

To,  
The Chairman,  
Bihar State Pollution Control Board,  
Beltron Bhavan, 2<sup>nd</sup> Floor, Lal Bahadur Shastri Nagar,  
Patna- 800023

DATED 24.05.2013

**Our Ref** : ECO/BIHAR/SEC/24052013/03


**Sub** : Environmental Monitoring results of M/s. Eco Cements Limited, Bhabhua for the period of OCT 2012 to MARCH 2013

Dear Sir,

This refers to above mentioned subject. In this matter, please find attached Environmental Monitoring results of Ambient Air Quality, Stack Emission and Fugitive Emission of M/s. Eco Cements Limited, Bhabhua for the period of OCT 2012 to MARCH 2013

Kindly acknowledge the receipt and oblige.

Thanking you in anticipation,  
For Eco Cements Limited

  
Rajiv Saini  
G.M. Projects

**Encl.**

1. Environmental Monitoring results of M/s. Eco Cements Limited, Bhabhua for the period of OCT 2012 to MARCH 2013

**Copy to.**

1. Ministry of Environment and Forests,  
A-3, Chandrashekharpur, Bhubaneswar – 751 023, Orissa.  
Tel: 0674-2301248, 2301213; Fax: 0674-2302432
2. The Chairman, Central Pollution Control Board,  
Parivesh Bhawan, CBD-cum-Office Complex,  
East Arjun Nagar, Delhi - 110 032

**ECO CEMENTS LIMITED**

REGD. OFF.: 1-E, 1<sup>st</sup> FLOOR, ASHUTOSH APARTMENT, 295/2, GT ROAD, HOWRAH - 700013  
FACTORY: PLOT NO. 1644, BHERIYA ROAD, KULHARIA, DURGAUTI, BHABHUA, BIHAR  
ZONAL OFF: 72, JAWAHAR NAGAR EXTN. BHELUPUR, VARANASI-221010 TEL.: 0542-2277074

Ambient Air Quality Monitoring Report (All Values in ug/m3)																	
Year: 2012-2013																	
S. N o.	Locati on →	Near Main Gate				Near CCR				Near Canteen				Near Gypsum & Clinker Storage			
	Month	PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>
1	Oct., 2012	-	76.1	19.3	23.4	-	80	19.1	22.5	-	69.7	15.4	19.3	-	76.3	17.9	20.7
2	Nov., 2012	-	72.8	21.2	22.2	-	75.7	18.4	19.8	-	67	16.5	21.2	-	72.5	16.4	18.3
3	Dec., 2012	-	72.7	17.6	23.5	-	79.7	16.6	20.4	-	70.4	15.1	19.3	-	73.6	12.7	18.9
4	Jan., 2013	-	72.5	16.4	18.3	-	75.7	16.5	21.2	-	71.5	21.2	23.4	-	75.7	15.4	19.3
5	Feb., 2013	34.9	67.1	10.5	11.5	37	71.2	9.3	10	31.5	60.6	9	9.5	33	63.4	7	10.1
6	Mar., 2013	33.2	70.1	11.5	10.3	36.1	70.9	10.9	12.3	30.7	67.3	11.2	9.9	32.1	67.2	10.2	9.3
Average			71.88	16.1	18.2	12.2	63.7	15.1	17.7	10.4	67.8	14.7	17.1	10.9	71.5	13.3	16.1

**ECO CEMENTS LTD.**  
Auth. Signatory

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ZONAL OFF: 72, JAWAHAR NAGAR EXTN. BHELUPUR, VARANASI-221010 TEL.: 0542-2277074

**Stack Emission Level Monitoring Report for the period April 2012 to September 2012**  
All Values in mg/m<sup>3</sup>

Sr. No.	Month & Year	Particulate Matter Emission ( mg/Nm <sup>3</sup> )						Standard Limit of Particulate Matter Emission
		Stack Attached with Bag House of Cement Mill	Stack Attached with Bag House of flyash unloader	Stack Attached with Bag House of Clinker & gypsum unloader	Stack Attached with Bag House of gypsum & clinker feeding	Stack Attached with DG 500 KVA	Stack Attached with DG 125 KVA	
1	Oct.,2012	28.4	27.1	25.4	30.4	NOT INSTALLED	32.5	50 mg/Nm <sup>3</sup>
2	Nov.,2012	29.1	26.1	28.2	29.3	NOT INSTALLED	33.5	
3	Dec.,2012	28.1	27.1	29.1	28.4	NOT INSTALLED	34.4	
4	Jan.,2013	27.1	25.4	28.4	29.4	NOT INSTALLED	31.1	
5	Feb.,2013	36.4	42.8	34.6	28.6	28.4	33.6	
6	Mar.,2013	26.1	28.2	27.7	28.1	32.7	32.7	
Average Values		29.20	29.45	28.90	29.03	10.18	32.97	

