CIN No. : L26943RJ1979PLC001935

Phone : 01462 228101-6 Toll Free : 1800 180 6003 / 6004 Fax : 01462 228117 / 228119

E-Mail : shreebwr@shreecement.com Website : www.shreecement.com



# SHREE CEMENT LTD.

An ISO 9001, 14001, 45001 & 50001 Certified Company

Regd. Office:

BANGUR NAGAR, POST BOX NO.33, BEAWAR 305901, RAJASTHAN, INDIA

SRCP/ENV/2022-23/29

8762\_\_

26th May, 2022

To,

Deputy Director General of Forests (C),

Integrated Regional Office Ministry of Environment Forest & Climate Change, Aranya Bhawan, North Block, Sector-19, Naya Raipur, Atal Nagar, Chhattisgarh.

Sub:- Submission of Half Yearly compliance status condition of Environmental Clearance for our Shree Raipur Cement Plant (Λ unit of Shree Cement Limited) for the capacity of 2\*2.6 to 3\*4.5 Million TPA Clinker, 2\*3.0 to 3\*5.5 million TPA Cement, 30 to 100 MW Waste Heat Recovery Power Plant, 25 to 125 MW Captive Power Plant along with Synthetic Gypsum Unit (65 TPH) and DG Sets [2000 KVA (size 1000/500/250/125)] located at Village Khapradih, Tehsil – Simga, District – Balodabazar Bhatapara (Chhattisgarh) for the period from October - 2021 to March - 2022.

Ref: - Environment Clearance Letter No. J-11011/235/2008- IA II(I) dated 11th September 2019.

Dear Sir,

With reference to the above subject, we are submitting herewith Six Monthly Environment Clearance (EC) compliance report for the period from October - 2021 to March - 2022 for our Shree Raipur Cement Plant (A unit of Shree Cement Limited) located at Village Khapradih, Tehsil – Simga, District – Balodabazar – Bhatapara.

Submitted for your kind information and record please.

Thanking you

Yours faithfully For Shree Raipur Cement Plant (A unit of Shree Cement Ltd.)

Dr. Anil Kumar Trivedi

Asst. Vice President & Head - Environment

Encl.- As above.

CC to: -

- The In charge (Zonal Office), Central Pollution Control Board (CPCB), Parivesh Bhawan, Paryavaran Parisar E-5, Arera Colony, Bhopal-462016
- The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhavan, North Block, Sector-19 Nawa Raipur, Atal Nagar (C.G).
- The Regional Officer, Chhattisgarh Environment Conservation Board, Commercial Complex, Chhattisgarh Housing Board Colony, Kabir Nagar, Raipur (C.G.) – 492099

JAIPUR OFFICE: SB-187, Bapu Nagar, Opp. Rajasthan University, JLN Marg, Jaipur 302015 Phone: 0141 4241200, 4241204

NEW DELHI OFFICE: 122-123, Hans Bhawan, 1, Bahadurshah Zafar Marg, New Delhi 110002

Phone: 011 23370828, 23379218, 23370776

CORP. OFFICE: 21, Strand Road, Kolkata 700001 Phone: 033 22309601-4 Fax: 033 22434226

## Compliance Status of Environment Clearance

Name of Project:	Shree Raipur Cement Plant (A unit of Shree Cement Ltd)	
Capacity:	2*2.6 to 3*4.5 Million TPA Clinker, 2*3.0 to 3*5.5 million TPA Cement, 30 to 100 MW Waste Heat Recovery Power Plant, 25 to 125 MW Captive Power Plant along with Synthetic Gypsum Unit (65 TPH) and DG Sets [2000 KVA (size 1000/500/250/125)]	
Location: Village Khapradih, Tehsil-Simga, Distt Balodabazar - Bhatapara (Chhatt		
EC letter No.	J-11011/235/2008- IA II (I) dated 11 <sup>th</sup> September 2019.	
	I .	

Sr. No.	Conditions	Compliance status
A. Sp	pecific Conditions:	
1	The limestone for the project shall be sourced only from (i) Existing Captive Semradih & Bharuwadih Limestone (M.L Area - 531.126 ha) and (ii) Karhi Chandi Limestone Mine (ML area 242.127 ha) which are located adjacent to plant site. In case of any change in source of limestone, the project proponent shall obtain prior permission from MoEF&CC.	Being Complied. Limestone for the project is being sourced from our existing Semradih & Bharwadih Captive Limestone Mines (Mining Lease Area of 531.126 Ha.). Production of Limestone from Karhi- Chandi Captive Limestone Mines (Mining Lease Area of 225.719 Ha) is not yet started. Prior permission will be taken from MoEF&CC in case of any change in source of limestone.
ii	Project proponent shall conduct health studies in all the villages covered within a radius of 2km radius of the project site for assessment of prevalence of silicosis for once in six months.	Noted.

Sr. No	Conditions	Compliance status
III	Railway siding shall be completed in a time frame of five years.	Being Complied.  We have obtained "In Principal Approval" from the Sr. Divisional Operations Manager, SEC Railway, Raipur, Vide Letter No. Sr.DOM/R/PLG/SCL-GPFT/2021/111, dated: 07.04.2021. Currently excavation and track bed laying work in under progress. The Railway siding will be completed within 5 years. The Copy of Approval Letter is attached as Annexure-1.



Correction-t 150

Divisional Office
South East Central Railway
Raigner - 442 008
Tel:00721 - 255208 FAA: (0771-232200)
Bit 72200 DM 72223 (886)
East 106-72200 DM 72223 (886)
Mobile: 9752877900
Date: 08.04.2021

Dr. Prakash Chandra Tripothi 5r,Divl.Operations Manager(Co-ord)

No. Sr.DOM/R/PLG/ SCL-GPPT/2021 11.

Add. GM. M/4 Shree Comerc Ltd. Bangar Nagar, Beawar, Rajathan.

Sub: 'In Principle Approval' [IPA] for the proposed construction of Green Field FFT by M/s Stree Cement Ltd. with take off from existing private stding of M/s Ultrahelic Cement Ltd. connected from IRN station.

Ref. This office letter no. Sc.DOM/R/PLU/ NCI-GPFT/2021/110 dated 07:04:2021

In reference to above mentioned better 'In Principle Appended' (IPA) for the proposed construction of Green field FPT by M/s Stree General Ltd. with take off from existing private siding of M/a Ultratech Cement Ltd. connected from HN station has been approved by competent authority of SEC Railway.

You are additional to submit the Described Project Report (DPR) along with Codel thougast of the proposed estimated seet in the more of FARCAD SEC disalway and get the detailed glan, addition prepared and and sanctioned Relivey dues and DPR, must be apposed within the specified time frame as mentioned in Master Circular on PFT 2020/D issued on dated 23.06.2020.

Please achnowledge the receipt

Sr. Divl. Operation Manager S.E.C. Railway Hulpur.

Copy: 1. PS to DRM for kind information of DRM/R Please.

Z. CTPM/SECR/BSP for land information please.

#### Annexure-1:

"In Principal Approval" from the Sr. Divisional Operations Manager, SEC Railway, Raipur,

Sr. No	Conditions	Compliance status
iv	CER related activities shall be completed within a time frame of three years.	Being Complied.  CER related activities are being implemented.CER activities & expenditure details for the period from April 2020 to March 2021 is attached as Annexure-2.

#### Annexure-2: Details of CER Expenses

Sr. No.	Area of CER	Expenditure FY- 2020-21 (in Rs.)
1.	Renovation of public health center of village Khaparadih, Semaradih, Bharuadih, Chandi & Karhi.  1. Construction of Male, Female and child ward 15 nos.  2. Construction of Male & Female toilet 20 nos.  3.Water cooler 05 nos.  4. Ambulance – 05 nos.	Construction of Public Toilet at Village- Chandi – <b>2,24,295</b>
2.	Health management center with full-fledged medical check-up, doctors and nursing staff, free medicines and 10 beds for male & female ward for primary health treatment and availability of 24x7 ambulance at village Bharuadih.	Administrative expenses of Health Management Centers including medicines, ambulance maintenance and running charges- 8,54,080
3.	Renovation of Govt. schools of village Khaparadih, Semaradih, Bharuadih, Chandi & Karhi.  1. Construction of rooms: 25 rooms.  2. Construction of Male & Female toilet: 30 nos.  3.Water cooler 05 nos.  4. Computers labs- 05 nos.	

