

HCIL(NGH)-ENV-F-101/2020/

**The Member Secretary  
M.P. Pollution Control Board  
Paryavaran Parishar,  
E-5, Arera Colony, Bhopal – 462016**

**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

**Jan 07, 2021****Sub.: Monthly Environmental Monitoring Reports for Dec 2020**

Sir,

Please find enclosed herewith the Environmental Monitoring Report of the following for the month of **Dec 2020**

<b>S. No.</b>	<b>Name of Plant / Mines</b>	<b>Monitoring Details</b>
1.	Clinkrisation Unit, Narsingarh (including WHRPP)	Ambient Air Quality Monitoring including Ambient Noise Monitoring, Stack Monitoring, STP Water Quality Analysis Report, ETP Water Quality Analysis Report, Fugitive Emission, Performance of ESPs & Bag Houses, Energy meter reading, Online monitoring data of CAAQMS.
2.	Grinding Unit, Imlai	Ambient Air Quality Monitoring including Ambient Noise Monitoring, Stack Monitoring, STP Water Quality Analysis Report, Performance of Bag Houses, Fugitive Emission, Energy meter reading and Online monitoring data of CAAQMS.
3.	Lime Stone Mines, Patharia	Ambient Air Quality Monitoring including Ambient Noise Monitoring, Stack Monitoring, Water, Waste water Quality Analysis Report Fugitive Emission and Online monitoring data of CAAQMS.

This is submitted for your kind perusal please.

Thanking you,

Yours faithfully,  
For Diamond Cements  
(Prop.: HeidelbergCement India Ltd.)

  
Sandeep Kumar Tiwari  
Manager – Environment

Encl: as above

**CC: The Zonal Officer (Central),**

Central Pollution Control Board, E-5, Link Rd Number 3, Ekant Park, Arera Colony, Bhopal, Madhya Pradesh 462016

**CC: The Regional Officer**

MP Pollution Control Board, Deen Dayal Nagar, Housing Board Colony, Sagar (MP)

**CC: Sr. G.M. Mines – For kind information & record please**

**CC: VP (T) Imlai – For kind information & record please**

**CC: Office Copy**

**ENVIRONMENTAL MONITORING  
REPORT**

*of*

**M/s Diamond Cements  
(Prop. HeidelbergCement India Limited)  
Village & Post: Narsingarh,  
District : Damoh**

*for*

**December, 2020**

**Prepared by:**



Certificate No.: Y-2202

**ecoMen**

**Ecomen Laboratories Pvt. Ltd.**

(An approved Laboratory from NABL & MoEF&CC )

Flat No 5-8, 2<sup>nd</sup> Floor Arif Chamber-V, Sector-H

Aliganj, Lucknow 226024 (U.P)

Phone No.: (+91-522) 2746282; Fax No.:(+91-522) 2745726

E-mail : Ravi.bhargava@gmail.com

# ECOMEN LABORATORIES PVT. LTD.

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LABORATORIES PVT. LTD.

Flat No. 8, 2nd Floor, Arif Chamber-V, Sector H, Aliganj, Lucknow - 226 024

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E-mail: ravi.bhargava@gmail.com, Website: www.ecomen.in, CIN - U74210UP1989PTC010601, GSTIN : 09AAACE6076H1Z1

An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. : ECO/QS/D/FORMAT/01  
REV. NO. : 00

TEST REPORT NO. : ECO LAB/D/A:05-08 & M:05-08/12/20  
ISSUE DATE : 31.12.2020

Month: December. 2020

## TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Name of Plant/Mines :

M/s Diamond Cements - Clinkerisation Unit  
(Prop. HeidelbergCement India Limited), Narsingarh, Damoh (M.P.)

AAQMS	Date/Time*	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Time	CO (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )	
		03.12.2020	04.12.2020		03.12.2020	03.12.2020	03.12.2020	
Near Hospital	08.00 am	32.60	50.60	06:00 am to 10:00 am	340	9.44	12.32	
				10:00 am to 02:00 pm				
				02:00 pm to 06:00 pm				
				08:00 pm to 10:00 pm	350	11.58	12.17	
								10:00 pm to 02:00 am
								02:00 am to 06:00 am
								Average Value
Near Gate of Mine Pit No.1	06.00 am	36.40	55.83	06:20 am to 10:20 am	330	11.28	13.67	
				10:20 am to 02:20 pm				
				02:20 pm to 06:20 pm	350	11.89	14.08	
				06:20 pm to 10:20 pm				
				10:20 pm to 02:20 am				
				02:20 am to 06:20 am	330	9.51	14.08	
				Average Value				337
Near STP Area	06.00 am	35.76	58.37	06:40 am to 10:40 am	320	8.89	13.03	
				10:40 am to 02:40 pm				
				02:40 pm to 06:40 pm	360	9.48	13.08	
				06:40 pm to 10:40 pm				
				10:40 pm to 02:40 am				
				02:40 am to 06:40 am	350	9.51	13.13	
				Average Value				343
Near Worker Colony	06.00 am	34.69	56.45	07:00 am to 11:00 am	350	10.72	10.53	
				11:00 am to 03:00 pm				
				03:00 pm to 07:00 pm	380	12.42	12.35	
				07:00 pm to 11:00 pm				
				11:00 pm to 03:00 am				
				03:20 am to 07:00 am	380	10.59	11.11	
				Average Value				363

Air (Ambient Standard) - The Environment (Protection) Rules, 1986 (NAAQMS)							
S.NO.	Standard	Time	PM 2.5	PM 10	SO2	NO2	CO
1	(µg/m <sup>3</sup> )	24 hours	60	100	80	60	2000
2		Annual	40	60	50	40	-

\* Time mentioned above is the Initial Time of Sampling.

SO<sub>2</sub> BDL < 4.0 (µg/m<sup>3</sup>) and NO<sub>2</sub> BDL < 6.1 (µg/m<sup>3</sup>)

*Handwritten signature*  
Chakraborty

*Handwritten signature*  
Authorized Signatory

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

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REV. NO. : 00

TEST REPORT NO. : ECO LAB/D/A/09-12 & M/09-12/12/20  
ISSUE DATE : 31.12.2020

Month: December, 2020

## TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Name of Plant/Mines :

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

AAQMS	Date/ Time*	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	Time	CO (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
		07.12.2020	08.12.2020		08.12.2020	08.12.2020	08.12.2020
Near Admin Bld.	06.00 am	30.83	53.37	06:00 am to 10:00 am	390	10.67	10.00
				10:00 am to 02:00 pm			
				02:00 pm to 06:00 pm			
				06:00 pm to 10:00 pm	430	9.70	11.81
				10:00 pm to 02:00 am			
				02:00 am to 06:00 am			
				Average Value			
Near Water Storage Tank (Behind D.G. Set)	06.00 am	38.32	57.83	06:20 am to 10:20 am	400	10.84	14.72
				10:20 am to 02:20 pm			
				02:20 pm to 06:20 pm	430	10.84	14.01
				06:20 pm to 10:20 pm			
				10:20 pm to 02:20 am			
				02:20 am to 06:20 am	440	8.89	13.61
				Average Value			
Near Railway Siding	06.00 am	40.88	60.78	06:40 am to 10:40 am	440	10.08	14.28
				10:40 am to 02:40 pm			
				02:40 pm to 06:40 pm	430	11.89	13.80
				06:40 pm to 10:40 pm			
				10:40 pm to 02:40 am			
				02:40 am to 06:40 am	410	10.57	12.96
				Average Value			
Near Worker Colony	06.00 am	31.57	54.53	07:00 am to 11:00 am	400	8.91	12.89
				11:00 am to 03:00 pm			
				03:00 pm to 07:00 pm	410	8.32	12.24
				07:00 pm to 11:00 pm			
				11:00 pm to 03:00 am			
				03:20 am to 07:00 am	420	10.00	12.29
				Average Value			

Air ( Ambient Standard ) - The Environment ( Protection ) Rules, 1986 [NAAQMS]							
S.NO.	Standard	Time	PM 2.5	PM 10	SO <sub>2</sub>	NO <sub>2</sub>	CO
1	(µg/m <sup>3</sup> )	24 hours	60	100	60	80	2000
2		Annual	40	60	50	40	-

\* Time mentioned above is the initial Time of Sampling.

SO<sub>2</sub> BDL<4.0 (µg/m<sup>3</sup>) and NO<sub>2</sub> BDL<8.1 (µg/m<sup>3</sup>)

Checked by

Authorized Signatory

Page No. 2

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. : ECO/QS/D/FORMAT/01  
REV. NO. : 00

TEST REPORT NO. : ECO LAB/DIA:01-04 & M:01-04/12/20  
ISSUE DATE : 31.12.2020

Month: December. 2020

### TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Name of Plant/Mines :

Lime Stone Mines, Patharia-Diamond Cements  
(Prop. HeidelbergCement India Limited), Damoh (M.P.)

