



NEW BIHAR CEMENT PLANT

(A Unit of Shree Cement Ltd.)
Jasoia More, BIADA Industrial Growth Centre,
Post/P.S.- Aurangabad (Bihar)-824101, India
Tel. : 06186-292294, 292295, 292296
E-mail Id : shreebcgu@shreecementltd.com
CIN : L26943RJ1979PLC001935

SCL/Bihar/Env/2019-20/ 222

Date: 25/09/2019

To,
The Member Secretary,
Bihar State Pollution Control Board
Parivesh Bhawan, N.S.B-2
Patliputra Industrial Area,
Patna (Bihar) - 800010

Sub: Environment Statement Report of Clinker Grinding Unit "M/s New Bihar Cement Plant, (A Unit of Shree Cement Ltd.)" Aurangabad, Bihar for the period of April, 2018 to March, 2019 under Environment Protection Act, 1986

Ref: - Consent to operate letter no. T – 1038 and T – 1039, dated 17/02/2018


Sir,

We are submitting herewith the Annual Environment Statement Report for the period from April 2018 to March 2019 for M/s New Bihar Cement Plant (A Unit of Shree Cement Ltd.) situated at Jasoia More, BIADA, Industrial Growth Centre, Aurangabad, Tehsil & Dist.-Aurangabad (Bihar).

This is for your kind information please.

Thanking you.

Yours faithfully,
For NEW BIHAR CEMENT PLANT
(A Unit of Shree Cement Ltd.)


(Gyanendra Mohan Khare)
Unit in charge

Copy to: The Additional Principal Chief Conservator of Forest (APCCF), Ministry of Environment, Forests & Climate Change, Regional Office, (ECZ), Bungalow No. A – 2, Shyamali Colony, Ranchi – 834002.

Office : New Bihar Cement Plant (A unit of Shree Cement Ltd.)
Jasoia More, BIADA Industrial Growth Centre, Post/P.S.-Aurangabad (Bihar) - 824101, India
Tel: 06186-292294, 292295, 292296, E-mail Id : shreebcgu@shreecementltd.com

ENVIRONMENT STATEMENT

FORM-V

(See Rule-14)

(APRIL, 2018 to MARCH, 2019)

PART – A

1.	Name and address of the Owner / Occupier of the Industry operation or process	M/s New Bihar Cement Plant (A Unit of Shree Cement Ltd.), Jasoia More, BIADA, Industrial Growth Centre, Aurangabad, Tehsil & Dist. Aurangabad, Bihar
2.	Industry Category Primary (S.T.C. Code) Secondary (S.T.C. Code)	Red Category
3.	<u>Production Capacity</u> Cement : D.G. Set :	4.5 Million TPA 1 x 500 KVA
4.	Year of Establishment	2018
5.	Date of the last Environmental Audit Report submitted	27 September 2018

PART – B

WATER AND RAW MATERIAL CONSUMPTION

(I) WATER CONSUMPTION:

Process : N.A. (As plant is based on dry Process technology)

Cooling and Dust Suppression : 44848 KL

Domestic : 1825 KL

Name of Product	Process Water Consumption per Unit of Product Output (Cement)	
	During Previous Financial Year	During Current Financial Year
Cement	0.0490 KL/ MT of Cement	0.0237 KL/ MT of Cement

(II) RAW MATERIAL CONSUMPTION: (CEMENT PLANT)

Name of Raw Material	Name of Product	Consumption of Raw Material Per Unit of Output (Cement)	
		During Previous Financial Year (2017-18) Metric Tons	During Current Financial Year (2018-19) Metric Tons
1. Clinker	Cement	0.590	0.577
2. Gypsum		0.070	0.082
3. Fly Ash		0.340	0.341
4. Slag		-	-

RAW MATERIAL CONSUMPTION: (HAG)

Name of Raw Material	Name of Product	Consumption of Raw Material per unit of Output (Cement)	
		During Previous Financial Year (2017-18) Metric Tons	During Current Financial Year (2018-19) Metric Tons
Fuel / Coal	Heat	0.0075	0.0053

RAW MATERIAL CONSUMPTION: (D.G. SET)

Name of Raw Material	Name of Product	Consumption of Raw Material per unit of Output (Liters / KWH)	
		During Previous Financial Year (2017-18)	During Current Financial Year (2018-19)
Fuel / Diesel	Power	D.G. Set is not operated so far	D.G. Set is not operated so far

