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SHREE JHARKHAND CEMENT PLANT

(A UNIT OF SHREE CEMENT LTD.)

Vill : Hansda-Burudih, Dist : Seraikela Kharsawan, Jharkhand 833220

SCL/Jharkhand/ENV/EC/2021-22/18

Date: 22,11,2021

To, The, Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (EZ), Bungalow No. A-2, Shyamali Colony, Ranchi-834002

Sub:

Six monthly Compliance report of Environmental clearance of Cement grinding unit of capacity 4.0 Millon TPA cement along with proposed Power plant 20 MW and captive railway siding near Village-Hansda, PO Burudih, Dist. Saraikela-Kharsawan, Jharkhand by M/s Shree Jharkhand Cement Plant (A unit of Shree Cement Limited) for the period **from April 2021 to September 2021**.

Ref: Ministry of Environment, Forests and Climate Change Environmental Clearance Letter No. J-11011/692/2008-IA-II (I) dated 21-02-2018.

Dear Sir,

With reference to the above referred letters, please find herewith compliance report of conditions stipulated in the Environmental Clearance of Cement grinding unit of capacity 4.0 Millon TPA cement along with proposed Power plant 20 MW and captive railway siding near Village-Hansda, PO Burudih, Dist. Saraikela-Kharsawan, Jharkhand by M/s Shree Jharkhand Cement Plant (A unit of Shree Cement Limited) dully supported with relevant annexures in hard & soft by E-mail. This compliance report is submitted for the period from **April 2021 to September 2021**.

This is submitted for your kind perusals.

Thanking you, Yours faithfully, For M/s. Shree Jharkhand Cement Plant (A Unit of Shree Cement Ltd)

(Asst. General Manager)

- Cc: 1. The Zonal Officer, Central Pollution Control Board, South end Conclave' Block-502, 5<sup>th</sup> and 6<sup>th</sup> Floor, 1582, Razidanga, Main Road, Kolkata-700107
  - 2. The Member Secretary, Jharkhand State Pollution Control Board, T.A Division building (Ground floor), HEC Campus, P.O. Dhurwa, Ranchi 834004, Jharkhand.
  - 3. The Regional Officer, JSPCB, Regional office cum laboratory, M.15, New Housing Colony, Adityapur, Jamshedpur 831013



# **Compliance Report of Environment Clearance**

## For the period from April 2021 to September 2021

(Ref. No. of EC: J-11011/692/2008-IA-II (I) dated 21-02-2018)

of

Cement grinding unit of capacity 4.0 Millon TPA cement along with

proposed Power Plant 20 MW and Captive Railway Siding

of M/s Shree Jharkhand Cement Plant (A unit of Shree Cement Limited) near Village-Hansda, PO Burudih, Dist. Saraikela-Kharsawan, Jharkhand

S.N.	Conditions	Compliance Status
Α	Specific Conditions :	
1	The validity of the present EC will be up to 29 <sup>th</sup> August 2020.	Noted
2	An amount equal to 5% of total cost proposed towards Enterprise Social Commitment (ESC) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.	Company is engaged in carrying out extensive CSR activity as under: <ul> <li>Health &amp; sanitation</li> <li>Education</li> <li>Women empowerment</li> <li>Infrastructure development</li> <li>Cultural and heritage promotion</li> <li>Ensuring environment sustainability</li> <li>A dedicated team is engaged in carrying out all the social activities around nearby villages.</li> <li>The details and Photograph are enclosed as Annexure – 1.</li> </ul>

C NI		YE	ARS (RS. IN LAC	CS)
S. N.	Activity Heads	2018-19	2019-20	2020-21
1	Educational Program	8.36	8.08	13.46
2	Health & Family Welfare	7.50	3.57	21.62
3	Sustainable Livelihood & women empowerment	3.94	3.84	1.61
4	Social Development & Welfare	5.49	5.49	63.91
5	Infrastructure Development	29.43	28.44	60.96
GRAN	D TOTAL	54.72	49.42	161.56

# **CSR ACTIVITIES - EDUCATION PROGRAMME**



**Distribution of School Bags in Government Schools** 



Renovation of Mahalisai Anganwadi Kendra

# **CSR ACTIVITIES – HEALTH & FAMILY WELFARE**



Medical Camp at Chilku



**Medical Camp at Deoli** 



**Medical Camp at Godpur** 



Financial contribution of Rs 7 Lakhs to District Disaster Management Authority & Handing over of 350 Home Isolation Kit to District Administration

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Distribution of Food Kit at Asura, Begnadih, Burudih, Mahali Sai, Shimla, Manjhi Tola, Kendudipa, Burusai, Shimla, Hansda, Gajudih, Nayasai & Rengogora



Construction of Solar water pump at village Hansda

Sanitization of nearest villages for controlling the spread of Corona Virus

# **CSR ACTIVITIES – SUSTAINABLE LIVELIHOOD & WOMEN EMPOWERMENT**



Sewing Centre Opening at Burudih



Sewing Centre Opening at Hansda



"Shree Jharkhand Cement Plant" has been awarded by "Arjuna Khel Ratna" by the "Saraikela-Kharsawan District Sport Association" for encouragement of rural sports in the area of Saraikela-Kharsawan and providing equipment, infrastructure and financial support to all rural sport groups for motivating rural athletes and participation in the state/national level championship.

# **CSR ACTIVITIES – SOCIAL DEVELOPMENT & WELFARE**



**Blanket Distribution in Burudih & Simla Panchayat** 



Mosquito Net Distribution to nearby villagers



Renovation of Shahid Park, Kharsawan



Distribution of Three Seater Chair & Steel Racks to BDO office, and Police Station, Saraikela



Model Polling Booth at Kuchai & Behrasai

# **CSR ACTIVITIES – INFRASTRUCTURE DEVELOPMENT**



# Cement Distribution at Shankar Mandir & Kharsawa High School, Kharsawan

# **CSR ACTIVITIES – AWARENESS PROGRAMME**

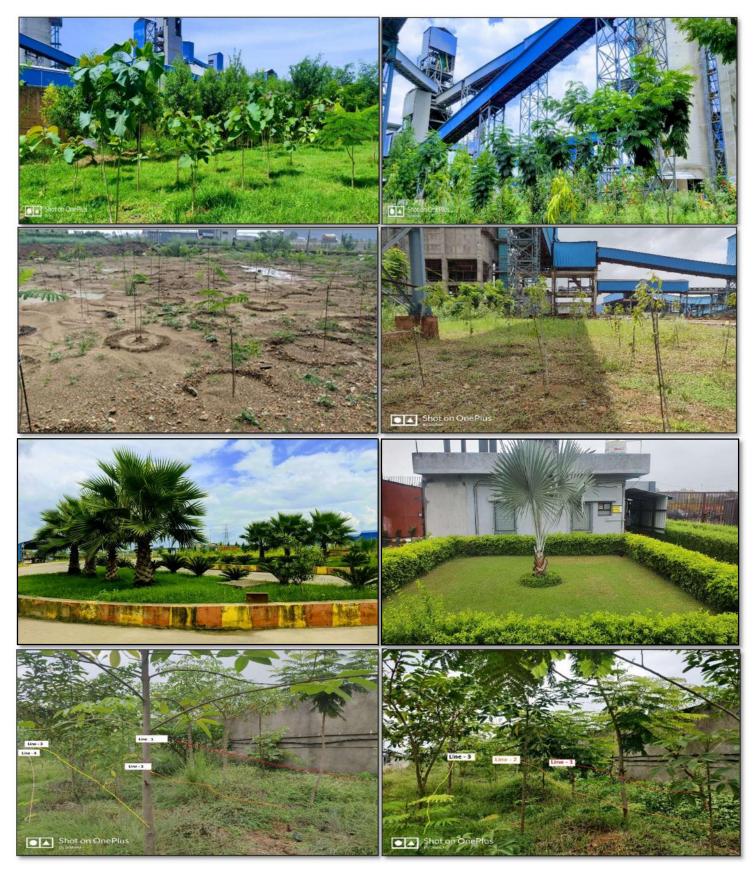


**Plastic Free Campaign at Kharsawan** 

S.N.	Conditions	Compliance Status
3	Green belt shall be developed equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The green belt shall inter alia cover the entire periphery of the plant.	<ul> <li>Plantation activities are done regularly. Out of total plant area of 110 acres, green belt has been developed in 37.2 acres (33.8%) area.</li> <li>Density of the plantation is being improved by planting more saplings.</li> <li>Native Plant species are being/will be planted.</li> <li>The details and Photograph are enclosed as Annexure – 2.</li> </ul>

		PLANTATION DI	ETAILS					
	Planted Specie	25		Nos of tr	ees Planted			
SI No	Botanical Name	Local Name	Upto 2018	FY 2019-20	FY 2020-21	FY 2021-22		
1	Mangifera indica	Mango	0	300	20	50		
2	Azadiracta indica	Neem	1100	290	587	215		
3	Dalbergia sissoo	Sissoo	0	185	393	200		
4	Terminalia arjuna	Arjuna	500	100	176			
5	Syzygium cumini	Jamun	0	100	0	100		
6	Millettia pinnata	Karanj	0	60	43			
7	Anacardium occidentale/Cashew	Kaju	0	50	0	300		
8	Roystonea regia	Royal Palm	0	97	80			
9	Albizia lebbeck	Siris	927	190	2763	2063		
10	Delonix regia	Golmahar	500	200	580	330		
11	Mimusops elengi	Baula/Maulsaree	200	0	0			
12	Tectona grandis	Sagwan	400	170	382	100		
13	Ficus religiosa	Peepal	50	0	35	100		
14	Artocarpus heterophyllus	Kathal	0	0	97	40		
15	Saraca asoca	Ashoka	0	200	100			
16	Anthocephalus camada	Kadam	0	0	0	300		
17	Psidium guajava	Guava	0	0	0	50		
18	Tamarindus indica	Emli	0	0	0	30		
19	Pongamia pinnata		0	0	0	300		
	Total		3677	1942	5256	4178		
	Total Numbers of sapling planted	till date	15053 numbers					
	Area Covered			37.	2 acre			

# EXISTING PLANTATION/GREENBELT DEVELOPMENT



S.N.	Conditions	Compliance Status						
4	The capital cost Rs8.72 Crores and annual recurring cost Rs1.93 Crores towards the	Total capital cost towards the Environmental protection measures is total Rs.89.38 Cr approximately.						
	environmental protection measures shall be earmarked separately. The funds so provided shall not be diverted for any other purpose.	Annual recurring cost towards the environmental protection measures for the period starting from April- 2021 to September-2021 is earmarked as below						
		1. Air Pollution Control Device Maintenance Cost: Rs.414.98 Lac						
		2. House Keeping and Vacuum sweeping machine m/c: Rs.122.33 lac						
		3. Environmental Monitoring & equipment m/c: Rs.4.93 lac						
		4. Plantation: Rs.4.09 lac						
		5. STP: Rs.14.28 lac						
		Total cost is Rs.0.56 Cr. Approximately.						
5	The company shall adopt the system of reporting of non-compliances/ infringements to the Board of Directors once in six months and at the time of any incidence.	Company has a well-established Corporate Environmental Policy. Environment, Social and Governance Committee (ESG) committee review all the environment compliances. All the issues of environment are being discussed in the committee and MOM of the same is enclosed as Annexure – 3.						

MINUTES OF THE MEETING OF THE ENVIRONMENT, SOCIAL & GOVERNANCE (ESG) COMMITTEE HELD ON 8<sup>TH</sup> APRIL, 2021 AT CONFERENCE ROOM, BANGUR NAGAR, BEAWAR

#### **MEMBERS PRESENT**

- 1. Shri P.N. Chhangani, Whole Time Director
- 2. Shri Sanjay Mehta, President (Commercial)
- 3. Shri Arvind Khicha, Jt. President (Commercial)
- 4. Shri M.M. Rathi, Sr. Vice President (Power Plant)
- 5. Shri Dr. Anil Kumar Trivedi, Sr. General Manager (Environment)
- 6. Shri K.K. Jain, Vice President (Accounts)
- 7. Shri S.S. Khandelwal, Company Secretary

#### INVITEES

- 1. Shri P.K. Bhardwaj, Vice President, P&A, Ras
- 2. Shri M.K. Garg, Asst. Vice President (Mines)
- 3. Shri Pankaj Agarwal, Asst. Vice President (Mines)
- 4. Shri Vivek Sharan, General Manager (Safety)

The meeting was attended by the members through Video Conferencing. Shri P.N. Chhangani, Whole Time Director was elected as Chairman of the Committee.

#### **1. TO GRANT LEAVE OF ABSENCE**

All the Committee members were present during the meeting. Hence, no leave of absence was granted.

#### 2. TO TAKE NOTE OF THE PREVIOUS MEETINGS OF THE ESG COMMITTEE

The minutes of the meetings of the ESG Committee held on  $24^{th}$  April, 2020 were placed before the Committee.

The committee reviewed and took note of the same.

#### **3.** ENVIRONMENTAL ISSUES

The following points were deliberated and reviewed by the Committee on Company's performance in the area of Environment Management:

#### A. TO REVIEW LEVELS OF POLLUTION MAINTAINED BY THE COMPANY

It was informed to the Committee that the pollution levels maintained by the Company at its various sites for the year 2020-21 were within the permissible limits. The annual average of actual pollution level and its comparison with permissible limits were as under:

#### SITE-WISE STACK EMISSION LEVEL

#### (a) Beawar, Ras, Raipur and Kodla

I. Stack Emission Level (Particulate Matter Mg/Nm<sup>3</sup>)

Source	Bea	awar (Un	its)					Ra	s (Units	)						Raipur		Ко	dla
	Norms	Η	=	Norms	ш	IV	v	VI	VII	VIII	іх	x	RNCU- 1	RNC U-2	Norms	-	П	Norm	Actu al
Raw Mill & Kiln	30	12.9	13.4	30	15.6	17.0	10.2	19.1	15.8	15.4	22.1	19.2	-	-	30	7.63	12.07	30	14.01
Coal Mill	30	9.2	8.5	30	13.5	16.3	18.4	15.6	14.4	15.8	15.2	17.7	-	-	30	12.53	13.83	30	17.38
Clinker Cooler	30	9.6	15.4	30	13.7	6.1	17.0	9.5	11.8	9.9	11.5	13.5	-	-	30	8.97	9.86	30	13.08
Cement Mill	30	12.1	12.9	30	17.6	17.4	-	-	-	-	-	-	15.6	17.0	30	13.28	-	30	15.48

#### II. Stack Emission Level Cement Plant (Flue Gas - Mg/Nm<sup>3</sup>)

Source		Beawar (Units) Ras (Units)										Raipur			Kodla					
	Norms	I	Norms	II	Norm	ш	IV	v	VI	VII	VIII	IX	x	RNCU- 1	RNCU-2	Norm	I	II	Norm	Actual
Raw Mill & Kiln	NOx (800)	298.3	NOx (1000)	317.4	NOx (800)	438	433	444	467	350	380	446	429	-	-	NOx (600)	313.97	389.73	600	552.37
	SO2 (100)	12.2	SO2 (100)	9.8	SO2 (100)	16	16	16	10	21	17	14	10	-	-	SO2 (100)	0.84	4.68	100	0.9

III. Stack Emission Level Power Plant (PM & Flue Gas in mg/Nm3)

			Beawar (Un	its)			Ras (Un	its)		Raipur (Units)		
Source	Norm	B-1(150 MW)	B-II (150 MW)	Norm	P-44 MW (B-I & II)	Norm	Boiler 2 & 3	Boiler 4 & 5	Boiler 6 & 7	Norm	CPP (mg/ Nm3)	
	PM-50 mg/Nm3	11.27	16.8	PM-100 mg/Nm3	19.4	PM (50 mg/Nm <sup>3</sup> )	27.8	33.5	36.3	PM (50 mg/Nm <sup>3</sup> )	31.09	
Power Plant	NO2-450 mg/Nm3	90.4	110	NO2-600 mg/Nm3	145.8	NOx (300 mg/Nm <sup>3</sup> )	115	159	109	NOx (300 mg/Nm <sup>3</sup> )	121.86	
	SO2- 600 mg/Nm3	154.5	186	SO2- 600 mg/Nm3	202	SO2 (600 mg/Nm <sup>3</sup> )	56	50	54	SO2 (600 mg/Nm <sup>3</sup> )	213.78	

#### (b) Grinding Units - Stack Emission Level (Particulate Matter mg/Nm<sup>3</sup>)

Source	Norms	K'khera	S'G	arh	Jobner	Roorkee	Bihar	UP	Panipat	Jhark	hand
			SGU	BCU							
Cement mill-I	30	17.5	20.98	21.67	14	22	17	21	19.4	20	8.94
Cement mill-II	30	13.3	-	-	-	-	20	-	-	-	-

#### SITE WISE AMBIENT AIR QUALITY LEVEL

Bea	awar:						ln j	µg/M³		
Sn	Monitoring Station	PM	10	PN	/ 2.5	SO <sub>2</sub>	Limit	NOx Limit		
		Limit	Actual	Limit	Actual	Limit	Actual	Limit	Actual	
1	Boundary near village	60	52	40	26	50	7	40	10	
2	Boundary near Power plant	60	48	40	28	50	9	40	10	
3	Residential colony	60	42	40	26	50	7	40	10	
4	Main Gate	60	46	40	27	50	8	40	11	

R	AS:								
Sn	Monitoring Station	PM	10	PN	1 2.5	SO	2 Limit	NOx Limi	t
		Limit	Actual	Limit	Actual	Limit	Actual	Limit	Actual
1	Plant boundary near Main Gate	60	38	40	26	50	12	40	15
2	Plant boundary near Mess	60	38	40	24	50	13	40	15
3	Plant boundary towards Stacker & Reclaimer	60	36	40	24	50	12	40	15
4	Plant boundary towards village- Khera & Jawangarh	60	38	40	24	50	12	40	14

R	aipur:	-						-		
Sn	Monitoring Station	PN	И 10	PIV	12.5	SO <sub>2</sub>	Limit	NOx Limit		
		Limit	Actual	Limit	Actual	Limit	Actual	Limit	Actual	
	AAQMS 1 (Mines boundary	60	49	40	25	50	12	40	10	
1	towards village Bharuwadih)									
	AAQMS 2 (Mines boundary	60	36	40	17	50	11	40	8	
2	towards villageSemradih)	00	50	40	17	50		-0	0	
	AAQMS 3 (Plant Boundary	60	48	40	25	50	13	40	10	
3	towards South Direction)	00	40	40	25	50	15	40	10	
	AAQMS 4 (Plant Boundary	60	46	40	24	50	8	40	7	
4	towards village Khapradih)	00	40	40	24	50	0	40	/	

K	odla								
Sn	Monitoring Station	PM 10		PIV	1 2.5	SO <sub>2</sub>	Limit	NOx Lim	it
		Limit	Actual	Limit	Actual	Limit	Actual	Limit	Actual
	AAQMS 1 (Near west plant	60	49	40	28	50	13	40	15
1	and mine boundary)	00	64	40	20	50	15	40	15
	AAQMS 2 (Near East plant and	60	47	40	24	50	12	40	14
2	mines boundary)	00	47	40	24	50	12	40	14
	AAQMS 3 (Near North side	60	43	40	25	50	12	40	15
3	plant boundary wall)	00	45	40	25	50	12	40	12
	AAQMS 4 (Near South Mine	60	35	40	15	50	10	40	12
4	boundary)	00	35	40	13	30	10	40	12

Job	ner:									
Sn	Monitoring Station	PM 10		PN	PM 2.5		Limit	NOx Lim	it	
		Limit	Actual	Limit	Actual	Limit	Actual	Limit	Actual	
1	Plant boundary towards CCR	60	45	40	25	50	8	40	11	
2	Plant Boundary towards electrical switchyard	60	50	40	30	50	10	40	13	
3	Plant boundary towards rain water collection pond	60	45	40	27	50	8	40	11	

#### Jharkhand:

.. ..