	5. Furniture's	45 55 00 000
4.	English medium school of 12 <sup>th</sup> standards at village Bharuadih.	15,57,00,000
5.	Sports complex in village Khaparadih and Bharuadih.  1. Construction of rooms: 2 rooms.  2. Construction of Male & Female toilet: 04 nos.  3.Water cooler 02 nos.  4. Preparation of playground: 02 nos.  5. Sports equipment's - 02 sets	
6.	Construction of roads in village:  1. Bharuadih : 02 Kms.  2. Chandi : 03 Kms.	CC Road at Village- Chandi and CC road work at moksh dham at chandi village – 3,78,126 Construction of CC Road at Village-Bhruadih (Colony)- 23,32,266 CC Road at Village- Pausari- 1,26,052 Traffic road barrier – 50,479
7.	Construction of community center at village Khaparadih, Semaradih, Bharuadih, Chandi & Karhi : 05 Nos.	Construction of community hall at Karhi- 3,59,534 Construction of Rangmanch at Bharuadih — 2,62,951 Construction of Rangmanch at Chandi — 1,85,021 Construction of Jai Stambh at Village-Bhruadih — 1,46,364 Costruction of Comunity hall- Village Bhruadih — 2,07,810 Construction of Temple at Village-Bharuadih — 1,50,847 Construction Of Jyoti Kaksh At Pausari — 1,39,267
8.	Drinking water tank at village Lohari & Paunsari	Drinking water pipeline for Village Sehmradih- 4,45,490 Extension of drinking water pipeline at Village Bhruadih – 22,686
9.	Renovation of existing water ponds for rainwater recharge and plantation all around the boundary of pond at village Khaparadih, Semaradih, Bharuadih, Chandi & Karhi.	
10.	Subsidy on drip irrigation system, seeds and agroforestry in 100 Ha agriculture land in nearby village Khaparadih, Semaradih, Bharuadih, Chandi & Karhi	:
11.	Plantation in nearby villages along the roads, Govt. offices, and available free space at village Khaparadih, Semaradih, Bharuadih, Chandi & Karhi @ 5000 per year.	Plantation in nearby villages – 1,81,844 Grill fixing & plantation work between divider at distt. balodabazar main road-19,88,026
12.	Installation of solar street lights at community center, common area, dispensary, bus stand and school at village Khaparadih, Semaradih, Bharuadih, Chandi & Karhi.	area
	Total (Rs.)	16,37,61,992

Sr. No.	Conditions	Compliance status
V	The project proponent shall reduce the abstraction of ground water by shifting the requirement to surface water and regular report shall be submitted to the Regional Office of the Ministry at the interval of six months.	We have reduced the use of ground water by using Surface water harvested at our existing mines pit for industrial & process water requirement, water for domestic use is being extracted from Ground water sources.  Water abstraction report for the period from October 2021 to March 2022 is attached as Annexure-3.

#### Annexure-3: Water Abstraction Report

	Shree Raipur Cement Plant (A Unit of Shree Cement Limited)				
The state of the s	Water Abstraction Report for the period from October 2021				
Month	Surface water - Mines Pit (KL)	Ground Water- Bore well (KL)			
Oct-21	38542	23240			
Nov-21	30888	20435			
Dec-21	31365	21950			
Jan-22	28875	19826			
Feb-22	31968	17497			
Mar-22	60852	19391			
Total	2,22,490	1,22,339			

## **B.** General Conditions -

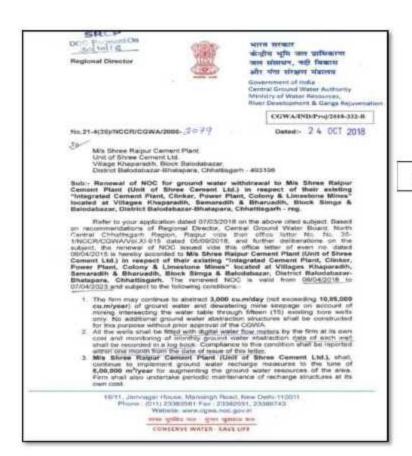
#### I- Statutory compliance

Sr. No	Conditions	Compliance status	
i	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	Being Complied.  We have obtained Consent to Operate vide CECB letter no. 9497/TS/CECB/2022 Nava Raipur Atal Nagar, dated 24/03/2022, please refer <b>Annexure- 4</b> . We have also obtained Consent to Establish for expansion project vide CECB letter No. 10020/TS/CECB/2020, Dated: 12.02.2020, please refer <b>Annexure- 5</b> .	





Sr. No.	Conditions	Compliance status	
li	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.	[[] [[] [[] [[] [] [[] [[] [] [] [] [] [	



Annexure-6: Copy of CGWA NOC

Sr. No.	Conditions	Compliance status	
III		Being Complied.  We have obtained authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 vide Letter No. 11201/HSMD/HO/CECB/2021 dated — 18.03.2021 valid up to 03.02.2024. The copy of the same is attached as Annexure-7.	



## CHHATTISGARH ENVIRONMENT CONSERVATION BOARD PARYAVAS BHAWAN, NORTH BLOCK, SECTOR -19, NAVA RAIPUR ATAL NAGAR, RAIPUR (C.G.) 492002 E-mail : hoccob@gmail.com, Pb. No. 0771-2512220

No. 11201/H5MD/HO/CECB/2021

Baipur, Date 1 8 / 03/2021

Tw.

M/s Shree Raipur Cement Plant, (A Unit of Shree Cement Limited), Village: Khaprudih, Tehril - Singa, Diut, - Balodahazar Bhatapara (C.G.)

Third amendances of sufficientian under fire Hazardova and Other Wastes (Management & Transboundary Movement) Rules, 2016.

- Ref :- 1. Chant of authorization letter no. 7883 HSMD HO CECB/2019 dated 17-02-2019.
  2. Amendment of authorization letter no. 5850/HSMD HO CECB/2019 dated 03/10/2019.

  - Second assaudusati of arthorization latter us. 11176/HSMD HO CECB 2019 doted
    13/03-2020.
     Your Online application to: 09/10707 dated 29/01/2021 & Subsequent Correspondence
    ending dated 2/8/02/2022.

Citarrisgash Environment Conservation Board had granted an amendment in notherization under Hazardons and Other Wastes (Management & Transformenty Movement) Rides, 2016 vide letter an 11/176-HSSED HO-CECH 2019 sheed 15/03/2020 for following learned-us waste, assegury and quantity subject to refullment of the terms and conditions mentioned therein.

Se. Ne.	Category of Harardous Wants as per the Schodules I, II and III of these rules	Authorised mode of disposal ar recycling or utilization or eu- processing etc.	Quantity (Tonney/Annum)
L.	Furnises or seacher residue and debris (Scheibide-L Cat. No. 1.1)	Co-pricessing	1000 MT Mouth
2.	Tarry cestifue and will bottoms from distillation (Schedule-L Cat. No. 1.2)	3:	1000 MT Mouth
3,	Oily sludge entitions (Schedule-L Cat. No. 1.3)	80	1000 MT Month
4-	Organic revidues (Nehelisle-L Cut. No. 1.4)	do	1000 MT Mouth
	Residues from alkali wash of facts (5shedulest, Cat. No. 1.5)	do	1000 MT Moute

Annexure-7: Copy of Hazardous Waste Authorization

Sr. No.	Conditions	Compliance status
i	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (Coprocessing Cement); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Being Complied.  We have installed Continuous Emission Monitoring System at all stacks to monitor stack emission as per prescribed standards and data is being transmitted to both SPCB & CPCB servers. Calibration of installed Continuous Emission Monitoring System are also being done on regular basis. Please refer following photographs.