(III) POWER CONSUMPTION (KWH/T OF CEMENT):

During Previous Financial Year (2017-18)	During Current Financial Year (2018-19)
46.51	26.95

(IV) TOTAL CEMENT PRODUCTION (MT):

During Previous Financial Year (2017-18)	During Current Financial Year (2018-19)
73400	1889019

(V) TOTAL D.G. POWER PRODUCTION (KWH):

During Previous Financial Year	During Current Financial Year
0	0

PART – C

DISCHARGED TO ENVIRONMENTAL / UNIT OF OUTPUT

Pollutants	Quantity of Pollutants Discharged	Concentration of Pollutants in Discharge (Mass/Value)	Percentage of variation from prescribed standard with reasons
(a)	Water	The plant is being operated on dry process technology, hence no liquid effluent is generated from the Clinker Grinding Unit. The waste water generated from office toilets is being treated at sewage treatment plant (STP). The STP treated water is being utilized in horticulture activities and also to flush water in toilets.	
(b)	Air	Please refer Annexures - I & II	
(c)	Noise	Please refer Annexure - III	

PART – D

HAZARDOUS WASTE

(As specified under Hazardous Waste (Management, Handling & Trans boundary Movement) Rules, 2016)

Hazardous Waste	Total Quantity (Liters.)	
	During Previous Financial Year (2017-18)	During Current Financial Year (2018-19)
a) From Process (Cement manufacturing (Grinding) is based on “Dry Process” No Hazardous waste is generated from the process except used oil which is drained from Machinery / Equipments)	Total quantity generated = N.A. Old stock = Zero Total disposal= Zero KL Balance quantity= Zero	Total quantity generated = Zero KL Old stock = Zero Total disposal= Zero KL Balance quantity= Zero
(b) From Pollution Control Facilities	N.A.	N.A.

PART – E

SOLID WASTE

		Total Quantity	
		During Previous Financial Year	During Current Financial Year
(a)	From Process	N.A.	N.A.
(b)	From Pollution Control Facility	Dust collected in the Bag Houses and Bag Filters are recycled to the system.	
(c)	1) Quantity rejected or re-utilized within the unit	100%	100%
	2) Sold	Nil	Nil
	3) Disposed	Nil	Nil

PART – F

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for the categories of wastes:

(I) Hazardous Waste:-

No Hazardous waste is generated from the process except used oil which is drained from machineries/ equipment. Used oil is sold to the CPCB/BSPCB authorized recycler.

(II) Battery waste:-

As specified under Batteries (Management & Handling) Amendment Rules, 2010, Details of Lead-Acid batteries are as under:-

Year 2018-19

Number of new batteries of different categories purchased from the manufacturer / importer / dealer or any other agency.	During 1st April, 2018 to 31st March, 2019	
Category:	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)
(i) Automotive		
a) Four wheeler	Nil	Nil
b) Two wheeler	Nil	Nil
(ii) Industrial		
a) UPS	Nil	Nil
b) Motive Power	03	NA
c) Stand –by	Nil	Nil
(iii) Others	Nil	Nil
Total	03	NA
Number of used batteries of categories and Tonnage of scrap sent to manufacturer/ dealer/importer/registered recycler/or any other agency to whom the used batteries scrap was sent.	During 1st April, 2018 to 31st March, 2019	
Category:	(i) No. of Batteries	(ii) Approximate Weight (In Metric Tonnes)
(i) Automotive		
a) Four wheeler	Nil	Nil
b) Two wheeler	Nil	Nil
(ii) Industrial		
a) UPS	Nil	Nil
b) Motive Power	Nil	Nil
c) Stand –by	Nil	Nil
(iii) Others	Nil	Nil
Total	Nil	Nil

(III) Bio-Medical Waste:

No Bio-Medical Waste was generated during current financial year April, 2018 to March, 2019.

(IV) E- Wastes:

Source	Total Quantity	
	During Previous Financial Year	During Current Financial Year
From Process	Nil	Nil
From Pollution Control Facility	Nil	Nil

(V) Solid Wastes: - N.A.