AAQMS	Date/ Time	PM <sub>2.5</sub> (µg/m <sup>3</sup> )		Time	CO (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
		01.12.2020	02.12.2020		02.12.2020	02.12.2020	02.12.2020
Near Main Office	06.00 am	33.51	52.80	06:00 am to 10:00 am	390	7.11	11.10
				10:00 am to 02:00 pm		9.44	9.47
				02:00 pm to 06:00 pm	400	8.53	10.53
				06:00 pm to 10:00 pm		8.83	12.05
				10:00 pm to 02:00 am	410	9.88	13.78
				02:00 am to 06:00 am		10.31	12.42
				<b>Average Value</b>	<b>400</b>	<b>9.20</b>	<b>11.57</b>
Near Back Filling Area	06.00 am	37.37	59.54	06:20 am to 10:20 am	390	8.51	12.89
				10:20 am to 02:20 pm		9.46	13.30
				02:20 pm to 06:20 pm	420	10.59	14.06
				06:20 pm to 10:20 pm		10.87	12.85
				10:20 pm to 02:20 am	410	9.88	12.60
				02:20 am to 06:20 am		9.83	12.96
				<b>Average Value</b>	<b>407</b>	<b>9.86</b>	<b>13.11</b>
Near Mine Pit	06.00 am	38.51	61.48	06:40 am to 10:40 am	390	10.05	11.87
				10:40 am to 02:40 pm		10.70	14.19
				02:40 pm to 06:40 pm	410	10.05	12.86
				06:40 pm to 10:40 pm		9.58	12.87
				10:40 pm to 02:40 am	400	7.83	12.02
				02:40 am to 06:40 am		10.34	12.62
				<b>Average Value</b>	<b>400</b>	<b>9.73</b>	<b>12.67</b>
Near Temple	06.00 am	30.40	50.98	07:00 am to 11:00 am	380	10.70	12.17
				11:00 am to 03:00 pm		9.84	12.90
				03:00 pm to 07:00 pm	360	9.03	10.45
				07:00 pm to 11:00 pm		9.48	12.35
				11:00 pm to 03:00 am	370	8.14	11.80
				03:20 am to 07:00 am		7.71	12.85
				<b>Average Value</b>	<b>370</b>	<b>8.15</b>	<b>12.10</b>

Air ( Ambient Standard ) - The Environment ( Protection ) Rules, 1986 [NAAQMS]							
S.NO.	Standard	Time	PM 2.5	PM 10	SO <sub>2</sub>	NO <sub>2</sub>	CO
1	(µg/m <sup>3</sup> )	24 hours	60	100	80	80	2000
2		Annual	40	60	50	40	-

\* Time mentioned above is the initial Time of Sampling.

SO<sub>2</sub> BDL < 4.0 (µg/m<sup>3</sup>) and NO<sub>2</sub> BDL < 6.1 (µg/m<sup>3</sup>)

*Alkhalifa*  
Checked by

*[Signature]*  
Authorized Signatory

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**An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi**

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REV. NO. : 00

TEST REPORT NO. : ECO LAB/D/A-13-16 & M:13-16/12/20  
ISSUE DATE : 31.12.2020

Month: December. 2020

### TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Name of Plant/Mines :

Lime Stone Mines, Patharia-Diamond Cements  
(Prop. HeidelbergCement India Limited), Damoh (M.P.)

AAQMS	Date/ Time*	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	PM <sub>10</sub> (µg/m <sup>3</sup> )	Time	CO (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
		17.12.2020	17.12.2020		17.12.2020	17.12.2020	17.12.2020
Near Main Office	06.00 am	27.95	51.79	06:00 am to 10:00 am	380	10.10	10.02
				10:00 am to 02:00 pm		8.89	10.95
				02:00 pm to 06:00 pm	410	8.87	9.26
				06:00 pm to 10:00 pm		10.03	11.52
				10:00 pm to 02:00 am	450	9.29	12.05
				02:00 am to 06:00 am		8.87	13.77
				Average Value	417	9.34	11.26
Near Back Filling Area	06.00 am	34.91	60.43	06:20 am to 10:20 am	350	10.05	12.59
				10:20 am to 02:20 pm		10.70	12.89
				02:20 pm to 06:20 pm	380	11.16	13.09
				06:20 pm to 10:20 pm		10.23	12.28
				10:20 pm to 02:20 am	340	10.51	10.32
				02:20 am to 06:20 am		9.88	10.97
				Average Value	357	10.43	12.02
Near Mine Pit	06.00 am	33.81	56.61	06:40 am to 10:40 am	410	9.42	11.81
				10:40 am to 02:40 pm		10.06	11.66
				02:40 pm to 06:40 pm	450	10.87	11.43
				06:40 pm to 10:40 pm		11.24	10.92
				10:40 pm to 02:40 am	420	11.29	13.13
				02:40 am to 06:40 am		10.94	11.84
				Average Value	427	10.61	11.80
Near Temple	06.00 am	29.44	55.49	07:00 am to 11:00 am	380	9.48	10.45
				11:00 am to 03:00 pm		9.44	12.79
				03:00 pm to 07:00 pm	400	10.64	13.80
				07:00 pm to 11:00 pm		11.26	11.19
				11:00 pm to 03:00 am	410	10.40	13.54
				03:00 am to 07:00 am		9.42	11.44
				Average Value	397	10.10	12.17

Air (Ambient Standard) - The Environment (Protection) Rules, 1986 (AAQMS)							
S.NO.	Standard	Time	PM 2.5	PM 10	SO2	NO2	CO
1	(µg/m <sup>3</sup> )	24 hours	60	100	80	80	2000
2		Annual	40	80	50	40	-

\* Time mentioned above is the initial Time of Sampling.

SO<sub>2</sub> BDL < 4.0 (µg/m<sup>3</sup>) and NO<sub>2</sub> BDL < 6.1 (µg/m<sup>3</sup>)

Checked by:

Authorized Signatory

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. : ECO/QS/D/FORMAT/02  
REV. NO. : 00

TEST REPORT NO. : ECO LAB/D/N:01/12/20  
ISSUE DATE: 31.12.2020

Month: : December 2020

## TEST REPORT OF AMBIENT NOISE MONITORING

Name of Plant/Mines : Ms Diamond Cements - Clinkerisation -Clinkerisation Unit  
(Prop. Heidelberg Cement India Limited), Narsingarh, Damoh (M.P.)

Date of Monitoring : 04.12.2020

Sl. No.	Location	Leq Value in dB(A)	
		Day Time	Night Time
1.	Near Hospital	50.3	42.5
2.	Near Gate of Mine Pit No.1	59.6	57
3.	Near STP Area	60.3	57.6
4.	Near Worker Colony	48.5	42.3

*Abhishek*  
Checked by

*[Signature]*  
Authorized Signatory

**Ecomen Laboratories Pvt. Ltd.**  
Flat No. 8, Sector H, Arif Chamber  
Aliganj - 226024  
Lucknow - 226024  
Phone: 2745726

### Noise (Ambient Standard) - Noise Pollution (Prevention & Control Rule 2000)

Area Code	Category of area	Limit in dB (A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

#### Note:

1	Day time is reckoned in between 6:00 AM and 10:00 PM.
2	Night time is reckoned in between 10:00 PM and 6:00 AM
3	Silence zone is defined as area up to 100m around such premises as hospitals, educational institutions & courts. The silence zones are to be declared by a competent authority.
4	Mixed categories of areas should be declared as one of the four above-mentioned categories by the competent authority and the corresponding standard shall apply.

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

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REV. NO. : 00

TEST REPORT NO. : ECO LAB/D/N:02/12/20  
ISSUE DATE: 31.12.2020

Month: : December 2020

## TEST REPORT OF AMBIENT NOISE MONITORING

Name of Plant/Mines : M/s Diamond Cements -Grinding Unit  
(Prop. Heidelberg Cement India Limited), Imlai, Damoh (M.P.)

Date of Monitoring : 08.12.2020

Sl. No.	Location	Leq Value in dB(A)	
		Day Time	Night Time
1.	Near ADM Bld.	54.8	51.7
2.	Near Worker Colony	47.5	43.1
3.	Near Railway Siding	61.7	57.8
4.	Near Water Storage Tank (Behind D.G.Set)	58.8	54.8

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Authorized Signatory

### Noise (Ambient Standard) - Noise Pollution (Prevention & Control Rule 2000)

Area Code	Category of area	Limit in dB (A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

#### Note:

1	Day time is reckoned in between 6:00 AM and 10:00 PM.
2	Night time is reckoned in between 10:00 PM and 6:00 AM
3	Silence zone is defined as area up to 100m around such premises as hospitals, educational institutions & courts. The silence zones are to be declared by a competent authority.
4	Mixed categories of areas should be declared as one of the four above-mentioned categories by the competent authority and the corresponding standard shall apply.



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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. : ECO/QS/D/FORMAT/02  
REV. NO. : 00

TEST REPORT NO. : ECO LAB/D/N:03/12/20  
ISSUE DATE: 31.12.2020

Month: : December 2020

## TEST REPORT OF AMBIENT NOISE MONITORING

Name of Plant/Mines : Lime Stone Mines, Patharia- Diamond Cements  
(Prop. Heidelberg Cement India Limited), Damoh (M.P.)