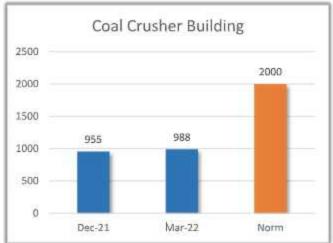


**Photos showing CEMS installation** 

Sr. No	Conditions	Compliance status
ii	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.	Being Complied. Fugitive emission monitoring is being done in the plant premises on regular basis through labs recognized under Environment (Protection) Act, 1986. Fugitive Emission Monitoring Reports for the period October - 2021 to March- 2022 are attached herewith as Annexure-8.

**Annexure 8: Fugitive Emission Monitoring Results** 





hree Raipur Cement Plant					
	Fugitive Emission Monitor	ring Results (µg/m³)			
Location	Monitoring Period				
	Norms	Dec-21	Mar-22		
Packing Plant	5000	1045	1264		
Coal Crusher Building	2000	955	988		

Sr. No.	Conditions	Compliance status
III	The project proponent shall install system carryout to Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM <sub>10</sub> and PM <sub>2.5</sub> in reference to PM emission, and SO <sub>2</sub> and NOx in reference to SO <sub>2</sub> and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.	Being Complied.  We have Installed 4 nos. of CAAQMS for the monitoring of the parameters PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NOx & CO out of which two are installed within the plant premises and two CAAQMS stations are installed outside the plant area. Photographs of the same are attached as Photo No. 1, 2, 3 & 4.





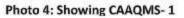








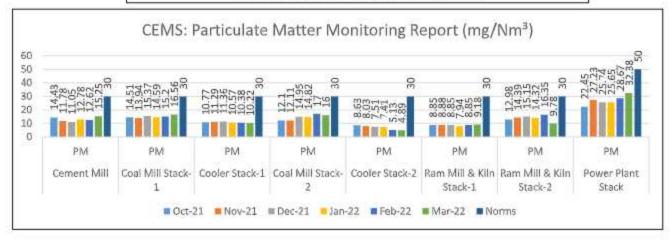
Photo 5: Showing CAAQMS- 2

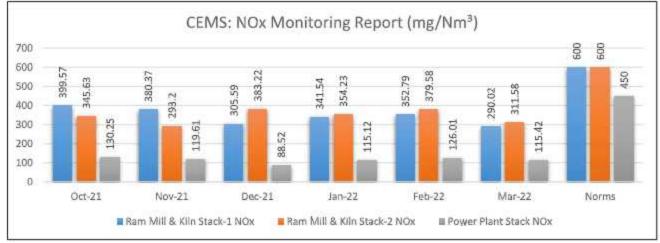


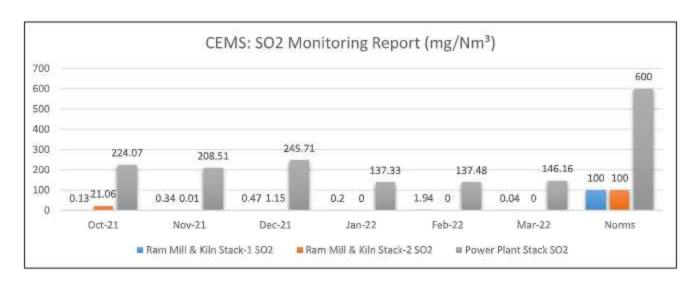
Photo 7: Showing CAAQMS- 4

Sr. No.	Conditions	Compliance status
iv	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with sixmonthly monitoring report.	Being Complied. Stack and ambient air quality monitoring data online as well as manual are being submitted along with six monthly compliance report. Monitoring reports are enclosed as Annexures 9 and 10.

#### Annexure 9: CEMS Stack Monitoring Report



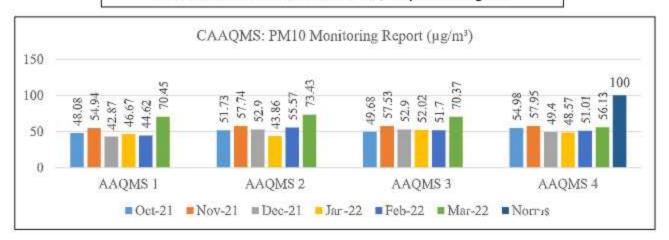


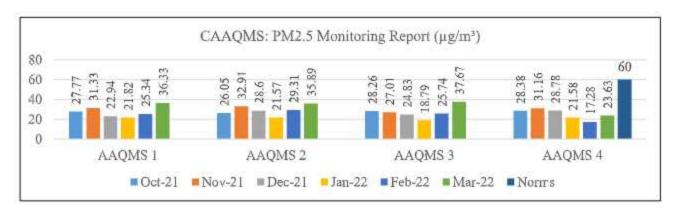


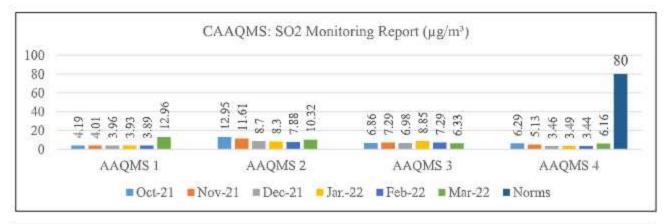
Name of Stacks	Davameter	7.8	Monitoring Period						
Name of Stacks	Parameter	Norms	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
Cement Mill	PM	30	14.43	11.78	11.05	12.78	12.62	15.25	
Coal Mill Stack-1	PM	30	14.51	13.94	15.37	14.59	15.20	16.56	
Cooler Stack-1	PM	30	10.77	11.29	11.36	10.57	10.38	10.22	
Coal Mill Stack-2	PM	30	12.10	12.11	14.95	14.82	17.00	16.00	
Cooler Stack-2	PM	30	8.63	8.03	7.51	7.41	5.13	4.89	
Ram Mill & Kiln Stack-1	PM	30	8.85	8.88	8.85	7.94	8.85	9.18	
	SO2	100	0.13	0.34	0.47	0.20	1.94	0.04	
	NOx	600	399.57	380.37	305.59	341.54	352.79	290.02	
Dom Mill B Kilo	PM	30	12.98	14.39	15.15	14.32	16.35	9.78	
Ram Mill & Kiln	SO2	100	21.06	0.01	1.15	0.00	0.00	0.00	
Stack-2	NOx	600	345.63	293.20	383.22	354.23	379.58	311.58	
Power Plant	PM	50	22.45	27.23	25.74	25.65	28.67	32.38	
	SO2	600	224.07	208.51	245.71	137.33	137.48	146.16	
Stack	NOx	450	130.25	119.61	88.52	115.12	126.01	115.42	

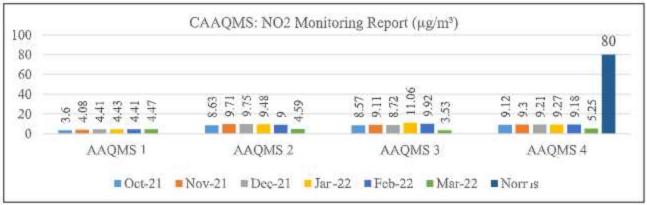
Name of Stacks	Mar	**********	Monitoring Period						
Name of Stacks	Parameter	Norms	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
Cement Mill	PM	30	16.73	16.11	15.0	13.28	13.21	18.10	
Coal Mill -1	PM	30	16.42	15.39	21.74	15.19	16.23	15.87	
Cooler Stack-1	PM	30	12.37	11.83	12.47	12.17	11.46	10.49	
Coal Mill -2	PM	30	16.56	12.54	19.80	13.31	16.93	17.78	
Cooler Stack-2	PM	30	7.95	8.14	9.16	8.16	6.34	5.28	
Ram Mill & Kiln Stack-1	PM	30	11.25	9.72	10.13	8.05	9.15	9.48	
	SO2	100	0	0	0	0	0	0	
	NOx	600	432.64	310.14	336.80	350.47	310	210.58	
Dama Adill O Mila	PM	30	13.67	14.80	20.58	16.78	15.64	6.65	
Ram Mill & Kiln	SO2	100	0	0	0	0	0	0	
Stack-2	NOx	600	446.58	350.24	480.60	450.22	412.22	364.57	
D	PM	50	28.46	25.80	25.80	26.74	26.98	30.80	
Power Plant	502	600	216.52	342.65	340.25	312.25	168	170.5	
Stack	NOx	450	186.36	212.31	208.42	198.46	138.20	85.16	

