

## 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/NBCP/Env/2020-21/ 2633

Date: 24/09/2021

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

Sub: Submission of Environment Statement Report of Clinker Grinding Unit "M/s New Bihar Cement Plant, (A Unit of Shree Cement Ltd.)" located at BIADA, Industrial Growth Center, Aurangabad, District – Aurangabad, Bihar for the period of April, 2020 to March, 2021 under Environment Protection Act, 1986

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


Sir,

With reference to the above subject and referred CTO letter, we are submitting herewith the Annual Environment Statement Report (in form – V) for the period from April 2020 to March 2021 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 and record 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.

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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, 2020 to MARCH, 2021)

### 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.	<b><u>Production Capacity</u></b> 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	24 September 2020

### 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	:	30739 KL
Domestic	:	5014 KL

Name of Product	Process Water Consumption per Unit of Product Output (Cement)	
	During Previous Financial Year (2019-20)	During Current Financial Year (2020-21)
Cement	0.0242 KL/ MT of Cement	0.0197 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 (2019-20) Metric Tons	During Current Financial Year (2020-21) Metric Tons
1. Clinker	Cement	0.569	0.553
2. Gypsum		0.085	0.100
3. Fly Ash		0.346	0.347
4. Slag		-	-
5. Coal (in HAG)	Heat	0.0061	0.0088
6. Diesel (in D.G. Set)	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 (2019-20)	During Current Financial Year (2020-21)
32.01	27.08

(IV) TOTAL CEMENT PRODUCTION (MT):

During Previous Financial Year (2019-20)	During Current Financial Year (2020-21)
1730733	1562313

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

During Previous Financial Year (2019-20)	During Current Financial Year (2020-21)
0	0

**PART - C**

DISCHARGED TO ENVIRONMENTAL / UNIT OF OUTPUT

Pollutants	Quantity of Pollutants Discharged (Mass/Day)	Concentration of Pollutants in Discharge (Mass/Value)	Percentage of variation from prescribed standard with reasons
(a) Water	No waste water is discharged outside the plant premises.	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	Particulate Matter from stack emission is 0.0440 MT/Day	Please refer <b>Annexures - I &amp; II</b>	
(c) Noise	-	Please refer <b>Annexure - III</b>	

**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 (2019-20)	During Current Financial Year (2020-21)
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 = 0.0 KL Old stock = 0.0 KL Total disposal = 0.0 KL Balance quantity = 0.0 KL	Total quantity generated = 2.1 KL Old stock = 0.0 KL Total disposal = 2.1 KL Balance quantity = 0.0 KL
(b) From Pollution Control Facilities	N.A.	N.A.

**PART – E**

**SOLID WASTE**

		Total Quantity	
		During Previous Financial Year (2019-20)	During Current Financial Year (2020-21)
(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. In 2020-21 total quantity of used oil generated is 2.1 KL

(II) Battery waste:-

During Previous Financial Year (2019-20)	During Current Financial Year (2020-21)
Nil	Nil

(III) Bio-Medical Waste:

No Bio-Medical Waste was generated during current financial year April, 2020 to March, 2021.

(IV) E- Wastes:

Source	Total Quantity	
	During Previous Financial Year (2019-20)	During Current Financial Year (2020-21)
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**

Annual recurring cost towards the environmental protection measures for the FY 2020-21 is Rs. 1.88 Crore approximately. Green belt development and tree plantation are our ongoing activity within the plant and outside of the plant area. Every year plantation activities are being done to increase the density and bio-diversity of the area. More than 33 % of the total plant area developed under greenbelt development area. In 2020-21 (last monsoon) 5000 trees have planted inside / outside the plant area. In monsoon of 2021-22, we have planted 1000 trees to dense the green area.