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ZONAL OFF: 72, JAWAHAR NAGAR EXTN. BHELUPUR, VARANASI-221010 TEL.: 0542-2277074

**Fugitive Dust Emission Level Monitoring Report for the period OCT 2012 TO MARCH 2013**  
Concentration of Total Dust (All Values in mg/m<sup>3</sup>)

Sl.No.	Month	Mill Section Ground Floor	Mill Section 1st Floor	Mill Section 2nd Floor	South Side of Mill Section	North side of Mill Section
1	Oct.,2012	3.4	3.9	2.9	4.9	3.7
2	Nov.,2012	3.2	3.8	3.1	5	3.3
3	Dec.,2012	3.5	4.1	2.8	5.3	3.3
4	Jan.,2013	3.3	3.9	2.9	5.1	3.2
5	Feb.,2013	5.1	4.4	30	5.6	4.2
6	Mar.,2013	3.6	4.2	2.7	5.2	3.2
Average		3.7	4.1	7.4	5.2	3.5

**ECO CEMENTS LTD.**

  
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FACTORY: PLOT NO. 1644, BHERIYA ROAD, KULHARIA, DURGAUTI, BHABHUA, BIHAR  
ZONAL OFF: 72, JAWAHAR NAGAR EXTN. BHELUPUR, VARANASI-221010 TEL.: 0542-2277074

**Ambient Noise level Monitoring Report From OCT 2012 to MARCH 2013**  
 dB(A)

**TIME WEIGHTED AVERAGE ( TWA) OF NOISE LEVEL IN dB(A)**

S. No.	Location	Plant boundary near Main gate	Plant boundary near CCR	Plant boundary near Canteen	Plant boundary near Gypsum storage	Plant boundary near clinker storage	Prescribed Standard Limit ( dB(A)
1	Oct.,2012	61.7	66.3	60	60	60	75dB(A) in day & 70 dB(A) in night
2	Nov.,2012	60.7	67.3	63.4	63.4	63.4	
3	Dec.,2012	64.6	69.1	60.2	58.4	58.8	
4	Jan.,2013	65.3	64.0	62.5	62.5	62.5	
5	Feb.,2013	62.8	63.7	59.3	60.2	58.4	
6	Mar.,2013	62.5	61.2	59.9	60.3	61.4	
Average Values		62.9	54.6	60.9	60.8	60.8	

**ECO CEMENTS LTD.**

Auth. Signatory

**ECO CEMENTS LIMITED**

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REGD. OFF.: 1-E, 1<sup>ST</sup> FLOOR, ASHUTOSH APARTMENT, 295/2, GT ROAD, HOWRAH -700013

Regd. Office :  
6D Extn. ; (Chatterjee Lane)  
Gardanibagh  
PATNA - 800 001 (Bihar)



Laboratory Address :-  
01<sup>st</sup> FLOOR, RAJHANS NIKETAN,  
NEAR CANAL, RUKUNPURA,  
BAILEY ROAD,  
PATNA - 800 014 (BIHAR)



## SHIVA TEST HOUSE

Tel. : 0612 - 2247538/ 2240752 ; TeleFax : 0612 - 2590705  
E.mail.: [sthatna1@yahoo.co.in](mailto:sthatna1@yahoo.co.in)



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BY DEPTT. OF INDUSTRY, FORESTS & ENVIRONMENT, GOVT. OF BIHAR AND BIHAR STATE POLLUTION CONTROL BOARD