#### Annexure 10: Continuous Ambient Air Quality Monitoring Data









Lagation	Danamatas		Monitoring Period						
Location	Parameter	Norms	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
AAQMS-1	PM10	100	48.08	54.94	42.87	46.67	44.62	70.45	
Mines Boundary	PM2.5	60	27.77	31.33	22.94	21.82	25.34	36.33	
towards village	SO2	80	4.19	4.01	3.96	3.93	3.89	12.96	
Bharuwadih	NOx	80	3.6	4.08	4.41	4.43	4.41	4.47	
AAQMS-2 Mines Boundary towards village	PM10	100	51.73	57.74	52.90	43.86	55.57	73.43	
	PM2.5	60	26.05	32.91	28.60	21.57	29.31	35.89	
	SO2	80	12.95	11.61	8.70	8.30	7.88	10.32	
Semradih	NOx	80	8.63	9.71	9.75	9,48	9.00	4.59	
AAQMS-3	PM10	100	49.68	57.53	52.90	52.02	51.70	70.37	
Plant Boundary	PM2.5	60	28.26	27.01	24.83	18.79	25.74	37.67	
towards South	SO2	80	6.86	7.29	6.98	8.85	7.29	6.33	
Direction	NOx	80	8.57	9.11	8.72	11.06	9.92	3.53	
AAQMS-4	PM10	100	54.98	57.95	49.40	48.57	51.01	56.13	
Plant Boundary	PM2.5	60	28.38	31.16	28.78	21.58	17.28	23.63	
towards village	502	80	6.29	5.13	3.46	3.49	3.44	6.16	
Khapradih	NOx	80	9.12	9.30	9.21	9.27	9.18	5.25	

127.00024.000	D/2475/00011=1007500	THE PROPERTY OF	Air Quality Monitoring Report (µg/m³)  Monitoring Period						
Location	Parameter	rameter Norms	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
AAQMS-1	PM10	100	55.36	60.22	53.4	69.87	65.9	73.73	
Mines Boundary	PM2.5	60	29.05	32.61	30.3	23.1	26.62	33.61	
towards village	SO2	80	5.47	5.29	8.9	5.21	5.17	12.24	
Bharuwadih	NOx	80	4.03	4.5	13.8	4.85	4.83	5.89	
AAQMS-2 Mines Boundary towards village	PM10	100	53.01	62.35	59.3	67.41	66.4	71.78	
	PM2.5	60	27.34	34.19	34.6	22.85	30.59	32.17	
	502	80	14.23	12.89	8.3	9.58	9.16	10.9	
Semradih	NOx	80	9.05	10.13	16.3	9.9	9.42	5.01	
AAQMS-3	PM10	100	57.96	65.39	57.3	70.2	68.2	68.65	
Plant Boundary	PM2.5	60	29.54	28.29	29.1	20.07	27.02	33.05	
towards South	SO2	80	8.14	8.57	9.6	10.13	8.57	9.61	
Direction	NOx	80	9.85	10.39	20.9	12.34	11.2	10.81	
AAQMS-4	PM10	100	56.26	59.23	51.4	62.87	65.4	70.48	
Plant Boundary	PM2.5	60	29.66	32.44	26.3	28.86	29.56	24.91	
towards village	502	80	7.57	6.41	7.3	4.77	4.72	7.44	
Khapradih	NOx	80	10.4	10.58	16.5	10.55	10.46	9.53	

Sr. No	Conditions	Compliance status
V	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Being Complied.  We have installed Appropriate Air Pollution Control (APC) measures at all the dust generating points including fugitive dust from all vulnerable sources to comply with prescribed standards.  Air Pollution Control (APC) measures details are attached as Annexure-11  Photographs of Air Pollution Control devises are attached as Photo No. 5,6,7,8,9 & 10.

#### **Annexure 11: Air Pollution Control Devices**

Sr. No.	Name of Sources	Pollution Control Measures
1.	Coal Unloading	Covered Unloading point
2.	Limestone Unloading	Covered unloading and water spray arrangement at crusher
3.	Material Transfer Points	Cover shed & Dust Collectors
4.	Fly Ash Storage	Silo
5.	Gypsum Storage	Cover shed
6.	Petcoke / Coal Storage	Cover shed
7.	Limestone Storage	Cover shed
8.	Clinker Storage	Silo
9.	Conveyor Belt	Covered
10.	Raw Mill & Kiln	RABH
11.	Clinker Cooler	ESP
12.	Coal Mill	Bag House
13.	Cement Mill	Bag House
14.	All Silos	Dust Collector for silo venting



Photo 5: Showing Line-1 RABH



Photo 6: Showing Line-2 RABH



Photo 7: Showing Line-1 Cooler ESP



Photo 8: Showing Line-2 Cooler ESP



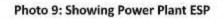




Photo 10: Showing Cement Mill Baghouse

Sr. No.	Conditions	Compliance status
vi	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Being Complied.  We have installed provision for leakage detection and mechanized bag cleaning facility for better maintenance of bags.
vii	Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.	Being Complied. Compliance status of conditions mentioned in CREP is attached herewith as Annexure-12.

## Annexure 12: Compliance of CREP Guidelines

Sr. No.	CREP Condition	Compliance				
1	Cement plant, which are not complying with notified standards, shall do the following to meet the standards: Augmentation of existing Air Pollution Control Devices - by July 2003.  Replacement of existing Air Pollution Control Devices - by July 2004.	by MoEF & CC and CECB.				
2	Cement plants located in critically polluted or urban areas( including 5 Km distance outside urban boundary) will meet 100 mg/Nm3 limit of particulate matter by December 2004 and continue working to reduce the emission of particulate matter 50 mg/Nm3.	Our plant is not located within critically polluted or urban area. And the emissions from our stacks are well within the statutory norms.				
3	The new cement kiln to be accorded NOC/ Environmental Clearance w.e.f 1/4/03 will meet the limit of 50 mg/Nm3 for particulate matter emission.	We are complying with the standards prescribed by MoEF & CC and CECB.				
4	CPCB will evolve load-based standards by December 2003.	Not Applicable.				
5	CPCB and NCBM will evolve SO2 and NOx emission standards by June -2004.	Standards Notified by MoEF&CC.				
6	The cement industries will control fugitive emission from all raw material and product storage and transfer points by December 2003. However, the National Task Force will decide the feasibility for the control of fugitive emission from limestone and coal storage areas. The NTF shall submit its recommendations within months.	control (APC) measures at all the dust general points including fugitive dust from all vulnera on sources to comply with prescribed standards.				
7	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum cock as fuel in Cement Kiln by July 2003.	Petcoke is being/will be used as source of feed stock to conserve natural coal.				
8	After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operation/section for installation of continuous monitoring equipment. The industry will install the continuous monitoring system (CMS) BY December 2003.	Continuous emission monitoring systems are installed at all the stacks to measure emission levels and measured data is being continuously uploaded to CPCB & CECB servers.				
9	Tripping in Kiln ESP to be minimized by July 2003 as per the recommendation of NTF.	Conditions of ESP tripping has been minimized as per given recommendation of NTF.				
10	Industries will submit the target date to enhance the utilization of waste material by April 2003.	100% fly - ash from our captive power plant being utilized in cement plant. Waste material (fly ash/Pond Ash) from oth Thermal Power Plant will be used in cement plan				

		Use of waste material in the form of gypsum in manufacturing of cement.  Used iron ore, waste material from steel plant for substituting laterite requirement.  Hazardous waste is being utilized in kiln after getting permission from CECB. Hazardous Waste i.e. spent catalyst, plastic waste, oily sludge, process resides, spent solvents, distillation residues, ETP sludge, Resin waste etc. are coprocessed in cement kilns as AFR.
11	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.	We have obtained applicable permissions from CPCB & CECB for use of spent catalyst, plastic waste, oily sludge, process resides, spent solvents, distillation residues, ETP sludge, Resin waste etc. for utilization of AFR.
12	Cement industries will carry out feasible study and submit target dates to CPCB co-generation of power by July-2003.	Waste Heat Recovery systems are installed at all the units.