Sn	Monitoring Station	PM 10		PN	1 2.5	SO₂ Limit		NOx Lim	it
		Limit	Actual	Limit	Actual	Limit	Actual	Limit	Actual
1	Boundary near Logistic Buildings	60	56	40	36	50	11	40	20
2	Boundary near Wagon Tippler	60	55	40	34	50	10	40	19
3	Boundary near RWHP	60	54	40	30	50	11	40	20
4	Boundary near Railway Siding	60	50	40	32	50	10	40	23

#### Khushkhera

S	Monitoring Station	PM	10	PM	2.5	SO <sub>2</sub>	Limit		
Ν		Limit	Results	Limit	Results	Limit	Results	Limit	Results
1	Plant boundary towards Arjun Road	60 μg/M3	47	40 µg/M3	29	50 μg/M3	19.3	40 µg/M3	28
2	Plant boundary towards Dharuheda Road	60 μg/M3	53	40 µg/M3	35	50 μg/M3	19.2	40 µg/M3	28
3	Plant boundary towards Khushkhera Village	60 μg/M3	50	40 µg/M3	33	50 μg/M3	19.7	40 µg/M3	29

	Panipat								
Sn.	Monitoring Station	PM	10	PM	2.5	SO <sub>2</sub>	Level NOx Leve		
		Limit	Results	Limit	Results	Limit	Results	Limit	Results
1	Near Admin Block (Main Gate)	60 µg/M3	52	40 µg/M3	34	50 μg/M3	22.4	40 µg/M3	31
2	Near Packing Plant	60 µg/M3	53	40 µg/M3	33	50 μg/M3	21.8	40 µg/M3	30
3	Near Field Hostel	60 µg/M3	43	40 µg/M3	29	50 μg/M3	20.7	40 µg/M3	29

#### UPGU

Sn.	Monitoring Station	PN	110	PM	2.5	SO <sub>2</sub>	Limit	NOx Limit	
		Limit	Results	Limit	Results	Limit	Results	Limit	Results
1	Plant boundary near Main gate area	60 μg/m3	58	40 μg/m3	39	50 μg/m3	11	40 µg/m3	21
2	Plant boundary towards Raja Rampur village	60 µg/m3	56	40 μg/m3	38	50 μg/m3	11	40 μg/m3	19
3	Plant boundary towards CCR Building	60 μg/m3	58	40 μg/m3	40	50 μg/m3	12	40 μg/m3	20
4.	Plant boundary near P&A office	60 µg/m3	57	40 μg/m3	37	50 μg/m3	12	40 μg/m3	20

#### Suratgarh:

Sn	Monitoring Station	PM 10 PM 2.5		/1 2.5	SO <sub>2</sub>	SO <sub>2</sub> Limit		it	
		Limit	Actual	Limit	Actual	Limit	Actual	Limit	Actual
1	Plant boundary toward truck parking area	60	52	40	32	50	11.8	40	14
2	Plant boundary behind CCR building.	60	53	40	32	50	12.6	40	14
3	Plant boundary towards Udepur village.	60	53	40	30	50	13.8	40	14

#### Roorkee

Sn	Monitoring	PM	10	PN	1 2.5	SO <sub>2</sub>	SO <sub>2</sub> Limit NOx Limit		
	Station	Limit	Actual	Limit	Actual	Limit	Actual	Limit	Actual
		Annual		Annual		Annual		Annual	
	Plant Boundary	60	49	40 μg/M3	32	50 μg/M3	12	40 µg/M3	13
1	Near Main Gate	μg/M3	49	40 µg/1vi5	52	50 µg/1v15	12	40 µg/1015	15
	Plant Boundary	60 μg/M3	46	40 μg/M3	31	50 μg/M3	12	40 µg/M3	12
2	Near CCR Building	ου μg/1vi5	40	40 µg/1vi5	51	50 µg/1015	12	40 µg/1015	12
	Plant Boundary	60 μg/M3	52	40 μg/M3	34	50 μg/M3	16	40 µg/M3	17
3	Near Diesel Pump	ου μg/1013	52	40 µg/1013	54	50 µg/1013	10	40 µg/1013	1/
0			10.43						

Remark: All values are annual average in  $\mu g/M^3$ 

	Bihar								
Sn	Monitoring Station	PM	PM 10		2.5	SO <sub>2</sub>	Limit	NOx Lim	it
		Limit	Actual	Limit	Actual	Limit	Actual	Limit	Actual
1	Boundary near Hostel building	60	53	40	28	50	7	40	19
2	Residential colony	60	49	40	28	50	5	40	16
3	Main Gate	60	53	40	30	50	8	40	22

The Committee discussed the matter and took note of the same.

# B. TO REVIEW AND DELIBERATE ON INSTANCES OF ANY PERILS / HAZARDS OCCURRED ON ACCOUNT OF POLLUTION LEVELS AND WASTES GENERATED DURING THE PROCESSES

It was informed that there were no instances of any perils or hazards on account of pollution levels and wastes generated by the company.

#### C. TO REVIEW AND DELIBERATE ON THE PLANTATION ACTIVITIES UNDERTAKEN BY COMPANY

It was informed that the Company has undertaken planting of trees as an important exercise which is reflected in the number of plants and saplings planted during the year. The details of plantation activities for the 2020-21 were placed before the Committee as under:

Details	Bea- war	Ras	Raipur	K'khera	S'Garh	Jobner	Roo- rkee	Bihar	Pani-	UP	Kodla	Jhark- hand	Total
No. of plants implanted	3996	150	21000	325	1106	444	300	5000	354	1790	18487	8500	61452
No. of Plants survived	3596	130	17540	297	931	400	285	4384	312	1352	15982	7350	52559
% of Survival	90%	87%	84%	91%	84%	90%	95%	88%	88%	76%	86%	86%	86%

The Committee discussed the matter and took note of the same.

# D. TO TAKE NOTE OF THE ACTIVITIES / INITIATIVES UNDERTAKEN IN THE FIELD OF ENVIRONMENT CLEANLINESS AND WATER CONSERVATION

It was informed to the Committee that Company is constantly making its efforts for environment cleanliness and water conservation in its plants operations. The following initiatives were undertaken by the Company in the field of environment cleanliness and water conservation during the year 2020-21:

-	
Beawar &	Construction of rainwater harvesting structures, rooftop harvesting, cleaning and
Ras	maintenance work inside and outside plant premises ponds and anicuts.
	Various Hazardous wastes are co-processed for gainful utilization
	• Indigenous species have been planted at plant and running mines area.
	• Online Digital Water Level Recorder (DWLR) with telemetry systems have been
	installed for continuous level monitoring of ground water.
	• Online digital water flow meter has been installed at all ground water abstraction
	structures.
	• Sprinklers are installed at mines for controlling of fugitive & road emissions.
	<ul> <li>Human occupied sensor lights have been installed at offices for energy saving.</li> </ul>
	<ul> <li>Water Audit has been carried out by FICCI</li> </ul>
Raipur	Constructed Rain Water Harvesting Ponds
naipai	<ul> <li>Use of Mines pit water for colony domestic purpose.</li> </ul>
	<ul> <li>Water Audit has been carried out by FICCI</li> </ul>
Kodla	
Koula	Water harvesting reservoir has been constructed within plant area.
	Water spray on haul road for dust control.
	Piezometers constructed in plant & mines area for water level measurement.
	• Installed closed conveyor system from mines to plant for transfer of raw material to
	reduce fugitive emissions.
Grinding	• Digital Water Level Recorder (DWLR) with telemetry system has been installed at
Units	piezometer well to monitor the water level.
	• Conservation of electrical energy through optimization of bore well pump operation.
	• Constructed raw material covered sheds for coal and gypsum storage to avoid fugitive
	emission.
	• Separation of drinking water line and plantation line to save water consumption.
	Decomposition of canteen waste and bio fertilizer used in plantation.

Developed new recharge structures to recharge ground water.
• Sprinklers are installed at plant area & all truck movement's area to save the wate
consumption as well controlling of fugitive & road emissions.
Constructed a big size RWH Structure at Budhi Bawal Gaushala to recharge groun
water

The Committee discussed the initiatives undertaken by the Company and took note of the same.

#### E. TO REVIEW AND DELIBERATE ON STEPS TAKEN TOWARDS ENERGY CONSERVATION

Focus on renewable energy continues to remain a thrust area in our sustainability agenda. This has helped Company in conserving precious natural resources, mitigating GHG emissions and controlling fugitive emission. Over the years, the Company has been steadily ramping up its power generation capacity from renewable sources spanning across Waste Heat Recovery (WHR), Solar and Wind power plants. The Company continues to have largest WHRP capacity in World Cement Industry excluding China. This apart, in terms of operational efficiency of WHRP, Company is regarded as one of the best in the industry. Its total Renewable Power (Green Power) Capacity stood at 255 MW.

Steps taken towards energy conservation and energy efficiency of Cement and Power plants during the year 2020-21 were as under:

#### (a) Steps taken for conversation of Energy

- Installed VFDs on the upper and lower and main pfister blowers to control coal firing
- Replacement of old pumps with energy efficient new pumps
- Interconnection between bag house inlet ducts
- Reduced interlocking timing of raw mill main drive
- Replaced Cement Ball Mill classifier with energy efficient classifier
- Installation of Solar and LED lights at various locations.
- Increase in coal mill bag house height.
- Modification in Raw Mill and Coal Mill to introduce higher capacity classifier
- Installation of new boiler feed pump in WHRP to improve the pump efficiency
- Installation of higher size pulley in fan to reduce speed for auxiliary power consumption
- Modification in suction duct of Boiler fans for efficiency improvement.
- Air preheater tubes cleaning by hrdrojet and tubes replacement
- Air ingressment reduction in Preheater waste heat recovery boilers.
- PH Boilers pneumatic conveying replacement by mechanical conveyor to reduce auxiliary power consumption
- Pump impeller trimming for auxiliary power saving.
- Addition of cells in air cooled condensers
- Installation of spray system at air cooled condenser
- Installation of new efficient steam turbine
- Installation of new efficient air compressor to reduce auxiliary power consumption.
- Increase in height of pyro to increase the heat transfer rate.
- Increase in kiln hood duct area to reduce the dust losses.

#### (b) Steps taken for utilizing alternate sources of energy

- Installed Renewable Energy Power Plants at various plant locations.
- Established waste heat recovery based power plants for generation of power through Waste heat recovery system.
- Installation of AFR feeding system in kiln and cement mill.
- AFR discharge chute modification for maximum utilization of heat.
- Use of industrial waste.

The Committee reviewed and took note of the same.

# F. TO REVIEW AND DELIBERATE ON USE OF ALTERNATE FUEL AND RAW MATERIALS IN OPERATIONS OF THE COMPANY

It was informed to the Committee that Company has continued its focus on utilizing alternate fuels to conserve the natural resources. Company is utilizing High CV and low CV solvents/ Liquid wastes from Pharma/ Chemical Industries, Spent carbon and Spent clay, oil sludge, sludge of common effluent plants (Alternate of Laterite), Oil well waste and industrial waste (Alternative of Fossil Fuel). Company is also utilizing Synthetic Gypsum being produced captively, which has replaced the consumption of Mineral Gypsum. Company has been making constant efforts to enhance proportion of PPC and PSC in its overall production so as to increase usage of fly ash and GBF Slag and thereby, reduce use of clinker to save limestone and coal.

The Committee discussed and took note of the same.

# G. TO REVIEW AND DELIBERATE ON MECHANISM TO IDENTIFY AND ASSESS POTENTIAL ENVIRONMENTAL RISKS AND POLICY ON ENVIRONMENT MANAGEMENT

It was informed to the Committee that there is system in place to identify existing and potential risks and to take action to mitigate such risks as also to look at opportunities inherent in those risks. Regular auditing and assessment of its environment management system is undertaken by internal and external agencies. Further as a requirement of issuing Corporate Sustainability Report (CSR), which company regularly issues on annual basis, Company undertakes external party assurance for its practices with respect to environment, energy, safety, HR, etc. Company regularly monitors its performance in the area of environment pollution and reports data on environment management to the State Pollution Control Board and Central Pollution Control Board.

The Committee discussed the Environment Management System and took note of the same.

#### H. TO REVIEW THE PERFORMANCE OF THE COMPANY AGAINST PAT SCHEME

It was informed to the Committee that As part of Perform, Achieve & Trade (PAT) Scheme of the Govt. of India, Company has overachieved its target (set under PAT Cycle I, 2012-15) of reducing its energy consumption and as a result Ministry has issued 86,117 (Nos) Energy saving certificates for Beawar and 72,140 (Nos) of Energy saving certificates (ESCerts) for Ras site. Company was also awarded the 'Best Performer' award for energy saving under PAT Cycle I by Bureau of Energy Efficiency (BEE) for the Beawar and Ras units.

ESCerts are traded at Indian Energy Exchange (IEX). The ESCert market at IEX saw price variation from Rs. 200 per ESCert to maximum of Rs.1200 per ESCert. Company has used 1050 ESCerts by selling on IEX at average price of Rs. 1010 per ESCert.

PAT cycle II period was FY 2016-2019. Company's 300 MW Power Plant (SMP) has also been included for the PAT cycle II. The energy saving target for Beawar is 3.74% and for Ras is 4.18% under PAT Scheme Cycle II. For SMP, the existing energy consumption level is required to be maintained. FY 2018-19 is the Assessment year for PAT II. Monitoring & Verification Audit for PAT cycle II is done. Company has overachieved its target in PAT II also as a result Company is entitled to claim 22041(Nos) Energy saving certificates for Beawar and 60636 (Nos) of Energy saving certificates (ESCerts) for Ras site and 22917(Nos) of Energy saving certificates (ESCerts) for SMP site . Issuance of ESCerts is pending from Ministry of power.

Shree Raipur Cement Plant is included in PAT III (FY: 2017-20), Baseline is 2015-16 & AY is 2019-20. Baseline Audit for data verification of the same is done in Jan 2018. Target for SRCP is 4.55 %. The Monitoring & Verification Audit for PAT cycle III is completed and company has overachieved its target and is entitled to claim 12623 (Nos) of ESCerts.

Shree Cement's 6 Nos of grinding units (RGU ,KKGU JGU, PGU, UPGU, BGU ) have also been notified in PAT - VI (Baseline FY 2018-19 & Target Year is FY 2022-23). The target for GUs in PAT -VI are 3.19 % ,3.81 %, 3.77 %, 4.17 %, 4.72 % & 5.19 % respectively.

The Committee discussed the matter and deliberated upon implementing various measures to further improve the performance.

#### I. TO TAKE NOTE OF ISSUANCE OF 16<sup>TH</sup> SUSTAINABILITY REPORT

It was informed to the Committee that Company has released its 16th annual Corporate Sustainability Report for the reporting period 2019-20 titled "Innovative to Survive and Collaborative to Thrive". Company has been advocating its policies and procedures and is proactive in showcasing its unique practices at the global platform. Company has built a strong collaborative approach with its partners such as suppliers, customers, vendors, and many other participating bodies. The said report was prepared in accordance with the "GRI Standards – Comprehensive Option" and assured by an independent certifying agency.

The Committee discussed and took note of the same.