Date of Monitoring : 17.12.2020

Sl. No.	Location	Leq Value in dB(A)	
		Day Time	Night Time
1.	Near Main Office	59.4	58.9
2.	Near Back Filling Area	51.7	47.5
3.	Near Mine Pit	61.8	57.6
4.	Near Temple	57.8	53.7

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*[Signature]*

Authorized Signatory  
*[Signature]*

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Ph: 2746282 Fax: 2745726

### Noise (Ambient Standard) - Noise Pollution (Prevention & Control Rule 2000)

Area Code	Category of area	Limit in dB (A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

#### Note:

1	Day time is reckoned in between 6:00 AM and 10:00 PM.
2	Night time is reckoned in between 10:00 PM and 6:00 AM
3	Silence zone is defined as area up to 100m around such premises as hospitals, educational institutions & courts. The silence zones are to be declared by a competent authority.
4	Mixed categories of areas should be declared as one of the four above-mentioned categories by the competent authority and the corresponding standard shall apply.

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FORMAT NO. : ECO/QS/D/FORMAT/03  
REV. NO : 00TEST REPORT NO. : ECO LAB/D/S:06,02 & 12/12/20  
ISSUE DATE : 31.12.2020

Month: December 2020

**TEST REPORT OF STACK MONITORING**

Name of Plant/Mines :

M/s Diamond Cements -Clinkerisation Unit  
(Prop. HeidelbergCement India Limited), Narsingarh, Damoh (M.P.)

Location	S-1	S-2	S-3
Date of Monitoring	07.12.2020	03.12.2020	24.12.2020
<b>Stack Details</b>			
Material of Construction (Stack/Duct)	M.S.	M.S.	M.S.
Stack Attached to	Coal Mill No-1	Coal Mill No-2	Coal Mill No-3
Name of Air Pollution Control Device	Bag House	Bag House	Bag House
Stack Height above the Groundlevel (m)	30.4	37	72.7
Stack Top	Circular	Circular	Circular
Inside Diameter of Stack (m)	1.45	1.45	2.12
Cross sectional area of Duct/Stack (m <sup>2</sup> )	1.65	1.65	3.53
Ambient Temp (°C)	28	25	21
Stack Gas Temp (°C)	56	64	70
Exit Velocity of Gas (m/sec.)	5.53	7.04	7.24
Flow Rate (Nm <sup>3</sup> /sec.)	7.94	9.39	20.74
<b>Lab Testing</b>			
Particulate Matter(PM) (mg/Nm <sup>3</sup> ) (Isokinetic Samples)	11.4	10.1	13.8

Stack Emission Standard = 30 mg/NM<sup>3</sup>

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

**Note:**

- S-1 : Coal Mill No-1
- S-2 : Coal Mill No-2
- S-3 : Coal Mill No-3

  
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Month: December 2020

### TEST REPORT OF STACK MONITORING

Name of Plant/Mines : M/s Diamond Cements -Clinkerisation Unll  
(Prop. HeidelbergCement India Limited), Narsingam, Oarnoh (M.P.)

Location	S-4	S-5	S-6
Date of Monitoring	19.12.2020	01.12.2020	21.12.2020
<b>Stack Details</b>			
Material of Construction (Stack/Duct)	M.S.	M.S.	M.S.
Stack Attached to	Kiln / Raw Mill No-1	Kiln / Raw Mill No-2	Kiln / Raw Mill No-3
Name of Air Pollution Control Device	Hybrid Filter	Hybrid Filter	RABH
Stack Height above the Groundlevel (m)	76.4	98	110
Stack Top	Circular	Circular	Circular
Inside Diameter of Stack (m)	2.4	2.65	4.5
Cross sectional area of Duct/Stack (m <sup>2</sup> )	4.52	5.51	15.90
Ambient Temp (°C)	37	34	21
Stack Gas Temp (°C)	127	147	83
Exit Velocity of Gas (m/sec.)	20.05	19.11	13.91
Flow Rate (Nm <sup>3</sup> /sec.)	64.78	67.49	174.1
<b>Test Conducted</b>			
Particulate Matter(PM) (mg/Nm <sup>3</sup> ) (Isokinetic Samples)	14.3	12.1	19.5
Oxygen (O <sub>2</sub> ) (%)	11.2	8.5	10.5
Sulphur Dioxide (SO <sub>2</sub> )	(mg/Nm <sup>3</sup> )	11.6	10.6
	at 10 % O <sub>2</sub> Correction (mg/Nm <sup>3</sup> )	13	9.3
Nitrogen Dioxides (NO <sub>x</sub> )	(mg/Nm <sup>3</sup> )	390.6	547.7
	at 10 % O <sub>2</sub> Correction (mg/Nm <sup>3</sup> )	438.4	482.0
<b>Standard</b>			
	PM	30 mg/Nm <sup>3</sup>	
	SO <sub>2</sub>	100 mg/Nm <sup>3</sup> at 10 % O <sub>2</sub>	
	NO <sub>x</sub>	800 mg/Nm <sup>3</sup> at 10 % O <sub>2</sub>	

Note: \* Plant was under Planned shutdown, Hence Stack Monitoring could not be conducted.

S-4 : Kiln / Raw Mill No-1  
S-5 : Kiln / Raw Mill No-2  
S-6 : Kiln / Raw Mill No-3

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**TEST REPORT OF STACK MONITORING**Name of Plant/Mines : M/s Diamond Cements -Clinkerisation Unit  
(Prop. HeidelbergCement India Limited), Narsingarh, Damoh (M.P.)

Location	S-7	S-8	S-9	S-10
Date of Monitoring	07.12.2020	19.12.2020	26.12.2020	21.12.2020
<b>Stack Details</b>				
Material of Construction (Stack/Duct)	M.S.	M.S.	M.S.	M.S.
Stack Attached to	Clinker Cooler No-1	Clinker Cooler No-2	Clinker Cooler No-3	Crusher
Name of Air Pollution Control Device	ESP	ESP	ESP	Bag House
Stack Height above the Groundlevel (m)	40	44.45	45.6	17
Stack Top	Circular	Circular	Circular	Circular
Inside Diameter of Stack (m)	2.976	3.75	3.75	0.8
Cross sectional area of Duct/Stack (m <sup>2</sup> )	6.95	11.05	11.05	0.282
Ambient Temp (°C)	22	26	23	19
Stack Gas Temp (°C)	186	215	160	24
Exit Velocity of Gas (m/sec.)	8.87	14.47	13.71	6.31
Flow Rate (Nm <sup>3</sup> /sec.)	38.41	93.56	100.1	3.04
Particulate Matter(PM) (mg/Nm <sup>3</sup> ) (Isokinetic Samples)	15.5	17.8	18.1	23.3

Stack Emission Standard = 30 mg/NM3

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

Note:

S-7 : Clinker Cooler No-1

S-8 : Clinker Cooler No-2

S-9 : Clinker Cooler No-3

S-10 : Crusher

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 ISSUE DATE : 31.12.2020

Month: December 2020

**TEST REPORT OF STACK MONITORING**
 Name of Plant/Mines : M/s Diamond Cements -Grinding Unit  
 (Prop. HeidelbergCement India Limited), Imlai, Damoh (M.P.)

Location	S-1	S-2	S-3
Date of Monitoring	05.12.2020	05.12.2020	05.12.2020
<b>Stack Details</b>			
Material of Construction (Stack/Duct)	M.S.	M.S.	M.S.
Stack Attached to	Cement Mill No-1	Cement Mill No-2	Cement Mill No-3
Name of Air Pollution Control Device	Bag House	Bag House	Bag House
Stack Height above the Groundlevel (m)	38	37.5	51
Stack Top	Circular	Circular	Circular
Inside Diameter of Stack (m)	1.45	1.5	1.12
Cross sectional area of Duct/Stack (m <sup>2</sup> )	1.65	1.77	0.985
Ambient Temp (°C)	20	22	20
Stack Gas Temp (°C)	79	68	88
Exit Velocity of Gas (m/sec.)	7.39	6.19	13.58
Flow Rate (Nm <sup>3</sup> / sec.)	9.48	9.97	10.53
<b>(Test Conducted)</b>			
Particulate Matter(PM) (mg/Nm <sup>3</sup> ) (Isokinetic Samples)	16.8	9.3	10.3

<b>Stack Emission Standard = 30 mg/NM<sup>3</sup></b>
---

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

**Note:**

- S-1 : Cement Mill No-1
- S-2 : Cement Mill No-2
- S-3 : Cement Mill No-3


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**TEST REPORT OF STACK MONITORING**

Name of Plant/Mines :

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

Location	S-4	
Date of Monitoring	30.12.2020	
<b>Stack Details</b>		
Material of Construction (Stack/Duct)	M.S.	
Stack Attached to	Packing Plant No-3	
Name of Air Pollution Control Device	Bag House	
Stack Height above the Groundlevel (m)	30	
Stack Top	Circular	
Inside Diameter of Stack (m)	0.53	
Cross sectional area of Duct/Stack (m <sup>2</sup> )	0.22	
Ambient Temp (°C)	19	
Stack Gas Temp (°C)	23	
Exit Velocity of Gas (m/sec.)	22.71	
Flow Rate (Nm <sup>3</sup> / sec)	4.87	
(Test Conducted)		
Particulate Matter(PM) (mg/Nm <sup>3</sup> ) Samples)	(Isokinetic)	22.0


Stack Emission Standard = 30 mg/NM<sup>3</sup>

Note:

S-4 : Packer No-3

  
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Month: December 2020

**TEST REPORT OF STACK MONITORING**Name of Plant/Mines : Lime Stone Mines, Patharia-Diamond Cements  
(Prop. HeidelbergCement India Limited), Damoh (M.P.)