### TEST REPORT

Ref. No. <i>ECI/TR/12-13/487(a)</i> Dt : <i>11.02.2013</i> Your Work Order No. <i>NIL</i> Dt : <i>28.01.2013</i>				
[a]	Name and address of the Customer	ECO Cement Ltd. Vill.: Mahmoodganj At : Kulharia Durgawati Dist.: Bhabua (Kaimur)		
[b]	Report to be submitted to	Director		
[c]	Details of Sample	Monitoring of Stack Emission of 125 KVA DG Set		
[d]	Sample Collected by	SHIVA TEST HOUSE on 02.02.13		
[e]	No. & Type of Container	Thimble & Glass Impinger		
[f]	Items required to be tested	As per request		
[g]	Whether any specific Method of Test has been suggested by the party	No		
[h]	Date of receiving the sample	03.02.13		
	<b>Parameters</b>	<b>Method of Test</b>	<b>Results</b>	
1.	Stack Connected to		125 KVA DG Set	
2.	Height of Stack (as reported)		2.1 m.	
3.	Dia of Stack at Top (as reported)		0.13 m.	
4.	Draft		Natural	
5.	Material of Construction		M.S.	
6.	Ambient Temperature, °C		19.0	
7.	Flue Gas Temperature, °C		112.0	
8.	Velocity, m/sec.		IS 11255 (Part-3)	7.1
9.	Sampling Point			Top of Exhaust
			<b>Concentration ( mg / NM<sup>3</sup> )</b>	
			<b>Limit as per E (P) Rules</b>	
10.	Particulate Matter (P.M.)	IS 11255 (Part-1)	33.6	75.00 mg / NM <sup>3</sup>
11.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-2)	58.4	Not Specified
12.	Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Part-7)	184.2	710.00 mg / NM <sup>3</sup>



*[Signature]*  
Dy. Quality Manager

N.B. 1. This Report applies only to sample tested as above.  
2. Total Liability of our Laboratory is limited to the invoiced Amount.

Regd. Office :  
6D Extn. : (Chatterjee Lane)  
Gardenibagh  
PATNA - 800 001 (Bihar)



Laboratory Address :-  
01<sup>st</sup> FLOOR, RAJHANS NIKETAN,  
NEAR CANAL, RUKUNPURA,  
BAILEY ROAD,  
PATNA - 800 014 (BIHAR)



# SHIVA TEST HOUSE

Tel. : 0612 - 2247538/ 2240752 : TeleFax : 0612 - 2590705  
E.mail.: sthpatna1@yahoo.co.in



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## TEST REPORT

Ref. No. <i>ECL/TR/12-13/487(b)</i> Dt : <i>11.02.2013</i> Your Work Order No. <i>NIL</i> Dt : <i>28.01.2013</i>			
[a] Name and address of the Customer	ECO Cement Ltd, Vill.: Mahmoodganj At : Kulharia Durgawati Dist.: Bhabua (Kaimur)		
[b] Report to be submitted to	Director		
[c] Details of Sample	Monitoring of Stack Emission of 500 KVA DG Set		
[d] Sample Collected by	SHIVA TEST HOUSE on 02.02.13		
[e] No. & Type of Container	Thimble & Glass Impinger		
[f] Items required to be tested	As per request		
[g] Whether any specific Method of Test has been suggested by the party	No		
[h] Date of receiving the sample	03.02.13		
<b>Parameters</b>	<b>Method of Test</b>	<b>Results</b>	
1. Stack Connected to	IS 11255 (Part-3)	500 KVA DG Set	
2. Height of Stack (as reported)		3.0 m.	
3. Dia of Stack at Top (as reported)		0.2 m.	
4. Draft		Natural	
5. Material of Construction		M.S.	
6. Ambient Temperature, °C		19.0	
7. Flue Gas Temperature, °C		118.0	
8. Velocity, m/sec.		6.2	
9. Sampling Point		Top of Exhaust	
		<b>Concentration ( mg / NM<sup>3</sup> )</b>	<b>Limit as per E (P) Rules</b>
10. Particulate Matter (P.M.)	IS 11255 (Part-1)	28.4	75.00 mg / NM <sup>3</sup>
11. Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-2)	62.0	Not Specified
12. Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Part-7)	198.7	710.00 mg / NM <sup>3</sup>



*[Signature]*  
Dy. Quality Manager

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6D Extn. ; (Chatterjee Lane)  
Gardanibagh  
PATNA - 800 001 (Bihar)



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Tel. : 0612 - 2247538/ 2240752 : TeleFax : 0612 - 2590705 ..  
E.mail.: sthpatna1@yahoo.co.in

Laboratory Address :-  
01<sup>st</sup> FLOOR, RAJHANS NIKETAN,  
NEAR CANAL, RUKUNPURA,  
BAILEY ROAD,  
PATNA - 800 014 (BIHAR)