# J. TO REVIEW AND DELIBERATE THE COMPLIANCES OF APPLICABLE ENVIRONMENTAL LAWS AND REGULATIONS AND ANY SHOW CAUSE NOTICE ISSUED BY CENTRAL/STATE POLLUTION BOARD

It was informed to the committee that there is a system wherein every Deptt head/Functional Head responsible for specific function sends a monthly certificate to the Company Secretary certifying compliance of laws and regulations related to that function. Based on this, a certificate is submitted to the Board of Directors stating compliance with all relevant laws and regulations by the company on quarterly basis. With regard to Environment the various laws and its responsibility matrix is as below:-

1Air (Prevention and Control of Pollution) Act, 1981Shri Vinay Saxena (for Unit I & II- Beawar)2Water (Prevention and Control of Pollution) Act, 1974Shri Vinay Saxena (for Unit I & II- Beawar)3Water (Prevention and Control of Pollution) Cess Act, 1977Shri Satish Maheshwari (Unit III- VIII)4Environment Protection Act, 1986Shri Sanjay Jain (Unit IX,X and RNCU)5.Lead Acid Batteries (Management and Handling) Rules, 2000 and 2010Shri K.L. Mahajan (For all existing Northern grinding units including AAC plant i.e. except Bihar, Jharkhand, Raipur and Odisha Units)7.Any other Rules, Regulations and Notifications related to their functional responsibility.Shri R.K. Vijay (For Raipur cement plants and Bihar, Jharkhand and Odisha Grinding Units)8.Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)Shri Arvind Kumar Patil (For Kodla Cement Plant & Pune Grinding Unit)9.Overall compliance management (including new project)Shri Anil Kumar Trivedi and Shri Anil Jain			
3       Water (Prevention and Control of Pollution) Cess Act, 1977         4       Environment Protection Act, 1986         5.       Lead Acid Batteries (Management and Handling) Rules, 2000 and 2010         6.       Bio-Medical Waste (Management and Handling) Rules         7.       Any other Rules, Regulations and Notifications related to their functional responsibility.         8.       Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)         8.       Compliance of Alternative Fuel (Industrial Waste)         9.       Overall compliance management (including new	1	Air (Prevention and Control of Pollution) Act, 1981	Shri Vinay Saxena (for Unit I & II- Beawar)
19774Environment Protection Act, 19865.Lead Acid Batteries (Management and Handling) Rules, 2000 and 20106.Bio-Medical Waste (Management and Handling) Rules7.Any other Rules, Regulations and Notifications related to their functional responsibility.8.Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)9.Overall compliance management (including new	2	Water (Prevention and Control of Pollution) Act, 1974	
4Environment Protection Act, 1986Shri Sanjay Jain (Unit IX,X and RNCU)5.Lead Acid Batteries (Management and Handling) Rules, 2000 and 2010Shri K.L. Mahajan (For all existing Northern grinding units including AAC plant i.e. except Bihar, Jharkhand, Raipur and Odisha Units)6.Bio-Medical Waste (Management and Handling) RulesShri K.L. Mahajan (For all existing Northern grinding units including AAC plant i.e. except Bihar, Jharkhand, Raipur and Odisha Units)7.Any other Rules, Regulations and Notifications related to their functional responsibility.Shri R.K. Vijay (For Raipur cement plants and Bihar, Jharkhand and Odisha Grinding Units)8.Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)Shri Arvind Kumar Patil (For Kodla Cement Plant & Pune Grinding Unit)9.Overall compliance management (including newShri Anil Kumar Trivedi and Shri Anil Jain	3	Water (Prevention and Control of Pollution) Cess Act,	Shri Satish Maheshwari (Unit III- VIII)
5.       Lead Acid Batteries (Management and Handling) Rules, 2000 and 2010       Shri K.L. Mahajan (For all existing Northern grinding units including AAC plant i.e. except Bihar, Jharkhand, Raipur and Odisha Units)         7.       Any other Rules, Regulations and Notifications related to their functional responsibility.       Shri R.K. Vijay (For Raipur cement plants and Bihar, Jharkhand and Odisha Grinding Units)         8.       Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)       Shri Arvind Kumar Patil (For Kodla Cement Plant & Pune Grinding Unit)         9.       Overall compliance management (including new       Shri Anil Kumar Trivedi and Shri Anil Jain		1977	
Rules, 2000 and 2010Shri K.L. Mahajan (For all existing Northern grinding units including AAC plant i.e. except Bihar, Jharkhand, Raipur and Odisha Units)7.Any other Rules, Regulations and Notifications related to their functional responsibility.Shri K.L. Mahajan (For all existing Northern grinding units including AAC plant i.e. except Bihar, Jharkhand, Raipur and Odisha Units)8.Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)Shri Arvind Kumar Patil (For Kodla Cement Plant & Pune Grinding Unit)9.Overall compliance management (including newShri Anil Kumar Trivedi and Shri Anil Jain	4	Environment Protection Act, 1986	Shri Sanjay Jain (Unit IX,X and RNCU)
6.Bio-Medical Waste (Management and Handling) Rulesgrinding units including AAC plant i.e. except Bihar, Jharkhand, Raipur and Odisha Units)7.Any other Rules, Regulations and Notifications related to their functional responsibility.Shri R.K. Vijay (For Raipur cement plants and Bihar, Jharkhand and Odisha Grinding Units)8.Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)Shri Arvind Kumar Patil (For Kodla Cement Plant & Pune Grinding Unit)9.Overall compliance management (including newShri Anil Kumar Trivedi and Shri Anil Jain	5.	Lead Acid Batteries (Management and Handling)	
0.       Dio Michael Waste (Management and Hahamg)         Rules       Bihar, Jharkhand, Raipur and Odisha Units)         7.       Any other Rules, Regulations and Notifications related to their functional responsibility.         8.       Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)         Shri Arvind Kumar Patil (For Kodla Cement Plant & Pune Grinding Units)         Shri Arvind Kumar Patil (For Kodla Cement Plant & Pune Grinding Unit)         All power plants of the Company including GPPs, Wind & Solar – Shri M.M. Rathi         9.       Overall compliance management (including new		Rules, 2000 and 2010	Shri K.L. Mahajan (For all existing Northern
7.       Any other Rules, Regulations and Notifications related to their functional responsibility.       Shri R.K. Vijay (For Raipur cement plants and Bihar, Jharkhand and Odisha Grinding Units)         8.       Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)       Shri Arvind Kumar Patil (For Kodla Cement Plant & Pune Grinding Unit)         9.       Overall compliance management (including new       Shri Anil Kumar Trivedi and Shri Anil Jain	6.	Bio-Medical Waste (Management and Handling)	grinding units including AAC plant i.e. except
related to their functional responsibility.Shri R.K. Vijay (For Raipur cement plants and Bihar, Jharkhand and Odisha Grinding Units)8.Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)Shri Arvind Kumar Patil (For Kodla Cement Plant & Pune Grinding Unit)9.Overall compliance management (including newShri Anil Kumar Trivedi and Shri Anil Jain		Rules	Bihar, Jharkhand, Raipur and Odisha Units)
8.       Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)       Bihar, Jharkhand and Odisha Grinding Units)         8.       Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)       Bihar, Jharkhand and Odisha Grinding Units)         9.       Overall compliance management (including new       Shri Arvind Kumar Trivedi and Shri Anil Jain	7.	Any other Rules, Regulations and Notifications	
8.       Compliance of regulatory requirements for transportation and use of Alternative Fuel (Industrial Waste)       Shri Arvind Kumar Patil (For Kodla Cement Plant & Pune Grinding Unit)         9.       Overall compliance management (including new       Shri Anil Kumar Trivedi and Shri Anil Jain		related to their functional responsibility.	Shri R.K. Vijay (For Raipur cement plants and
Waste)       Shri Arvind Kumar Patil (For Kodla Cement Plant & Pune Grinding Unit)         All power plants of the Company including GPPs, Wind & Solar – Shri M.M. Rathi         9.       Overall compliance management (including new    Shri Anil Kumar Trivedi and Shri Anil Jain	8.	Compliance of regulatory requirements for	Bihar, Jharkhand and Odisha Grinding Units)
<ul> <li>&amp; Pune Grinding Unit)</li> <li>All power plants of the Company including GPPs, Wind &amp; Solar – Shri M.M. Rathi</li> <li>9. Overall compliance management (including new</li> <li>Shri Anil Kumar Trivedi and Shri Anil Jain</li> </ul>		transportation and use of Alternative Fuel (Industrial	
All power plants of the Company including GPPs, Wind & Solar – Shri M.M. Rathi         9.       Overall compliance management (including new    Shri Anil Kumar Trivedi and Shri Anil Jain		Waste)	
GPPs, Wind & Solar – Shri M.M. Rathi           9.         Overall compliance management (including new           Shri Anil Kumar Trivedi and Shri Anil Jain			& Pune Grinding Unit)
GPPs, Wind & Solar – Shri M.M. Rathi           9.         Overall compliance management (including new           Shri Anil Kumar Trivedi and Shri Anil Jain			
9. Overall compliance management (including new Shri Anil Kumar Trivedi and Shri Anil Jain			
			GPPs, Wind & Solar – Shri M.M. Rathi
projects)	9.	Overall compliance management (including new	Shri Anil Kumar Trivedi and Shri Anil Jain
projects		projects)	

During the year there was no notice issued to the Company with regard to pollution level impacting the operations of the Company.

The Committee took note of the same.

#### 4. SOCIAL ISSUES

Following Social issues were deliberated by the Committee during the meeting:

# A. TO REVIEW AND DELIBERATE ON ACTIVITIES UNDERTAKEN TOWARDS OCCUPATIONAL HEALTH AND SAFETY SYSTEM.

Company continued to put focus on ensuring a safe and healthy work place at its manufacturing locations and all offices. The 'Safety Department' manned by people experienced in safety practices, is focussed on building a Safety Culture across the organization. It was informed to the committee that various safety initiatives undertaken by the Company are reported to the Board on quarterly basis. The details of Safety programs organized by the Company and persons who participated in the said programs during the year 2020-21 were as under:

Р	articulars	Beawar	Ras	Raipur	Kodla	GU's	Total
Staff Safety	a) No. of Programs	15	11	9	24	44	103
Training	b) No. of Participants	627	462	392	349	470	2299
Contract	a) No. of Programs	47	16	92	2	420	577
Workers Safety Training	b) No. of Participants	912	261	2648	39	5539	9399
Safety Induction Training	No. of Participants	1653	11933	4434	3191	2505	23715
Truck Driver	a) No. of Programs	26	28	1	2	62	119
Training	b) No. of Participants	267	201	45	22	926	1461
Tool Box	a) No. of Programs	731	4346	162	307	2473	8019
Talks	b) No. of Participants	7450	22792	3505	7136	35633	74516
No. of Joint Safety Audits Conducted		36	35	4	168	228	471
No. of Mock Drill Conducted		3	4	3	4	22	36
Safety Inspections by Safety Department		40	210	105	368	560	1273

Most of the training programmes were conducted virtually due to covid-19 pandemic. The safety initiatives undertaken by the company during the year 2020-21 including accidents occurred during the year were discussed by the Committee in detail. Necessary measures required for further improvement in this regard were also discussed.

#### B. TO REVIEW AND DELIBERATE ON INITIATIVES TOWARDS EMPLOYEES WELL BEING

It was informed to the committee that the Company considers employee wellbeing and continuous skill upgradation as key to its sustainable growth. Company has conducted programmes on holistic health and wellness, staying fit at home, mental health, yoga by industry experts. The in-house coach also conducted virtual exercise classes encouraging people to stay fit during these tough times. Our efforts were recognised when Company was the recognised as a winner in the Health and Wellness category by Society of Human Resource Management, India.

Company has a policy on Human resource which among other things, ensures:

- No deployment of child labour or forced labour
- Providing of a congenial but challenging work place which attracts best talent
- makes no discrimination in recruitment and training of employees

It was informed that there were no complaints received during year 2020-21 regarding Child/ forced/involuntary labour and Discriminatory employment.

Company provides a congenial work atmosphere where every employee enjoys while working in the Company. It works on creating people practices which makes it the best place to work for everyone.

The Committee discussed the matter and took note of the same.

#### C. POLICY ON PREVENTION, PROHIBITION AND REDRESSAL OF SEXUAL HARASSMENT AT WORKPLACE

The Company has adopted a Policy on Prevention, Prohibition and Redressal of Sexual Harassment at the Workplace, in line with the provisions of the "Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013" and the Rules there under. Company has formed an "Internal Complaints Committee" for prevention and redressal of sexual harassment at workplace. The committee is having 5 members and is chaired by a senior women member of the organization. The composition of the Committee is as under:

- 1. Ms. Preeti James, Chairperson, Doctor in Shree Medical Service
- 2. Ms. Deepika Jain, Member, Sr. Manager, Commercial
- 3. Shri Bhawani Singh, Member, Asstt. Vice President, Estate Management
- 4. Ms. Poonam Sharma, Sr. Manager, Project Comml.
- 5. Ms. Deepali Lal External Member of NGO (outside member)

Compliance officer has informed that Company has not received any complaint of sexual harassment during the financial year 2020-21.

The Committee took note of the same.

#### D. TO DISCUSS THE CHANGES MADE IN CSR REGULATION BY THE MINISTRY OF CORPORATE AFFAIRS

It was informer to the Committee that, Ministry of Corporate Affairs has made amendments in Section 135 of the Companies Act, 2013 and its Rules vide notification dated 22<sup>nd</sup> January, 2021. The key changes made are as under:

SN	Particulars	Amendment
1	Applicability	The Amendment Rules are applicable w.e.f. from 22.1.2021
2	Activities not to be	The following activities are specifically disallowed as CSR activities:
	considered as CSR	- Activities undertaken in pursuance of normal course of business of the
	Activities	company
		- any activity undertaken by the company outside India except for training of
		Indian sports personnel representing any State or Union territory at national
		level or India at international level
		- contribution of any amount directly or indirectly to any political party;
		- activities benefitting employees of the company as defined in clause (k) of
		section 2 of the Code on Wages, 2019 (29 of 2019);
		- activities supported by the companies on sponsorship basis for deriving
		marketing benefits for its products or services; and
		- activities carried out for fulfilment of any other statutory obligations under any
		law in force in India.
3	Allowed Registered	- Prior to the present amendment, Section 8 Companies, Registered Trusts and
	Trusts & Societies	Societies (either established by the Company or implementing agencies) were
	to undertake the	allowed to carry-out CSR activities. It included 'private trusts' also. Now,
	CSR Activities	through the Amendment, the word "Public" has been inserted before Trusts
		whereby the private trusts have been excluded from eligibility criteria. Further
		such Section 8 companies/trusts/societies are compulsorily required to be
		registered under Income Tax Act (u/s 80G and 12A) which was not there
		earlier.
4	Registration of	Agencies undertaking CSR activities / projects (Registered Trusts/ Section 8
	Section 8 Company	Companies/Societies) are required to get themselves registered on MCA Portal
	& Registered Trust	before 1 <sup>st</sup> April, 2021 to carry-out CSR activities.
	with MCA	
5	Impact Assessment	- Every company having average CSR obligation of ten crore rupees or more in
		the three immediately preceding financial years, shall undertake impact
		assessment, through an independent agency, of their CSR projects (a)
		having outlays of one crore rupees or more, and (b) which have been
		completed not less than one year before undertaking the impact study.
		- The impact assessment reports shall be placed before the Board and shall be
		annexed to the annual report on CSR.
		A Company undertaking impact assessment may book the expenditure incurred
		on impact assessment towards Corporate Social Responsibility for that financial
		year, which shall not exceed five percent of the total CSR expenditure for that
		financial year or fifty lakh rupees, whichever is less. This is in addition to CSR
		overhead of 5%.
		UVCIIICAU UI 3/0.

SN	Particulars	Amendment				
6	Excess expenses to be adjusted in subsequent years	Where a company spends an amount in excess of requirement, such excess amount may be set off against the CSR expenditure in immediate succeeding three financial years.				
7	CSR for the purpose of Creation/ acquisition of Capital Assets	The CSR amount may be spent by a company for creation or acquisition of a capital asset, <u>through a</u> company established under section 8 of the Act, or a Registered Public Trust or Registered Society, or beneficiaries of groups of the said CSR project. Company cannot own capital assets created/acquired through use of CSR funds. Any assets already so held will need to be transferred to a Trust/Society/Section 8 Company/Beneficiaries/self-help groups within 180 days from such				
8	Transfer of CSR Fund to unspent CSR Account	commencement of the Rules. The unspent CSR amount (other than ongoing project) and any unspent amount (mentioned below) after 3 years is required to be transferred to funds specified in Schedule VII within a period of 6 months of the expiry of the financial years. [Clean Ganga Fund, prime minister's national relief fund, Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund, any other fund set up by the central govt. for socio economic development and relief and welfare of the schedule caste, tribes, other backward classes, minorities and women.] Any unspent amount of ongoing project (Multi-year CSR Projects) is required to be transferred by the Company within a period of 30 days from the end of the financial year to a Special Account to be opened by the Company in any scheduled Bank namely "Unspent CSR Account" and the same is required to be spent within a period of 3 years from the end of the financial year.				
9	Penalty	In case, company fails to spend the CSR amount/transfer the unspent amount to the specified funds/account, the following penalty would be levied- (a) Company : Max Rs. 1 Crore (b) Every Officer in default: Max. Rs. 2 lac.				

A detailed note was presented before the committee during the meeting. The Committee discussed the matter and took note of the same.

#### E. TO DISCUSS DRAFT AMENDED CSR POLICY INCORPORATING THE CHANGES PURSUANT TO AMENDMENTS MADE BY MINISTRY OF CORPORATE AFFAIRES IN CSR PROVISIONS

In compliance to the amendments made in Section 135 of the Companies Act and CSR Rules, Company has modified the existing CSR Policy of the Company. The draft of amended CSR Policy of the Company was placed before the Committee.

The Committee discussed the draft policy and recommended the same to the CSBR Committee and Board for its approval.

# F. TO REVIEW AND DELIBERATE ON ACTIVITIES UNDERTAKEN IN THE FIELD OF CORPORATE SOCIAL RESPONSIBILITY

The various activities undertaken by the Company towards Corporate Social Responsibility during 2020-21 are detailed below:-

Various activities undertaken by the Company towards discharge of its Corporate Social Responsibility during year 2020–21 are detailed below: –

#### Literacy and Education for the Community

• *Basic infrastructure support* – In order to improve the quality of education in nearby areas, through its dedicated school support programs, Company equips government schools with basic infrastructure facilities like seating arrangements, water & sanitation facilities, furniture, stools, tables & other facilities

and supplements efforts of the State Govt of providing basic education to rural communities. Further additional teachers on honorarium basis have been appointed in Government schools nearby Company's plant areas. From such initiatives undertaken by the Company in vicinity of its Beawar, Ras, Aurangabad, Laksar, Bulandshahr, Baloda Bazar, Kodla, Suratgarh, Khushkhera, Jobner and Panipat manufacturing locations, around 13000 students were benefitted during the year.

Promotion of computer literacy – At Ras site, Company has established three computer literacy centres and conducts Computer literacy programmes for students and villagers. It has collaborated with NIIT foundation through which structured course material, assessment and certificates to student are provided by trainers in the training centres. 147 students were benefited from these trainings during 2020-21. Company has also started conducting RS-CIT (Rajasthan State Certificate on Information Technology) certificate course under which 164 persons were enrolled till date.

- Shree Ki Pathshala:
  - <u>Ras site</u> Company, under its 'Shree Ki Pathshala' project, is running centres for imparting basic education to girls aged between 9 16 years who never attended any school or are drop outs. At Ras site, 197 girls are enrolled with 9 such centres.
  - <u>Beawar site</u>: At Beawar site, under this program, tuition facility is provided to students of nearby community appearing for 10<sup>th</sup> standard exams after school hours. Trained and professional teachers teach English, Science and Mathematics subjects to the students. 202 students were benefitted from four centres run by the Company during year 2020-21.

• *Financial assistance and scholarships to students* – Through its dedicated programs, Company provided support to needy students by providing scholarships and extended financial support to undertake further/ higher studies.

#### Livelihood, Income Generation and support to farmers

• *Skill and knowledge building of farmers of nearby community*— To the farmers in the nearby communities, Company provides training and conducts live demonstration of new farming techniques so as to improve their farming productivity. Exposure visits to nearby Krishi Vigyan Kendra are also organized for expanding knowledge base of the farmers. They are also sensitized about various government schemes e.g. crop insurance, irrigation, etc. and trained to take proper action in the event of extreme weather conditions, insects' attacks, etc. on crops. Around 156 farmers were benefitted from these trainings.

• Distribution of agriculture tools, seeds, etc. to improve farmers productivity–Company provides agriculture tools (like sprayer machine, sprinkler sets, HDPE pipes) to farmers and distributes high quality seeds at subsidized rates for improved yield. Company also provided subsidy on plantation of fruit bearing plants to farmers. Around 560 farmers of nearby communities of Beawar and Ras locations were benefitted from these initiatives. These initiatives helped farmers to increase their productivity and overall income from farming activities.