Location	S-01
Date of Monitoring	23.12.2020
<b>Stack Details</b>	
Material of Construction (Stack/Duct)	M.S.
Stack Attached to	Crusher
Name of Air Pollution Control Device	Bag House
Stack Height above the Groundlevel (m)	30
Stack Top	Circular
Inside Diameter of Stack (m)	1.5
Cross sectional area of Duct/Stack (m <sup>2</sup> )	1.77
Ambient Temp (°C)	24
Stack Gas Temp (°C)	25
Exit Velocity of Gas (m/sec.)	12.01
Flow Rate (Nm <sup>3</sup> / sec.)	20.4
<b>(Test Conducted)</b>	
Particulate Matter(PM) (mg/Nm <sup>3</sup> ) (Isokinetic Samples)	25.1

Stack Emission Standard = 30 mg/NM<sup>3</sup>Note:  
S-1 : Crusher  
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TEST REPORT NO.:ECO LAB/D/F:01-07/12/20

ISSUE DATE: 31.12.2020

Month: Dec 2020

**TEST REPORT OF FUGITIVE EMISSION MONITORING**Name of Plant/Mines : M/s Diamond Cements -Clinkerisation Unit  
(Prop. HeidelbergCement India Limited), Narsingarh, Damoh (M.P.)

Sl. No.	Location	Date	Time	SPM ( $\mu\text{g}/\text{m}^3$ )
1	In between Lime Stone Stock Pile & Coal Yard	09.12.2020	09:00 am to 01:00 pm	987
2	Laterite Yard	09.12.2020	02:00 pm to 06:00 pm	1121
3	Near Crusher	09.12.2020	09:00 am to 01:00 pm	985
4	Near Raw Mill Silo	09.12.2020	02:00 pm to 06:00 pm	951
5	Clinker Stock Pile	10.12.2020	09:00 am to 01:00 pm	895
6	Lime Stone Stock Area Line-3	10.12.2020	02:00 pm to 06:00 pm	1082
7	Coal Stock Area Line-3	10.12.2020	09:00 am to 01:00 pm	1011

Fugitive emission Standard for Cement Plants as per CPCB guidelines		
Sl. No.	Particular	Fugitive Emission Standard
1	Coal handling area	2000 ( $\mu\text{g}/\text{m}^3$ )
2	Other than Coal handling area	5000 ( $\mu\text{g}/\text{m}^3$ )

  
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REV. NO. : 00

ISSUE DATE: 31.12.2020

Month: Dec 2020

**TEST REPORT OF FUGITIVE EMISSION MONITORING**Name of Plant/Mines : M/s Diamond Cements -Grinding Unit  
(Prop. HeidelbergCement India Limited), Imlai, Damoh (M.P.)

Sl. No.	Location	Date	Time	SPM ((µg/m <sup>3</sup> ))
1	Clinker Stock Pile	15.12.2020	09:00 am to 01:00 pm	1016
2	Coal Yard	15.12.2020	02:00 pm to 06:00 pm	902
3	Gypsum Yard	15.12.2020	09:00 am to 01:00 pm	984
4	Fly ash Handling System	15.12.2020	02:00 pm to 06:00 pm	815
5	Near Cement Silo	16.12.2020	09:00 am to 01:00 pm	1020

Fugitive emission Standard for Cement Plants as per CPCB guidelines		
Sl. No.	Particular	Fugitive Emission Standard
1	Coal handling area	2000 (µg/m <sup>3</sup> )
2	Other than Coal handling area	5000 (µg/m <sup>3</sup> )

  
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REV. NO. : 00

TEST REPORT NO.: ECO LAB/D/F:13-17/12/20  
ISSUE DATE: 31.12.2020

Month: Dec 2020

## TEST REPORT OF FUGITIVE EMISSION MONITORING

Name of Plant/Mines : Lime Stone Mine ,Patharia - Diamond Cements  
(Prop. HeidelbergCement India Limited), Damoh (M.P.)

Sl. No.	Location	Date	Time	SPM ((µg/m <sup>3</sup> ))
1	Near Loading Point - Belt Conveyor	18.12.2020	09:00 am to 01:00 pm	1026
2	Haulage Road	18.12.2020	02:00 pm to 06:00 pm	853
3	Near Crusher	18.12.2020	09:00 am to 01:00 pm	1121
4	Near Lime Stone Stock Area	18.12.2020	02:00 pm to 06:00 pm	865
5	Near Drilling Area	19.12.2020	09:00 am to 01:00 pm	825

Fugitive emission Standard for Cement Plants as per CPCB guidelines		
Sl. No.	Particular	Fugitive Emission Standard
1	Coal handling area	2000 (µg/m <sup>3</sup> )
2	Other than Coal handling area	5000 (µg/m <sup>3</sup> )

  
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TEST REPORT NO. : ECO LAB/D/ELW:12844-12845/12/20  
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Month: December 2020

## TEST REPORT OF WASTE WATER ANALYSIS

Name of Plant/Mines : M/s Diamond Cements -Clinkerisation Unit  
(Prop. Heidelbergcemen India Limited),Narsingarh Damoh (M.P.)

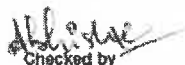
Date of Sample Collection : 17.12.2020

Source of Sample : Sewage Treatment Plant (STP)

Sl. No.	Parameters	Result		PCB Standards
		STP Inlet	STP Outlet	
1	pH	7.70	7.56	5.5 - 9.0
2	Total Suspended Solid (TSS)	347.7	7.5	10.0
3	Total Dissolved Solid (TDS)	741.5	325.0	-
4	Biochemical Oxygen Demand (3 days at 27 °C)	157.5	7.2	10.0
5	Chemical Oxygen Demand (COD)	58.7	25.6	50.0
6	Oil & Grease (O&G)	1.5	BDL	10.0
7	Sodium Adsorption Ratio (SAR)	1.7	0.75	-
8	Fecal Coliform (FC) MPN/100ml	-	78	1000

Note: All parameters are in mg/l except pH and SAR

Oil & Grease BDL < 1.0 (mg/l)

  
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## TEST REPORT OF WASTE WATER ANALYSIS

Name of Plant/Mines : M/s Diamond Cements -Grinding Unit  
(Prop. HeidelbergCement India Limited), Imtai, Damoh (M.P.)

Date of Sample Collection : 17.12.2020


Source of Sample : Sewage Treatment Plant (STP)

Sl. No.	Parameters	Result		PCB Standards
		STP Inlet	STP Outlet	
1	pH	7.78	7.45	5.5 - 9.0
2	Total Suspended Solid (TSS)	289.4	7.7	10.0
3	Total Dissolved Solid (TDS)	474.0	278.0	-
4	Biochemical Oxygen Demand (3 days at 27 °C)	174.6	8.8	10.0
5	Chemical Oxygen Demand (COD)	367.6	18.9	50.0
6	Oil & Grease (O&G)	1.7	BDL	10.0
7	Sodium Adsorption Ratio (SAR)	1.9	1.3	-
8	Fecal Coliform (FC) MPN/100ml	-	88	1000

Note: All parameters are in mg/l except pH and SAR

Oil & Grease BDL < 1.0 (mg/l)

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FORMAT NO. : ECO/QS/D/FORMAT/06  
REV. NO. : 00

TEST REPORT NO. : ECO LAB/D/ELW:12848/12/20  
ISSUE DATE : 31.12.2020

Month: December 2020

## TEST REPORT OF WASTE WATER ANALYSIS

Name of Plant/Mines : Lime Stone Mines, Patharia-Diamond Cements  
(Prop. HeidelbergCement India Limited), Damoh (M.P.)

Date of Sample Collection : 17.12.2020

Source of Sample : Septic tank

Sl. No.	Parameters	Result	PCB Standards
1	pH	7.8	5.5 - 9.0
2	Total Suspended Solid (TSS)	6.4	10.0
3	Total Dissolved Solid (TDS)	468.2	-
4	Biochemical Oxygen Demand (3 days at 27 °C)	6.7	10.0
5	Chemical Oxygen Demand (COD)	22.7	50.0
6	Oil & Grease (O&G)	BDL	10.0
7	Chloride(Cl)	35.8	1000.0

Note: All parameters are in mg/l except pH and SAR

Oil & Grease BDL < 1.0 (mg/l)

Checked by

  
Authorized Signatory

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**Ecomen Laboratories Pvt. Ltd.**  
Fiat No.8 Second Floor Arif Chamber  
Sector-H, Aliganj, Lucknow-226024  
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# ECOMEN LABORATORIES PVT. LTD.

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FORMAT NO. : ECO/QS/D/FORMAT/06  
REV. NO. : 00

TEST REPORT NO. : ECO LAB/D/ELW:12848/12/20  
ISSUE DATE : 31.12.2020

Month: December 2020

## TEST REPORT OF WASTE WATER ANALYSIS

Name of Plant/Mines : Lime Stone Mines, Patharia-Diamond Cements  
(Prop. HeidelbergCement India Limited), Damoh (M.P.)