Sr. No.	Conditions	Compliance status
yili	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Being Complied.  Provided 4 Numbers of heavy duty sweeping machines for regular sweeping of all plants roads, shop floors on regular basis.  Photograph of sweeping machines are attached as Photo -11 & 12.





Photo 11 & 12: Showing Sweeping machine engaged to clean Roads, floors on regular basis

Sr. No	Conditions	Compliance status
ίx	Recycle and reuse lime fines, coal fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after agglomeration.	Being Complied.  Dust collected from pollution control devices and vacuum cleaning devices is being totally recycled & reused in the process of cement manufacturing.
x	Ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;	Being Complied. All the Environment protection measures have been taken to reduce impact on surrounding environment. All raw materials are being transported in tippers/trucks covered by tarpaulin to prevent spillage and dust generation. Limestone and other material is transported through covered conveyor belts. Fly ash transportation is being done in closed bulkers only. Photographs of the covered conveyor is attached as Photo no 13. Photographs of closed bulker is attached as Photo no 14.



Photo 13: Showing Covered Conveyor Belt on the Right & Pipe Conveyor Belt on the Left



Photo 14: Showing Transportation through Closed bulkers

Sr. No.	Conditions	Compliance status
xi	Provide wind shelter fence and chemical spraying on the raw material stock piles; and	Being Complied. Covered storage shed have been provided for stockpiles of Limestone, Coal & Gypsum. Fly ash is being stored in silos and the transportation of fly ash is done through closed bulkers only. Photographs of covered stock yard is attached as Photo no 15. Photographs of fly ash silo is attached as Photo no 16.



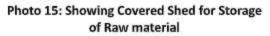
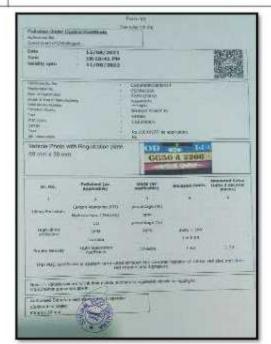




Photo 16: Showing fly ash Silo

Sr. No	Conditions	Compliance status				
xii	Provide Low NOx burners as primary measures and SCR /NSCR technologies as secondary measure to control NOx emissions. Have separate truck parking area and monitor vehicular emissions at regular interval.	Being Complied.  We have Installed Low NOx burners as primary measure to control NOx emissions. And provided separate truck parking area with basic amenities and vehicles with valid PUC are allowed to enter.  Sample copy of PUC vehicle is attached as attached as Annexure-13.				



Annexure 13: Sample Copy of PUC

Sr. No.	Conditions	Compliance status
xiii	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport.	Being Complied.  All the Environment protection measures has been taken to reduce impact on surrounding environment. The raw material i.e. limestone is transported to plant with help of covered conveyor belts and end product Cement & Clinker being transported in trucks covered with tarpaulin.  Photographs of covered conveyor belt is attached as Photo no 17.  Photographs of transportation trucks covered with tarpaulin is attached as Photo no. 18.

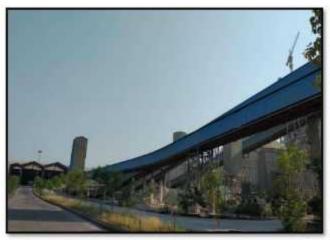






Photo 18: Showing truck covered with tarpaulin

Sr. No.	Conditions	Compliance status
xiv	Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.	Being Complied.  Ventilation system has been designed as per ACGIH specifications at all tunnels, motor houses, cement bagging/Packing plants area.
III. W	ater quality monitoring and preservation	
)	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement)and subsequent amendment dated 9th May, 2016 (Cement)and 10th May, 2016(in case of Co-processing Cement)as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants)as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Not applicable.  No effluent is generated from the Cement plant process as the cement manufacturing is based on dry process technology.  However, treated waste water from WTP is being reuse in process.  Zero effluent discharge is being maintained.

The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.

Being Complied.

Monitoring of ground water quality on regular basis (pre and post monsoon) through labs recognized under EPA, 1986 and NABL accredited lab.

The ground water monitoring report is attached as Annexure-14.

#### Annexure 14: Ground Water Quality Monitoring Report

Sr. No.	Parameters	Unit	Permissible Limit	BW-1	BW-2	BW-3	BW-4	BW-5	BW-6
1	pH	ē	No relaxation	7.26	6.95	7.06	7.50	7.32	7.37
2	Turbidity	NTU	5	0.80	0.60	0.50	0.50	<0.10	0.50
3	Total Alkalinity	mg/lit	600	208.00	258.00	248.00	232.00	268.00	272.00
4	Total Hardness as CaCO3	mg/lit	600	332.00	302.00	306.00	340.00	304.00	298.00
5	Ca Hardness as CaCO3	mg/lit	-	234.00	178.00	200.00	306.00	260.00	240.00
6	Mg Hardness as CaCO3	mg/lit	600	98.00	124.00	106.00	34.00	44.00	58.00
7	Chlorides as Cl	mg/lit	1000	32.99	57.98	71.03	48.98	63.98	63,98
8	Total Dissolved Solid	mg/lit	2000	405.0	419.00	470.00	481.00	459.00	489.00
9	Nitrate as NO3	mg/lit	No relaxation	11.98	18.29	<0.05	13.26	15.89	10.23
10	Calcium as Ca	mg/lit	200	93.79	71.34	80.16	122.64	104.21	96.19
11	Magnesium as Mg	mg/lit	100	23.81	30.13	25.76	8.26	10.69	14.09
12	Sulphates as SO4	mg/lit	400	20.26	31.45	31.75	98.26	13.26	15.64
13	Iron As Fe	mg/lit	No relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Copper as Cu	mg/lit	1.5	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
15	Fluoride as F	mg/lit	1.5	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
16	Manganese as Mn	mg/lit	0.3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
17	Free Residual Chlorine	mg/lit	1	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
18	Zinc as Zn	mg/lit	15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
19	Mineral oil	mg/lit	No relaxation	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
20	Phenolic compound	mg/lit	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
21	Ammonical Nitrogen (as NH3)	mg/lit	No relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
22	Anionic detergents (as MBAS)	mg/lit	1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
23	Barium (as Ba)	mg/lit	No relaxation	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
24	Boron as B	mg/lit	1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
25	Chloramines (as Cl <sub>2</sub> )	mg/lit	No relaxation	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
26	Sulphide (as H₂S)	mg/lit	No	<0.10	<0.10	< 0.10	< 0.10	<0.10	<0.10

			relaxation						
27	Selenium (as Se),	mg/lit	No	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
			relaxation		1.00-1.00				