• Support for livestock management – For improving productivity of livestock which is one of the major sources of livelihood of nearby communities, Company provides fodder seeds to farmers for cultivation and ensuring availability of green fodder for cattle throughout the year. It has given financial assistance for construction of feed manager (*chara kheli*) in individual households to minimize wastage of fodder during cattle feeding. 25 farmers of villages around Beawar and Ras sites were benefitted during the year.

• Training and skill development of masons – Company is providing training to masons to upgrade their professional knowledge about the construction methods and techniques. It gives them an opportunity to learn about the methods of environment friendly usage of cement and other building materials and acquire information about the latest constructing techniques to improve their overall competence.

• Consumer awareness and knowledge building –This apart, Company also organizes visits of its technical teams comprising of civil engineers to consumers' site to create awareness about good construction practices among consumers in using cement in the most efficient manner for extracting maximum benefits and construct long lasting and sustainable structures with optimum resource utilization.

• Industrial training for increasing employability – The Company arranges internship training for students of IITs and IIMs to provide them a structured opportunity to gain practical experience of onsite working. Similarly, vocational trainings were provided to ITI passed students of nearby areas. This enabled the students to integrate knowledge gained through their classroom learning with the competencies made available through actual experience in a professional setting and enhance their employability.

#### Healthcare programs and arranging safe drinking water

• Running Health Management Centres- Company's 24X7 Health Management Centres (HMC) at Beawar, Ras and Baloda Bazar provide primary healthcare services to local communities. These centres are equipped with all facilities to meet primary and emergency medical needs of nearby communities. Ambulance services are also made available from these centres for critical and emergency cases for people of nearby communities.

• Arrangement of mobile health care units at Ras –From mobile health care units of the Company, onthe-spot medical services are provided to patients in extreme interiors where medical facilities are not available. 200 patients of nearby communities were benefitted during the year at Ras location.

• *Mamta Project* – In 'Mamta Project', Company organizes health camps and arranges doctors' visits in the nearby villages of its facilities for medical check-up of pregnant women and new-born children. To promote institutional delivery cases of pregnant women in nearby villages, Company has appointed volunteers (Sakhis) to act as health educators and counselors.

• Shree Swachhta Project – To increase awareness about sanitation and hygiene in daily life, Company has undertaken Swachhta Project wherein initiative of organizing awareness campaigns, distribution of dustbins, slogan writing on walls, schools rallies, celebration of cleanliness weeks, distribution of materials like calendars, diaries having messages about sanitation and hygiene are undertaken.

• Arrangement of drinking water – To maintain minimum supply levels during peak summer season and otherwise augment the water supply in nearby villages, Company constructed public water huts, water tanks, installed bore wells & pumps and supplied RO water through tankers in nearby villages.

Healthcare efforts to curb spread of COVID-19 and arranging food / shelter for migrants/ nearby communities— To mitigate and curb the spread of COVID-19 pandemic in and around its surroundings and nearby localities, the Company took precautionary measures such as distribution of masks and sanitizers, disinfectant sprays, disseminating awareness of hygiene and social distancing. It distributed food packets, medicines and other items of basic necessity to the migrants/ poor / daily wage earners who were forced to stay at home during the lockdown / curfew. Company provided 5 Truenet COVID-19 testing machines to district administration of Aurangabad, Gaya, Rohtas, Jehanabad, Nawad in Bihar. To augment and maintain the oxygen supplies for critical patients in hospitals, Company refilled oxygen cylinders free-of-cost from its oxygen generation plants at Ras, Baloda Bazar and Kodla.

• Company made financial contributions to PM CARES fund (Rs. 1.25 Crore), Chief Ministers Relief Fund of Rajasthan (Rs. 2.51 Crore), Chhattisgarh (Rs. 0.51 Crore) and Karnataka (Rs. 0.51 Crore) to help the fight from the pandemic.

#### Women empowerment and skill development

Shree Shakti Project – Under 'Shree Shakti Project', Company promotes formation of Self-help groups (SHGs) of local rural women to help inculcating a habit of saving and creating corpus. Members of these groups with own corpus and financial assistance from lending institutions undertake entrepreneur assignments. As part of training to SHG members, Company organizes orientation programs for SHG women to gain practical knowledge and acquaint themselves with different mechanism involved in functioning of SHG. The members have taken up activities like cattle farming, fodder growing, irrigation farming, etc.

• *Skill development of rural women* – For skill development of rural women, Company conducted various training programmes on sewing and cutting, bag making, food processing, beauty parlor, carding and spinning, hand embroidery etc. Around 200 local women were benefitted from these initiatives carried out at Beawar, Roorkee and Panipat facilities.

• Save the Girl Child –In order to reduce girl infant mortality, Company under its 'Save the Girl Child Campaign' provided help in the form of a fixed deposit of Rs. 5000 at the time of birth of girl child which is available to her after attaining 18 years of age. At Ras and Beawar sites, 11 families were benefitted in year 2020-21.

• Support on marriage of BPL girls – Company provides basic essential items (like utensil set, sewing machine, bed, cooking stove, cooker, wedding attires, etc.) on the occasion of marriage of girl of BPL families after attending the age of 18 years. Approx. 98 girls were benefitted in year 2020-21 in villages nearby to Company's facilities at Beawar, Ras, Baloda Bazar, Khushkhera and Laksar.

#### Helping old age people, needy and orphans

• *Project Pronam for senior citizens* – Company is supporting project 'Pronam' of "The Bengal" foundation for the elderly people of Kolkata under which medical services like ambulance, health check-ups, camps, etc. are organized. This project also provides safety and security services to these people in co-ordination with Kolkata Police including legal help wherever necessary. As at the end of the year, 20,301 persons were registered members of the said project covering 13578 houses. During the year, 405 medical services were provided; 1645 safety and security services were given and legal help extended to 5 members.

 Distribution of essential items to needy people –Company on various religious and social occasions and as and when need arises, undertakes distribution of food, clothes, shoes, winter wears, medicine, etc. to people living in old age homes, orphan and needy people of nearby community to meet their daily essential requirements.

#### Community Infrastructure and Rural Development

• *Roads construction, repairing for improving road connectivity* – In order to remove bottleneck of road connectivity in rural areas, Company has undertaken construction and repairing work of the roads in nearby villages of its plants at Beawar, Ras, Baloda Bazar, Kodla and Aurangabad.

• Construction of assets for community usage – Company undertakes civil works in nearby villages to systematically improve infrastructure base. Such work includes construction/ repair of public institutions, renovation of old buildings and community centres, construction of stages, boundary wall, stay rooms, waiting stands, etc. which are commonly used by the communities at large.

#### Promotion of art and culture

Promotion of Indian culture – To preserve and nurture Indian tradition and culture, Company
promotes traditional Indian art by organizing tableau (Jhankis) on the occasion of the anniversary of Lord
Hanuman temple at Beawar. The tableaus apart from projecting mythological and religious characters
also convey environmental/ social messages. Besides this, it provides financial contribution and support
for organizing various social and cultural events by nearby communities which help conservation of their
ancient tradition and practices and creates a social harmony.

• Support to promote art and culture – It sponsors and supports events organized by various institutions, private bodies that promote literature, music, poetry, folk, art, etc. and encourages artists, writers, musicians, etc. to showcase their talent. The said initiative is being undertaken by the Company with support of implementing agencies viz. Rajasthan Forum, Prabha Khaitan Foundation and Ess Bee Consultants.

#### Measures for the benefit of armed forces veterans, war widows and their dependents

The Company institutionalized project Naman whereby free-of-cost cement is provided for building house upto 4000 sq feet to widows and dependents of armed forces martyred in the twenty-year period from 1 Jan 1999 to 1 Jan 2019. For the same, an official MOU has been entered into between Company and Kendriya Sainik Board. Commenced in Jan-2021, under 61 applications, the Company has released more than 15000 bags to beneficiaries.

#### Promotion of sports

To inculcate sporting habit and promote sports, Company provides contribution and sponsorship for organising various sporting events, activities, tournaments in schools and nearby areas. This apart, it also provides financial aid/ arranges sports equipment for needy people of nearby communities.

#### Environment Sustainability and conservation of natural resources

• *Tree plantation* – Company distributes saplings among farmers of nearby villages for plantation to cover the open areas and development of green belt. Further Company conducts school plantation programmes wherein it encourages students to plant trees. For nearby areas of other manufacturing facilities, the company with government administration plant saplings with tree guards and carry out their maintenance to ensure their survival and growth.

• Green belt development in Baloda Bazar, Chhattisgarh– In the state of Chhattisgarh, the Company had undertaken mass tree plantation drive in four villages of Baloda Bazar District to enhance the green cover in the area. Now the Company is carrying out maintenance and nurturing activities of around 25000 plants roped in previous years to ensure their survival and growth. The plants are protected with barbed wire fencing and a bore well for watering of plants through underground pipeline.

A summary of the amount incurred on CSR initiatives taken by the Company during 2020-21 is given below:-

		Amount (Rs. lac)
S. No.	CSR Heads as per Schedule VII of the Act	Expenditure
A.	Eradicating hunger, poverty and malnutrition, promoting health care including preventive health care and sanitation including contribution to the Swach Bharat Kosh set-up by the Central Government for the promotion of sanitation and making available safe drinking water	7.79
В.	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects	6.39
C.	Promoting gender equality, empowering women, setting up homes and hostels for women and orphans; setting up old age homes, day care centres and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups	2.90
D.	Ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga	1.61
E.	Protection of national heritage, art and culture including restoration of buildings and sites of historical importance and works of art; setting up public libraries; promotion and development of traditional art and handicrafts	11.02
F.	Measures for the benefit of armed forces veterans, war widows and their dependents, Central Armed Police Forces (CAPF) and Central Para Military Forces (CPMF) veterans, and their dependents including widows	0.09
G.	Training to promote rural sports, nationally recognised sports, paralympic sports and Olympic sports	0.37
н.	Rural development projects	13.32
۱.	CSR overheads (limited to 5% of expenditure)	2.24
	Total	45.73

The Company was required to incur Rs. 44.84 Crore during 2020-21 towards CSR activities. During the year, Company has actually incurred total expenditure of Rs. 45.73 Crore on CSR activities.

In terms of proviso to Section 135 (5) of the Companies Act, 2013, the excess amount incurred by the Company may be set off against the requirement of CSR spending for succeeding financial years with the

approval of the Board. In financial year 2020-21 company has spent excess amount of Rs. 0.89 Crores as CSR expenditure. The same may be set- off in the year 2021-22.

The Committee discussed the matter, recommended to the CSBR committee and Board to carry forward the excess CSR expenditure incurred by the Company for consideration in the next year budget (year 2021-22).

The Committee took note of the same.

#### G. TO DISCUSS AND RECOMMEND THE CSR BUDGET FOR THE YEAR 2021-22 TO CSBR COMMITTEE

As required under the Companies Act, 2013, Company is required to incur at least 2% of its average net profit of previous 3 years on CSR activities specified under Schedule VII of the Companies Act, 2013. Based on the estimated profit for the FY 2020-21, CSR Budget for the Financial Year 2021-22 works out to Rs. 52.00 Crore was placed before the Committee during the meeting. For preparation of Budget for 2021-22, details of CSR expenditure planned by each of the company unit has been considered.

Committee discussed and approved the CSR Budget of the Company for the year 2021-22 and recommended the same to CSBR Committee of the Board for its review and approval.

#### H. CONTRIBUTION MADE BY THE COMPANY TO FIGHT AGAINST COVID-19 PANDEMIC

It was informed to the Committee that as part of its social obligation, Company is regularly supporting the community in combating with Covid-19 pandemic. The initiatives undertaken by the Company in this respect are as under-

- Contributed Rs. 1.25 Crores to PM Care Fund and Rs. 3.53 Crores to CM Care Funds of State Governments for Rajasthan, Chhattisgarh & Karnataka, aggregating to Rs. 4.78 Crores
- Company is distributing oxygen cylinders. Oxygen concentrators/ Oximeters and other life-savings equipment
- Extended its medical facilities to nearby areas.
- Regular sanitisation, disinfectant sprays, distribution of masks & other hygiene products in nearby community

The Committee discussed the initiatives taken by the Company and appreciated the efforts.

# I. TO REVIEW AND DISCUSS ABOUT THE COMPLIANCE WITH APPLICABLE SAFETY AND LABOUR LAWS AND REGULATIONS

It was informed to the meeting that there is a system wherein departmental head/ respective functional head responsible for specific function sends a monthly certificate to the Company Secretary certifying compliance of laws and regulations related to that function. Based on this, a certificate is submitted to the Board of Directors stating compliance with all relevant laws and regulations by the company on quarterly basis. With regard to compliance with safety and labour laws, the responsibility matrix is as below:-

1	Factories Act	Shri Neeraj Kumar Sharma (For operations at
2	Industrial Dispute Act	Beawar)
3	Industrial Relations Act	
4	Payment of Bonus Act	Shri P.K. Bharadwaj – For operations at Ras
5	Employees Provident Fund Act	
6	Employees State Insurance Act	Shri Sanjay Kumar Sharma (For all Northern
7	Contract Labour (R&A) Act	Grinding Units, Kodla Cement Plant, Pune
8	India Explosives Act, 1884 (related to staff and	Grinding Unit and AAC Plant except Raipur
	workers)	Cement Plant(s), Bihar, Jharkhand and Odisha
9	Workmen Compensation Act	Grinding Units)
10	Payment of Gratuity Act	Shri Rajesh Sharma – for Raipur Plants
11	Employment Exchange compulsory notification, 1959	

12	Safety and Security related compliances	Shri Ravi Tiwari – For Bihar Grinding Units
13	Maternity Benefits Act & Rules	Grinding Unit at Jharkhand: Shri Rama Kant
14	Any other Rules, Regulations and notifications related to their functional responsibility	Singh
		Grinding Unit at Odisha : Shri M.K. Joshi

The Committee took note of the same.

#### 5. GOVERNANCE ISSUES

Following Governance issues were deliberated by the Committee during the meeting:

#### A. TO REVIEW AND DELIBERATE ON INTERNAL CONTROL SYSTEMS OF THE COMPANY

It was informed to the meeting that as required under Listing Regulations, Company has an in-house Internal Audit department manned by qualified professionals and an external firm acting as independent internal auditors that reviews internal controls and operating systems and procedures on a regular basis. Company's internal control systems include policies and procedures, IT systems, delegation of authority, segregation of duties, internal audit and review framework etc. Company has designed the necessary internal financial controls and systems with regard to adherence to company's policies, safeguarding of its assets, prevention and detection of frauds and errors, accuracy and completeness of the accounting records and timely preparation of reliable financial information. Company keeps documented Standard Operating Procedures (SOPs) for all its major operations.

It was further informed that the compliance to these controls and systems including SOPs are periodically reviewed by the Internal Audit function and exceptions are reported. All material audit observations and follow up actions thereon are reported to the Audit and Risk Management Committee. The Committee holds regular discussions with the auditors to ensure adequacy and effectiveness of the internal control systems and monitors implementation of audit recommendations.

The Committee took note of the same.

#### B. COMPLIANCE OF APPLICABLE LAWS AND REGULATIONS WITH RESPECT TO GOVERNANCE ISSUES

The regulations and responsibility matrix for compliance with various applicable laws was placed before the meeting. It was informed that in line with the requirement of the new Companies Act 2013 wherein the Board of Directors are required to mention the status of compliances in the Board Report, a review of compliance of laws is undertaken by the Internal Audit team. The team undertakes a review of all the compliances made by the company and submits its report which is submitted to the Board for its perusal. Based on the reports, there is no non-compliance.

The Committee discussed and took note of the same.

#### C. VIGIL MECHANISM / WHISTLE BLOWER POLICY

The Company has adopted a whistle blower policy and has established the necessary vigil mechanism for employees and directors to report concerns about unethical behaviour. The Policy provides for adequate safeguards against victimization of employees who avail of the mechanism and also provides for direct access to the Chairman of the Audit and Risk Management Committee.

During the year 2020-21, there were no cases which required reporting to the Audit and Risk Management Committee.

The Committee took note of the same.

#### D. TO REVIEW THE POLICIES OF THE COMPANY AS ENUNCIATED IN BUSINESS RESPONSIBILITY REPORT

It was informed to the Committee that that the Company had framed policies for each of the nine principles enunciated in the Business Responsibility Framework specified under the Regulation 34 (2) (f) of the SEBI (Listing Obligations and Disclosure Requirements), Regulations 2015.

It was further informed that all the policies are in line with the prescribed principles of Business Responsibility Report.

The Committee reviewed the same and decided to continue the other policies without any change.

#### E. TO REVIEW AND DISCUSS THE DRAFT BUSINESS RESPONSIBILITY REPORT (BRR)

Draft Business Responsibility Report (BRR) for the year 2020-21 was placed before the Committee. The Committee deliberated and approved the same for placing before the Corporate Social and Business Responsibility Committee (CSBR) of the Board of Directors of the Company for its consideration.

#### 6. TO TAKE NOTE OF IMPACT OF COVID-19 VIRUS AND SAFETY MEASURES TAKEN BY THE COMPANY

It was informed to the committee that Company undertook all the necessary steps to curb the spread of the COVID-19 virus. Few of them were as under:-

- All employees have been instructed to follow the Social distancing norms and avoid gathering
- Compulsory Quarantine requirement for minimum 4 days for the employees who have participated in any marriage, funerals or other family function
- Only essential staff has been permitted to come to office.
- Restriction on entry of the Visitors/Vendors from entering Company's premises
- Entry of the employees in Company's premises permitted only after thermal scanning and proper sanitization
- Providing good quality masks and sanitisers to all employees
- Availability of medical services/medicines etc. including ambulance services for staff
- Ready to use Oxygen Cylinders are provided to the employees and their family members who suffering from Covid and finding difficulty in procurement of the same.

Company has put in place the Safe Operating Procedure (SOP) and protocols at all Manufacturing Units / Marketing Offices / Project Sites.

The Committee discussed the matter and took note of the same.

There being no other business, the meeting ended with a vote of thanks to the Chair.

CHAIRMAN

S.N.	Conditions	Compliance Status
6	The emission for the bag house shall be maintained less than 20 mg/Nm3.	The Particulate Matter emission are maintained below the prescribed standards of 20 mg/Nm <sup>3</sup> .
		Stack emission monitoring report is enclosed as Annexure – 4.