M.S. 2012



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## TEST REPORT

\* Ref. No. ECI/TR/12-13/487(c) Dt: 11.02.2013 Your Work Order No. NIL Dt: 28.01.2013

(a) Name and address of the Customer	ECO Cement Ltd. Vill.: Mahmoodganj At : Kulharia Durgawati Dist.: Bhabua (Kaimur)			
(b) Report to be submitted to	Director			
(c) Details of Sample	Monitoring of Stack Emission			
(d) Sample Collected by	SHIVA TEST HOUSE on 02.02.13			
(e) No. & Type of Container	Thimble & Glass Impinger			
(f) Items required to be tested	As per request			
(g) Whether any specific Method of Test has been suggested by the party	No			
(h) Date of receiving the sample	03.02.13			
	<b>Parameters</b>	<b>Method of Test</b>	<b>Results</b>	
1.	Stack Connected to	IS 11255 (Part-3)	Bag Filter at Clinker Unloading Area	
2.	Height of Stack (as reported)		30 m.	
3.	Dia of Stack at Top (as reported)		0.75 m.	
4.	Draft		ID Fan	
5.	Material of Construction		M.S.	
6.	Ambient Temperature, °C		20.0	
7.	Flue Gas Temperature, °C		49.0	
8.	Velocity, m/sec.		6.3	
9.	Sampling Point		11 m.	
		<b>Concentration (mg / NM<sup>3</sup>)</b>	<b>Limit as per E (P) Rules</b>	
10.	Particulate Matter (P.M.)	IS 11255 (Part-1)	34.6	150.00 mg / NM <sup>3</sup>
11.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-2)	Not Detectable	Not Specified
12.	Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Part-7)	11.2	Not Specified



*[Signature]*  
Dy. Quality Manager

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60 Extn. : (Chatterjee Lane)  
Gardenibagh  
PATNA - 800 001 (Bihar)



Laboratory Address :-  
01<sup>ST</sup> FLOOR, RAJHANS NIKETAN,  
NEAR CANAL, RUKUNPURA,  
BAILEY ROAD,  
PATNA - 800 014 (BIHAR)



## SHIVA TEST HOUSE

Tel. : 0612 - 2247538/ 2240762 ; TeleFax : 0612 - 2690705  
E.mail. : sthpatna1@yahoo.co.in



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### TEST REPORT

Ref. No. <i>ECL/TR/12-13/487(d)</i> Dt : <i>11.02.2013</i> Your Work Order No. <i>NIL</i> Dt : <i>28.01.2013</i>			
[a] Name and address of the Customer	ECO Cement Ltd. Vill.: Mahmoodganj At : Kulharia Durgawati Dist.: Bhabua (Kaimur)		
[b] Report to be submitted to	Director		
[c] Details of Sample	Monitoring of Stack Emission		
[d] Sample Collected by	SHIVA TEST HOUSE on 02.02.13		
[e] No. & Type of Container	Thimble & Glass Impinger		
[f] Items required to be tested	As per request		
[g] Whether any specific Method of Test has been suggested by the party	No		
[h] Date of receiving the sample	03.02.13		
	<b>Parameters</b>	<b>Method of Test</b>	<b>Results</b>
1.	Stack Connected to		Bag Filter at Gypsum Unloading Area
2.	Height of Stack (as reported)		30 m.
3.	Dia of Stack at Top (as reported)		0.6 m.
4.	Draft		ID Fan
5.	Material of Construction		M.S.
6.	Ambient Temperature, °C		20.0
7.	Flue Gas Temperature, °C		51.0
8.	Velocity, m/sec.	IS 11255 (Part-3)	5.6
9.	Sampling Point		9 m.
			<b>Concentration ( mg / NM<sup>3</sup> )</b>
10.	Particulate Matter (P.M.)	IS 11255 (Part-1)	<b>28.6</b>
11.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-2)	<b>Not Detectable</b>
12.	Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Part-7)	<b>10.2</b>
			<b>Limit as per E (P) Rules</b>
			<i>150.00 mg / NM<sup>3</sup></i>
			<i>Not Specified</i>
			<i>Not Specified</i>