PART – G

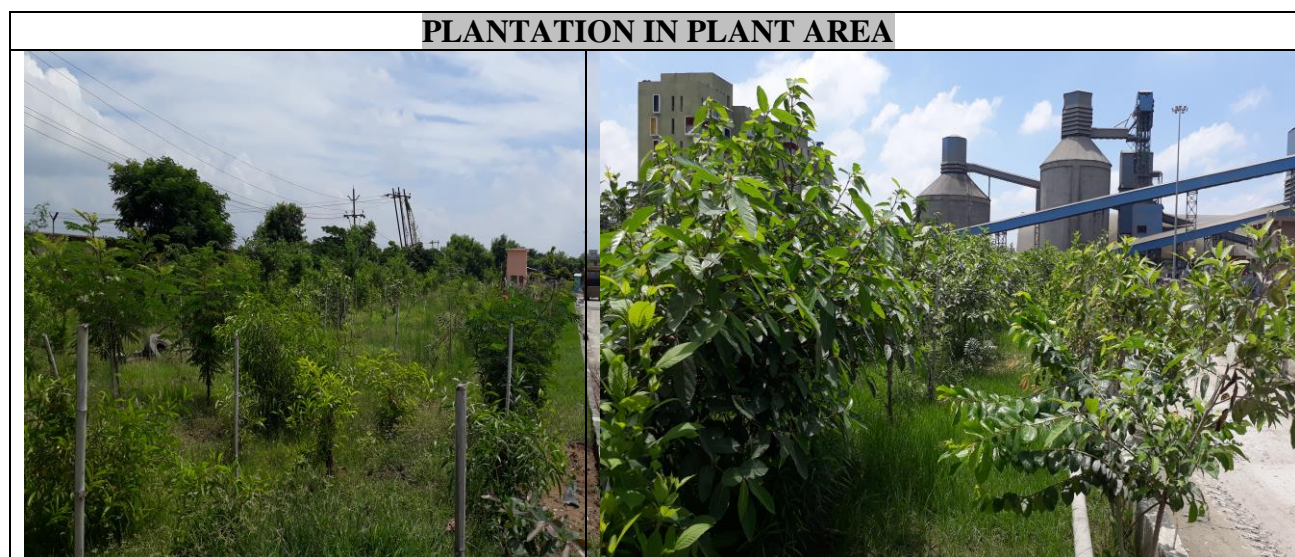
IMPACT OF THE POLLUTION CONTROL MEASURES ON CONSERVATION OF NATURAL RESOURCES AND CONSEQUENTLY ON THE COST OF PRODUCTION

M/s New Bihar Cement Plant, A Unit of Shree Cement Limited (Grinding Unit) is being operated on dry process technology, which is cost effective and environmentally clean technology. The advantage of dry process is also in fuel economy. The stack emissions from the plant are controlled by equipment like bag house and bag filters installed at various material transfer points to clean the process and arrest the fugitive emissions. The particulate matter collected in the pollution control equipment is recycled in process and neutralizing the cost of operation of pollution control equipments and hence no cost impact on the production cost. Further fly ash is also being utilized in the production of cement thus eliminating the harmful impacts on environment.

PART – H

ADDITIONAL MEASURES / INVESTMENTS PROPOSAL FOR ENVIRONMENT PROTECTION INCLUDING ABATEMENT OF POLLUTION

Green belt development and tree plantation are our ongoing activity within the plant area and outside of the area. Every year plantation activities are being done to increase the bio-diversity of the area. Till 31st March 2019 we have covered 91088 m² area, around 26834 nos. of trees and shrubs with 24716 nos. survival with a survival rate of 92%, this is around 33 % green area of the total plant area. During the financial year 2019-20 we have a target of planting around 12000 nos. of tree species inside / outside of plant area.



PART – I
ANY OTHER PARTICULATES FOR IMPROVING THE QUALITY OF ENVIRONMENT.

1. We have full-fledged Environment Department with three separate cells, one for monitoring, one for maintenance of pollution control equipment and one for Green Belt development.
2. Regular monitoring of stack emissions, ambient air quality, ambient noise and ground water quality & levels. Data analysis is being done to further improve the environment quality of the plant area.
3. Maintenance Department is performing regular checking and scheduled maintenance of all the pollution control devices i.e. bag filters etc.
4. Civil and Personal & Administration departments are taking care of entire House keeping of the Plant area.
5. To further reduce fugitive emissions, we have a big size truck mounted and 02 nos of small 3D TPS sweeping machines for regular sweeping and cleaning of paved area. All the material transfer belts are covered and transfer points are equipped with pollution control equipment. Truck parking area and vehicle movement area are concreted to avoid any fugitive emissions.
6. Horticulture section is taking care of tree plantation and green belt development. Every year we are planting tree species inside and outside of the plant area.
7. We have installed Continuous Emission Monitoring System (CEMS) to display the data on CPCB and BSPCB servers.
8. Domestic waste water is being treated at Sewage Treatment Plant (STP). This treated water is being utilized in plantation & flushing.
9. We are maintaining Zero Liquid Discharge (ZLD) from our premises.
10. We create environment awareness for all our stakeholders through meetings, training programs, world environment day celebrations etc.