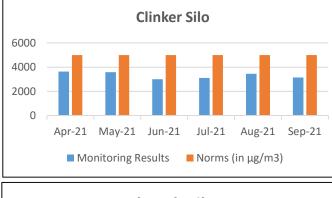
# STACK EMISSIONS MONITORING RESULTS

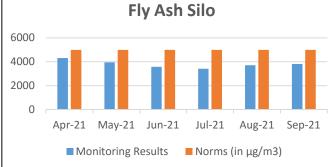
Location / Months	Stack Attached to Cement Mill		PM data (in mg/Nm3)					
Norms	20 mg/Nm3							
Apr-21	9.35	1				13.23	12.02	
May-21	9.84	1	9.35	9.84	9.34			10.42
Jun-21	9.34							
Jul-21	13.23							
Aug-21	12.02							
Sep-21	10.42		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21

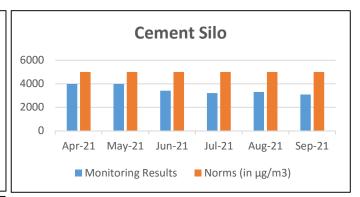
S.N.	Conditions	Compliance Status
В	General Conditions :	
1 (a)	The project proponent shall (Air Quality Monitoring) : Install 24X7 continuous emission monitoring system at power plant stack to monitor stack emission with respect to parameters prescribed in S.O. 3305 (E) dated 7 <sup>th</sup> December 2015 for thermal power plants as amended from time to time and connected to CPCB online.	<ul> <li>CPP will be installed in Second phase.</li> <li>Continuous emission monitoring system will be installed at power plant stack once CPP will be installed &amp; transfer data to CPCB and SPCB server.</li> </ul>
1(b)	The project proponent shall (Air Quality Monitoring): Monitor fugitive emissions in the plant premises.	Fugitive emissions have been monitored in the plant premises. Report enclosed as Annexure – 5.

Location / Months	Clinker Silo	Cement Silo	Fly Ash Silo	Packing Plant
Norms	5000 µg/m3	5000 µg/m3	5000 µg/m3	5000 µg/m3
Apr-21	3639	3983	4312	4705
May-21	3586	3983	3955	4173
Jun-21	3005	3407	3577	3884
Jul-21	3105	3202	3412	3565
Aug-21	3449	3299	3711	3903
Sep-21	3154	3089	3817	3979

#### FUGITIVE EMISSIONS MONITORING RESULTS







# Packing Plant 7000 5000 3000 1000 Apr-21

Norms (in µg/m3)

Monitoring Results

S.N.	Conditions	Compliance Status
1(c)	The project proponent shall (Air Quality Monitoring) : Carryout continuous Ambient Air Quality monitoring as per National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826 (E) dated 16 <sup>th</sup> November 2009 (as amended from time to time) within and outside the plant area at least at four locations covering upwind and downwind directions at an angle of 120 <sup>o</sup> each;	<ul> <li>Four numbers of Continuous Ambient Air Quality monitoring (CAAQMS)systems have been installed for the measurement of PM2.5, PM10, SO2, NOX &amp; CO.</li> <li>Real time data of the same is transferred to JSPCB server.</li> <li>Photograph of CAAQMS is enclosed as Annexure – 6 and snapshot of JSPCB server showing Shree Cement CAAQMS data is enclosed as Annexure – 7.</li> </ul>

# <u>Annexure-6</u>

## **CONTINUOUS AMBIENT AIR QUALITY MONITORING STATIONS**





**CAAQMS-1 Near Logistic Buildings** 

**CAAQMS-2 Near Wagon Tippler** 



CAAQMS-3 Near RWHS



CAAQMS-4 Near Railway Siding

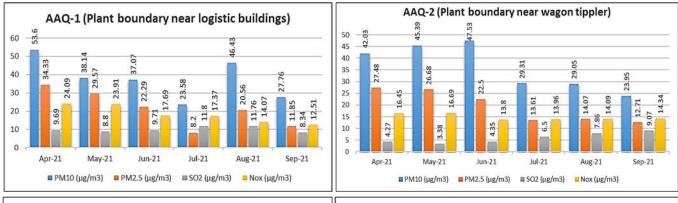
Annexure-7

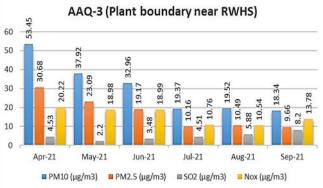
# SNAPSHOT OF JSPCB SERVER SHOWING SHREE CEMENT CAAQMS DATA

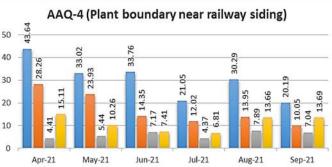
PM10 Anat	yzer	STITIGUE ISPEB			nd State P Introl Boar			weit & efzen and & egyne	
	Home	e Dashboard D	ay Wise Data	Month Wise Data	Industry Detail	Industry Catego	ory Star Registration	Login	
	Indust Show 10	ry Details ✓ entries			Vendor	-Select-	~	113 Live    <b>113</b> Search: shree cer	
	SI. No.	Vendor Name	In	dustry Name			Industry Type	Tabular / Graphical	Today's Status
	79	Knowledgelens	M/s	Jharkhand Cement P	lant(A unit of Shree	Cement Ltd)	Cement	Tabular Data Graphical	-
	Showing 1 to	o 1 of 1 entries (filtered	from 146 total e	ntries)				Previo	ous 1 Nex

S.N.	Conditions Compliance Status					
1(d)	The project proponent shall (Air Quality Monitoring): Submit monitoring report to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	Ambient air quality monitoring report have been submitted to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB in six- monthly compliance of conditions of Environmental clearance. Monitoring report is enclosed as Annexure – 8.				

					Am	bient Air (	Quality M	onitoring D	ata (value	es in µg/m <sup>i</sup>	)					
Locations	Plant boundary near logistic building				Plant boundary near wagon tippler			Plant boundary near Rain water harvesting pond			Plant boundary near railway siding					
Parameters	PM10	PM2.5	SO <sub>2</sub>	NO <sub>2</sub>	PM10	PM2.5	SO <sub>2</sub>	NO <sub>2</sub>	PM10	PM2.5	SO <sub>2</sub>	NO <sub>2</sub>	PM10	PM2.5	SO <sub>2</sub>	NO <sub>2</sub>
Norms	100	60	80	80	100	60	80	80	100	60	80	80	100	60	80	80
Apr-21	53.6	34.33	9.69	24.09	42.03	27.48	4.27	16.45	53.45	30.68	4.53	20.22	43.64	28.26	4.41	15.11
May-21	38.14	29.57	8.8	23.91	45.39	26.68	3.38	16.69	37.92	23.09	2.2	18.98	33.02	23.93	5.44	10.26
Jun-21	37.07	22.29	9.71	17.69	47.53	22.5	4.35	13.8	32.96	19.17	3.48	18.99	33.76	14.35	7.17	7.41
Jul-21	23.58	8.2	11.8	17.37	29.31	13.61	6.5	13.96	19.37	10.16	4.51	10.76	21.05	12.02	4.37	6.81
Aug-21	46.43	20.56	11.76	14.07	29.05	14.07	7.86	14.09	19.52	10.49	5.88	10.54	30.29	13.95	7.89	13.66
Sep-21	27.76	11.85	8.34	12.51	23.95	12.71	9.07	14.34	18.34	9.66	8.2	13.78	20.19	10.05	7.04	13.69







■ PM10 (μg/m3) ■ PM2.5 (μg/m3) ■ SO2 (μg/m3) ■ Nox (μg/m3)

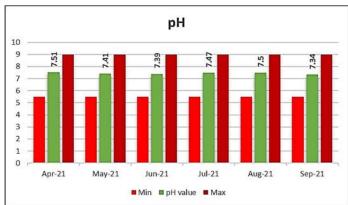
S.N.	Conditions		Compliance Status
2(a)	The project proponent shall (Water Quality Monitoring): Install effluents monitoring	•	Clinker grinding is a dry process and therefore, no effluent is generated from the process.
	system at all the discharge points to monitor treated effluents with respect to parameters prescribed in S.O. 3305 (E) dated 7 <sup>th</sup> December 2015 for thermal power plants as	•	Domestic waste water generated from office toilet and mess is being treated in STP and treated water is being used for plantation purpose.
	amended from time to time as amended	•	CPP will be installed in second phase.
	from time to time;	•	Photograph of STP and utilization of treated water is enclosed as Annexure – 9.

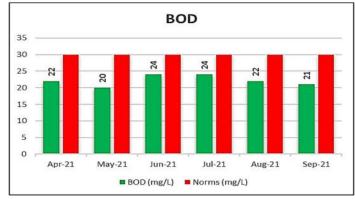
# **STP & UTILIZATION OF TREATED WATER IN PLANTATION**

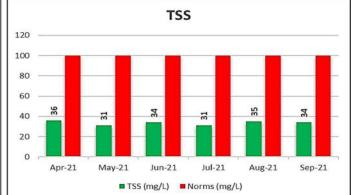


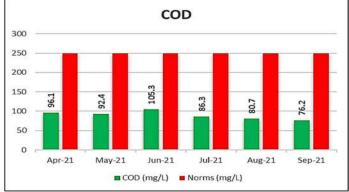
S.N.	Conditions	Compliance Status
2(b)	The project proponent shall (Water Quality Monitoring): Submit monitoring report to	<ul> <li>Tread effluent – Nil (Cement grinding based on dry process.</li> </ul>
	Regional Office of MoEF&CC, Zonal office of CPCB and Regional office of SPCB along with six-monthly monitoring report.	• STP treated water analysis report have been submitted to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB in six-monthly compliance of conditions of Environmental clearance.
		• STP treated water analysis reports are enclosed as Annexure – 10 and ground water analysis report are enclosed as Annexure – 11.

Sewage Treatn	nent Plant O	utlet Analysis	Report		
Parameters	рН	TSS	BOD	COD	O&G
Norms as per CTO No.– JSPCB/HO/RNC/CTO – 6972715/2020/210; dated 22/01/2020.	5.5-9.0	100 mg/L	30 mg/L	250 mg/L	10 mg/L
Apr-21	7.51	36	22	96.1	<4.0
May-21	7.41	31	20	92.4	<4.0
Jun-21	7.39	34	24	105.3	<4.0
Jul-21	7.47	31	24	86.3	<4.0
Aug-21	7.5	35	22	80.7	<4.0
Sep-21	7.34	34	21	76.2	<4.0









### **GROUND WATER ANALYSIS REPORT**

	O PRO			Consultar	EERS Its and Ana	PVT. LTE lytical Laborato 15 Certified Compe	
	Office & Laboratory : 32/41, Contact No.: 9818405427, 9810	South Side of G. T. Road, UPSIDC Indus 0240678, 8526344487 E-mail: email@ekop	strial Area, Gha ro.in, ekoproengi	nziabad - 201 neers@gmail.c	009 (Delhi-N on, website : w	ICR) INDIA. www.ekopro.in	
		TEST REP					
Test Ro Issued	aport No. : EKO/182/176521 To	Water Sample Analy : SHREE JHARKHAND CEMEN (A Unit of Shree Cerrent Ltd.) Vilage - Hansda, P.O Burudin, District - Sereikela Kharsawan, Jharkhand	NT PLANT		Issue	Date : 22/05/2021	
Sample Sample Sample Samplin Samplin Sample Environ	Description Drawn on Drawn by Received on g Location g Plan & Procedure Quantity mental Conditions Duration (if any)	: Ground Water : 15/05/2021 : EPEPL (Mr. Saurabh Rao) : 17/05/2021 : From Borewell Near Cooling Tox : SOP-W/66 : 1.0 Litre : Normal : 17/05/2021 To 22/05/2021 : NA	wer				
		RESULTS		1	I imite as a	44 18: 44400 2042	
S. No.	Parameters	Test Methods	Results	Units	Limits as per IS: 10500-2012 (Amd.No.2 Sep-2018) Acceptable Permissible		
1	pH	IS: 3025 (P-11)	7.31	-	6.5-9.5	No relaxation	
2	Total Hardness (as CaCO <sub>2</sub> )	IS: 3025 P-21)	170.0	mg/L	200.0	600.0	
3 4	Calcium (as Ca) Iron (as Fe)	IS: 3025 (P-40)	70.8	mg/L	75.0	200.0	
5	Chloride (as Cl)	EKO/CHEM/SOP-ICPMS/W-01 IS: 3025 (P-32)	<0.005 30.5	mg/L	1.0	No relaxation	
6	Fluoride (as F)	IS: 3025 (P-60)	<1.0	mg/L	250.0	1000.0	
7	Total Dissolved Solids	IS: 3025 (P-16)	235.0	mg/L	500.0	1.5	
8	Total Suspended Solids	IS: 3025 (P-17)	<5.0	mg/L		2000.0	
the second s	Magnesium (as Mg)	IS: 3025 (P-46)	16.5	mg/L	30.0	100.0	
	Manganese (as Mn)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mgAL	0.1	0.3	
	Sulphate (as SO <sub>4</sub> ) Nitrate (as NO <sub>2</sub> )	IS: 3025 (P-24)	62.3	mgiL	200.0	400.0	
	Mercury (as Hg)	15: 3025 (P-34)	1.25	mg/L	45.0	No relaxation	
	Arsenic (as As)	EKO/CHEM/SOP-ICPMS/W-01 EKO/CHEM/SOP-ICPMS/W-01	<0.001	mg/L mg/L	0.001	No relaxation No relaxation	
	Total Alkalinity (as CaCO <sub>3</sub> )	IS: 3025 (P-23)	136.0	mg/L	200.0	600.0	
	Lead (as Pb) Total Chromium (as Cr)	EKO/CHEM/SOP-ICPMS/W-01 EKO/CHEM/SOP-ICPMS/W-01	<0.005	mgL	0.01	No relaxation	
The cust This leaf The test The test the custo	omer asked for the above lests only. report will not be generated again, either report will not be used for any publicity/ samples will be disposed off after 15 da	is from the date of issue of test report, unless u is will be destroyed after 7 days from the date of	mil apecified by		LED EAVOINE LED EAVOINE LEN CAT MAI	No relaxation	
				A	ullitriesd. Sage	MIRCHAT	

_	Contact No.: 9818405427, 981	energeop	and amplearing.			
		TEST REF Water Sample Analy				
est R ssued	eport No. : EKO/183/170521 To	: SHREE JHARKHAND CEMEI (A Unit of Shree Cement Ltd.) Village - Hansda, P.O Burudin, District - Sarakela Kharsawan, Jharkhand	NT PLANT		Issue	Date : 22/05/202
ample ample amplin amplin ample nvironi nalysis	Description Drawn on Drawn by Received on Ig Location Ig Plan & Procedure Quantity mental Conditions Is Duration (if any)	: Ground Water : 15/05/2021 : EPEPL (M: Saurabh Rao) : 17/05/2021 : From Borewell Near Weight Bric : SOP-W/66 : 1.0 Litre : Normal : 17/05/2021 To 22/05/2021 No	5g0			
SILTERA	(ii any)	: NA RESULTS				
3. No.	Parameters	Test Methods	Results	Units		er IS: 10500-2012 0.2 Sep-2018) Permissible
1	pH	IS: 3025 (P-11)	7.21	-	6.5-8.5	No relaxation
2	Total Hardness (as CaCO <sub>3</sub> )	IS: 3025 P-21)	162.0	mg/L	200.0	600.0
4	Cakium (as Ca) Iron (as Fe)	IS: 3025 (P-40) EKO/CHEM/SOP-ICP//S/W-01	38.8	mg/L	75.0	200.0
5	Chloride (as Cl)	IS: 3025 (P-32)	33.5	mgAL mgAL	1.0	No relaxation 1000.0
6	Flucride (as F)	IS: 3025 (P-60)	<1.0	mg/L	1.0	1.5
7	Total Dissolved Solids	18: 3025 (P-16)	255.0	mg/L	500.0	2000.0
8	Total Suspended Solids	IS: 3025 (P-17)	<5.0	mg/L		
	Magnesium (as Mg) Manganese (as Mn)	IS: 3025 (P-46)	15.8	mg/L	30.0	100.0
11	Sulphate (as SO <sub>4</sub> )	EKO/CHEWSOP-ICPMS/W-01 IS: 3025 (P-24)	<0.005	mg/L	0.1	0.3
12	Nitrate (as NO.)	IS: 3025 (P-24)	32.0	mg/L mg/L	200.0	400.0
13	Mercury (as Hg)	EKO/CHEM/SOP-ICPMSAV-01	<0.001	mg/L	0.001	No relaxation
_	Arsenic (as As)	EKOVCHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation
15 16	Total Alkalinity (as CaCO <sub>3</sub> ) Lead (as Pb)	IS: 3025 (P-23)	140.0	mg/L	200.0	600.0
-	Total Chromlum (as Cr)	EKO/CHEM/SOP-ICPMS/W-01 EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation
he result he cust his test he test he test he custo	Its given above are related to the tested tomor asked for the above tests only. report will not be generated again, eithe report will not be used for any publicity samples will be disposed off after 15 da	ys from the data of issue of test report, unless u is will be destroyed after 7 days from the date of	ntil specified by	M.	0.05	No relaxation