Date of Sample Collection : 17.12.2020


Source of Sample : Oil & Grease Trap

Sl. No.	Parameters	Result	PCB Standards
1	pH	7.8	5.5 - 9.0
2	Total Suspended Solid (TSS)	8.6	10
3	Total Dissolved Solid (TDS)	487.8	-
4	Biochemical Oxygen Demand (3 days at 27 °C)	7.5	10
5	Chemical Oxygen Demand (COD)	17.4	50
6	Oil & Grease (O&G)	BDL	10

Note: All parameters are in mg/l except pH and SAR

Oil & Grease BDL < 1.0 (mg/l)

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FORMAT NO. : ECO/QS/D/FORMAT/06  
REV. NO. : 00

TEST REPORT NO. : ECO LAB/D/ELW/12850/12/20  
ISSUE DATE : 31.12.2020

Month: December 2020

## TEST REPORT OF WATER ANALYSIS

Name of Plant/Mines : Lime Stone Mines, Patharia-Diamond Cements  
(Prop. HeidelbergCement India Limited), Damoh (M.P.)  
Date of Sample Collection : 17.12.2020  
Source of Sample : Mine Pit

Sl. No.	Parameters	Result
1	pH	7.4
2	Suspended Solid	82.6
3	Total Dissolved Solid (TDS)	376.4
4	Total Hardness as CaCO <sub>3</sub>	458
5	Oil & Grease (O&G)	BDL
6	Fluoride as F	0.08
7	Calcium as CaCO <sub>3</sub>	261
6	Magnesium as CaCO <sub>3</sub>	177
9	Sodium as Na	15.6
10	Total Alkalinity	24.6
11	Potassium	1.3
12	Chloride as Cl	14.5
13	Total Organic Carbon (TOC)	1.7

Note: All parameters are in mg/l except pH

Oil & Grease BDL  $\leq$  1.0 (mg/l)

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. : ECO/QS/D/FORMAT/08  
REV. NO. : 00

TEST REPORT NO. : ECO LAB/D/ELW:12651/12/20  
ISSUE DATE : 31.12.2020

Month: December 2020

## TEST REPORT OF WASTE WATER ANALYSIS

Name of Plant/Mines

(Prop. Heidelbergcemen India Limited), Narsingarh Damoh (M.P.)

Date of Sample Collection

17.12.2020

Source of Sample

Effluent Treatment Plant

Sl. No.	Parameters	Result	PCB Standards
1	pH	7.3	5.5 - 9.0
2	Total Suspended Solid (TSS)	17.8	100
3	Total Dissolved Solid (TDS)	475.8	2100
4	Biochemical Oxygen Demand (3 days at 27 °C)	4.3	30
5	Chemical Oxygen Demand (COD)	36.5	250
6	Oil & Grease (O&G)	BDL	10
7	Chlorides	267	1000

Note: All parameters are in mg/l except pH

Oil & Grease BDL < 1.0 (mg/l)

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*[Signature]*

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*[Signature]*

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Ecomen Laboratories Pvt. Ltd.  
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### Data Report

FromTime : 01 Dec 2020 00:00:00 ToTime : 31 Dec 2020 00:00:00 Interval : hour

Near Hospital

Time	AAQMS3-PM-10- µg/m <sup>3</sup>	AAQMS3-PM-2.5- µg/m <sup>3</sup>	AAQMS3-CO- mg/m <sup>3</sup>	AAQMS3-NO2- µg/m <sup>3</sup>	AAQMS3-SO2- µg/m <sup>3</sup>
01 Dec 2020 00:00	43.73	13.97	0.47	5.69	55.64
01 Dec 2020 12:00	16.37	8.85	0.38	5.48	57.16
02 Dec 2020 00:00	40.83	14.59	0.49	5.89	55.74
02 Dec 2020 12:00	31.3	10.83	0.4	5.6	58.82
03 Dec 2020 00:00	34.41	17.6	0.59	5.48	58.55
03 Dec 2020 12:00	29.36	12.64	0.47	5.36	59.83
04 Dec 2020 00:00	31.32	17	0.57	5.81	59.13
04 Dec 2020 12:00	20.02	8.23	0.34	5.49	60.28
05 Dec 2020 00:00	35.19	14.14	0.49	5.52	59.38
05 Dec 2020 12:00	24.82	9.99	0.39	5.48	60.57
06 Dec 2020 00:00	39	15.56	0.5	5.57	60.07
06 Dec 2020 12:00	35.8	10.4	0.38	5.55	61.12
07 Dec 2020 00:00	30.57	12.6	0.45	5.4	61.06
07 Dec 2020 12:00	15.61	7.66	0.33	5.64	42.16
08 Dec 2020 00:00	36.93	15.32	0.49	5.51	34.56
08 Dec 2020 12:00	16.44	8.32	0.34	5.55	36.09
09 Dec 2020 00:00	45.96	15.98	0.5	5.54	35.38
09 Dec 2020 12:00	55.9	14.07	0.52	5.67	36.65
10 Dec 2020 00:00	31.31	13.94	0.47	5.45	35.5
10 Dec 2020 12:00	17.46	8.24	0.33	5.42	36.67
11 Dec 2020 00:00	23.7	11.22	0.41	5.46	35.84
11 Dec 2020 12:00	18.64	9.9	0.36	5.36	37.58
12 Dec 2020 00:00	10.59	7.96	0.28	5.91	37.01
12 Dec 2020 12:00	25.84	13.15	0.42	5.56	37.59
13 Dec 2020 00:00	21.59	14.1	0.46	5.21	37.33
13 Dec 2020 12:00	17.43	12.87	0.4	5.68	37.47
14 Dec 2020 00:00	22.75	17.59	0.56	5.31	37.93
14 Dec 2020 12:00	21.14	16.59	0.52	5.43	37.54
15 Dec 2020 00:00	16.27	12.84	0.39	5.47	36.75
15 Dec 2020 12:00	22.63	16.66	0.45	5.36	38.38
16 Dec 2020 00:00	18.51	14.69	0.4	5.23	37.96
16 Dec 2020 12:00	21.74	16.67	0.43	5.52	37.7
17 Dec 2020 00:00	27	17.62	0.45	4.88	37.3
17 Dec 2020 12:00	19.62	11.38	0.36	5.1	38.76
18 Dec 2020 00:00	21.91	11.09	0.37	5.46	38.26
18 Dec 2020 12:00	27.34	14.33	0.4	5.73	38.63
19 Dec 2020 00:00	27.09	15.83	0.49	5.27	38.25
19 Dec 2020 12:00	23.24	10.79	0.37	5.83	39.11
20 Dec 2020 00:00	32.01	16.63	0.52	5.6	38.53
20 Dec 2020 12:00	17.53	8.63	0.35	5.14	38.83
21 Dec 2020 00:00	27.64	14.18	0.46	5.57	38.45

21 Dec 2020 12:00	21.18	8.93	0.35	5.33	39.97
22 Dec 2020 00:00	22.49	13.7	0.45	5.14	38.22
22 Dec 2020 12:00	20.32	10.95	0.41	5.47	40.24
23 Dec 2020 00:00	32.98	15.11	0.47	5.38	39.2
23 Dec 2020 12:00	21.95	12.73	0.41	5.33	40.2
24 Dec 2020 00:00	28.13	16.5	0.5	5.42	39.18
24 Dec 2020 12:00	20.36	13.76	0.43	5.2	40.79
25 Dec 2020 00:00	27.97	19.22	0.48	5.16	39.97
25 Dec 2020 12:00	22.23	15.35	0.46	5.18	40.66
26 Dec 2020 00:00	45.82	19.85	0.54	5.96	40.25