*[Signature]*  
Dy. Quality Manager

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## TEST REPORT

Ref. No. <i>ECL/TR/12-13/487(e)</i> Dt : <i>11.02.2013</i> Your Work Order No. <i>NIL</i> Dt : <i>28.01.2013</i>			
[a]	Name and address of the Customer	ECO Cement Ltd. Vill.: Mahmoodganj At : Kulharia Durgawati Dist.: Bhabua (Kaimur)	
[b]	Report to be submitted to	Director	
[c]	Details of Sample	Monitoring of Stack Emission	
[d]	Sample Collected by	SHIVA TEST HOUSE on <i>02.02.13</i>	
[e]	No. & Type of Container	Thimble & Glass Impinger	
[f]	Items required to be tested	As per request	
[g]	Whether any specific Method of Test has been suggested by the party	No	
[h]	Date of receiving the sample	<i>03.02.13</i>	
	<b>Parameters</b>	<b>Method of Test</b>	<b>Results</b>
1.	Stack Connected to	IS 11255 (Part-3)	Bag Filter at Fly Ash Unloading Area
2.	Height of Stack (as reported)		30 m.
3.	Dia of Stack at Top (as reported)		1.05 m.
4.	Draft		ID Fan
5.	Material of Construction		M.S.
6.	Ambient Temperature, °C		19.0
7.	Flue Gas Temperature, °C		46.0
8.	Velocity, m/sec.		7.1
9.	Sampling Point		14 m.
		<b>Concentration (mg / NM<sup>3</sup>)</b>	<b>Limit as per E (P) Rules</b>
10.	Particulate Matter (P.M.)	42.8	150.00 mg / NM <sup>3</sup>
11.	Sulphur Dioxide (SO <sub>2</sub> )	Not Detectable	Not Specified
12.	Oxides of Nitrogen (NO <sub>2</sub> )	13.6	Not Specified



*[Signature]*  
Dy. Quality Manager

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Gardanibagh  
PATNA - 800 004 (Bihar)



Laboratory Address :-  
01<sup>st</sup> FLOOR, RAJHANS NIKETAN,  
NEAR CANAL, RUKUNPURA,  
BAILEY ROAD,  
PATNA - 800 014 (BIHAR)



# SHIVA TEST HOUSE

Tel. : 0612 - 2247538/ 2240752 : TeleFax : 0612 - 2590705  
E.mail. : shipatna1@yahoo.co.in



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## TEST REPORT

Ref. No. <i>ECL/TR/12-13/487(f)</i> Dt : <i>11.02.2013</i> Your Work Order No. <i>NIL</i> Dt : <i>28.01.2013</i>				
[a] Name and address of the Customer	ECO Cement Ltd. Vill.: Mahmoodganj At : Kulfaria Durgawati Dist.: Bhabua (Kaimur)			
[b] Report to be submitted to	Director			
[c] Details of Sample	Monitoring of Stack Emission			
[d] Sample Collected by	SHIVA TEST HOUSE on 02.02.13			
[e] No. & Type of Container	Thimble & Glass Impinger			
[f] Items required to be tested	As per request			
[g] Whether any specific Method of Test has been suggested by the party	No			
[h] Date of receiving the sample	03.02.13			
	<b>Parameters</b>	<b>Method of Test</b>	<b>Results</b>	
1.	Stack Connected to		Bag Filter attached Cement Mill Vent	
2.	Height of Stack (as reported)		33 m.	
3.	Dia of Stack at Top (as reported)		1.2 m.	
4.	Draft		ID Fan	
5.	Material of Construction		M.S.	
6.	Ambient Temperature, °C		19.0	
7.	Flue Gas Temperature, °C		45.0	
8.	Velocity, m/sec.		IS 11255 (Part-3)	6.0
9.	Sampling Point			21 m.
		<b>Concentration (mg / NM<sup>3</sup>)</b>	<b>Limit as per E (P) Rules</b>	
10.	Particulate Matter (P.M.)	IS 11255 (Part-1)	36.4	150.00 mg / NM <sup>3</sup>
11.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-2)	Not Detectable	Not Specified
12.	Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Part-7)	10.8	Not Specified

ECO CEMENTS LTD.

Auth. Signatory



*[Signature]*  
Dy. Quality Manager

- N.B. 1. This Report applies only to sample tested as above.  
2. Total Liability of our Laboratory is limited to the invoiced Amount.