	Office & Laboratory : 32/41.	En South Side of G. T. Road, UPSIDC Indu	strial Area. Gba	Consultar	n ISO 9001.20	PVT. LTI lytical Laborate 15 Certified Compl
	Contact No.: 9818405427, 981	0240678, 8826344487 E-mail : emal@ekop	ro.in, ekoproengi	neersggmaild	om, website : w	ww.ekopro.in
		TEST REF				
Test R Issued	eport No. : EKO/154/170521 To	: SHREE JHARKHAND CEMEI (A Unit of Shree Cament Ltd.)	Village - Hansda, P.O Burudin, District - Saraikela Kharsawan,			Date : 22/05/2021
Sample Sample Samplin Samplin Sample Environ Analysis	Description Drawn on Drawn by Received on 10 Location 10 Plan & Procedure Quantity mental Conditions 10 Uration (If any)	: Ground Water : 15/05/2021 : EPEPL (Mr. Saurabh Rao) : 17/05/2021 : From Borewell Near Project Offi : SOP-W/66 : 1.0 Litre : Normal : 17/05/2021 To 22/05/2021 : NA	ice			
		RESULTS				
S. No.	Parameters	Test Methods	Results	Unite		er IS: 10500-2012 o.2 Sep-2018)
1	pH	IS: 3025 (P-11)	7.31	-	6.5-8.5	No relaxation
2	Total Hardness (as CaCO <sub>3</sub> ) Calcium (as Ca)	IS: 3025 P-21)	180.0	mg/L	200.0	600.0
4	Iron (as Fe)	IS: 3025 (P-40) EKO/CHEM/SOP-ICPMS/W-01	43.3	mg/L	75.0	200.0
5	Chloride (as C)	IS: 3025 (P-32)	<0.005 33.5	mg/L	1.0	No relaxation
6	Fluoride (as F)	IS: 3025 (P-60)	<1.0	mg/L mg/L	250.0	1000.0
7	Total Dissolved Solids	IS: 3025 (P-16)	260.0	mgit	500.0	1.5
8	Total Suspended Solids	IS: 3025 (P-17)	<5.0	mg/L		-
9	Magnesium (as Mg) Manganese (as Mn)	IS: 3025 (P-46)	17.5	mg/L	30.0	100.0
11	Sulphate (as SO4)	EKO/CHEM/SOP-ICPMSAV-01	<0.005	mg/L	0.1	0.3
12	Nitrate (es NO <sub>3</sub> )	IS: 3025 (P-24) IS: 3025 (P-34)	39.6	mg/L	200.0	400.0
13	Mercury (as Hg)	EKO/CHEM/SOP-ICPMS/W-01	<0.001	mgA	45.0	No relaxation
14	Arsonic (as As)	EKO/CHEM/SOP-ICPMSAV-01	<0.005	mg/L mg/L	0.001	No relaxation No relaxation
15	Total Alkelinity (as CaCO <sub>3</sub> )	IS: 3025 (P-23)	150.0	mg/L	200.0	600.0
-	Lead (as Pb) Total Chromium (as Cr)	EKO/CHEM/SOP-ICPMS/W-01 EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L mg/L	0.01	No relaxation No relaxation
The cusi This test The test The test Pie cusic	omer asked for the above tests only. report will not be generated again, eithe report will not be used for any publicity/i temples will be disposed off after 15 day	a from the date of issue of test report, unless us will be desiroyed after 7 days from the date of	all searched by			BURNIN TO.
				1 A	thoraged Sin	REARINENT

	Omce & Laboratory : 32/41, Contact No.: 9818405427, 981	South Side of G. T. Road, UPSIDC Indui 0240678, 8526344487 E-mail: email@ekop	strial Area, Gha ro.in, ekoproengir	ziabad - 201 neers@gmail.c	009 (Dehi-N om, website : w	CR) INDIA. ww.ekopro.in
		TEST REF Water Sample Analy				
Test R Issued	eport No. : EKO/155/170521 To	<ul> <li>SHREE JHARKHAND CEMEI (A Unit of Shree Coment Ltd.) Wilage - Hansda, P.O Burudin District - Saraikela Kharsawan, Jharkhand</li> </ul>	NT PLANT		Issue	Date : 22/05/202
Sample Sample Sample Samplin Samplin Sample Sample Sample	Description Drawn on Drawn by Received on ing Location g Plan & Procedure Quantity mental Conditions Duration ((if any)	: Ground Water : 15/05/2021 : EPEPL (Mr. Saurabh Rao) : 17/05/2021 : From Borowoll Near RWHS : SOP-W/06 : 1.0 Litre : Normal : 17/05/2021 To 22/05/2021 : NA				
	T	RESULTS				
5. No.	Parameters	Test Methods	Results	Units		er IS: 10500-2012 0.2 Sep-2018) Permissible
1	pH Total Handana Ing Galage	IS: 3025 (P-11)	7.38	-	6.5-8.5	No relaxation
2	Total Hardness (as CaCO <sub>3</sub> ) Caklum (as Ca)	IS: 3025 P-21)	168.0	mg/L	200.0	600.0
4	Iron (as Fe)	15: 3025 (P-40) EKONCHEM/SOP-ICP//S/W-01	40.5	mgAL	75.0	200.0
5	Chloride (as Ci)	IS: 3025 (P-32)	<0.005 36.5	mg/L mg/L	1.0	No relaxation
6	Fluoride (as F)	IS: 3025 (P-60)	<1.0	mg/L	1.0	1000.0
7	Total Dissolved Solids	IS: 3025 (P-16)	270.0	mg/L	500.0	2000.0
8	Total Suspended Solids	IS: 3025 (P-17)	<5.0	mg/L		
10	Magnesium (as Mg) Manganese (as Mn)	IS: 3025 (P-46)	16.3	mg/L	30.0	100.0
11	Sulphate (as SO <sub>4</sub> )	EKO/CHEM/SOP-ICPMS/W-01 IS: 3025 (P-24)	<0.005	mg/L	0.1	03
12	Ntrate (as NO <sub>3</sub> )	IS: 3025 (P-34)	1.65	mg/L mg/L	200.0	400.0 No relaxation
13	Mercury (as Hg)	EKO/CHEM/SOP-ICPMS/W-01	<0.001	mg/L	0.001	No relaxation
_	Arsenic (as As)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation
	Total Akalinky (as CaCO <sub>2</sub> ) Lead (as Pb)	IS: 3025 (P-23) EKO/CHEAVSOP-ICPMS/W-01	142.0	mg/L	200.0	600.0
_	Total Chromium (as Cr)	EKOCHEN/SOP-ICPMS/W-01	<0.005	mol	0.01	No relaxation
tes: The result This test This test The fest the queto	Its given above are related to the tested concreasived for the above tests only. report will not be generated egain, eith report will not be used for any publicity samplas will be disposed off after 15 da	I sample, as received & manifored parameters. In wholy or in part, without prior written permissi regal purpose. If from the date of issue of test report, unless u is will be destroyed ofter 7 days from the date of	til scecifed by			No relaxation

C	Office & Laboratory : 32/41, S Contact No.: 9818405427, 9810		ironmental (	Consultan (A	ts and Analy ISO 9001:2015 009 (Delhi-NC	VT. LTI tical Laborato Certified Compa
		TEST REP	ORT			
		Water Sample Analys	sis			*****
Test Re Issued	eport No. : EKQ/156/170521 To	: SHREE JHARKHAND CEMEN (A Unit of Shree Cement Ltd.) Village - Hansda, P.O Burudin, District - Seraikela Khansawan, Jharkhand	T PLANT		Issue D	ate : 22/05/2021
Sample Sample Samplin Samplin Sample Environi Analysis	Description Drawn on Drawn by Received on ng Location g Plan & Procedure Quantity mental Conditions s Duration ((if any)	: Ground Water : 15/05/2021 : EPEPL (Mr. Saurabh Rao) : 17/05/2021 : From Borewell Near CAAQMS-1 : SOP-W/86 : 1.0 Litre : Normal : 17/05/2021 To 22/05/2021 : NA				
Net tiar K	<u>[]</u> ] 3 21	RESULTS	•••••			
S. No.	Parameters	Test Methods	Results	Units	(Amd.No	r IS: 10500-2012 2 Sep-2018) Permissible
1	pH	IS: 3025 (P-11)	7.35	-	6.5-8.5	No relaxation
2	Total Hardness (as CaCO <sub>3</sub> )	IS: 3025 P-21)	185.0	mg/L	200.0	600.0
3	Calcium (as Ca)	IS: 3025 (P-40)	44.5	mg/L	75.0	200.0
4	Iron (as Fe)	EKO/CHEM/SOP-ICPMSAV-01	<0.005	mgAL	1.0	No relaxation
5	Chioride (as CI)	IS: 3025 (P-32)	43.5	mgAL	250.0	1000.0
6	Fluoride (as F)	IS: 3025 (P-60)	<1.0	mg/L	1.0	1.5
7	Total Dissolved Solids	IS: 3025 (P-16)	270.0	mg/L	500.0	2000.0
8	Total Suspended Solids	IS: 3025 (P-17)	<5.0	mg/L	-	
9	Magnesium (as Mg)	IS: 3025 (P-46)	18.0	mg/L	30.0	100.0
10	Manganese (as Mn)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.1	0.3
11	Sulphate (as SO <sub>4</sub> )	IS: 3025 (P-24)	52.0	mg/L	200.0	400.0
12	Nilrate (as NO <sub>3</sub> )	IS: 3025 (P-34)	1.95	mg/L	45.0	No relaxation
13	Mercury (as Hg)	EKO/CHEM/SOP-ICPMS/W-01	<0.001	mg/L	0.001	No relaxation
14	Arsenic (as As)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation
15	Total Akalinity (as CaCO <sub>3</sub> ) Lead (as Pb)	IS: 3025 (P-23) EKO/CHEM/SOP-ICPMS/W-01	140.0 <0.005	mg/L mg/L	200.0	600.0 No relaxation
17	Total Chromium (as Cr)	EKO/CHEM/SOP-ICPMSAV-01	<0.005	mg/L	0.05	No relaxation
	Total Chickman (as Cry	End of Largor for a direct	-0.005	in the second	0.03	100 10 20 20 001

The test earnples will be deposed of effer 15 days from the date of issue of test report, unless until specified by the customer. Sample received for biological tests will be destroyed after 7 days from the date of issue of lest report.
 Responsibility of the Laboratory is limited to the involced amount only.

"End of Report"

For EKELEND ENGINEERS PVT A BABARN RNR HOISED SIGNATORY (Authons

Page 1 of 1

Contact : +91 - 9810243870 EKO PRO EKO PRO ENGINEERS PVT. LTD. Environmental Consultants and Analytical Laboratory (An ISO 9001:2015 Certified Company) Office & Laboratory : 32/41, South Side of G. T. Road, UPSIDC Industrial Area, Ghaziabad - 201 009 (Delhi-NCR) INDIA. Contact No.: 9818405427, 9810240678, 8826344487 E-mail : email@ekopro.in, ekoproengineers@gmail.com, website : www.ekopro.in TEST REPORT Water Sample Analysis Test Report No. : EKO/157/210521 Issue Date : 22/05/2021 Issued To : SHREE JHARKHAND CEMENT PLANT (A Unit of Shree Cement Ltd.) Village - Hansda, P.O.- Burudin, District - Saraikela Kharsawan, Jharkhand Ground Water Sample Description : Sample Drawn on 15/05/2021 : Sample Drawn by EPEPL (Mr. Saurabh Rao) : Sample Received on 17/05/2021 : Sampling Location From Borewell Near CAAQMS-2 : Sampling Plan & Procedure : SOP-W/66 Sample Quantity 1.0 Litre : Environmental Conditions Normal : Analysis Duration 17/05/2021 To 22/05/2021 : Remark (if any) NA RESULTS Limits as per IS: 10500-2012 S. No. Parameters Test Methods Results Unite (Amd.No.2 Sep-2018) Acceptable Parmissible 1 DH IS: 3025 (P-11) 7.55 6.5-8.5 No relaxation 2 Total Hardness (as CaCO<sub>3</sub>) IS: 3025 P-21) 184.0 mo/L 200.0 600.0 Calcium (as Ca) 3 IS: 3025 (P-40) 44.1 mg/L 75.0 200.0 4 Iron (as Fe) EKO/CHEM/SOP-ICPMS/W-01 <0.005 mg/L 1.0 No relaxation Chloride (as Cf) 5 IS: 3025 (P-32) 40.5 mg/L 250.0 1000.0 6 Fluoride (as F) IS: 3025 (P-60) <1.0 mg/L 1.0 1.5 Total Dissolved Solids 7 IS: 3025 (P-16) 290.0 mg/L 500.0 2000.0 8 **Total Suspended Solids** IS: 3025 (P-17) <5.0 mgil . 9 Magnesium (as Mg) IS: 3025 (P-46) 17.9 mg/L 30.0 100.0 10 Manganese (as Mn) EKOVCHEM/SOP-ICPMS/W-01 <0.005 0.1 mg/L 0.3 11 Sulphate (as SO4) IS: 3025 (P-24) 62.3 200.0 mg/L 400.0 12 Nitrate (as NO<sub>3</sub>) IS: 3025 (P-34) 1.55 45.0 mg/L No relaxation 13 Mercury (as Hg) EKO/CHEM/SOP-ICPMS/W-01 <0.001 0.001 mg/L No relaxation 14 Arsenic (as As) EKO/CHEM/SOP-ICPMS/W-01 <0.005 mg/L 0.01 No relaxation 15 Total Alkalinity (as CaCO<sub>3</sub>) IS: 3025 (P-23) 156.0 mg/L 200.0 600.0 16 Lead (as Pb) EKO/CHEM/SOP-ICPMSAV-01 <0.005 0.01 mg/L No relaxation 17 EKO/CHEM/SOP-ICPMS/W-01 Total Chromium (as Cr) <0.005 mo/L 0.05 No relaxation Notes: 1. The results given above are related to the lasted sample, as received & mentioned parameters The customer asked for the above lasts only. 2. This test report will not be generated egain, either wholly or in part, without prior written permission of the Laboratory. 3. The tast report will not be used for any publicity/legal purpose. 4. The test samples will be disposed off after 15 days from the date of issue of test report, unless until specified by the customer. Sample received for biological tests will be destroyed after 7 days from the date of issue of test report. 5. Responsibility of the Laboratory is limited to the invoiced amount only.

"End of Report"

For EKS PROSEN DE ELE EVE LTD. PURNING TONIHAN Authorsed Signat

Page 1 of 1

S.N.	Conditions	Compliance Status
3(a)	The project proponent shall (Air Pollution Control): Provide appropriate Air Pollution Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources;	<ul> <li>Unit has installed a Bag-house having 5304 numbers of bag at cement mill section for the control of particulate matter emissions. Photograph is enclosed as Annexure – 12.</li> <li>Conveyer belts are covered. Photograph enclosed as Annexure – 13.</li> <li>Moreover, 57 numbers of Bag filters have been installed at various transfer points to control fugitive dust emissions. Photograph enclosed as Annexure – 14.</li> </ul>

# **BAG HOUSE ATTACHED TO CEMENT MILL**

Annexure-13

Annexure-12

# COVERED CONVEYER BELTS AND TRANSFER POINTS WITH BAG FILTER



# **LIST OF BAG FILTERS**

S.NO.	LOCATION	CAPACITY	NO. OF BAGS
	FLYASH HANDLING		
1	Dump Hopper	50000	320
2	DFA TT	7500	64
3	Inlet of Silo Feeding BE	7500	64
4	Silo Top	15000	121
5	F/A Discharge BE	7500	64
	Clinker handling		
6	Clinker BRU 1	25000	196
7	Clinker BRU 2	25000	196
8	Clinker BRU 3	25000	196
9	Clinker tank Bottom at TT1	10000	81
10	Clinker Feed BE Top at TT1	15000	121
11	Clinker Extraction tunnel 1 at T.E	10000	81
12	Clinker Extraction tunnel 1 at H.E	10000	81
13	Clinker Extraction tunnel 2 at T.E.	10000	81
14	Clinker Extraction tunnel 2 at H.E.	15000	121
15	Clinker Extraction tunnel 3 at T.E.	10000	81
16	Clinker Extraction tunnel 3 at H.E.	10000	81
17	Clinker Extraction BC near BRU	15000	121
18	For Clinker tank Top	50000	320
19	At Mill Hopper Bldg. Top	15000	121
	Gypsum, P/A Storage and Handling		
20	Gypsum BRU	20000	156
21	Crusher Bldg. TT-3	10000	81
22	Gyp. Hopper TT4/TT-5	10000	81
23	At TT5	6500	56
24	At TT7	6500	56
25	At Mill Hopper Bldg. Top	5000	42
	Coal Handling & Storage		
26	At Coal BRU	20000	156
27	At Coal TT3 (Crusher Bldg.)	10000	81
28	At Coal Hopper Bldg. Bottom	10000	81
29	At Coal BE Top & HAG Belt	7500	64
30	At HAG Bin Top	6500	56
	Cement Mill Hopper & Reject Bldg.		
31	For Weigh Feeder at Hopper Bldg.	20000	156
32	At Weigh Feeder & Belt Feeding Mill	10000	81
33	Mill Fresh Feed BE & Reject BE Top at FL +37.750M	15000	121
34	Mill Reject BC & BE at FL +9.700M	7500	64
35	At FL +2.00M LVL For Mill Feed BE	7500	64

	Bag House To Cement Silo Feed	172000	
36	For AirSlide below Bag house at +10.200M LVL	10000	81
37	At PPC silo feeding elevator bottom	10000	81
38	At PPC silo Top	15000	121
39	At PSC Silo Top	15000	121
	Cement Silo Bin Venting		
40	At PPC Silo Bin	5000	42
41	At PSC Silo Bin	5000	42
	Packin Plant		
42	Packer Feed BE1	7500	64
43	Packer Feed BE2	7500	64
44	Packer Feed BE3	7500	64
45	Packer Feed BE4	7500	64
46	At Packin Plant Top For Bin 1	40000	320
47	At Packin Plant Top For Bin 2	40000	320
48	At Packin Plant Top For Bin 3	40000	320
49	At Packin Plant Top For Bin 4	40000	320
50	For Desudtin near Packer 1	20000	156
51	For Desudtin near Packer 2	20000	156
52	For Desudtin near Packer 3	20000	156
53	For Desudtin near Packer 4	20000	156
54	For Cement Bulk Point	5000	42
55	Stacker TT2	7500	64
56	At TT1	7500	64
57	Pnematic Handling Fly Ash	2500	30

S.N.	Conditions	Compliance Status
3(b)	The project proponent shall (Air Pollution Control): Design suitable capacity of bag filters to handle gas/air shall be 150% of the normal flow from process / from suction hoods to achieve particulate emission to less than 20 mg/Nm3	Installed designed bag filter as per the dust load to achieve particulate emission less than mg/Nm3.
3(c)	The project proponent shall (Air Pollution Control): Provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags;	<ul> <li>DP transmitter has been provided on every dust collector for leakage detection.</li> <li>Mechanized bag cleaning facilities i.e. Purging system has been provided for better maintenance of bags.</li> </ul>

S.N.	Conditions	Compliance Status
3(d)	The project proponent shall (Air Pollution Control): Provide pollution control system in	
	the cement plant as per the CREP Guideline of CPCB.	or Environmental Protection (CREP) for the cement plants, details are as follows. Details compliance of CREP is enclosed as Annexure – 15.