On support of above, we are enclosing herewith following Annexures:-

Annexure-I	:	Ambient Air Quality Monitoring Report for the year 2018-19
Annexure-II	:	Stack Emission Level Monitoring Report for the year 2018-19
Annexure-III	:	Ambient Noise level Monitoring Report for the year 2018-19

ANNEXURE-I**AMBIENT AIR QUALITY ($\mu\text{g}/\text{m}^3$) FOR YEAR 2018-19**

Location Month	Plant boundary towards main gate / NH - 98				Plant boundary towards Hostel				Plant boundary towards Water harvesting pond			
	PM10	PM2.5	SO2	NO2	PM10	PM2.5	SO2	NO2	PM10	PM2.5	SO2	NO2
Apr-18	65	46	11	24	57	36	10	16	56	34	6	12
May-18	58	39	14	18	58	30	9	18	54	29	9	16
June-18	56	33	16	23	56	37	12	19	54	34	11	14
July-18	55	31	12	21	55	20	9	15	51	27	8	17
Aug-18	55	33	17	22	54	27	8	19	52	25	12	19
Sept-18	59	37	19	18	55	33	11	17	55	36	10	21
Oct-18	68	55	10.6	21	64	46	11.5	18	57	44	7.5	18.2
Nov-18	63	34	11.2	19.6	60	32	11.9	19.4	56	31	9.3	17.6
Dec-18	60	35	11.8	21.7	59	33	10.6	18.9	57	32	11.6	19.8
Jan-19	59	41	10.9	19.9	58	38	12.1	20.3	55	36	10.9	20.4
Feb-19	58	33	11.7	20.3	58	29	11.4	19.6	54	27	11.1	18.6
Mar-19	62	34	11.6	18.4	59	31	10.9	19	55	36	10.4	19.6
Median	59	34.5	11.8	20.7	58	32.5	11	19	55	33	10.2	18.4

ANNEXURE-II**STACK EMISSION LEVEL (mg/Nm^3) FOR YEAR 2018-19**

Sr. No.	Month	Pollution Control Measures	PM (mg/Nm^3)
1	April-18	Bag House	19
2	May-18	Bag House	20
3	June-18	Bag House	20
4	July-18	Bag House	17
5	August-18	Bag House	20
6	September-18	Bag House	17
7	October-18	Bag House	17
8	November-18	Bag House	20
9	December-18	Bag House	20
10	January-19	Bag House	19
11	February-19	Bag House	17
12	March-19	Bag House	22
Median		Bag House	19.5

ANNEXURE-III**NOISE LEVEL Leq-dB (A) FOR YEAR 2018-19**

S. No.	Monitoring Location Month	Plant boundary towards main gate / NH - 98		Plant boundary towards Hostel		Plant boundary towards Water Harvesting Pond	
		Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
01.	Apr-18	64.2	59.8	66.7	62.7	58.7	56.2
02.	May-18	66.7	59.8	65.8	61.6	56.4	50.2
03.	June-18	65.8	60.7	60.3	57.2	55.9	51.4
04.	July-18	64.7	60.2	62.8	58.8	56.7	48.5
05.	Aug-18	62.6	61.1	60.5	57.3	58.7	54.2
06.	Sept-18	64.7	58.9	63.4	59.7	58.6	52.6
07.	Oct-18	65.3	56.2	66.3	59.3	58.9	52.3
08.	Nov-18	66.9	55.6	65.5	58.1	56.7	51.3
09.	Dec-18	66.7	56.9	62.5	57.3	56.2	54.3
10.	Jan-19	68.2	57.2	62.1	56.9	56.7	53.1
11.	Feb-19	65.9	58.3	60.5	57.2	57.3	52.3
12.	Mar-19	66.3	56.3	63.8	58.4	55.8	50.6
	Median	65.9	58.6	63.1	58.3	56.7	52.3