (µg/m³)	NO <sub>2</sub> (μg/m <sup>3</sup> )
Near Admin Bld	16.9	47.1	410	5.9	8.4
Near Water Storage tank (behind D.G. set)	26.8	53.0	427	5.4	8.9
Near Railway Siding	23.1	49.2	397	5.2	8.7
Near Worker Colony	17.9	46.1	400	6.5	8.3

Month: August 2019

AAQMS	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	PM <sub>10</sub> (μg/m <sup>3</sup> )	CO (µg/m³)	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
Near Admin Bld	11.70	30.22	312	8.82	12.53
Near Water Storage tank (behind D.G. set)	19.20	29.80	311	9.76	12.02
Near Railway Siding	16.70	32.39	295	10.55	14.17
Near Worker Colony	13.40	28.66	306	8.69	13.99

Month: September 2019

AAQMS	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	PM <sub>10</sub> (μg/m <sup>3</sup> )	CO (µg/m³)	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
Near Admin Bld	10.90	19.30	367	10.31	13.11
Near Water Storage tank (behind D.G. set)	11.60	21.70	397	11.08	13.45
Near Railway Siding	12.20	24.90	373	11.19	14.72
Near Worker Colony	9.80	18.70	340	10.84	13.71

Month: October 2019

AAQMS	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	PM <sub>10</sub> (μg/m <sup>3</sup> )	CO (µg/m³)	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )
Near Admin Bld	19.60	38.20	335	8.25	11.79
Near Water Storage tank (behind D.G. set)	24.50	39.90	331	9.04	12.83
Near Railway Siding	23.40	40.80	320	9.74	13.46
Near Worker Colony	17.20	37.50	323	8.01	10.27

Month: November 2019

				montain	TOTOITIBOL ZOTO
AAQMS	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	PM <sub>10</sub> (μg/m <sup>3</sup> )	CO (µg/m³)	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )
Near Admin Bld	23.06	52.73	350	10.19	13.77
Near Water Storage tank (behind D.G. set)	27.19	54.19	376	11.06	12.94
Near Railway Siding	29.34	58.82	345	10.42	15.36
Near Worker Colony	21.12	53.65	361	9.45	14.34

Month: December 2019

AAQMS	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	PM <sub>10</sub> (μg/m³)	CO (µg/m³)	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )
Near Admin Bld	26.11	53.92	353	9.25	15.39
Near Water Storage tank (behind D.G. set)	30.19	58.85	440	11.39	14.60
Near Railway Siding	31.86	62.11	420	12.12	16.94
Near Worker Colony	23.41	54.86	373	9.51	16.14

Month: January 2020

AAQMS	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	PM <sub>10</sub> (μg/m <sup>3</sup> )	CO (µg/m³)	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
Near Admin Bld	30.19	59.35	357	10.22	14.42
Near Water Storage tank (behind D.G. set)	34.27	63.23	443	12.32	16.23
Near Railway Siding	35.95	63.93	433	13.61	15.79
Near Worker Colony	29.16	56.14	373	11.86	12.05

Month: February 2020

					T Oblidaty Tollo
AAQMS	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> (μg/m <sup>3</sup> )	CO (µg/m³)	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (μg/m <sup>3</sup> )
Near Admin Bld	31.92	57.18	370	8.32	11.79
Near Water Storage tank (behind D.G. set)	37.40	60.88	457	10.70	14.62
Near Railway Siding	36.73	58.70	450	11.71	11.71
Near Worker Colony	27.94	52.94	387	10.19	10.52

Month: March 2020

AAQMS	PM <sub>2.5</sub> (μg/m <sup>3</sup> )	PM <sub>10</sub> (μg/m <sup>3</sup> )	CO (µg/m³)	SO <sub>2</sub> (μg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m³)
Near Admin Bld	30.86	59.18	387	9.84	12.52
Near Water Storage tank (behind D.G. set)	34.10	62.35	450	11.34	14.57
Near Railway Siding	38.20	56.14	435	10.47	10.83
Near Worker Colony	31.40	51.31	390	8.62	11.71

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 Cements (Prop. HeidelbergCement India Limited) GRINDING UNIT, IMLA! AMBIENT NOISE LEVEL [Leq Value in dB (A)]