# Compliance of the Corporate Responsibility or Environmental Protection (CREP) for the cement plants

S. N.	Conditions	Status
1.	<ul> <li>Cement Plants which are not complying* with notified standards:</li> <li>Augmentation of existing Air Pollution Control Devices - by July 2003.</li> <li>Replacement of existing Air Pollution Control Devices - by July 2004.</li> </ul>	Unit commissioned on 31st May 2019 and complying with new emission norms.
2.	Cement plants located in critically polluted or urban areas (including 5 km distance outside under urban boundary) will meet 100 mg / Nm <sup>3</sup> limit of particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg / Nm <sup>3</sup>	Shree Jharkhand Cement Plant is located at a long distance from urban areas. At present emission level are with well in the limits as per CTO i.e. <20 mg/Nm <sup>3</sup> for PM concentration.
3.	The new cement kilns to be accorded NOC/Environmental Clearance w.e.f. 01.04.2003 will meet the limit of 50 mg/ Nm3 for particulate matter emissions.	Unit is clinker grinding unit only and emission level is being / will be maintained <20 mg/Nm³ as per the CTO condition.
4.	CPCB will evolve load based standards by December 2003.	Load based standards issued by the MoEF is for Kiln only. This is cement grinding unit hence, this condition is not applicable.
5.	CPCB and NCBM will evolve SO2 and NO2 emission standard by June 2004. The above referred Notification has stimulated emission standards for SO2 - 100 mg / Nm3 and NOx - 600 mg / Nm3	not applicable.
6.	The cement industries will control fugitive emissions from all the raw material and products storage and transfer points by December 2003. However, the feasibility for the	All conveyors belts are covered.

	control of fugitive emissions from limestone and coal storage areas will be decided by the National Task Force (NTF). The NTF shall submit its recommendation within three months.	extraction, loading and unloading hoppers
7.	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum coke as fuel in cement kiln by July 2003.	
8.		
9.	Tripping in ESP to be minimized by July 2003 as per recommendation of NFT.	Not applicable
10.	Industries will submit the target date to enhance the utilization of waste material by April 2003.	<ul> <li>SJHCP is putting efforts to continuously use waste materials:</li> <li>Waste material (fly ash) from nearby Thermal Power Plants is being used in cement plant.</li> <li>Slag, waste material from steel plant is being used for manufacturing of PSC cement.</li> </ul>
11.	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.	Not applicable
12.	Cement industries will carry out feasibility study and submit target dates to CPCB for co- generation of power by July 2003.	

S.N.	Conditions	Compliance Status
3(e)	Control): Provide sufficient number of mobile	Vacuum sweeping machines are being used continuously for maintaining housekeeping. Photograph of Vacuum sweeping machines are enclosed as Annexure – 16.



#### **VACUUM SWEEPING MACHINES**



\$.N.	Conditions	Compliance Status
3(f)	The project proponent shall (Air Pollution Control): Use leak proof trucks/dumpers for carrying raw materials & cement and shall cover them with tarpaulin. Use closed bulkers for carrying fly ash;	Covered trucks are used for transportation of raw materials like coal; clinker, gypsum and slag are transported through Railway wagon, and closed bulkers are deployed for the transportation of fly ash. Photograph of unloading of fly ash is enclosed as Annexure – 17.

# UNLOADING OF FLY ASH FROM CLOSED BULKER



S.N.	Conditions	Compliance Status
3(g)		Clinker, Cement and Fly ash are being stored in cemented silo. Gypsum/slag and coal are being stored in covered shed. Photograph of storage silo and covered shed are enclosed as Annexure – 18.

#### **CLINKER SILO**



**CEMENT SILO - 1** 

**CEMENT SILO - 2** 



**GYPSUM YARD** 

**COAL YARD** 



Created with PDFBear.com

S.N.	Conditions	Compliance Status
3(h)	The project proponent shall (Air Pollution Control): Provide low NOx burners to control NOx emission	<ul><li>Not applicable for clinker grinding unit.</li><li>CPP will be installed in second phase</li></ul>
3(i)	The project proponent shall (Air Pollution Control): Have separate truck parking area and monitor vehicle emissions at regular interval.	<ul> <li>Separate truck parking area has been developed.</li> <li>Only vehicles having PUC are allowed for transportation.</li> <li>Photograph of Truck yard is enclosed as Annexure – 19.</li> </ul>

#### **TRUCK PARKING AREA**



S.N.	Conditions	Compliance Status
4(a)	The project proponent shall (Water Pollution Control): Adhere to 'zero liquid discharge';	<ul> <li>Complying with Zero liquid discharge.</li> <li>Clinker grinding is a dry process and therefore, no effluent is being generated from the process.</li> <li>Domestic waste water generated from office toilet and canteen is being treated in STP and treated water is used for horticulture purpose.</li> <li>Photograph of STP and utilization of treated water are enclosed as Annexure – 9.</li> </ul>
4(b)	The project proponent shall (Water Pollution Control): Provide Sewage Treatment Plant for domestic wastewater;	Domestic waste water from office and guest house is treated in STP and treated water is used for plantation purpose. Photograph of STP and utilization of treated water are enclosed as Annexure – 9.

S.N.	Conditions	Compliance Status
4(c)	The project proponent shall (Water Pollution Control): Provide garland drains and collection pits for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	All the raw materials are stored under covered shed. Silos for the storage of clinker, cement and fly ash are made available. Photograph of storage silo and covered shed are enclosed as Annexure – 18.
5(a)	The project proponent shall (Water Conservation): Practice rainwater harvesting to maximum possible extent;	<ul> <li>Rainwater harvesting pond (RWHP) developed within plant area with storage capacity 51405 m<sup>3</sup>.</li> <li>Artificial rain water recharge structures are constructed inside plant premises to recharge ground water.</li> <li>Photograph of RWHP and artificial rain water recharge structure are enclosed as Annexure – 20.</li> </ul>

#### RWHP

### ARTIFICIAL RAIN WATER REHARGE STRUCTURE



S.N.	Conditions	Compliance Status
5(b)	The project proponent shall (Water Conservation): Provide water meters at the inlet to all unit processes in the power plant;	-

Annexure-22

#### DIGITAL WATER METER INSTALLED AT BORE WELL



S.N.	Conditions	Compliance Status
5(c)	The project proponent shall (Water Conservation): Make efforts to minimize water consumption in the complex by segregation of used water, practicing cascade use and by recycling treated water;	<ul> <li>Complying with Zero liquid discharge.</li> <li>Clinker grinding is a dry process and therefore, no effluent is being generated from the process.</li> <li>Domestic waste water generated from office toilet and canteen is being treated in STP and treated water is used for horticulture purpose.</li> <li>Photograph of STP and utilization of treated water are enclosed as Annexure – 9.</li> </ul>
6(a)	The PP shall (Energy conservation): Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.	<ul> <li>Solar lights are provided in common area, street lights and parking area.</li> <li>In addition to above 1.999 MW Solar power systems installed.</li> <li>Photograph of installed solar power system is enclosed as Annexure – 22.</li> </ul>

# **SOLAR POWER 1.999 MW**



S.N.	Conditions	Compliance Status
6(b)	The PP shall (Energy conservation): Provide the project proponent for LED lights in their offices and residential area;	÷ · ·

# **LED LIGHT IN OFFICES & PLANT PREMISES**

# Annexure-23



S.N.	Conditions	Compliance Status
6(C)	The PP shall (Energy conservation) : Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards; and.	Fly ash and slag have been used as per BIS standard for manufacturing PPC and Slag cement.
7	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land.	<ul> <li>Raw materials (Clinker, Gypsum &amp; Slag) are transported through rail.</li> <li>Closed bulkers have been used for the transportation of fly ash and covered trucks are used for the transportation of coal.</li> <li>Only PUC vehicles are allowed for transportation of raw materials.</li> <li>Cleaning of roads and truck parking area is being done by vacuum cleaning machine.</li> <li>Photograph of closed bulker and covered truck for raw materials transportation are enclosed as Annexure – 24.</li> </ul>

# CLOSED BULKER FOR THE TRANSPORTATION<br/>OF FLY ASHCOVERED TRUCK WHILE TRANSPORTING<br/>RAW MATERIALS



S.N.	Conditions	Compliance Status
8	The PP shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.	GHG emissions inventory for the plant has been prepared. GHG emission inventory statement for the FY 2020-21 is enclosed as Annexure – 25.

# Annexure-25

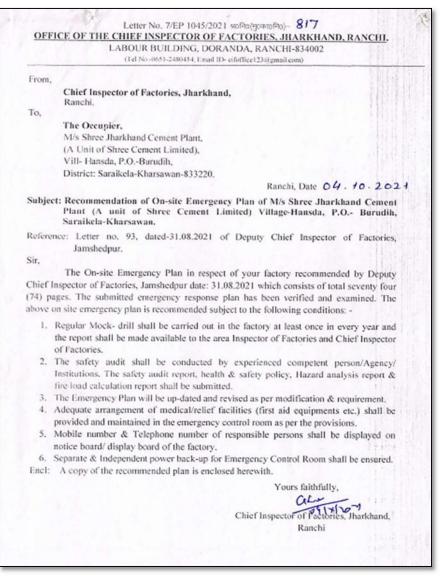
M/s. Shree Jharkhand Cement Plant (A Unit of Shree Cement Ltd.)			
	A. Total CO <sub>2</sub> Emission	:	31473 tons
1	B. CO <sub>2</sub> Sequestered by Green Belt development	:	41.02 tons of CO <sub>2</sub>
	C. Measures adopted for CO <sub>2</sub> reduction	:	
1	Following measures have been taken for the reduction th	ne COz	emission.
	<ol> <li>Unit has installed 1.999 MW Solar Power System clinker grinding unit.</li> </ol>	m (Sola	r PV based) within the existin
	2. Fly ash is being used for making of PPC cement		
	3. Slag is being used for making of PSC cement		
	4. Enhance the optimization of all electrical devices		
	5. Materials transported by vehicles as per their app	roved o	capacity
	6. Increase the density of Green Belt development for	or more	e carbon sequestration
	7. Ensure timely maintenance of plant vehicles		
	And SCL	)	

### GHG EMISSION INVENTORY STATEMENT FOR THE FY 2020-21

S.N.	Conditions	Compliance Status
9	Emergency preparedness plan based on the Hazard identification and Risk assessment (HIRA) and Disaster Management Plan shall be implemented.	On-Site Emergency preparedness plan based on the Hazard identification and Risk assessment (HIRA) and Disaster Management Plan has been prepared and implemented. Approved copy of On-site emergency plant is enclosed as Annexure – 26.
10	The PP shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	This is a clinker grinding unit and the unit is not going for clinker manufacturing. Hence, Heat stress analysis report not required as per Factory & Boiler Act.

# <u>Annexure-26</u>

#### **APPROVED COPY OF ON-SITE EMERGENCY PLAN**



S.N.	Conditions	Compliance Status
11	The PP shall adhere to the corporate environmental policy and system of the reporting of any infringements/ non- compliance of EC conditions at least once in a year to the Board of Directors and the copy of the board resolution shall be submitted to the MoEF&CC as a part of six- monthly report.	Company has a well-established Corporate Environmental Policy. Environment, Social and Governance Committee (ESG) committee review all the environment compliances. All the issues of environment are being discussed in the committee. MoM of the same is enclosed as Annexure – 3.
12	All the recommendations made in the Charter on corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.	We are strictly complaining all the recommendations of the Corporate Responsibility or Environmental Protection (CREP) for the cement plants, details are as follows. Details compliance of CREP is enclosed as Annexure – 15.
13	A dedicated environmental cell with qualified personnel shall be established. The head of the environment cell shall report directly to the head of the organization.	A dedicated environmental cell with qualified personnel has been established and directly reporting to the Senior Executive. Appoint copy of Environmental Officer for the site is enclosed as Annexure – 27.

# APPOINTMENT COPY OF ENVIRONMENTAL OFFICER

	CIN No. 1.234540.1047394.001935 94xx1v: 0.4542.231514. Tol Free: 1900 400 00024.6004 Fax: 1900 400 00024.6004 E-&Kaul 1.chreeSwergshreetenerfilic.com Website: 1www.shreetenermet.in
3	BANGUR NAGAR POST BOX NO.33, BEAMAR 305 901, RAJASTHAN, INDIA
	SCL/BWR/HR/JHGU1/2019 Date : 22/06/2019.
	Mr. Bibhuti Naik, Officer (Environment), Emp. Code : 16715.
	The Management is pleased to confirm your services in the company as Officer (Environment) w.c.f. 01/08/2019.
	Other terms and conditions of your employment shall remain the same as mentioned in the letter of appointment No.SCL/HR/OGU1/S36/ENVIRONMENT/ E.C.16715/2019/ dated 04/02/2019.
	FOR SHREE CEMENT LTD.
1	Oiloy VJAY VYAS, DY. MANAGER (H.R.)
Ś	~
-	JAIPUR OFFICE : SB-187, Bapu Nagar, Opp. Rajasihan University, JLN Marg, Jaipur-302 615 Phone : 0141 4241200, 4241204, Fax : 0141 4241216 NEW DELHI OFFICE : 124723, Jans Barwan, 1, Sahadunah Zafar Marg, New Delhi 110 002 Phone : 011 2370283, 23379216, 23379776, Fax : 017 23370499 CORP. OFFICE : 21, Strum Rang, Kolaut 20 001 Phone : 03322309014 Fax : 033 22434226

S.N.	Conditions	Compliance Status
14	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Provision was made for the housing of construction labour within the site with all necessary infrastructure and facilities. Housing, toilets with soak pits & septic tank, safe drinking water, medical healthcare etc. have been provided to construction labors. Photograph of Labour houses, toilets and STP are enclosed as Annexure – 28.

#### **LABOUR HOUSES**

#### LABOUR TOILET

Annexure-28

STP



S.N.	Conditions	Compliance Status
15	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Complying with the stipulations made by SPCB.
16	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Agreed, we will obtain prior approval from MoEF&CC for further expansion or modification.
17	The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Trans-boundary Movement) Rules, 2016	Used Oil is being collected in drums and sold to CPCB authorized recyclers as per the Hazardous & Other waste (Management & Trans-boundary Movement) Rules, 2016. Manifest copy is enclosed as Annexure – 29.

#### FORM 10 [See rule 19(1)] MANIFEST FOR HAZARDOUS AND OTHER WASTE Sender's Name & Mailing Address (including Phone No. & e-mail) have 1460 01.7 PLANE Hansda, - Byzudih, Sezaliula - Kharsoa 2 Sender's Authorisation No. 3 Manifest Document No. The Transporter's Name & Address (including Phone No. and e-mail) 4 BOLBUM PETROLEUM PRODUCTS Plot No. C-72, 3rd Phase Adityapur Industrial Area, Adityapur, Jamshedpur Ph. 0857-6560375, e-mail: bolbumpetroleum@yahoo.com (Truck / Tanker / Special Vehicle) 5 Type of Vehicle JSPCB/HO/RNC/HWM/1276380/2017 6 Transporter's Registration No. 7 Vehicle Registration No. JH05 CY-0964 BOLBUM PETROLEUM PRODUCTS Plot No. C-72, 3rd Phase Adityapur Industrial Area, Adityapur, Jamshedpur Ph: 0657-6560375, e-mail : bolbumpetroleum@yahoo.com Receiver's Name and mailing Address (including Phone No. and e-mail) 8 **MANIFEST FOR HAZARDOUS** The obstration of the second state of the seco 9 Receiver's Authorisation No. 10 Weste description Total Quantity No. of Containers 11 (Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) 12 Physical form we constitution, laading an 13 Special handling instructions and use proper. P.P.E and then set Sender's Certificate I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorized, packed, marked, and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations. 14 Signature : Day Year Name Month 0809 2021 Transporter Acknowledgement of rece of wastes 15 Signature Name and stamp Month Day Vear 08 09 2021 reacipt of hazardous and other waste 16 Receiver's certification for Signature Month Day Year Name and stamp : 08092021 White : To be forwarded by the sender to the State Pollution Control Board after signing all the seven copies

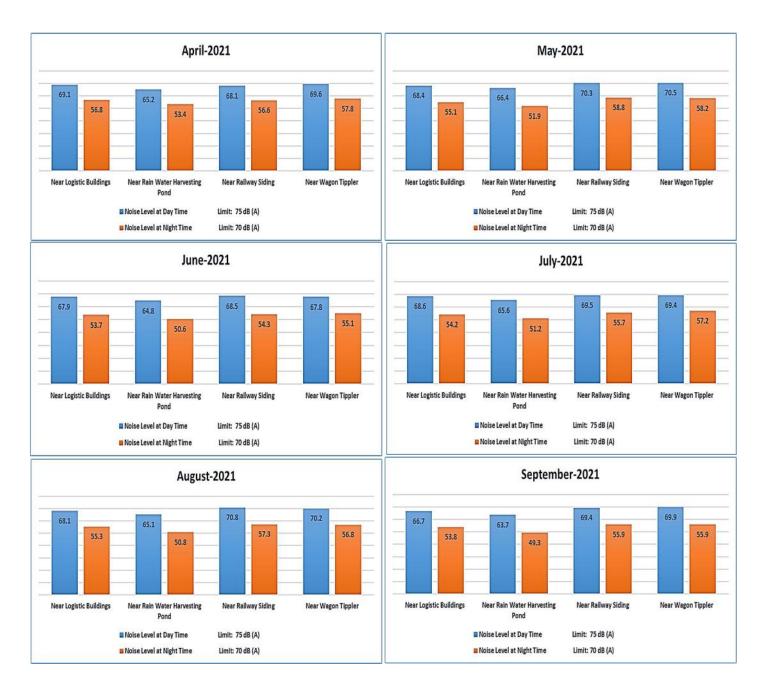
S.N.	Conditions	Compliance Status
18	The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dB (A) during day time and 70 dB (A) during night time.	Noise level is being monitored on regular basis and results are enclosed as Annexure – 30.