Regd. Office :  
6D Extn. ; (Chatterjee Lane)  
Gardanibagh  
PATNA - 800 001 (Bihar)



Laboratory Address :-  
01<sup>st</sup> FLOOR, RAJHANS NIKETAN,  
NEAR CANAL, RUKUNPURA,  
BAILEY ROAD,  
PATNA - 800 014 (BIHAR)



# SHIVA TEST HOUSE

Tel. : 0612 - 2247538/ 2240752; TeleFax : 0612 - 2590705  
E.mail.: sthpatna1@yahoo.co.in



ISO 18001:2007  
OHSAS Certified

RECOGNISED AS ENVIRONMENTAL LABORATORY BY CENTRAL GOVT. UNDER ENVIRONMENT ( PROTECTION ) ACT 1986,  
BY DEPTT. OF INDUSTRY, FORESTS & ENVIRONMENT, GOVT. OF BIHAR AND BIHAR STATE POLLUTION CONTROL BOARD

## TEST REPORT

Ref. No. *ECL/TR/12-13/487(g)* Dt : *11.02.2013* Your Work Order No. *NIL* Dt : *28.01.2013*

[a] Name and address of the Customer	ECO Cement Ltd. Vill.: Mahmoodganj At : Kulharia Durgawati ; Dist.: Bhabua (Kaimur)					
[b] Report to be submitted to	Director					
[c] Details of Sample	Monitoring of Ambient Air Quality					
[d] Sample Collected by	SHIVA TEST HOUSE on 02.02.13					
[e] No. & Type of Container	Filter Paper ; Glass Impinger					
[f] Items required to be tested	As per request					
[g] Whether any specific Method of Test has been suggested by the party	No					
[h] Date of receiving the sample	03.02.13					
Parameters	Method of Test	Sampling Station				Limit as NAAQS Nov. '2009
		Near Main Gate	Near CCR	Near Caneeln	Near Gypsum Storage Area	
1. Particulate Matter (PM <sub>10</sub> ), µg / m <sup>3</sup>	IS 5182 (Part-23)	70.5	79.4	68.7	66.3	100 µg / m <sup>3</sup>
		66.6	73.3	61.0	63.5	
		64.4	60.9	52.0	60.5	
2. Particulate Matter (PM <sub>2.5</sub> ), µg / m <sup>3</sup>	CPCB	36.6	41.3	35.7	34.4	60 µg / m <sup>3</sup>
		34.7	38.1	31.7	33.1	
		33.5	31.7	27.0	31.5	
3. Sulphur Dioxide as SO <sub>2</sub> , µg / m <sup>3</sup>	IS 5182 (Part-2)	11.5	10.2	10.0	8.5	80 µg / m <sup>3</sup>
		12.6	11.0	10.7	8.0	
		10.6	9.3	8.8	6.9	
		9.8	8.5	8.0	6.8	
		9.4	8.9	9.3	6.2	
4. Nitrogen Dioxide as NO <sub>2</sub> , µg / m <sup>3</sup>	IS 5182 (Part-6)	8.9	8.1	7.3	5.4	80 µg / m <sup>3</sup>
		12.4	9.8	9.9	10.8	
		13.3	11.9	10.5	11.5	
		11.5	11.0	9.4	10.3	
		10.9	9.5	9.9	9.3	
Average Value		11.2	9.3	8.8	9.6	
		10.0	8.7	8.3	9.0	
PM <sub>10</sub>		67.1	71.2	60.6	63.4	
PM <sub>2.5</sub>		34.9	37.0	31.5	33.0	
SO <sub>2</sub>		10.5	9.3	9.0	7.0	
NO <sub>2</sub>		11.5	10.0	9.5	10.1	



*[Signature]*  
Dy. Quality Manager

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## TEST REPORT

Ref. No. ECL/TR/12-13/487(h) Dt : 11.02.2013 Your Work Order No. NIL Dt : 28.01.2013

[a]	Name and address of the Customer	ECO Cement Ltd. Vill.: Mahmoodganj At : Kulharia Durgawati Dist.: Bhabua (Kaimur)			
[b]	Report to be submitted to	Director			
[c]	Details of Sample	Monitoring of Fugitive Emissions in Work Zone Area			
[d]	Monitored by	SHIVA TEST HOUSE on 02.02.13			
[e]	No. and Type of Container	Filter Paper			
[f]	Items required to be tested	As per request			
[g]	Whether any specific Method of Test has been suggested by the party	No			
[h]	Date of receiving the sample	03.02.13			
S. N.	Sampling Point	Concentration of Total Dust	Permissible TWA Conc <sup>n</sup> *	Concentration of Respirable Dust	Permissible TWA Conc <sup>n</sup> *
		(mg/M <sup>3</sup> )	(mg/M <sup>3</sup> )	(mg/M <sup>3</sup> )	(mg/M <sup>3</sup> )
1	Mill Section Ground Floor	5.1	10.00	1.3	5.00
2	Mill Section 01 <sup>st</sup> Floor	4.4	10.00	1.4	5.00
3	Mill Section 02 <sup>nd</sup> Floor	3.0	10.00	2.0	5.00
4	South side of Mill Section	5.6	10.00	1.7	5.00
5	North side of Mill Section	4.2	10.00	1.1	5.00