Location→	Nr. Admi Bui	Nr. Administrative Building	Nr. Worker Colony	r Colony	Nr. Railway Side	ay Side	Nr. Wate Tank (Be	Nr. Water Storage Tank (Behind D.G. Set)
Apr-19	56.2	49.0	53.6	42.5	65.2	60.0	67.2	61.0
May-19	58.4	48.0	55.5	43.2	67.5	59.4	65.1	58.0
Jun-19	56.6	51.0	53.7	44.0	68.0	58.3	64.0	9.09
Jul-19	55.5	49.3	53.0	42.0	64.0	56.0	61.2	57.0
Aug-19	57.1	48.2	56.9	51.7	63.7	56.6	64.2	59.3
Sep-19	56.8	50.5	57.3	44.9	64.4	0.09	65.0	61.6
Oct-19	55.5	49.2	56.8	43.6	65.3	61.8	67.5	62.4
Nov-19	52.7	56.9	9:99	43.1	61.8	55.3	63.3	57.7
Dec-19	54.2	50.0	53.6	42.0	62.4	54.2	61.0	56.4
Jan-20	56.6	53.4	50.7	42.1	65.1	58.2	63.2	97.9
Feb-20	58.4	53.4	54.1	44.2	67.6	58.2	65.3	59.9
Mar-20	56.7	51.9	51.1	41.8	62.6	299	61.9	57.2

(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-4**

M/s Diamond Cements (Prop. HeidelbergCement India Limited) Results of Treated Sewage Water Grinding Unit - Imlai

7	6	5	4	ယ	2	1	No.	,
Sodium Adsorption Ratio (SAR)	Oil & Grease	COD	вор	TDS	SST	рН	Parameters	
1.25	BDL	15.6	7.5	372.0	8.0	7.50	STP Outlet	22.04.2019
1.57	BDL	16.9	8.0	360	7.8	7.60	STP Outlet	25.05.2019
1.33	BDL	16.3	83	345.2	7.2	7.40	STP Outlet	22.06.2019
1.20	BDL	15.8	7.9	340.2	8.0	7.50	STP Outlet	26.07.2019
1.10	BDL	15.3	7.3	334.3	7.6	7.46	STP Outlet	26.08.2019
1.00	BDL	14.8	7.1	325.2	7.5	7.25	STP Outlet	25.09.2019
1.15	BDL	15.2	6.9	338.4	7.8	7.40	STP Outlet	22.10.2019
1.60	BDL	14.3	7.1	337.2	7.6	7.32	STP Outlet	27.11.2019
1.80	BDL	15.6	7.8	345.6	8.1	7.60	STP Outlet	27.12.2019
1.60	BDL	16.4	7.1	325.7	7.6	7.40	STP Outlet	25.01.2020
1.60	BDL	18.2	6.5	320.5	7.4	7.50	STP Outlet	26.02.2020
1.40	BDL	14.2	8.2	328.7	6.4	7.60	STP Outlet	14.03.2020

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

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-5**

Details of Pollution Control Measures installed at various locations Diamond Cements, Grinding Unit – Imlai, Damoh (M.P.)