Data Report

FromTime : 01 Dec 2020 00:00:00 ToTime : 01 Jan 2021 00:00:00 Interval : hour

Time	Worker colony				
	AAQMS2-PM10- µg/m3	AAQMS2-PM2.5- µg/m3	AAQMS2-SO2- µg/m3	AAQMS2-NO2- µg/m3	AAQMS2-CO- mg/m3
01 Dec 2020 00:00	34.96	20.59	16.76	24.95	0.13
01 Dec 2020 12:00	35.42	15.29	16.75	24.88	0.12
02 Dec 2020 00:00	24.18	17.34	16.76	24.97	0.12
02 Dec 2020 12:00	32.26	17.62	16.81	24.84	0.12
03 Dec 2020 00:00	26.16	21.88	16.8	24.92	0.15
03 Dec 2020 12:00	32.69	18.11	16.86	24.76	0.13
04 Dec 2020 00:00	28.68	23.57	16.86	24.83	0.15
04 Dec 2020 12:00	61.68	19.84	16.9	24.84	0.11
05 Dec 2020 00:00	24.93	18.28	16.85	24.97	0.12
05 Dec 2020 12:00	46.28	18.74	16.96	24.87	0.13
06 Dec 2020 00:00	42.2	23.79	16.98	24.86	0.13
06 Dec 2020 12:00	31.67	13.85	17.04	24.8	0.1
07 Dec 2020 00:00	24.85	16.92	16.96	24.89	0.11
07 Dec 2020 12:00	33.63	13.09	17.02	24.92	0.1
08 Dec 2020 00:00	39.82	23.23	17.01	25.05	0.12
08 Dec 2020 12:00	34.23	13.51	17.04	24.94	0.1
09 Dec 2020 00:00	26.35	18.5	17.11	24.88	0.12
09 Dec 2020 12:00	32.17	15.5	17.12	24.84	0.1
10 Dec 2020 00:00	34.94	19.47	17.18	24.89	0.12
10 Dec 2020 12:00	39.4	15.68	17.15	24.9	0.12
11 Dec 2020 00:00	38.39	17.97	17.23	24.94	0.12
11 Dec 2020 12:00	21.06	13.66	17.29	24.92	0.09
12 Dec 2020 00:00	13.01	11.32	17.4	24.89	0.07
12 Dec 2020 12:00	24.31	18.04	17.45	24.9	0.1
13 Dec 2020 00:00	21.41	20.03	17.48	24.94	0.11
13 Dec 2020 12:00	23.59	19.49	17.57	24.86	0.09
14 Dec 2020 00:00	35.34	28.44	17.53	24.97	0.13
14 Dec 2020 12:00	30.63	25.68	17.57	24.96	0.12
15 Dec 2020 00:00	28.9	21.2	17.51	24.92	0.09
15 Dec 2020 12:00	39.92	26.59	17.54	24.95	0.11
16 Dec 2020 00:00	26.84	24.01	17.51	25.02	0.1
16 Dec 2020 12:00	30.01	26.01	17.55	25	0.11
17 Dec 2020 00:00	31.81	27.05	17.54	24.86	0.12
17 Dec 2020 12:00	22.37	14.08	17.51	24.92	0.1
18 Dec 2020 00:00	21.04	14.7	17.45	24.87	0.1
18 Dec 2020 12:00	25.49	13.14	17.49	24.94	0.11
19 Dec 2020 00:00	22.09	20.49	17.52	24.96	0.12
19 Dec 2020 12:00	27.89	10.45	17.45	24.93	0.12
20 Dec 2020 00:00	23.37	12.6	17.47	24.97	0.14
20 Dec 2020 12:00	30.07	8.14	17.5	24.9	0.11
21 Dec 2020 00:00	20.77	16.85	17.55	24.93	0.11

21 Dec 2020 12:00	26.56	16.01	17.48	24.85	0.13
22 Dec 2020 00:00	21.7	19.83	17.53	24.94	0.13
22 Dec 2020 12:00	29.54	18.22	17.59	24.82	0.12
23 Dec 2020 00:00	27.6	21.49	17.59	24.91	0.12
23 Dec 2020 12:00	43.24	21.69	17.61	24.83	0.13
24 Dec 2020 00:00	39.37	26.39	17.66	24.92	0.15
24 Dec 2020 12:00	40.62	17.43	17.65	24.9	0.14
25 Dec 2020 00:00	31.95		17.68	24.95	0.12
25 Dec 2020 12:00	37.7		17.67	25.02	0.14
26 Dec 2020 00:00	30.59		17.71	25.02	0.15
26 Dec 2020 12:00	36.81	25.62	17.76	24.95	0.15
27 Dec 2020 00:00	32.43	25.56	17.75	24.86	0.15
27 Dec 2020 12:00	30.13	21.04	17.81	24.87	0.12
28 Dec 2020 00:00	38.64	29.26	17.83	24.88	0.16
28 Dec 2020 12:00	48.92	32.44	17.93	24.83	0.14
29 Dec 2020 00:00	43.56	24.66	17.83	24.88	0.12
29 Dec 2020 12:00	51	30.14	17.83	24.99	0.14
30 Dec 2020 00:00	44.72	24.93	17.83	24.91	0.12
30 Dec 2020 12:00	49.52	29.06	17.85	24.96	0.15
31 Dec 2020 00:00	41.01	27.92	17.84	24.89	0.14
31 Dec 2020 12:00	62.85	38.15	17.94	24.85	0.16

## Data Report

FromTime : 01 Dec 2020 00:00:00 ToTime : 31 Dec 2020 00:00:00 Interval : hour

Time	Patharia mines				
	AAQMS1-PM10- µg/m3	AAQMS1-PM2.5- µg/m3	AAQMS1-SO2- µg/m3	AAQMS1-NO2- µg/m3	AAQMS1-CO- mg/m3
01 Dec 2020 00:00	33.89	27.2	50.12	10.49	0.06
01 Dec 2020 12:00	25.54	14.07	50.91	10.45	0.05
02 Dec 2020 00:00	47.15	25.82	49.65	10.56	0.06
02 Dec 2020 12:00	34.36		49.7	10.5	0.05
03 Dec 2020 00:00	35.04		49.43	10.53	0.07
03 Dec 2020 12:00	27.8	28.19	50.23	10.5	0.06
04 Dec 2020 00:00	38.6	31.95	50.48	10.46	0.07
04 Dec 2020 12:00	21.14	13.53	50.96	10.48	0.05
05 Dec 2020 00:00	29.08	27.15	50.4	10.47	0.07
05 Dec 2020 12:00	22.78	16.91	51.84	10.53	0.05
06 Dec 2020 00:00	28.56	26.19	50.78	10.49	0.06
06 Dec 2020 12:00	23.77	15.03	51.24	10.51	0.05
07 Dec 2020 00:00	24.9	24.84	50.76	10.52	0.06
07 Dec 2020 12:00	22.52	16.23	51.56	10.48	0.05
08 Dec 2020 00:00	35.12	31.49	50.71	10.59	0.06
08 Dec 2020 12:00	18	14.73	51.54	10.57	0.05
09 Dec 2020 00:00	29.33	27.56	51.13	10.61	0.06
09 Dec 2020 12:00	17.9	17.8	51.87	10.52	0.05
10 Dec 2020 00:00	26.25	26.35	51.31	10.54	0.06
10 Dec 2020 12:00	18.01	14.72	51.64	10.45	0.05
11 Dec 2020 00:00	21.21	22.21	51.13	10.48	0.06
11 Dec 2020 12:00	20.13	19.41	52.04	10.51	0.05
12 Dec 2020 00:00	37.31	14.14	51.85	10.57	0.04
12 Dec 2020 12:00	31.46	23.54	51.6	10.43	0.05
13 Dec 2020 00:00	32.45	31.16	52.45	10.55	0.07
13 Dec 2020 12:00	29.67	28.2	51.9	10.56	0.05
14 Dec 2020 00:00	29	35.37	51.68	10.48	0.07
14 Dec 2020 12:00	29.04	36.65	52.04	10.5	0.08
15 Dec 2020 00:00	25.72	31.83	51.84	10.49	0.05
15 Dec 2020 12:00	38.3	37.57	51.95	10.51	0.06
16 Dec 2020 00:00	26.55	31.46	52.19	10.49	0.05
16 Dec 2020 12:00	32.38	39.75	52.96	10.5	0.06
17 Dec 2020 00:00	43.75	43.6	51.67	10.47	0.07
17 Dec 2020 12:00	37.48	22.68	52.04	10.6	0.05
18 Dec 2020 00:00	34.62	30.79	51.28	10.54	0.05
18 Dec 2020 12:00	39.1	25.74	51.65	10.52	0.05
19 Dec 2020 00:00	47.41	34.07	51.28	10.51	0.07
19 Dec 2020 12:00	29.95	20.41	52.09	10.48	0.06
20 Dec 2020 00:00	33.04	31.37	52.9	10.55	0.07
20 Dec 2020 12:00	35.73	11.48	53.4	10.6	0.06
21 Dec 2020 00:00	46.3		52.21	10.58	0.09

21 Dec 2020 12:00	28.95	22.92	52.2	10.5	0.05
22 Dec 2020 00:00	35.42	28.61	52.27	10.54	0.08
22 Dec 2020 12:00	47.69	22.14	53.44	10.5	0.07
23 Dec 2020 00:00	40.79	30.77	53.04	10.51	0.07
23 Dec 2020 12:00	36.64	22.42	53.71	10.49	0.06
24 Dec 2020 00:00	34.6	32.71	53.1	10.54	0.08
24 Dec 2020 12:00	41.35	27.9	53.66	10.52	0.07
25 Dec 2020 00:00	87.53	45.47	53.04	10.4	0.09
25 Dec 2020 12:00	52.24	30.08	53.3	10.56	0.06
26 Dec 2020 00:00	44.29	40.84	53.58	10.59	0.08
26 Dec 2020 12:00	30.96	29.18	55.52	10.62	0.05
27 Dec 2020 00:00	36.97	38.52	56.86	10.52	0.07
27 Dec 2020 12:00	34.56	29.58	53.65	10.48	0.12
28 Dec 2020 00:00	38.27	38.41	53.27	10.37	0.1
28 Dec 2020 12:00	65.58	41.4	53.12	10.49	0.07
29 Dec 2020 00:00	72.69	34.28	52.95	10.46	0.06
29 Dec 2020 12:00	76.07	40.67	53.06	10.46	0.08
30 Dec 2020 00:00	53.52	34.64	53.29	10.47	0.07
30 Dec 2020 12:00	92.1	39.72	53.05	10.45	0.09