**FORM 10** 

**AND OTHER WASTE** 

#### Annexure-30

	Ambient Sound Level Monitoring Data Leq. in dB(A)							
Locations	Plant boundary near logistic building		Plant boundary near Rain water harvesting pond		Plant boundary near railway siding		Plant boundary near wagon tippler	
Time	Day Time	Night Time	Day Time Night Time		Day Time	Night Time	Day Time	Night Time
Norms	75	70	75	70	75	70	75	70
Apr-21	69.1	56.8	65.2	53.4	68.1	56.6	69.6	57.8
May-21	68.4	55.1	66.4	51.9	70.3	58.8	70.5	58.2
Jun-21	67.9	53.7	64.8	50.6	68.5	54.3	67.8	55.1
Jul-21	68.6	54.2	65.6	51.2	69.5	55.7	69.4	57.2
Aug-21	68.1	55.3	65.1	50.8	70.8	57.3	70.2	56.8
Sep-21	66.7	53.8	63.7	49.3	69.4	55.9	69.9	55.9



S.N.	Conditions	Compliance Status
19	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	<ul> <li>Annual occupational health surveillance program of the workers and staff are performed on regular basis.</li> <li>Records are maintained as per the Factory act.</li> <li>Sample report enclosed as Annexure – 31.</li> </ul>

#### SAMPLE MEDICAL REPORT

		0					Certifica	ertificate of Fitness			
										Bihar Factory Rule 1950	
	1		. Serial number :-	17984				Serial numbe	er :- 13	984	
			. Date :-	2020-08	3-04			Date :-	20	20-08-04	
		з	. Sex :-	Male				I Certify that	1 have recent	y examined	
		4	. Residence :-	bhopal -	district.mad	hya pradesh		Date :-		20-08-04	
			. Date of Birth if ava					Son of :-		IANDRA SHEKHAR TRIPATHI	
			10-Feb-1967								
			Physical Fitness :-					Resident at :-	- bł	opal -district, madhya pradesh	
	1.00	/	Descriptive marks	- BM OVER	R LT HAND						
								that his/her a	us of being en oge as nearlya	aployed in a factory & scan be ascertained	
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		C	1). Refusal of certica	te							
	0.74						-	and that he/:	she Fit for em	oloyement in factory as	
								as an adult/o	child		
	1.00		<ol><li>Certificate of bein</li></ol>	ng revoked							
			-				_	His/Her desci BM OVER LT		ire	
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		)	NOTE :- Exact detail	DE. R Add. G. M UNK O. MA UNK O. MA	physical disa		clear stat	ted.	Init	Description all of certifying surgeon Description A of the Internation of the Internation of the Internation of the Internation International International Internation International Internation International International Internation International International Internati	
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12	SHRE	E CEMENT LTD	and the second se		Specific Grave	1		1.010 - 1.030		FEF75-65 [JA] - 1.40	-
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COMPLETE BLC	OD COUNT		vonuere verfe		Proteis	Absent		Absent		2 FEFSON (LA) 523 3.64 73	-
Hb (Hermoglabic)	15.3	gm/dt	Male : 13.0-18.0 Female : 12-15.5 Infant	135.005	Chacmer	Absent		Abarra		0 FEFTS% [J.a] 2.19 1.77 81 FEFTS% [J.a] 2.19 1.77 81	-
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DIFFERENTIAL C	DUNT					EXAMINATION				4 FEVIFEV8 (%)	-
Neutrophils	65	*	42 - 65		Pus Cella RBC	1-2	/hpf			a	-
Lyntphosytes Monocytes	30	*	29 - 45 2 + 10		Epithelial Cells	Absent	Pat			-10 Vit. Ameril LungAge (Y) \$3.00 45.00 67	-
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Basephile Based Celle	0		0-1		Crystals	Absent	8,310	and the second		7 FF29N (LA) - 8.18	-
Platelet Count	1.45	Lakte/cumm	100.45		LIPID PROFIL	1	and the second	IL KENS		* FF50% [JA] - 4.07 FF50% [JA] - 2.12	-
PCV (Packed Cell V		%	25-54	1000	S-Cholesterol	201	mg/dl	Desirable 1 + 200		PN/5 [J] - 2.33	-
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MCHC (Mean Corp.	acular Hb 34.23	gm/di	32 - 35		% 7mg/yeerides	163	mg/dl	Desirable 1 < 150		3 7000 PN SFINC [0] - 02.63	-
Crecestration	nutur 31.1				1.1			Borderine high : 150 - 199 High : 200 - 499		FIVENC N	-
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	XAMINATION REPORT								S. Enito	CODD Severity within Normal Groce	128 190
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	2.00			1.1		1.					1

\$.N.	Conditions	Compliance Status
20		All the environment protection measure and safeguards recommended in EIA/EMP has been complied. Details enclosed as Annexure – 32.

#### Shree Jharkhand Cement Plant Shree Jharkhand Cement Plant (A Unit of Shree Cement Limited) (A Unit of Shree Cement Limited) EIA/EMP Implementation Matrix **EIA/EMP Implementation Matrix** 5.1. Development of green belt in 36.3 acre (33%) of the total S. No Parameters EIA/ EMP Implementation Status Implemented Green Belt 5 plant area 5.2. Plantation of local plant species Development 1.1. Installation of Bag House at Cement Mill Implemented Implemented Air Pollution 1 5.3. Post plantation activities for its survival 1.2. Installation of 57 numbers of Bag filters at all material Implemented Implemented Control transfer point 1.3. Storage of Materials in cover shed Implemented 1.4. Installation of water sprinklers to control fugitive dust Implemented nuisance 1.5. Periodical monitoring of air parameters by NABL certified Implemented environmental lab 1.6. Installation of continues stack monitoring system and same Implemented is connected with SPCB and CPCB serve 1.7. Installation of 04 nos continues Ambient Air Quality Implemented monitoring stations and same is connected with SPCB and CPCB servers 2.1. Installation of piezometer (Automatic Ground water level Implemented 2 Water recorder with telemetry) for ground water level Pollution monitoring 2.2. Installation of digital water flow meter for ground water Control Implemented abstraction 2.3. Installation of STP for treatment of domestic waste water Implemented 2.4. Implementation of rain water harvesting cum ground water Implemented recharge structure 2.5. Periodical monitoring of water parameters by NABL Implemented certified environmental lab 3.1. Storage of used oil under proper shed as per CPCB guideline Implemented 3.2. Disposal of used oil by CPCB registered recycler Implemented 3 Waste management 3.3. Dust collected from the dust collectors (Bag Filters) Implemented recycled back to the process 3.4. Utilization of STP Sludge as manure for greenbelt Implemented development / plantation 3.5. Selling of Lead acid battery to CPCB authorised recycler Implemented 3.6. Selling E-waste to CPCB authorised recycler Implemented 3.7. Enhance regular hose keeping by vacuum sweeping machine Implemented 4.1. Maintained machinery with proper maintenance, oiling and Implemented Noise greasing at regular intervals 4 Pollution 4.2. Provision of adequate silencers for all diesel engines Implemented Control 4.3. Periodical monitoring of noise level by NABL certified lab Implemented 4.4. Provision for earmuffs to all operators and employees Implemented working near the machinery Shree Ibarkhand Coment Plant (A Unit of Shrao Comont Ltd.) Shree Jharkhand Cement Plant (A Unit of Shree Cement Ltd.) ï

# **EIA/EMP Matrix**

#### Annexure-32

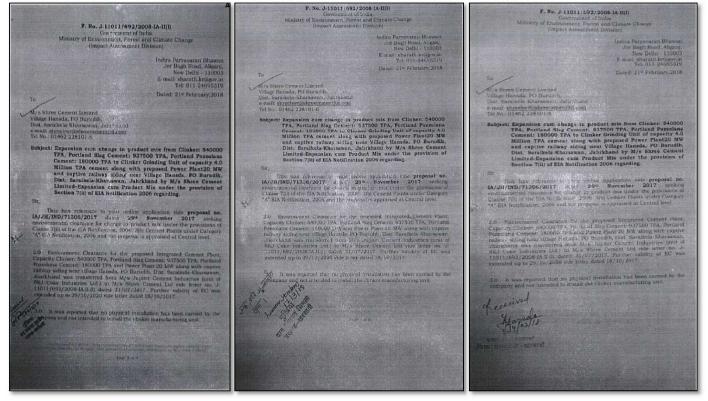
S.N.	Conditions	Compliance Status
21	adequate air changes as per ACGIH	Ventilation system has been designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.

S.N.	Conditions	Compliance Status
22	Sufficient number of color coded waste collection bins shall be constructed at shop floors in each shop to systematically segregate and store waste materials generated at the shop floors (other than Process waste) in designated colored bins for value addition by promoting reuse of such wastes and for good housekeeping.	Color coded waste collection bins have been placed at various places in the plant premises for good housekeeping. Photographs are enclosed as Annexure – 33.

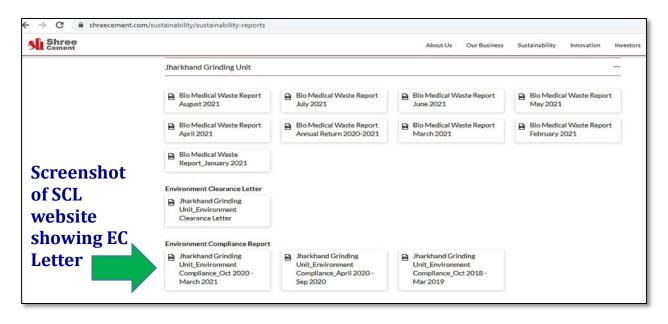
# Dust Bin at different location inside plant premises



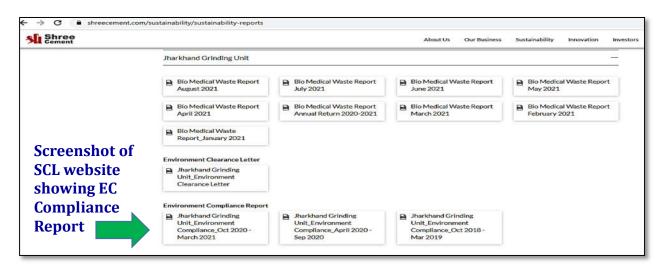
S.N.	Conditions	Compliance Status
23 (a)	The project proponent shall (post-EC Monitoring) : Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;	<ul> <li>Copy of EC has been provided to following local bodies:</li> <li>1. Gram Panchayat, Simla Block, Kharsawan on dated 12.03.2018</li> <li>2. Gram Panchayat, Burudih Block, Kharsawan on dated 14.03.2018</li> <li>3. Chief of Block Kharsawan, District: Saraikela-Kharsawan on 14.03.2018</li> <li>Photocopy of received copy are enclosed as Annexure – 34.</li> </ul>



S.N.	Conditions	Compliance Status
23 (b)		The copy of environment clearance letter is available on the web site of Shree Cement Ltd. <u>www.shreecement.in</u> Screenshot of Shree Cement Ltd. website showing EC letter is enclosed as Annexure – 35.



S.N.	Conditions	Compliance Status
23 (c)	The project proponent shall (post-EC Monitoring): Inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) at http:/envfor.nic.in.	EC was received on 7th March 2018 and advertised in Prabhat Khabar & Dainik Bhaskar local newspapers have been published on dated 11/03/2018 & 13/03/2018 respectively. Copy of the same submitted on 14/03/2018.
23 (d)	The project proponent shall (post-EC Monitoring): Upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;	Status of compliance of the stipulated environment clearance conditions, including results of monitored data is available on the web site of Shree Cement Ltd. <u>www.shreecement.in</u> Screenshot of Shree Cement Ltd. website showing EC compliance report is enclosed as Annexure – 36.



S.N.	Conditions	Compliance Status
23 (e)	The project proponent shall (post-EC Monitoring) : Monitor the criteria pollutants level namely; PM10, S02, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;	<ul> <li>4 nos. CAAQMS has been installed inside plant premises for the monitoring of PM10, PM2.5, SO2, NOx &amp; CO.</li> <li>CEMS i.e. opacity meter for PM measurement has been provided at cement mill stack.</li> <li>Monitoring data of the same is being uploaded/ available on JSPCB server and same are being displayed at company main gate.</li> <li>Snapshot of JSPCB server showing Shree Cement CAAQMS data is enclosed as Annexure – 37, Photograph of CAAQMS and CEMS are enclosed as Annexure – 38, and photograph of display board at main gate is enclosed as Annexure – 39.</li> </ul>

## Annexure-37

#### SNAPSHOT OF JSPCB SERVER SHOWING SHREE CEMENT CAAQMS DATA

lick PM	10 Analyzer		l State Poll trol Board	lution	(e)		adi é dizateli adi é spenasti i	
	Home Dastiboard Day Wise Data	Month Wise Data	Industry Detail (	ndustry Category	Star Registration	Llogin		
1578 R	cord Found			Export to Excel	Close	9		
SI. No	Industry Name	stationId	analyserid	Parameter	Process Value	Unit	Submitted Date	Timestamp of Analyser
1	M/s Jharkhand Cement Plant(A unit of Shree Cement Ltd)	Stack_1_Cement Mill_1	jhar_analyzer_103	PM	0.08	mg/Nm3	01-10-2021 13:12:29	2021-10-01 12:45
2	M/s Jharkhand Cement Plant(A unit of Shree Cement Ltd)	AQMS_4	jhar_analyzer_103	NOx	12.25	ug/m3	01-10-2021 13:12:29	2021-10-01 12:45
3	M/s Jharkhand Cement Plant(A unit of Shree Cement Ltd)	AQMS_4	jhar_analyzer_103	co	0.42	mg/m3	01-10-2021 13:12:26	2021-10-01 12:45
4	M/s Jharkhand Cement Plant(A unit of Shree Cement Ltd)	AQMS_4	jhar_analyzer_103	NÖZ	10.05	ug/m3	01-10-2021 13:12:24	2021-10-01 12:45
0	M/s Jharkhand Cement Plant(A unit of Shree Cement Ltd)	AQMS_4	jhar_analyzer_103	NO	2.19	ug/m3	01-10-2021 13:12:23	2021-10-01 12:45
0	M/s Jharkhand Cement Plant(A unit of Shree Cement Ltd)	AQMS_3	jhar_analyzer_103	co	0.49	mg/m3	01-10-2021 13:12:23	2021-10-01 12:45
6		AQMS 4	thar analyzer 103	PM2.5	9.50	ug/m3	01-10-2021 13:12:23	2021-10-01 12:45
17. 11.	M/s Jharkhand Cement Plant(A unit of Shree Cement Ltd)	AGIVI5_4						
6	M/s Jharkhand Cement Plant(A unit of Shree Cement Ltd) M/s Jharkhand Cement Plant(A unit of Shree Cement Ltd)	AQMS_3	jhar_analyzer_103	NOX	18.17	ug/m3	01-10-2021 13:12:23	2021-10-01 12:45
6 7			jhar_analyzer_103 jhar_analyzer_103		16.17 6.36	ug/m3 ug/m3	01-10-2021 13:12:23 01-10-2021 13:12:23	

# **CONTINUOUS AMBIENT AIR QUALITY MONITORING STATIONS**



Opacity meter installed at Cement Mill Stack



CAAQMS-1 Near Logistic Buildings



**CAAQMS-2** Near Wagon Tippler



**CAAQMS-3 Near RWHS** 



**CAAQMS-3 Near Railway Siding** 

Annexure-39



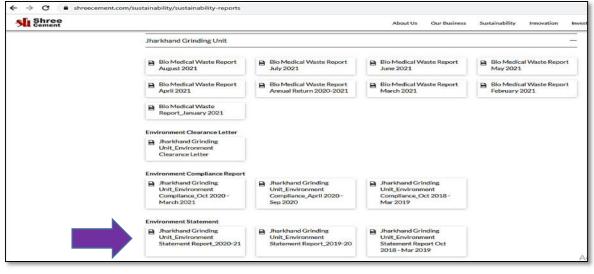
**Display Board at Main Gate** 

S.N.	Conditions	Compliance Status
23 (f)		Compliance report is being submitted on regular basis to the Regional Office of MoEF&CC, Zonal Office of CPCB and the SPCB. Screenshot of mail for the submission of half yearly compliance is enclosed as Annexure – 40.

# Screenshot showing the submission of Half Yearly EC Compliance

To:	ro.ranchi-mef@gov.in	
Cc: zokolkatta.cpcb@nic.in, ranchijspcb@gmail.com, "JSPCB Jamshedpur" <jspcb.jsr@gmail.com></jspcb.jsr@gmail.com>		
Bcc:	Dr. Anil Kumar Trivedi/scl@sd, Ashok 14470 Kumar/scl@sd, Bibhuti Naik/Odisha/sd@scl	
Date: Thursday, May 27, 2021 05:20PM		
Subject:	bject: Half Yearly Compliance of Conditions of EC for the Cement Grinding Unit, Shree Jharkhand Cement Plant - Reg.	
Dear Sir		
In reference t	o the above subject matter, please find here the attached report for half yearly compliance of conditions of EC Letter No. J-11011/692/2008-IA-II	
In reference t (I) dated 21-0	to the above subject matter, please find here the attached report for half yearly compliance of conditions of EC Letter No. J-11011/692/2008-IA-II 02-2018 for the period of October-2020 to March-2021 for the Cement Grinding Unit M/s. Shree Jharkhand Cement Plant (A Unit of Shree Cement ted at Village-Hansda, PO-Burudih, Dist. Saraikela-Kharsawan, Jharkhand.	
In reference t (I) dated 21-( Limited); loca	02-2018 for the period of October-2020 to March-2021 for the Cement Grinding Unit M/s. Shree Jharkhand Cement Plant (A Unit of Shree Cement	
In reference t (I) dated 21-( Limited); loca Regards,	02-2018 for the period of October-2020 to March-2021 for the Cement Grinding Unit M/s. Shree Jharkhand Cement Plant (A Unit of Shree Cement ted at Village-Hansda, PO-Burudih, Dist. Saraikela-Kharsawan, Jharkhand.	
In reference t (I) dated 21-( Limited); loca Regards, Environment ( M/s. Shree Jho	02-2018 for the period of October-2020 to March-2021 for the Cement Grinding Unit M/s. Shree Jharkhand Cement Plant (A Unit of Shree Cement ted at Village-Hansda, PO-Burudih, Dist. Saraikela-Kharsawan, Jharkhand. Cell arkhond Cement Plant	
In reference t (I) dated 21-( Limited); loca Regards, Environment ( M/s. Shree Jho	02-2018 for the period of October-2020 to March-2021 for the Cement Grinding Unit M/s. Shree Jharkhand Cement Plant (A Unit of Shree Cement ted at Village-Hansda, PO-Burudih, Dist. Saraikela-Kharsawan, Jharkhand. Cell	
In reference t (I) dated 21-0 Limited); loca Regards, Environment ( M/s. Shree Jho A Unit of Shree	02-2018 for the period of October-2020 to March-2021 for the Cement Grinding Unit M/s. Shree Jharkhand Cement Plant (A Unit of Shree Cement ted at Village-Hansda, PO-Burudih, Dist. Saraikela-Kharsawan, Jharkhand. Cell arkhond Cement Plant	
(I) dated 21-0 Limited); loca Regards, Environment ( M/s. Shree Jho A Unit of Shree Attachments:	02-2018 for the period of October-2020 to March-2021 for the Cement Grinding Unit M/s. Shree Jharkhand Cement Plant (A Unit of Shree Cement ted at Village-Hansda, PO-Burudih, Dist. Saraikela-Kharsawan, Jharkhand. Cell arkhond Cement Plant	

S.N.	Conditions	Compliance Status
23 (g)	The project proponent shall (post-EC Monitoring) : submit the environmental statement for each financial year in Form – V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company;	the Jharkhand State Pollution Control Board and is available on the web site of Shree Cement Ltd.



#### Screenshot of SCL website showing Environmental Statement

S.N.	Conditions	Compliance Status
23 (h)	Monitoring) Inform the Regional Office	Plant was commissioned on 31st May, 2019. CA certified financial closure is enclosed as Annexure – 42.

#### **CA certified financial closure**