\*Permissible Time Weighted Average (TWA) Conc<sup>n</sup> based on Silica Content as per Factories Act'1948 Second Schedule



*[Signature]*  
Dy. Quality Manager

- N.B. 1. This Report applies only to sample tested as above.  
2. Total Liability of our Laboratory is limited to the invoiced Amount.

**TEST REPORT**

DATE – 22.03.13

[a] Name and address	<b>ECO Cement Ltd.</b> <b>Vill.: Mahmoodganj</b> <b>At : Kulharia</b> <b>Durgawati</b> <b>Dist.: Bhabua (Kaimur)</b>
[b] Report to be submitted to	Director
[c] Details of Sample	Monitoring of Ambient Noise Level
[d] Monitored by	<b>ECO Cement Ltd.</b> on 22.03.13
<b>Sampling Location</b>	<b>Time Weighted Average (TWA)</b> <b>of Noise Level in dB(A)</b>
1. Near Main Gate	<b>62.5</b>
2. Near CCR	<b>61.2</b>
3. Near Canteen	<b>59.9</b>
4. Near Gypsum Storage Area	<b>60.3</b>
5. Near Clinker Storage Area	<b>61.4</b>
N.B.:	<i>The Ambient Air Quality Standards in respect of Noise as per Noise Pollution (Regulation and Control ) Rules 2000 for Industrial area is 75.0 dB(A), for Commercial area is 65.0 dB(A), for Residential area is 55.0 dB(A) &amp; for Silence Zone is 50.0 dB(A) in daytime i.e. 6.00 am to 9.0 p.m. As per Rule 7(1&amp;2) the authority shall take action against violator if the noise level exceed the ambient noise standards by 10 dB(A) or more against any area/zone.</i>

**ECO CEMENTS LTD.**  
Anth. Signatory

**ECO CEMENTS LIMITED**

Corp. Office : 72, Jawaharnagar Extn, Bhelupur, Varanasi-221010. Telefax – 0542-2277074  
Zonal Office : HIG-195, Saileshree Vihar, Chandrasekharapur, Bhubaneswar, Orissa, Email - enquiry@ecocem.in  
: 1644, Beriya Road, Kulharia, Durguati, Bhabua ( Kamur), Bihar- 821105.



# RAYTHEON TECHNOLOGIES

"GOKULAM" No.41, Teachers' Colony, Vettuvankeni, Chennai - 600 041.  
Ph : 24492285 , 28250989. Fax : 24491647 , 28254718  
e-mail : hiraytech@hotmail.com

RT/ECL/CC/602/13

18<sup>th</sup> Mar., 2013.

## CALIBRATION CERTIFICATE

1. Calibration Requested by :: M/s. Eco Cements Limited,  
Plot No.1644, Bheriya More, Kulharia,  
Durgauti, Bhabhua, Bihar : 821 105
2. Description of Item :: Environmental Noise Pollution Monitor.  
Make : Raytheon Technologies, Chennai.  
Model : RT-5001  
SI No. : (120410892)
3. **Date of Calibration** :: **18.03.2013.**

4. Calibration Results -

SI No	Standard Noise Source.	RT-5001
1.	50.0db.	50.5db
2.	60.0 db.	60.4db.
3.	75.0 db	75.2db
4.	90.0 db.	90.1db

@ Standard Noise Source : Standard Noise Generator duly calibrated to National Standards - Reference Report  
No.: ETDC(CN)-2012-43621.

5. Temperature & Humidity during calibration. :: 24 C & 51% RH

6. **Next Calibration due on** :: **17.03.2014.**

7. Remarks :: Accuracy is found to be within approved limits.

8. Authorised Signatory

Note: \* It is mandatory to re-calibrate our Noise Meter once in twelve months as per ISO norms. Next Calibration due date is mentioned above.

\* Please mention the above Reference No. for your next re-calibration.