Sr. No.	Parameters	Unit	Permissible Limit	BW-7	BW-8	BW-9	BW-10	BW-11	BW-12
1	pH	74):	No relaxation	6.93	7.11	7.28	7.45	7.35	7.47
2	Turbidity	NTU	5	0.70	<0.10	0.70	1.80	0.80	0.30
3	Total Alkalinity	mg/lit	600	294.00	304.00	206.00	252.00	238.00	262.00
4	Total Hardness as CaCO3	mg/lit	600	236.00	228.00	186.00	220.00	216.00	122.00
5	Ca Hardness as CaCO3	mg/lit		130.00	22.00	140.00	162.00	162.00	72.00
6	Mg Hardness as CaCO3	mg/lit	600	106.00	206.00	46.00	58.00	54.00	50.00
7	Chlorides as Cl	mg/lit	1000	64.98	19.99	16.99	13.99	18.99	27.99
8	Total Dissolved Solid	mg/lit	2000	503.00	502.00	413.00	389.00	414.00	393.00
9	Nitrate as NO3	mg/lit	No relaxation	11.75	21.36	15.06	14.29	13.56	16.31
10	Calcium as Ca	mg/lit	200	52.10	8.82	56.11	64.93	64.93	28.86
11	Magnesium as Mg	mg/lit	100	25.76	50.06	11.18	14.09	13.12	12.15
12	Sulphates as SO4	mg/lit	400	22.65	35.68	26.65	38.26	24.92	37.26
13	Iron As Fe	mg/lit	No relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Copper as Cu	mg/lit	1.5	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
15	Fluoride as F	mg/lit	1.5	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
16	Manganese as Mn	mg/lit	0.3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
17	Free Residual Chlorine	mg/lit	1	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
18	Zinc as Zn	mg/lit	15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
19	Mineral oil	mg/lit	No relaxation	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
20	Phenolic compound	mg/lit	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
21	Ammonical Nitrogen (as NH3)	mg/lit	No relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
22	Anionic detergents (as MBAS)	mg/lit	1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
23	Barium (as Ba)	mg/lit	No relaxation	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
24	Boron as B	mg/lit	1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
25	Chloramines (as Cl <sub>2</sub> )	mg/lit	No relaxation	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
26	Sulphide (as H₂S)	mg/lit	No relaxation	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
27	Selenium (as Se),	mg/lit	No relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Sr. No.	Parameters	Unit	Permissible Limit	BW-13	BW-14	TW-1	TW-2	TW-3	TW-4
1	pH	(5)	No relaxation	7.01	8.02	7.25	7.22	7.31	7.44
2	Turbidity	NTU	5	0.30	2.90	<0.10	<0.10	0.1	0.8
3	Total Alkalinity	mg/lit	600	288.00	122.00	256.00	232.00	224.00	192.00
4	Total Hardness as CaCO3	mg/lit	600	142.00	148.00	238.00	230.00	236.00	198.00
5	Ca Hardness as CaCO3	mg/lit	-	88.00	98.00	160.00	142.00	162.00	158.00
6	Mg Hardness as CaCO3	mg/lit	600	54.00	50.00	7800	88.00	74.00	40.00
7	Chlorides as Cl	mg/lit	1000	30.99	15.99	24.99	44.99	53.98	9.99
8	Total Dissolved Solid	mg/lit	2000	477.00	281.00	415.00	408.00	422.00	398.00
9	Nitrate as NO3	mg/lit	No relaxation	16.19	9.25	9.23	13.27	9.68	11.26
10	Calcium as Ca	mg/lit	200	35.27	39.28	64.13	56.91	64.93	63.33
11	Magnesium as Mg	mg/lit	100	13.12	12.15	18.95	21.38	17.98	9.72
12	Sulphates as SO4	mg/lit	400	40.12	12.15	11.67	26.92	28.06	22.56
13	Iron As Fe	mg/lit	No relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
14	Copper as Cu	mg/lit	1.5	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
15	Fluoride as F	mg/lit	1.5	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
16	Manganese as Mn	mg/lit	0.3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
17	Free Residual Chlorine	mg/lit	1	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
18	Zinc as Zn	mg/lit	15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
19	Mineral oil	mg/lit	No relaxation	<2.00	<2.00	<2.00	<2.00	<2.00	<2,00
20	Phenolic compound	mg/lit	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
21	Ammonical Nitrogen (as NH3)	mg/lit	No relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
22	Anionic detergents (as MBAS)	mg/lit	1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.01
23	Barium (as Ba)	mg/lit	No relaxation	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
24	Boron as B	mg/lit	1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
25	Chloramines (as Cl <sub>2</sub> )	mg/lit	No relaxation	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
26	Sulphide (as H₂S)	mg/lit	No relaxation	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
27	Selenium (as Se),	mg/lit	No relaxation	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Sr. No.	Borewell Number	Borewell Location
1	BW-1	Near CCR Building
2	BW-2	Cement mill Garden
3	BW-3	RABH
4	BW-4	Cement mill feed hopper
5	BW-5	GPP Office
6	BW-6	Old pump house
7	BW-7	Mahto Batching plant
8	BW-8	Near main gate
9	BW-9	Limestone stacker
10	BW-10	Crusher 1
11	BW-11	Crusher 2
12	BW-12	GDCL labour hutment
13	BW-13	IOT labour hutment
14	BW-14	Mines pit
15	TW-1	Bharuadih Village
16	TW-2	Semradih Village
17	TW-3	Khapradih Village
18	TW-4	Chandi Village

Sr. No.	Conditions	Compliance status
iii	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	Being Complied.  No effluent is generated from the Cement plant process as the cement manufacturing is based on dry process technology.  The monitoring report of ground water quality is attached as Annexure-14.
ív	Adhere to 'Zero Liquid Discharge'.	Being Complied.  Cement manufacturing is based on dry process technology. Zero effluent discharge is being maintained inside/outside of plant premises.
V	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Being Complied.  We have installed STP for treatment of Domestic sewage which is generated from offices & canteen. Photograph of STP is attached as Photo no.19. and STP -1 & 2 treated water quality report for the period October, 2021 to March, 2022 is attached as Annexure-15.



Photo 19: Showing STP present in Plant

#### Annexure 15: STP Treated Water Quality Monitoring Report

Sr. No.	Location	Parameters	Prescribed Limit	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
1	STP -1	200	6500	8.0	8.10	7.56	7.78	7.92	7.56	
	STP-2	pН	6.5-9.0	7.9	8.20	7.9	7.85	7.78	7.80	
2	STP -1	TCC	100	38.0	40.0	46.0	32.0	25.0	26.0	
	STP-2	TSS 1	122	100	40.0	41.0	36.0	22.0	30.0	18.0
3	STP -1	COD	250	70.0	70.0	47.80	40.64	42.8	46.80	
	STP-2			60.0	80.0	45.7	32.24	36.4	28.64	
4	STP -1	BOD (3 day	20	10.0	12.0	14.52	12.68	13.5	16.28	
	STP-2	27°)	30	12.0	11.0	12.4	8.80	10.2	10.8	
5	STP -1	Oil & Grease	TP-1 0118.5 40	40	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	STP-2		10	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
6	STP-1	Fecal	1000	<100	<100	<100	<100	<100	<100	
	STP-2	Coliform	Coliform 1000	<100	<100	<100	<100	<100	<100	

Sr. No	Conditions	Compliance status
vi	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off.	Being Complied. The raw material stock piles are kept under covered shed. So, no surface runoff is generated from stock pile. Photograph of Covered shed is attached as <b>Photo no.</b> 14.
vii	The project proponent shall practice rainwater harvesting to maximum possible extent.	Being Complied.  For augmentation of ground water, we have constructed Rain water harvesting ponds. The photographs of rain water harvesting ponds are attached as <b>Photo no. 20, 21 &amp; 22.</b>





Photo 20 & 21: Showing Rain Water Harvesting Ponds



Photo 22: Showing RWH Recharge Structure

Sr. No	Conditions	Compliance status
viii	Water meters shall be provided at the inlet to all unit processes in the cement plant.	Being Complied.  We have installed digital water flow meter with telemetry at every bore wells & as well as at the inlet of all unit in the plant.  Photographs of digital flow meters are attached as Photo no. 23 & 24.





Photo 23 & 24: Showing Digital Flow meters at different locations

Sr. No	Conditions	Compliance status
ix	The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.	Not Applicable.
IV. N	oise monitoring and prevention	
i	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Being Complied.  Noise Monitoring is being carried out as per the prescribed guidelines on regular basis.  The noise monitoring report for the period October 2021 to March 2022 is attached as Annexure-16.