## Report Name : Average Report

From: 01-12-2020 - 00:00:00 To: 31-12-2020 - 23:59:00

Date (DD-MM-YYYY)	AAQMS_1 PM10 (ug/m3)Normalized	AAQMS_1 SO2 (ug/m3)Normalized	AAQMS_1 NO2 (ug/m3)Normalized	AAQMS 1 PM2.5 (ug/m3) Normalized	AAQMS_1 NOx (ug/m3)Normalized	AAQMS_1 NO (ug/m3)Normalized
Avg	124.33	26.83	2.61	49.2	5.59	3.53
Min	43.13	25.42	1.51	31.79	4.58	2.15
Max	348.59	29.63	17.15	112.84	20.36	23.78
Geom.Mean	124.33	26.83	2.61	49.2	5.59	3.53
Median	72.19	0.84	3.42	16.64	3.19	4.55
Mode	165.18	25.91	1.6	70.27	4.63	2.18
Std.Deviation	106.49	26.61	1.6	46.11	4.68	2.18
Prescribed Standard	100.0	80.0	80.0	60.0	80.0	80.0
First Max occurred at	13-12-2020	10-12-2020	22-12-2020	12-12-2020	10-12-2020	22-12-2020
First Min occurred at	15-12-2020	01-12-2020	02-12-2020	13-12-2020	08-12-2020	08-12-2020
Valid Data Points	30	31	28	30	28	28
Total Data Points	31	31	31	31	31	31
Data Availability %	96	100	90	96	90	90
Uncertainty	0	0	0	0	0	0
01-12-2020	165.18	25.42	1.65	32.02	4.88	2.29
02-12-2020	106.49	25.75	1.51	41.91	4.6	2.18
03-12-2020	113.11	25.78	1.6	52.62	4.64	2.16
04-12-2020	120.98	25.91	1.56	45.9	4.63	2.18
05-12-2020	109.69	25.91	1.54	44.55	4.63	2.19
06-12-2020	105.73	26.06	1.55	41.06	4.63	2.18
07-12-2020	83.54	26.29	1.59	33.49	4.64	2.16
08-12-2020	73.74	26.39	1.55	33.39	4.58	2.15
09-12-2020	80.89	26.48	1.59	34.28	4.65	2.18
10-12-2020	331.5	29.63	12.17	83	20.36	14.72
11-12-2020	0	27.97	0	0	0	0
12-12-2020	254.78	28.38	0	112.84	0	0
13-12-2020	348.59	27.88	0	31.79	0	0

14-12-2020	55.13	26.58	1.61	40.94	4.69	2.18
15-12-2020	43.13	26.52	1.62	35.49	4.73	2.2
16-12-2020	49.31	26.56	1.63	39.95	4.73	2.19
17-12-2020	80.8	26.61	1.6	42.2	4.68	2.18
18-12-2020	118.92	26.59	1.63	43.6	4.71	2.18
19-12-2020	158.68	26.55	1.6	53.76	4.68	2.17
20-12-2020	62.01	26.45	1.58	34.96	4.69	2.19
21-12-2020	152.89	27.09	3.11	51.82	6.01	4.29
22-12-2020	138.76	27.35	17.15	48.91	12.39	23.78
23-12-2020	192.13	27.85	2.54	70.27	5.8	3.68
24-12-2020	82.61	27.01	1.54	50.57	4.6	2.17
25-12-2020	98.42	26.82	1.62	46.11	4.68	2.17
26-12-2020	134.75	26.92	1.58	54.86	4.64	2.17
27-12-2020	109.64	26.98	1.61	49.76	4.69	2.19
28-12-2020	96.62	27.06	1.54	70.27	4.63	2.18
29-12-2020	105.58	27.05	1.6	55.04	4.66	2.17
30-12-2020	77.8	27.03	1.62	48.05	4.71	2.19
31-12-2020	77.33	27	1.58	52.46	4.66	2.17



### Report Name : Average Report(Continued)

<b>Date (DD-MM-YYYY)</b>	<b>AAQMS_1 CO (mg/m3)Normalized</b>
Avg	0.43
Min	0.34
Max	0.56
Geom.Mean	0.43
Median	0.05
Mode	0.47
Std.Deviation	0.42
Prescribed Standard	4.0
First Max occurred at	22-12-2020
First Min occurred at	15-12-2020
Valid Data Points	31
Total Data Points	31
Data Availability %	100
Uncertainty	0
01-12-2020	0.37
02-12-2020	0.43
03-12-2020	0.52
04-12-2020	0.51
05-12-2020	0.47
06-12-2020	0.47
07-12-2020	0.4
08-12-2020	0.39
09-12-2020	0.4
10-12-2020	0.46
11-12-2020	0.48
12-12-2020	0.47
13-12-2020	0.4
14-12-2020	0.42
15-12-2020	0.34

16-12-2020	0.35
17-12-2020	0.37
18-12-2020	0.38
19-12-2020	0.42
20-12-2020	0.4
21-12-2020	0.38
22-12-2020	0.56
23-12-2020	0.46
24-12-2020	0.46
25-12-2020	0.39
26-12-2020	0.46
27-12-2020	0.47
28-12-2020	0.45
29-12-2020	0.42
30-12-2020	0.41
31-12-2020	0.47

## Report Name : Average Report

From: 01-12-2020 - 00:00:00 To: 31-12-2020 - 23:59:00

Date (DD-MM-YYYY)	AAQMS_2 NOx (ug/m3)Normalized	AAQMS_2 NO (ug/m3)Normalized	AAQMS_2 CO (mg/m3)Normalized	AAQMS_2 SO2 (ug/m3)Normalized	AAQMS_2 NO2 (ug/m3)Normalized	AAQMS 2 PM2.5 (ug/m3) Normalized
Avg	4.5	2.26	0.18	18.67	1.24	18.95
Min	4.47	2.24	0.13	18.62	1.22	12.55
Max	4.51	2.27	0.20	18.73	1.25	24.14
Geom.Mean	4.5	2.26	0.18	18.67	1.24	18.95
Median	0.01	0.01	0.02	0.03	0.01	2.35
Mode	4.5	2.26	0.18	18.65	1.23	18.33
Std.Deviation	4.5	2.26	0.18	18.66	1.24	19.2
Prescribed Standard	80.0	80.0	4.0	80.0	80.0	60.0
First Max occurred at	20-12-2020	27-12-2020	14-12-2020	15-12-2020	05-12-2020	29-12-2020
First Min occurred at	03-12-2020	05-12-2020	12-12-2020	27-12-2020	03-12-2020	12-12-2020
Valid Data Points	30	30	30	30	30	29
Total Data Points	30	30	30	30	30	30
Data Availability %	100	100	100	100	100	96
Uncertainty	0	0	0	0	0	0
01-12-2020	4.5	2.26	0.16	18.67	1.23	18.33
02-12-2020	4.49	2.25	0.17	18.66	1.24	20.07
03-12-2020	4.47	2.25	0.19	18.64	1.22	23.52
04-12-2020	4.49	2.26	0.19	18.69	1.23	22.2
05-12-2020	4.48	2.24	0.18	18.68	1.25	21.42
06-12-2020	4.48	2.26	0.18	18.71	1.23	20.32
07-12-2020	4.49	2.25	0.16	18.7	1.23	15.35
08-12-2020	4.47	2.25	0.16	18.7	1.23	17.31
09-12-2020	4.49	2.26	0.18	18.72	1.23	21.27
10-12-2020	4.49	2.25	0.18	18.68	1.24	19.31
11-12-2020	4.5	2.25	0.17	18.68	1.25	18.08
12-12-2020	4.49	2.26	0.13	18.66	1.23	12.55
14-12-2020	4.5	2.26	0.2	18.69	1.24	19.2

15-12-2020	4.5	2.26	0.17	18.73	1.23	17.48
16-12-2020	4.5	2.26	0.16	18.7	1.24	20.06
17-12-2020	4.5	2.26	0.16	18.69	1.24	16.82
18-12-2020	4.49	2.25	0.15	18.63	1.24	16.19
19-12-2020	4.49	2.25	0.16	18.63	1.24	18.28
20-12-2020	4.51	2.26	0.18	18.63	1.24	19.64
21-12-2020	4.49	2.26	0.17	18.64	1.23	16.66
22-12-2020	4.5	2.26	0.17	18.64	1.24	18.37
23-12-2020	4.5	2.26	0.18	18.65	1.23	17.59
24-12-2020	4.48	2.25	0.19	18.65	1.23	20.02
25-12-2020	4.51	2.26	0.18	18.65	1.25	17.22
26-12-2020	4.51	2.26	0.19	18.65	1.25	19.92
27-12-2020	4.51	2.27	0.2	18.62	1.23	19.43
28-12-2020	4.51	2.26	0.19	18.64	1.25	0
29-12-2020	4.5	2.26	0.18	18.68	1.24	24.14
30-12-2020	4.5	2.26	0.19	18.66	1.23	19.15
31-12-2020	4.51	2.27	0.2	18.65	1.23	19.75