**PHOTOGRAPHS OF PLANTATION IN PLANT AREA**







### **PART – I**

#### **ANY OTHER PARTICULATES FOR IMPROVING THE QUALITY OF ENVIRONMENT.**

1. We have full-fledged Environment Department for monitoring, maintenance of pollution control equipment and greenbelt development.
2. Regular monitoring of stack emissions, ambient air quality, ambient noise and ground water quality & levels is being done on periodically and regular basis. 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.
6. All the material transfer belts are covered and transfer points are equipped with pollution control equipment.
7. Truck parking area and vehicle movement area are concreted to avoid any fugitive emissions.
8. Our horticulture section in coordination with environment department is taking care of tree plantation and green belt development. Every year during monsoon, we are planting tree species inside and outside of the plant area.
9. We have installed Continuous Emission Monitoring System (CEMS) to display the data on CPCB and BSPCB servers.
10. Domestic waste water generated from office toilets is being treated at Sewage Treatment Plant (STP) and treated water is being utilized in plantation & dual flushing of toilets.
11. We are maintaining Zero Liquid Discharge (ZLD) from our premises.
12. 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:-**

<b>Annexure-I</b>	:	Ambient Air Quality Monitoring Report for the year 2020-21
<b>Annexure-II</b>	:	Stack Emission Level Monitoring Report for the year 2020-21
<b>Annexure-III</b>	:	Ambient Noise level Monitoring Report for the year 2020-21

**ANNEXURE-I****AMBIENT AIR QUALITY ( $\mu\text{g}/\text{m}^3$ ) FOR YEAR 2020-21**

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-20	51	23	5	15	49	24	5	14	44	22	5	12
May-20	52	28	5	18	51	25	5	17	46	25	5	11
June-20	54	30	7	22	52	28	5	20	51	29	5	16
July-20	55	31	9	21	50	27	9	17	50	28	7	19
Aug-20	54	34	8	21	53	30	9	20	52	30	5	15
Sept-20	50	29	11	24	52	27	12	22	48	26	10	18
Oct-20	72	39	4	19	86	52	6	18	74	45	4	18
Nov-20	49	25	4	15	46	22	5	15	41	22	4	14
Dec-20	47	26	7	20	48	24	5	19	42	25	4	15
Jan-21	45	28	9	21	47	26	8	12	44	26	7	16
Feb-21	56	31	8	20	54	30	9	11	50	29	6	11
Mar-21	50	28	9	19	51	25	7	17	48	25	5	12
<b>Median</b>	<b>51.5</b>	<b>28.5</b>	<b>7.5</b>	<b>20</b>	<b>51</b>	<b>26.5</b>	<b>6.5</b>	<b>17</b>	<b>48</b>	<b>26</b>	<b>5</b>	<b>15</b>

**ANNEXURE-II****STACK EMISSION LEVEL ( $\text{mg}/\text{Nm}^3$ ) FOR YEAR 2020-21**

Sr. No.	Month	Pollution Control Measures	PM ( $\text{mg}/\text{Nm}^3$ )
1	April-20	Bag House	09
2	May-20	Bag House	15
3	June-20	Bag House	14
4	July-20	Bag House	16
5	August-20	Bag House	18
6	September-20	Bag House	25
7	October-20	Bag House	27
8	November-20	Bag House	22
9	December-20	Bag House	25
10	January-21	Bag House	23
11	February-21	Bag House	22
12	March-21	Bag House	25
<b>Median</b>		<b>Bag House</b>	<b>22</b>

**ANNEXURE-III****NOISE LEVEL  $\text{Leq-dB (A)}$  FOR YEAR 2020-21**

S. No.	Monitoring Location $\Rightarrow$ Month $\downarrow$	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-20	38.7	37.5	39.0	35.7	38.5	36.2
02.	May-20	42.1	40.3	41.8	48.3	41.5	42.4
03.	June-20	56.8	55.2	59.1	55.4	56.8	54.2
04.	July-20	62.1	57.1	62.7	57.3	57.8	50.8
05.	Aug-20	65.2	55.3	64.8	55.8	59.3	52.3
06.	Sept-20	63.8	57.8	62.1	54.1	56.2	48.9
07.	Oct-20	68.5	58.6	63.5	56.7	59.7	49.8
08.	Nov-20	66.1	60.2	60.8	58.1	58.6	48.6
09.	Dec-20	65.8	59.4	62.1	56.4	57.6	52.1
10.	Jan-21	63.5	58.8	62.7	56.8	57.5	50.5
11.	Feb-21	66.2	56.5	63.8	54.9	58.7	55.1
12.	Mar-21	62.4	57.8	60.7	55.3	58.5	51.7
<b>Median</b>		<b>63.7</b>	<b>57.5</b>	<b>62.1</b>	<b>55.6</b>	<b>57.7</b>	<b>50.7</b>