## Annexure 16: Noise Monitoring Report

					Cement Pla oring Repo			05	
S No.	Location	AAQMS-1 (Near AAQMS-2 (Near Bharuadih) Semradih)		PARTICIONE MANAGEMENT AND AND AND ASSESSMENT OF A STATE OF THE PARTY O		AAQMS-4 (Near Khapradih)			
	Month	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
1	Oct-21	47	40	44	38	42	35	45	39
2	Nov-21	55	45	59	49	62	55	60	45
3	Dec-21	62	42	69	43	60	45	58	40
4	Jan-22	56	47	59	45	60	52	55	40
5	Feb-22	52	40	55	42	59	46	57	43
6	Mar-22	63	45	65	42	58	44	55	40

Sr. No.	Conditions	Compliance status
li	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	Regular monitoring of ambient noise levels is being

		1 CONTROL OF THE STREET, 18 CO. 19 CO	[생생 [[생 [생 [] ] ] ] [[생 [] [] [[ [] [] [] [] [] [] [] [] [] []	ts during the period ttached as <b>Annexure</b> -
V. E	nergy Conservation measures			
i	Waste heat recovery system shall be provided for kiln and cooler.		Recovery System ha	as been installed for e heat gases of kiln &
II	The project proponent make efforts to achieve power consumption less than 65 units/tone for Portland Pozzolona Cement (PPC) and 85 units/tone for Ordinary Portland Cement (OPC) production and	All efforts are being made to achieve power consumption & thermal energy consumption for		
	thermal energy consumption of 670 Kcal/Kg of clinker.	Year	Power consumption for cement production	Thermal energy consumption for Clinker
		2021-22	61.91	766
iii	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.	colony area. solar plant to	olar light system for Further we are plant o be most efficient for mon areas, street lig	street lights at our ning to layout for the r solar powered lights ghts, parking around
iv	Provide the project proponent for LED lights in their offices and residential areas.	Being Comp Provided Li	lied.	in all office areas. ned as <b>Photo no. 25.</b>



Photo 25: Showing LED light fixtures at Office

Sr. No.	Conditions	Compliance status
V	Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.	Being Complied. Continuous efforts have been made for use of maximum fly ash in making PPC cement as per BIS standards.
vi	maximize utilization of alternate fuels and Co-processing to achieve best practice norms.	Being Complied. For utilization/co-processing of Hazardous wastes in Cement kiln. We have obtained the authorization for co processing the various types of hazardous

		wastes & non-hazardous waste such as ETP sludge, Organic residue, Process residue from pharmaceutical industries including RDF/MSW in our cement kiln. Further we will explore the higher calorific waste materials for co-processing as AFR in our cement plant.
VI.	Waste management	
1	Used refractories shall be recycled as far as possible.	Being Complied.  The used refractories are being sold to vendors for recycling.
11	The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.	Being Complied.  Generated used/spent oil are being store in earmarked area with concrete flooring and is only sold to CPCB/ SPCB authorized parties.
iii	Kitchen waste shall be composted or converted to biogas for further use.	Being Complied  Waste generated from kitchen is converted into manure which is used as bio-fertilizer in green belt development.
VII.	Green Belt	
1	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant	Being Complied. Out of Total plant area of 159.256 hectare, Green belt has been developed on 55.75 Hectare (35%) area with 1,21,976 Nos. of saplings along with entire periphery of the plant. Under Hariyar Chhattisgarh project we have planted 15,000 saplings near school of Bharuwadih, Semradih, Khapradih, Chandi, Karahi & Parkidih villages. Road side plantation of about 10 KM on both side of road from Bharuwadih to Chandi village has been done. And we have also planted 15,050 saplings at Bhatapara. Apart from that 2,000 sapling has been planted near the Logistic building. Apart from that 6,000 sapling has been planted near the Diesel Pump area. Local native species viz. Neem, Karanj, Platofarm, Cassia Siamea, Shisham etc. are planted to increase the survival rate.

## Photos Showing Plantation within the Plant area













Sr. No.	Conditions	Compliance status
II	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programmer for reduction of the same including carbon sequestration including plantation.	Being Complied.  A team of expert performs the survey of the entire plant and collect the raw data of GHG emissions. Company follow the GCCA and Energy Accounting and reporting standard for the Cement Industry" for the calculation of the GHG emission.  Every year a third party is engaged for assurance of GHG data.
VIII.	Public hearing and Human health issues	
i	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Being Complied. The emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan is implemented.
ii	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.	Being Complied.  Heat stress analysis is conducted for the workmen who work in high temperature work zone, and Personal Protection Equipment (PPE) are provided to all the workers working in the plant as per the norms of Factory Act. Photographs of the same is attached as Photo no. 26.



Photo 26: Showing PPEs provided to workers

Sr. No.	Conditions	Compliance status
NI .	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.	Complied.  During construction, we have provided temporary housing structures with all necessary infrastructure and facilities such as fuel for cooking, toilets, STP, safe drinking water, medical health care etc. for construction workers.
iv	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Being Complied. Occupational health programs are conducted on regular basis and records being maintained by the Occupation Health Center (OHC). During the period of October 2021 to March 2022 total 4533 Nos. health checkup conducted. A sample copy of Occupational health surveillance is attached as Annexure-17.

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**Annexure 17: Sample Medical Report** 

Sr. No.	Conditions	Compliance status	
1	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1 <sup>st</sup> May 2018, as applicable, regarding Corporate Environment Responsibility.	All commitments made during the public hearing have been incorporated in CSR activities. Details of expenses for CSR activities from April- 2020 to March- 2021 enclosed as <b>Annexure- 18</b> .  Refer following photographs of some CSR Activities.	

#### **Annexure 18: CSR Expenditure Details**

	Shree Raipur Cement Plant (A Unit of Shree Cement Limited)	
Sr. No.	Particulars of CSR activity undertaken	Amount in Rs.
1	Eradicating hunger, poverty and malnutrition, promoting preventive health care and sanitation and making available safe drinking water & Expenses held for Covid-19 relief	1,03,57,582
2	Promoting education, including special education and employment enhancing vocation skills specially among children, women, elderly and the differently abled and livelihood enhancement projects (Inc. consumer education and awareness)	2,24,308
3	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	6,44,049
4	Ensuing environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water	5,18,794
5	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 arts and handicrafts;	5,27,400
6	Training to promote rural sports, nationally recognized sports, Paralympic sports and Olympic sports	16,59,440
7	Rural development projects	66,00,005
8	Overheads related to CSR activities (maximum up to 5% of total CSR expenses)	25,46,300
	Total	2,30,77,878





Sanitizations of nearby villages





Activities under COVID-19





Support to BPL family for Girl's Marriage





Vocational training on cutting & tailoring





Support to Mahila Commando group





Monetary support to various socio-cultural functions (Vishwakarma Pooja, Ganesh Pooja, Durga Pooja, Dussehra, Guru Ghasidas Jayanti etc.)

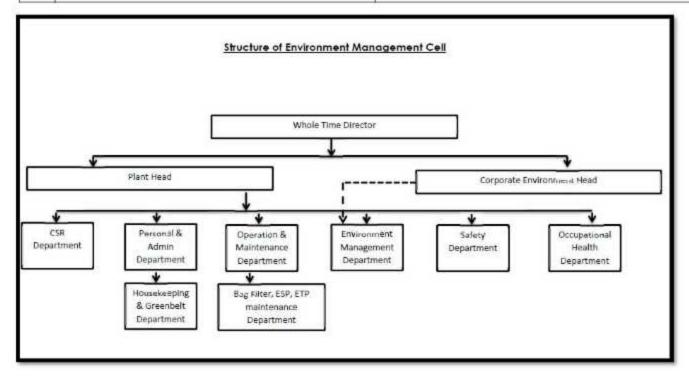




Vridashram Constructed by Shree Cement Ltd. At Bhatapara

Plantation & guard rail provided at Balodabazar

Sr. No.	Conditions	Compliance status
III	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Separate Environmental Cell has been established in plant with qualified person to take care day to day environmental activities and reports to head of the organization. Please refer <b>Annexure</b> – <b>19</b> .