## Report Name : Average Report(Continued)

Date (DD-MM-YYYY)	AAQMS_2 PM10 (ug/m3)Normalized
Avg	75.49
Min	38.56
Max	127.22
Geom.Mean	75.49
Median	21.77
Mode	77
Std.Deviation	79.7
Prescribed Standard	100.0
First Max occurred at	05-12-2020
First Min occurred at	12-12-2020
Valid Data Points	30
Total Data Points	30
Data Availability %	100
Uncertainty	0
01-12-2020	77
02-12-2020	67.05
03-12-2020	78.72
04-12-2020	79.7
05-12-2020	127.22
06-12-2020	99.44
07-12-2020	72.66
08-12-2020	88.13
09-12-2020	50.01
10-12-2020	96.73
11-12-2020	91.5
12-12-2020	38.56
14-12-2020	55.85
15-12-2020	41.73
16-12-2020	43.11

17-12-2020	50.49
18-12-2020	51.33
19-12-2020	60.43
20-12-2020	86.98
21-12-2020	49.41
22-12-2020	96.2
23-12-2020	93
24-12-2020	87.09
25-12-2020	79.95
26-12-2020	120.34
27-12-2020	80.48
28-12-2020	66.78
29-12-2020	71.95
30-12-2020	83.54
31-12-2020	80.44

**DIAMOND CEMENTS - DAMOH**  
**PERFORMANCE OF ESPs/ BAG HOUSES**

Dec-20

PCM ATTACHED TO	Plant Operation		PCM Operation		PCM Stoppage Hrs.	No. OF ESP Trippings	% OF		Remarks
	Hrs.	Min	Hrs.	Min			ESP	R.Hrs	
ESP To KILN NO. 1 + RAW MILL NO.1	743	0	743	0	0.000	0	100.000		
ESP To KILN NO. 2 + RAW MILL NO. 2	738	25	738	25	0.000	0	100.000		
REVERSE AIR BAG HOUSE(RABH) To KILN NO. 3 + RAW MILL NO. 3	318	0	318	0	0.000	0	100.000		
BAG HOUSE To COAL MILL NO. 1	533	0	533	0	0.000	0	100.000		
BAG HOUSE To COAL MILL NO. 2	625	25	625	25	0.000	0	100.000		
BAG HOUSE To COAL MILL NO. 3	298	30	298	30	0.000	0	100.000		
ESP To COOLER NO. 1	743	0	743	0	0.000	0	100.000		
ESP To COOLER NO. 2	738	25	738	24	0.017	1	99.998		
ESP To COOLER NO. 3	318	0	318	0	0.000	0	100.000		
BAG HOUSE To CEMENT MILL NO. 1	690	0	690	0	0.000	0	100.000		
BAG HOUSE To CEMENT MILL NO. 2	681	5	681	5	0.000	0	100.000		
BAG HOUSE To CEMENT MILL NO. 3	144	5	144	5	0.000	0	100.000		

DIAMOND CEMENTS DAMOH					
Energy Meter Reading					
Month : December - 20					
S.No.	Location	Month	Consumption (KWH)	Remarks, If Any	
<b>Clinkerisation Unit Narsingarh</b>					
1	Hybrid ESP For KILN/ RAW MILL NO.1	Dec-20	7120		
2	Hybrid ESP For KILN/ RAW MILL NO.2	Dec-20	9406		
3	RABH For KILN / RAW MILL NO. 3	Dec-20	104367		
4	ESP For COOLER NO. 1	Dec-20	18794		
5	ESP For COOLER NO. 2	Dec-20	21118		
6	ESP For COOLER NO. 3	Dec-20	9430		
7	BAG HOUSE For COAL MILL NO. 1	Dec-20	28992		
8	BAG HOUSE For COAL MILL NO. 2	Dec-20	183737		
9	BAG HOUSE For COAL MILL NO. 3	Dec-20	164090		
10	SEWAGE TREATMENT PLANT	Dec-20	10930		
<b>Grinding Unit Imlai</b>					
1	BAG HOUSE For CEMENT MILL NO. 1	Dec-20	9581		
2	BAG HOUSE For CEMENT MILL NO. 2	Dec-20	17542		
3	BAG HOUSE For CEMENT MILL NO. 3	Dec-20	5157		
4	SEWAGE TREATMENT PLANT	Dec-20	10110		



## ABBREVIATIONS

S. No.	Abbreviation	Full Form
1.	SPM	Suspended Particulate Matter
2.	RABH	Reverse Air Bag House
3.	PM	Particulate Matter
4.	PM <sub>10</sub>	Particulate Matter of less than 10 micron size
5.	PM <sub>2.5</sub>	Particulate Matter of less than 2.5 micron size
6.	SO <sub>2</sub>	Sulphur Dioxide
7.	NO <sub>2</sub>	Nitrogen Dioxide
8.	CO	Carbon Monoxide
9.	AAQMS	Ambient Air Quality Monitoring Station
10.	BDL	Below Detection Limit
11.	dB	Decibel
12.	°C	Degree Centigrade
13.	m/sec	Meter per second
14.	m <sup>2</sup>	Meter square
15.	Nm <sup>3</sup> /sec	Normal cubic meter per second
16.	µg/m <sup>3</sup>	Micro Grams per cubic meter
17.	mg/Nm <sup>3</sup>	Milli Grams per Normal cubic meter
18.	mg/l	Milli Grams per liter



**National Accreditation Board for  
Testing and Calibration Laboratories**  
(A Constituent Board of Quality Council of India)



**CERTIFICATE OF ACCREDITATION**

**ECOMEN LABORATORIES PVT. LTD.**

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2005**

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

Flat 5-8, IIInd Floor, Arif Chamber V, Sector-H, Aliganj,  
Lucknow, Uttar Pradesh

in the field of

**TESTING**

Certificate Number TC-7587 (in lieu of T-2202)

Issue Date 25/07/2018

Valid Until 24/07/2020

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website [www.nabl-india.org](http://www.nabl-india.org))

Signed for and on behalf of NABL



9076971 1000306 01777

Anil Relia  
Chief Executive Officer



# National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)



26.06.2020

## Extension in Validity of Accreditation

**NABL Policy:** It is decided to extend the validity of accreditation for a period of one year to all conformity assessment bodies (CABs) where renewal of accreditation is to take place and accreditation validity date is between 01.01.2020 and 30.06.2022 **subject to the following:**

1. Providing satisfactory documents based on NABL-218 wrt compliance to the requirements of the relevant Standard and NABL requirements.
2. The CABs are required to conduct additional internal audit to ensure compliance with the standard requirements (by increasing the existing frequency of their audit plan) and submit the document.
3. The CABs are required to provide control charts and trends for assuring the validity of results.
4. CABs are required to provide an undertaking to undergo unannounced assessment (onsite and/or remotely, depending on the situation) and actions as per NABL-216 thereof, at any point of time during the validity period.
5. Making payment of **annual accreditation fee** for the extended period.

### Examples:

- Accredited CABs with date of issue 15.01.2018 and valid till 14.01.2020, then their Accreditation validity will be extended till 14.01.2021.
- Accredited CABs with date of issue 15.02.2019 and valid till 14.02.2021, then their Accreditation validity will be extended till 14.02.2022.
- Accredited CABs with date of issue 15.06.2020 and valid till 14.06.2022, then their Accreditation validity will be extended till 14.06.2023

### NOTE:

1. The above will be applicable to the laboratories for which transition to ISO/IEC 17025:2017 version has been completed. For the laboratories which are accredited as per ISO/IEC 17025:2005 version, they have to undergo transition assessment (onsite and/or remotely, depending on the situation) and follow transition plan defined.
2. The above is not applicable to CABs where there will be a change in name of CAB and/or legal identity change and/or Premises change.
3. Also, **the above is not applicable to the CABs which are not registered in portal** (exemption- International accredited CABs).
4. Routine assessments will take place for any scope extension /addition.
5. Payment due to NABL can be deferred (postpone the payment) upto a period of Six (6) months. There will be no waive-off of any fee for any CABs. If payments are not made, then action as per procedure (NABL-216) will be initiated. There will be no relaxations wrt payment from 01.01.2021.

**N.Venkateswaran**  
CEO, NABL



# CERTIFICATE

This is to Certify that the  
Occupational Health & Safety Management System  
of

**ECOMEN LABORATORIES PVT. LTD.**  
FLAT NO. 5-8, 2ND FLOOR, ARIF CHAMBER-V, SECTOR-H,  
ALIGANJ, LUCKNOW-226024, (U.P.) INDIA.

has been independently assessed and is compliant  
with the requirements of

**OHSAS 18001:2007**

This Certificate is applicable to the following product or service ranges:

ENVIRONMENTAL MONITORING, STUDIES, TESTING SERVICES IN  
CHEMICAL FIELD, ENVIRONMENTAL IMPACT ASSESSMENT,  
ENVIRONMENTAL MANAGEMENT PLAN AND  
CONSULTANCY SERVICES

Certificate No. IN32538C

LAS UID No. MSCB-132-76321

Date of initial registration 15 July 2015

Date of this Certificate 14 July 2018

Surveillance audit on or before 14 July 2019

Recertification Due / Certificate expiry 14 July 2021

This Certificate is property of LMS Certification and remains valid  
subject to satisfactory surveillance audits.

*[Signature]*  
Director

For verification and updated information concerning the present certificate visit [www.lmscert.com](http://www.lmscert.com)

This Certificate is the property of LMS Certification Limited and shall be returned immediately when demanded.



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