S.N.	Diamond Cements, Grinding Unit – Imlai, Damoh (M. Location of PCM	PCM
1	Cement Mill -1	Bag House
2		Bag House
3	Belt goes to yard, near Gypsum yard, feeding to hopper (Transfer Tower BC-32 TO BC-6/BC-33)	Bag Filter BFA
4	Belt coming from yard to hopper conveying Fly ash/ Gypsum (BC-02A TO BC-02B)	Bag Filter BF B
5	Belt from yard to transfer Tower, conveying clinker (BC-7 TO BC-8)	Bag Filter BFC
6	At Transfer Tower, clinker transfer point (BC-8- BC-9)	Bag Filter BFD
7	CM -2 Hopper top (BC-9 TO BC-11)	Bag Filter BFE
8	Top of the wagon loading hopper	Bag Filter BFH
9	Packing Plant No. 3	Bag Filter BFG
10	Rope way unloading hopper	Bag Filter BFF (S)
11	Packing Plant No. 2	Bag Filter
12	Packing Plant No. 4	Bag Filter
13	Top of cement Silo 1	Bag Filter
14	Top of cement Silo 2	Bag Filter
15	Top of cement Silo 3	Bag Filter
16	Top of cement Silo 4	Bag Filter
17	Air Lift	Bag Filter
18	BC-33 discharge to clinker stock pile	Bag Filter
19	BC-6 discharge to mills feed dump hoppers	Bag Filter
20	Cement Mill No. 1 feed hopper top	Bag Filter
21	Coal Dump Hopper at Imlai	Dust Suppression System
22	Clinker belt Bc-32, BC- 6 and BC-8	Dust Suppression System
23	Water Spray system in the Gypsum & Coal unloading yard	Dust Suppression System
24	Sewage Treatment Plant for Domestic Sewage	STP (90 KLD)
25	Green Belt Development in the premises	Green Belt Development
	Dry Fly ash management system embodied with following	PCM at Imlai
1	Truck Tippler (Above Dump hopper)	Bag Filter
2	Truck Tippler (Above Dump hopper)	Bag Filter
3	Silo Extraction (Bottom)	Bag Filter
4	Silo Top	Bag Filter
5	Day Bin Top	Bag Filter
6	Control/ Calibration Bin	Bag Filter
7	Control/ Calibration Bin	Bag Filter
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S. No.	Location of air pollution control equipment (main equipment/ transfer point)	Type of air pollution control equipment (Bag House/ Dust Collector)
1	BF080 Gypsum intake and crusher	Dust Collector
2	BF300 Gypsum intake and crusher,apron feeder	Dust Collector
3	BF320 Gypsum intake and crusher	Dust Collector
4	BF350 Gypsum intake and crusher	Dust Collector
5	212.BF400 Gypsum intake and crusher	Dust Collector
6	BF450 Gypsum intake and crusher	Dust Collector
7	BF070 Gypsum and coal storage	Dust Collector
8	BF170 Gypsum and coal storage	Dust Collector
9	BF035 Dry flyash transport to Cement mill	Dust Collector
10	BF050 Dry flyash transport to Cement mill	Dust Collector
11	BF210 Dry flyash transport to Cement mill	Dust Collector
12	.BF075 Clinker transport to storage	Dust Collector
13	.BF085 Clinker transport to storage	Dust Collector
14	471.BF090 Clinker transport to storage	Dust Collector
15	BF120 Clinker transport to storage	Dust Collector
16	BF150 Clinker transport to storage	Dust Collector
17	BF165 Clinker transport to storage	Dust Collector
18	BF175 Clinker transport to storage	Dust Collector
19	481.BF185 Clinker transport to storage	Dust Collector
20	BF290 Clinker transport to storage	Dust Collector
21	BF020 Cement mill feed	Dust Collector
22	511.BF030 Cement mill feed	Dust Collector

23	BF560 Cement mill feed	Dust Collector
24	BF215 Cement mill	Dust Collector
25	BF260 Cement mill	Dust Collector
26	BF420 Cement mill, o - sepa venting	Dust Collector
28	BF565 Cement mill	Dust Collector
29	BF570 Cement mill	Dust Collector
30	541.BF150 Cement transport to silo from existing cement mill	Dust Collector
31	BF1 (Top of cement silo)	Dust Collector
32	BF2 (Venting of collecting bin of cement silo)	Dust Collector
33	BF1 (For packer 1)	Dust Collector
34	BF2 (For packer 1)	Dust Collector
35	BF3 (For air slide-14)	Dust Collector
36	BF4 (For air slide-13)	Dust Collector
37	BF5 (For air slide-22 & boot of bucket elevator -3)	Dust Collector
38	BF6 (For air slide-11, 15 & boot of bucket elevator -4)	Dust Collector
39	BF1 (For packer-2)	Dust Collector
40	BF2 (For packer-2)	Dust Collector
41	BF1 (For packer-4)	Dust Collector
42	BF2 (For packer-4)	Dust Collector

# **ANNEXURE - 6**

Year wise plantation at Grinding Unit – Imlai

Year	Plantation (Nos.)	
1983	50000	
1984	10410	
1985	17843	
1986	31047	
1987	33522	
1988	19356	
1989	16764	
1990	26373	
1991	24582	
1992	27381	
1993	19460	
1994	11374	
1995	11918	
1996	14047	
1997	16770	
1998	10000	
1999	13714	
2000	10091	
2001	7246	
2002	4500	
2003	6097	
2004	6700	
2005	4000	
2006	4500	
2007	4690	
2008	3293	
2009	3500	
2010	3500	
2011	6369	
2012	2500	
2013	6850	
2014	5612	
2015	5493	
2016	5443	
2017	3000	
2018 1795		
2019	1600	
TOTAL	451340	
Total area of Grinding Unit: 75 Ha		
Total area of Green Belt Development: 29.32		
% of green belt development: 39.09%  Types of Species planted: Seesham, Teak, Parasonia, S		

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 etc.