**Annexure 19: Detailed Organization Chart** 

Sr. No	Conditions	Compliance status
iv	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.	Being Complied.  The funds earmarked for Environmental Protection measures are being utilized for the same and total expenditure incurred during the period April- 2021 to March - 2022 is attached as Annexure – 20.

## Annexure 19: Details of Environment Expenditure

Sr. No.	Description	Amount in Rs.
1	Sewage Treatment Plant	1,92,870
2	Technical Consultancy & Monitoring	43,99,731
3	Plantation	1,26,52,231
4	Housekeeping & Vacuum Sweeping	5,38,58,697
5	Energy Consumption in Pollution Control Devices	19,43,01,705
6	Rates & Taxes	3335036
	Total	26,87,40,270

Note- Environment expenditure 'ncurred for SRCP Cement Plant & Lime Stone M'nes.

Sr. No	Conditions	Compliance status
V	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Being Complied. Self-environmental audit is conducted internally on Annual basis.
vi	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.	Being Complied.  All CREP recommendations have been implemented.  Compliance status of CREP conditions is attached as  Annexure- 12.
X. N	liscellaneous	M.
i	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Advertised the environment clearance in two different newspapers with one in vernacular language "Dainik Bhaskar" & "Times of India" dated 14.09.2019 within the stipulated time period. The copy the EC letter has been put on the company website that can be downloaded from by the following link www.shreecement.com  The copy of advertisement is attached as Annexure-21.

## मैसर्स श्री रायपुर सीमेंट प्लांट

(इकाई श्री सीमेन्ट लिमिटेड)

गाँव- खपराजीह, तहसील- सिमगा जिला-बलीदाबाजार-माटापारा (छलीसगढ़)

### सार्वजनिक सूबना

सर्व साधारण को सुचित किया जाता है कि मैससे श्री रायपुर सीमंट प्लाट (इकाई श्री सीमेन्ट लिमिटेड) के इन्टीग्रटेड सीमेन्ट प्लाट का विस्तार, झमता 2 x 26 लाख टन प्रतिवर्ध से 3 x 45 लाख टन प्रतिवर्ध किलेकर, 2 x 30 लाख टन प्रतिवर्ध से 3 x 55 लाख टन प्रतिवर्ध सीमेन्ट, कैप्टिय पावर प्लाट 25 मेगायाट से 125 मेगायाट नस्ट डीट रिकारी पावर प्लाट 30 मेगावाट से 100 मेगावाट, सिंधेटिक जिल्लाम 65 टन प्रतिवंदा तथा डीजी सेट 2000 कंबीए, जो कि गाव-यपराडीह, राहसील- सिमगा जिला-बलौवाबाजार-माटापारा (छलीसगढ़) में स्थापित किये जा रहे हैं, को भारत सरकार के पर्यावरण, वन एवं जलवायु परिवर्तन मंजालय, नई दिल्ली द्वारा पर्यावरणीय स्वीकृति पत्र क्रमाक F. No. J-11011/235/2008-IA-II (I) विनाक 11 सितंबर 2019 के द्वारा दी गई है।

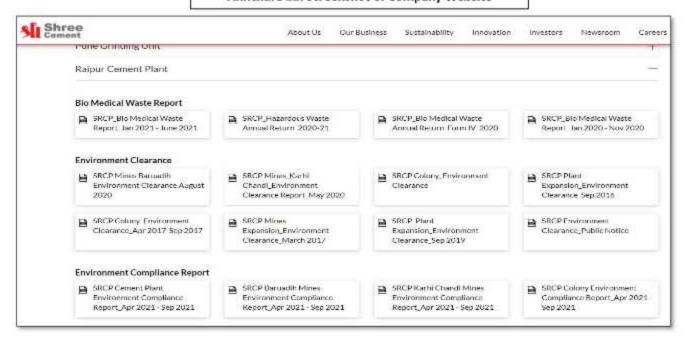
पर्यावरण स्वीकृति पत्र की प्रतिलिपि छत्तीसगढ पर्यावरण संरक्षण मण्डल, शयपुर ने चपलब्ध है तथा पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत संरक्षार की वेषसाइट "www.moef.nic.in" एवं श्री सीमेन्ट लिमिटेड की वेषसाइट "www.shreecement.in" पर भी उपलब्ध है।

Dainik Bhankar-14/09/19 Raipun

#### Annexure 21: Copy of Paper Advertisement

Sr. No.	Conditions	Compliance status
ii	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied.  Copy of EC letters have been submitted to the respective Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government date 13.09.2019 for their information.
iii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	Complied. The status of compliance of the stipulated environment clearance conditions, including results of monitored data uploaded on the company's website <a href="https://www.shreecement.com">www.shreecement.com</a> . The screenshot of the company website is attached as Annexure-22.

#### Annexure 22: Screenshot of Company Website



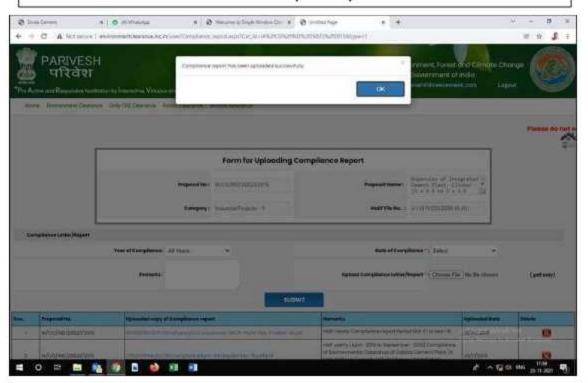
Sr. No.	Conditions	Compliance status
iv	The project proponent shall monitor the criteria pollutants level namely; PM10, S02, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Being Complied.  The monitoring data of ambient monitoring quality & stack emission is uploaded on our company website www.shreecement.com.  The screenshot of the company website is attached as Annexure-22.  Monitoring data of existing cement plant is being displayed at main gate of the company.  Photograph of the same is attached as Photo no. 31.



Photo 31: Showing Display Board installed at Plant Main gate

Sr. No.	Conditions	Compliance status
٧	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	The Six monthly compliance report on the status of the compliance of the stipulated environmental conditions is uploaded on the website of the MoEF&CC at Environment Clearance portal.  The E.C Compliance for the period April, 2021 to September, 2021 has been uploaded on the website of the MoEF&CC at Environment Clearance portal.  Screenshot of the uploaded E.C compliance on the website of the MoEF&CC at Environment Clearance portal is attached as Annexure-23.

#### Annexure 23: Screenshot of E.C Compliance Uploaded on Parivesh Portal



Sr. No.	Conditions	Compliance status
vi	The project proponent shall 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.	Being Complied. The Environment statement for each financial year in FORM-V is submitting regularly to the Chhattisgarh Environment Conservation Board as prescribed under the Environment (Protection) Rules, 1986, and the copy of the same is also being uploaded in the company's website i.e. <a href="www.shreecement.com">www.shreecement.com</a> The Copy of Environment statement submitted for FY 2020-2021 is attached as Annexure-24.



Annexure 24: Copy of Environment Statement in Form V submitted to CECB, Raipur

Sr. No.	Conditions	Compliance status
vii	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Noted.
viii	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Being Complied.  We are complying with all the conditions stipulated by the State Pollution Control Board and the State Government.
ix	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Noted. All the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing are being complied.
x	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).	Noted.  Prior approval shall be obtained from MoEF&CC in case of any expansion or modification in the plant.
xi	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental	Noted.

	clearance and attract action under the provisions of Environment (Protection) Act, 1986.	
xii	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
xiii	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Noted. We shall abide by any additional conditions if any stipulated by MoEF&CC.
xiv	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	Noted. Full co-operation shall always be extended to the officers of the Regional Office.
xv	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter	Noted
xvi	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted