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SHREE RAIPUR CEMENT PLANT

(A UNIT OF SHREE CEMENT LIMITED)

Village: Khaparadih, Tehsil: Simga

Distt.: Baloda Bazar-Bhatapara (C.G.) Pin: 493 332, Ph.: 07727-203101

CIN No.: L26943RJ1979PLC001935

SRCP/BB/ 2017-18/23

Date: - 15/05/2017

To,

The Director

Regional office, (WCZ), Ministry of Environment & Forest, Ground Floor, East Wing, New Secretariate Building Civil Lines, Nagpur – 440001, (M.H)

Sub:- Regarding compliance for the period October, 2016 to March, 2017 to the conditions of Environment Clearance for Green Field Integrated Cement Plant (Shree Raipur Cement Plant): Clinker 3.0 MTPA, Cement- 5.2 MTPA, Captive Power Plant- 2*25 MW and Limestone Mining- 4.8 MTPA, (ML area 531.126 ha.) located near village Khapradih, Semaradih & Bharuwadih, Tehsil-Simga & Balodabazar in District - Baloda Bazar - Bhatapara (Chhattisgarh) by Shree Raipur Cement Plant (A unit of Shree Cement Limited).

Ref: - Environment Clearance Letter No. J-11011/235/2008- IA II (I) dated 7th March 2011, 1st June, 2011 & 4th Feb, 2015.

Dear Sir.

In reference to the above subject matter & reference letter, it is submitted herewith the point wise Half Yearly compliance status for the period of October, 2016 to March, 2017 is enclosed herewith for your kind perusal please.

Hope you will find this in order.

Thanking you.

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

R. K. Vijay AVP (Operations) 2315117

Enclosures: Compliance status Report period October-2016 to March-2017.

Cc to:-

- The In charge (Zonal Office), Central Pollution Control Board (CPCB), 3^{1d} floor, Sahkar Bhawan, North T.T. Nagar, Bhopal – 462003 (M.P.).
- 2) The Member Secretary, Chhattisgarh Environment Conservation Board, Commercial complex, Chhattisgarh Housing Board Colony, Kabir Nagar, Raipur (Chhattisgarh).

[■] RAIPUR OFFICE: House No. 31/248, Civil Lines, Near C.M. House, Raipur-492001, Ph.: 0771-2430007, Fax: 0771-2430007

[■] REGD. OFFICE: Bangur Nagar, Post Box No. 33, Beawar, 305901, Dist. Ajmer (Raj.)
Phone: 01462-228101-105, Fax: 01462-228117/119, e-mail: shreebwr@shreecementitd.com, Website: www.shreecementitd.in

Environment Clearance compliance Status report Period from October -2016 to March-2017

Name of Project: Shree Raipur Cement Plant (A unit of Shree Cement Ltd)

Capacity & Location: 2*1.5 Million TPA Clinker, 2*2.6 million TPA Cement, 15 MW Waste Heat Recovery Power Plant, 2*25 MW Captive Power Generation Near Village Khapradih, Tehsil-Simga, Dist.-Raipur (Chhattisgarh) and 4.8 MTPA Limestone Mine (531.126 ha) near village Semaradih and Bharuwadih in Tehsil & District Balodabazar, (Chhattisgarh).

EC letter No. J-11011/235/2008- IA II (I) dated 7th March 2011, amended on 1st June, 2011 & 4th Feb, 2015.

Specific Conditions:

Sr.No.	Condition	Compliance
I	No construction work without approvals from IBM and State Govt. of Chhattisgarh. A copy of mine lease approval from IBM and State Govt. of Chhattisgarh shall be submitted to the Ministry and its Regional Office before initiating any construction work at site related to mining.	Mining lease executed on 11 th January 2011 and registered on 12 th January 2011 by the State Govt. of Chhattisgarh. Mining Planhas been approved by IBM.
II	Rehabilitation and Resettlement Plan for the project affected population shall be implemented as per the policy of the State Govt. in consultation with the State Govt. of Chhattisgarh. Compensation paid in any case shall not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy, 2007.	agreement & as per norms. There is no any rehabilitated from the project site.
III	Continuous monitoring system to monitor gaseous emissions shall be provided and limit of SPM should be controlled within 50 mg/Nm3 by installing adequate air pollution control system and energy efficient technology.	Opacity meters have been installed for the continuous monitoring of dust particulate matter at the stack of kiln, cement mill, coal mill, clinker cooler & CPP ESP. Continuous emission monitoring system (CEMS) at Raw mill & kiln and CPP ESP stack has been installed for on line measurement of SO2 & NOx. Data of Stack Monitoring Report are enclosed as
V	Possibilities shall be explored for the utilization of gases generated from the kiln in waste heat recovery boiler (WHRB).	WHRB has been installed with clinker unit to utilized waste heat for waste heat power
/	Data on ambient air quality (PM10, S02, NOx) shall be regularly submitted to the Ministry including its Regional office and the	generation. 4 numbers of AAQMS have been installed at the boundary of plant and mine for the measurement of PM2.5, PM10, CO, S02



	State Pollution Control Board / Centra Pollution Control Board once in six months. The critical parameters such as PM10, NOx in the ambient air within the impact zone, peak particle velocity at 300 m distance or within the nearest habitation whichever is closer shall be monitored periodically.	enclosed as Annexure – 2.
	Quality of discharged water shall also be monitored [(TDS, DO, pH) and total Suspended solids (TSS)].	Two STP capacity 40 KL/day each, has been installed & being operated. Treated effluent being used in green belt development. No residential colony establish at the site yet. STP water monitoring report enclosed as Annexure - 3.
	The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain.	the plant main gate also available at the web site of the company.
VI	The Company shall install low NOx burner with Kiln/calciner for control of NOx emissions as per CPCB norms	Pyro-jet burner has been installed to reduce NOx in the process.
VII	Secondary fugitive emissions shall be controlled within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.	Following measures have been taken for control of fugitive emission: 1. Silo for storage of clinker and fly ash, 2. Covered storage for gypsum 3. Water spray for limestone and coal & pet coke unloading and storage 4. Pucca roads and vacuum sweeping 5. Bag filters at all material transfer points. 6. Good housekeeping.
VIII	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 should be followed.	4 numbers of AAQMS have been installed for the measurement of PM2.5, PM10, CO, S0 ₂ and NOx level. AAQMS report enclosed as Annexure – 2.
IX	pollution and having high levels of SPM and RPM should be ensured.	Cemented roads have been constructed in plant area.
X	Efforts should be made to reduce impact of	Transportation of fly ash is being done in closed trucks / bulkers.



XI	including agricultural land. All the raw materials including fly ash should be transported in the closed containers only and should not be overloaded. Vehicular emissions shall be regularly monitored. Rainwater harvesting measures should be	1. Earthen nit of 1.0 Lakh KL consoits has
	adopted for the augmentation of ground water at cement plant, colony and mine site. The company must also collect rain water in the mined out pits of captive limestone mine and use the same for the various activities of the project to conserve fresh water.	been developed in plant area for stars
XII	The project proponent shall ensure that no natural water course shall be obstructed due to any mining operations.	No natural water course will be obstructed due to any mining operations.
XIII	Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, inter burden and mineral dumps to arrest flow of silt and sediment. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted, particularly after monsoon, and maintained properly.	Catch drains and siltation pond has been constructed for working pit to collect rain water and being utilized.
XIV	Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and inter burden dumps and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.	Garland drain along with sedimentation pits has been constructed along with dump site.



XVI	Regular monitoring of ground water leand quality should be carried out establishing a network of existing wells a constructing new piezometers at suitable locations by the project proponent in a around project area in consultation wire Regional Director, Central Ground Water Board. The frequency of monitoring shound be four times a year-pre-monsoon (April May), monsoon (August), post-monsoon (November), and winter (January). Data the collected shall be sent at regular intervals the Ministry of Environment and Forests and it Regional Office at Bhopal, Central Ground Water Authority and State Ground Water Board. Dimension of the retaining wall at the toe of inter burden dumps and inter burden benches within the mine to check run-off and siltation should be based on the rain fall data. Suitable conservation measures to augment ground water resources in the area shall be planned and implemented in consultation with Regional Director, Central Ground Water board.	and quality are being carried out be establishing a network of existing wells an constructed new piezometers. Ground water monitoring Report is enclosed herewith as Annexure – 4. Over burden benched developed. But height of the dump is less than 10 meter it is vegetated & planted. It is stabilized. 1. Earthen pit of 1.0 Lakh KL capacity has been developed in plant area for storage of rain water. 2. One more earthen pit of 1.0 Lakh KL capacity being developed.
		plant area for storage of rain water. 3. Earthen pit of 2.5 Lakh KL capacity has been developed in mines area for storage of mine pit & rain water.
XVIII	All the bag filter dust, raw meal dust, coal	Apart from above, additional rain water harvesting measures are under implementation.
	pollution control devices shall be recycled and reused in the process and used for element manufacturing	Bag filter dust, raw meal dust, coal dust, clinker dust and cement dust collected from pollution control devices being recycled in process.
c a	An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly.	Proposed to use Acid Tar sludge & tyre chips the high calorific hazardous waste wailable in the area as alternate raw naterial and fuel after getting state board uthorization. Applications for obtaining o-processing authorization have been ubmitted to the State board. Presently It is
The same of the sa		

	more fly ash and solid waste in the cem manufacturing.	
XXI	All the fly ash shall be utilized as per Fly A Notification, 1999 subsequently amended 2003 and 2010. Efforts should be made use fly ash maximum in making Pozollo. Portland Cement (PPC)	sh Fly ash is being utilized for making PPC.
XXII	Risk and Disaster Management Plan alor with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office at Bhopa CSPCB and CPCB.	ng Submitted along with EIA / EMP report.
XXIII	Blasting operation shall be carried out onl during the daytime. Controlled blasting should be practiced. The mitigative measure for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	Blasting operation being carried out only during the daytime. Latest controlled blasting technique using shock tube detonator (Downline detonator in combination with trunk line data.
XXIV	Wet drilling blasting method and provision for the control air emissions during blasting using dust collectors at a latest and provisions.	vibration and dust emission. Wet drilling and dry drilling and
XXV	using dust collectors etc. shall be used. Bench height, width and slope for individual bench should be properly assessed and implemented. Adequate measures should be adopted to stabilize the slope before abandonment. The fencing around the reservoir shall be provided to prevent accidents.	arrangement being used
XXVI	Action plan for the mining, management of over burden (removal, storage, disposal etc.), reclamation of the mined out area and mine closure shall be submitted to the Ministry and its Regional Office at Bhopal. The inter burden and other waste generated should be stacked at	Mining plan and mine closure plan have been submitted.
	only and should not be kept active for long period. The total height of the dumps should not exceed 30 m in three terraces of 10 m each and the over all slope of the dump should be maintained to 28°. The inter burden dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring	The waste generated will be stacked at earmarked dump site(s) only. Total height of the dumps will be 30 m in three terraces of 10 m each and the overall slope of the dump will be 28°. Plantation being done on dumps. An earlier Half yearly Compliance status report period from — Oct-15 to March-16, has been sent thru courier on as well as mail on dated 12.05.2016 & dated 97.05.2016 respectively.

	basis.	
XXVIII	The project proponent shall modify the mir plan of the project at the time of seekin approval for the next mining scheme from the Indian Bureau of Mines so as to reduce the area for external over burden dump be suitably increasing the height of the dump with proper terracing. It should be ensure that the overall slope of the dump does not exceed 28°.	g e e e y s s
XXIX	The void left unfilled in the mining area shall be converted into water body. The higher benches of excavated void/mining pit should be terraced and plantation done to stabilize the slopes. The slope of higher benches should be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.	will be converted into water body. The higher benches of excavated void/mining pit will be terraced and plantation shall be done to stabilize the slopes. The slope of higher benches will be made gentler for easy accessibility by local people to use the water body. Peripheral fencing will be
XXX	Top soil, if any, shall be stacked with proper slope at earmarked site(s) only with adequate measures and should be used for reclamation and rehabilitation of mined out areas.	As per approved mining plan, top soil is being separate stacked and top soil also being used for plantation along mines lease
XXXI		Green belt in 33% of plant area shall be achieved within 5 years i.e till 2018-19. 55,158 saplings have been planted at various locations in the plant premises covering about 31.7 ha land for green belt development within the plant premises. Plantation in mine area shall be developed in phased manner. At present, 125,632 plants have been planted in Mines area. Apart from this, we have planted about 2, 00,000 numbers of hedging in various gardens developed in within plant premises. We have also planted 2000 trees near School of Bharuwadih, Semradih, Khapradih, Chandi, Karahi & Parkidih villages and 13000 trees planted about 10 KM of both side of road plantation from Bharuwadih to chandi village under
į L	All the safety norms stipulated by the Director General, Mine & Safety (DGMS)	Hariyar Chhattisgarh project. All the safety norms stipulated by the Director General, Mine & Safety (DGMS) has been adopted & implemented.

XXXI	on Cor Protect	recommendations made in the Charter porate Responsibility for Environment ion (CREP) for the Cement plants be implemented.	All actions have been taken to comply wit CREP recommendation.
	S. No.		Action Plan
	1.	The new cement kiln to be according NOC/ Environmental Clearance w 1/4/03 will meet the limit of 50 mg/N for particulate matter emission.	ded All Pollution Control Equipments
		The cement industries will cont fugitive emission from all raw mater and product storage and transfer points. December 2003. However, the Nation Task Force will decide the feasibility the control of fugitive emission from limestone and coal storage areas. The NTF shall submit its recommendation within months.	Following measures have been taken: Silos for Clinker and Fly Ash and covered shed for Gypsum. Water spray arrangement at raw
		ndustries will submit the target date to inhance the utilization waste material by April 2003.	II. ca
		ICBM will carry out a study on azardous waste utilization in cement kiln becember 2003.	Hazardous waste will be utilized after CPCB permission and SPCB authorization.
	St	ement industries will carry out feasible udy and submit target dates to CPCB e-generation of power by July-2003.	
	The comp commitmen held on 7th for implen allocated ar	ts made during public hearing hearing April, 2010 and a separate budget active the part of information submitted to the degional Office at Bhopal.	commitments made during the public ing have been incorporated in CSR ities. All commitments made during public hearing have been incorporated SR activities. An amount 101 lakh is has been incurred on socio-omic activities from October 2016 to

		March 2017. Details enclose for CSI expenses as given in Annexure- 5.
		Following are the public hearing commitments:
		Land purchase with mutual agreement Preference to local people according to work knowledge Emission control measures have been taken.
		 Need based CSR activities has been started.
XXXV	At least 5 % of the total cost of the project should be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program should be ensured accordingly in a time bound manner.	CSR budget is 5% of the total project cost for the period of mine life. Mine life is 28 years; project cost is Rs. 1100 Crores. CSR budget per year is Rs. 2.2 Crores.
XXXVI	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 attentions.	Housing, fuel, toilets with soak pits & septic tank, safe drinking water, medical healthcare etc have been provided to labors.
	of temporary structures to be removed after the completion of the project.	

Sr.No.	Condition	
I	The project authority shall adhere to the	Compliance
	Environment Conservation Board (CECB) and State Government	Chhattisgarh Environment Conservation Board (CECB)
II	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.	Agreed.
III	level concentration of PM10 SO and NO	c
	Data on ambient :	Data on ambient air quality and stack emissions being submitted to MoEF &CC Regional Office and SPCB / CPCB once in



	Ministry including its Regional Office a SPCB / CPCB once in six months.	nd six months
IV	Industrial wastewater shall be proper collected and treated so as to conform to the standards prescribed under GSR 422 (Industrial 19th May, 1993 and 31st December 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	been installed & being operated. Treate effluent being used in green be development. No residential colony has been established at the site yet.
V	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures in a little of the standards.	in closed building.
	control measures including acoustic hoods silencers, enclosures etc. on all sources o noise generation.	f plant boundary.
	The ambient noise levels shall conform to the standards prescribed under Environmenta (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	1
VI	occupational health programmes shall be taken up. Occupational Health Surveillance programme shall be done on a regular basis and records maintained properly for at least 30-40 years. The programme shall include	Proper housekeeping of the entire plant is being maintained by engaging two road sweeping machine. Manpower is also engaged for cleaning work for plant &
	lung function and sputum analysis tests once in six months. Sufficient preventive measures shall be adopted to avoid direct exposure to dust etc.	Occupational health programmes is going on and records being maintained by the OHC team.
		Occupational health programmes is going on and records being maintained by the OHC team.
/II	The company shall and the	PPEs have been provided to all working at the site.
	development measures including community welfare measures in the project area	Plantation in and around the plant area being done.
III	all the environmental protection measures and safeguards recommendation to EVA	Environmental protection measures recommended in EIA/ EMP have been
ζ	A separate environmental management cell	implemented. A separate environmental management cell with full fledged laboratory facilities has



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X	Adequate fund shall be allocated to Adequate fund are	
	implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. Time bound implementation schedule for implementing all the conditions stipulated herein shall be submitted. The funds so provided shall not be diverted for any other purpose. Adequate fund are available for implementation of the conditions stipulate by the Ministry of Environment as Forests as well as the State Government.	ted
XI	SPCB shall monitor the stipulated conditions. The project authorities shall extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports. A six monthly compliance report and the monitored data alongwith statistical interpretation shall be submitted to them regularly. Full cooperation is extended to the Go authorities. We are regularly submitting half year Compliance reports. An earlier Half year Compliance status report period from April-16 to September-16, has been ser thru Mail as well as courier on date 24.10.16 & dated 25.10.2016 respectively Courier receipt is enclosed as Appreyuse.	ly ly - nt
XIII	monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both on hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the CECB. We are regularly submitting half yearly Compliance reports. An earlier Half yearly Compliance status report period from April-16 to September-16, has been sent thru Mail as well as courier on dated 24.10.2016 & dated 25.10.2016 respectively. Courier receipt is enclosed as Annexure - 7.	y y t
	The Project Authorities 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 and the date of commencing the land development work. 1. Date of start of project work is 28/08/2013. Financial closure shall be informed to the Regional Office and Ministry. 2. 1st clinker grinding unit has been started on 24/02/2015. 3. 1st clinker unit (Pyro processing) has been started on 20/05/2015. 4. Erection work of 2nd clinker grinding unit and clinker unit (Pyro processing) has been started. 5. Limestone mines Commissioned on 12.03.2015. 6. Waste heat power plant commissioning & generation on 23.07.2015. 7. Captive Power Plant (CPP) has been started on 15/07/2016.	
XIV	working shall be made without prior approval of the Ministry of Environment & Forests N.	
-	change in the calendar plan including	



	excavation, quantum of limestone and was shall be made.	te
XV	Measures shall be taken for control of nois levels below 85 dBA in the wor environment. Workers engaged in operation of HEMM etc. shall be provided with eapluggs/ muffs.	Measures have been taken for control of noise levels below 85 dBA in the workers engaged in operations of HEMM etc. has been
XVI	Industrial waste water (workshop and waste water from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (Edated 19th May, 1993 and 31st December 1993 or an experience of the standards prescribed under GSR 422 (Edated 19th May, 1993 and 31st December 1993 or an experience of the standards prescribed under GSR 422 (Edated 19th May, 1993 and 31st December 1993 or an experience of the standards prescribed under GSR 422 (Edated 19th May, 1993 and 31st December 1993).	workshop waste water is reused for spray in crusher after separation of oil and grease.
	1993 or as amended from time to time. Oi and grease trap shall be installed before discharge of workshop effluents.	I com mater generated from the
XVII	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	provided to all. Adequate training and information on safety and health aspects provided to all.
XVIII	Regional Office located regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	 Date of start of project work is 28/08/2013. Financial closure shall be informed to the Regional Office and Ministry. 1st clinker grinding unit has been started on 24/02/2015. 1st clinker unit (Pyro processing) has been started on 20/05/2015. Erection work of 2nd clinker grinding unit and clinker unit (Pyro processing) has been started. Limestone mines Commissioned on 12.03.2015. Waste heat power plant commissioning & generation on 23.07.2015.
IX	A copy of clearance letter shall be marked to concerned Panchayat / local NGO, if any, from whom suggestion/representation, if any, was received while processing the proposal.	7. Captive Power Plant (CPP) unit has been started on 15/07/2016. Copy of environment clearance letter has been sent on 15.3.2011 to the followings:- 1. Gram Panchayat, Semaradih. 2. Gram Panchayat, Bharuwadih. 3. Gram Panchayat, Chandi.

XX	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations if any, were received while processing the proposal. The clearance letter shall also put up on the website of the Company by the proponent.	5. All India Human Rights Inspection Committee, Vill. Paunsari, Teh. Balodabazar, Distt. Raipur EC letter has been put on our web site:
XXI	The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the Chhattisgarh Environment Conservation Board and also at web site of the Ministry of Environment and Forests at "http://envfor.nic.in and a copy of the same shall be forwarded to the Regional Office of this Ministry.	Advertised in two local news papers widely circulated in the region namely, Dainik Bhaskar and Navbharat on 7/6/2011. Copy of Paper of cutting has been already submitted.
XXII	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the Company along with the status of compliance of EC conditions and shall also be sent to the respective regional Office of the MoEF by e-mail.	Environmental statement for year-2015-16 has been already submitted to the Chhattisgarh Environment Conservation Board (CECB) Raipur on 14.09.16. EC compliance has been put on our web site: www.shreecement.in.

RK Vijay AVR (Operations)

Enclosed: - As above

Annexure - 1

Shree Raipur Cement Plant (A Unit of Shree Cement Ltd)

Stack Emission Report (PM All values in mg/Nm3)

			(A IM An value	s in ing/ivins)	
S. No.	Month	Cement Mill	Raw Mill & Kiln Stack	Coal Mill Stack	Clinker Cooler Stack	Captive Power plant Stack
1	Oct-16	13.1	11.7	42.0		Julia
2	Nov-16	17.3	700	13.0	9.3	14.8
3	Dec-16	26.8	12.5	16.3	11.6	14.3
4			9.0	10.5	14.0	17.5
	Jan-17	18.9	17.0	13.7	14.2	
5	Feb-17	23.9	18.7			27.3
6	Mar-17	20.3		16.3	18.4	32.5
		20.3	16.5	11.8	18.3	37.3



		Mar-17	29 6	20.0	10.1	0.0	3.5	41.7	117	0 0	0.0	14.3	36.7	7.00	18.9	210	77.0	5.0	246	0:44	13.6	7.1	1.0	7.6
		Feb-17	49.0	17.7	22	2.2	5.9	50.0	13.8	0.6	2.0	4.77	39.5		21.0	13.0	C.C.	7.0	37.4		17.0	8.6	196	17.0
		Jan-17	62.8	31.1	3.7	67		57.5	22.5	6.5	29.5	6.67	50.6		26.2	13.2	7.7	77	30.3	7.4.0	7.47	5.0	26.1	
ATAG MOIT	ALION DALA	Dec-16	57.7	27.7	17.1	7.3	707	10.1	35.3	8.9	30.8		72.4		48.9	10.3	125		63.6	3/1/	+:+0	11.9	23.1	1
AMBIENT AIR QUALITY MONITORING STATION PATA	No. 40	9T-AON	54.5	36.2	15.8	7.5	65.4	1.00	30.1	7.3	25.0		22.5	0.5	0.4	6.3	6.8	L	25.8	35.2	1	14.1	15.1	
UALITY MOF	04-16	OT-130	27.79	24.6	15.1	10.2	86.5	000	20.0	4.7	10.7		48.9	28.9	0.01	6.9	12.6	510	0.1.0	28.5	0.1	J.T.	6.2	
IBIENT AIR C	Unit											µg/m3									L			
AN	Parameters	PM 10	PM 2 S	507	NOS	2000	FM 10	PM 2.5	502	NO2	707	PM 10		PM 2.5	502	MOD	402	PM 10	DAADE	1/1 2.5	S02	NO2		
	Location	TOWN T SPACKY	AAGINIS I (IVIINES	boundary towards	VIIIage Bharuwadih)	I	AAQMS 2 (Mines			VIIIdgeSemradin)				Boundary towards	South Diection) S			AAOMS 4 (Plant		HISTOR	village Khapradih) (St			

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	7	7- 416	SIP-T	STP-2	STP-1	STP-2	STP-1	C DTD	CTD 4	o day		
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BOD (2 don 177		00:00	0.00	7.07	98.9	7.64	6.82	7.46	7.73	671	7.3	2,70
food (a day at 2)										1	7.2	29'/
deg), mg/l	n	4	9	ĸ	m	4	4	9	m	4	loce than 2	7 0
COD. mg/l	22	1	41)		יראא נוובוו ל	
1/8	25	20	7/	56	40	25	70					
Total Suspended						3	40	64	31.4	24	7.84	43.1
Solids, mg/l	4	4	9	9	4	10	4	20	36	×	loce than 7	
	loca those	+							2	0	7 Hall Scal	٥
Oil & Grease, mg/l	less then	less then	less then		less then	less then			17			
10	0.2	0.2	0.2	less then 0.2		0.3	less then 0.2	less then 0.2 less then 0.2	less then	less then	less then less then less then	less then
					4:0	7.0			0.5	00	00	0
										1	-	

18



SHREE CEMENT LTD.

House No. 31/248, Civil Lines. Near C.M. House, Raipur-492 001 (C.G.) Ph.: 0771-2430022/2430007. Fax: 0771-2430007 CIN No.: L26943RJ1979PLC001935



Ref: SCL/SRCP/CEC/CGWB/Monitoring Report2016/ 2017

Date: 27th January, 2017

The Regional Director, Central Ground Water Board, North Central Chhattisgarh Region Reena Complex, 2nd Floor Dhamtari Road - Raipur(C.G.)

Subject: Submission of Ground Water Monitoring Report for the Year 2016 in and around Semradih, Bharuadih & Khapradih Lime-Stone Mine & Plant area (Cement Plant &TPP) of Shree Raipur Cement Plant, District - Balodabazar - Bhatapara, Chhattisgarh) unit of M/s Shree Cement Limited - Reg.

Ref: Renewal Letter No. & Date: 21-4/36/NCCR/CGWA/2008-569 Date: 08 April, 2015

Sir.

With reference to the above subject, we are herewith submitting the ground water monitoring report in and around Semradih, Bharwadih & khapradih Lime-Stone Mine & Cement Plant area of Shree Raipur Cement Plant, District - Baloda Bazar - Bhatapara, Chhattisgarh (from January 2016 to the December 2016 with comparisons from prior year) for Year 2016 including of the water level monitoring data four times in a year i.e. January, May of pre-monsoon with August & November of post-monsoon, maps showing the depth to water levels for pre-monsoon & pot-monsoon period and hydro-geological scenario in and around plant area within 10 km radius along with the change in ground water levels & quality analysis for both periods with all details. The rain water harvesting system has been developed to recharge the ground

We hope that the documents are in the line with the requirement and kindly acknowledge the receipt.

This is for kind information and record please.

Thanking You,

For, Shree Cement Limited

Ravi Tiwari

Chief Executive (Co-ordination)

Encl: 3 Copy of Ground Water Monitoring Report.

Copy to: District Collector, Balodabazar : Bhatapara (CG):- For kind information please.

ari Road.

CORP. OFFICE: 21. Strand Road, Kolkala 700 001 Phose: 033 22309601-5 Fax: 033 22434226

REGD. OFFICE: Bangur Nagar, Post Box No. 33, Seawar 305901 Dist Ajmer (Raj.)

Shree Raipur Cement Plant

(A Unit of Shree Cement Ltd)

Pre - Monsoon (May 2016) Ground Water Quality Analysis in Core Zone, Year-2016

Si:3025 (part 11)-1983 15:3025 (part 11)-1984 15:3025 (part 23)-1986 15:3025 (part 46)-1991 15:3025 (part 46)-1994 15:3025 (part 46)-1998 15:3025 (part 32)-1988 15:3025 (part 32)-1988 15:3025 (part 53-2004) 15:3025 (part 53-2004) 16:3025 (part 53-20	No.	Parameters		Acceptabl Limit (IS	Acceptable / Permissible Limit (IS 10500-2012)			00000	Co	Core Zone		
Signozic (parti 1)-1988 Signozic (parti			Ref. Method		1	Unit	Ground Water from Bore Well (within	Ground Water from	Ground Water from	Ground Water Car	Ground water from	
5.3025 (part 15)-1983 6.5-8.5 NR 6.833 7.337 7.49 7.69 7.68 7.69 7.69 7.68 7.69 7.68 7.69 7.6				Desirable			Plant)	Area)	Bharuwadih Village	Dhabadih Village	Bore well water	Ground Water
actors 15:3025 (part 16)-1984 500 12100 mg/1 706 446 398 772 526 24) 15:3025 (part 23)-1386 200 600 mg/1 362 224 192 332 244 526 24) 15:3025 (part 40)-1991 75 600 mg/1 328 246 244 152 104 7 4) 15:3025 (part 40)-1991 75 200 mg/1 244 183 20.5 128 39.5 27 1 4) AWG2-1 15:3025 (part 40)-1994 30 100 mg/1 244 183 20.5 12.8 8.7 20.0 1 4) APHA-22nd Edition 200 400 mg/1 4.8 8.9 8.7 50.7 20.0 4.4 5:3025 (part 32)-2004) 0.3 NR mg/1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 -0.1 <			IS:3025 (part11)-1983	6.5-8.5	NR		6.83				Champa Village	iromsarseni village
acto3 Exi3025 part 231-1986 200 mg/1 706 446 388 772 526 244 553025 part 231-1986 200 600 mg/1 328 246 192 332 244 24-1 5:3025 part 401-1981 75 200 mg/1 328 246 244 152 1044 1 24-1 5:3025 part 401-1984 30 100 mg/1 24.4 18.3 20.5 128 27 1 4) APHA-22nd Edition 200 400 mg/1 4.8 8.9 8.7 50.7 20.0 4 5:3025 part 452nd Edition 1.0 1.0 mg/1 4.8 8.9 8.7 50.7 20.0 4 4) APHA-22nd Edition 1.0 1.5 mg/1 4.8 8.9 8.7 50.7 50.7 4 5:3025 (part 452-2004) 0.3 NR mg/1 -0.1 -0.1 -0.1 6.1 6.1 6.1			IS:3025 (part 16)-1984	202				7.33	7.37	7.49	7.68	7.00
358 53025(part 23)-1986 500 mg/1 362 224 192 332 772 526 24) 55.3025(part 21)-1983 200 600 mg/1 328 246 192 332 244 24) 55.3025 (part 46)-1994 75 200 mg/1 24.4 18.3 20.5 65.4 39.5 104 4) APHA-22nd Edition 200 1000 mg/1 4.4 18.3 20.5 12.8 8.7 20.0 70.0				2000	2100	mg/1	206	446	0000			00.7
24) IS:3025 (part 21)-1983 200 GOO mg/1 328 246 192 332 244 24) IS:3025 (part 40)-1991 75 200 mg/1 90.5 67.9 67.9 67.9 67.9 104 104 5 Mg2+) IS:3025 (part 46)-1994 30 100 mg/1 24.4 18.3 20.5 12.8 8.7 104 104 10.0 11.0 24.0 11.0 24.0 44.0 20.0 10.0 11.0 4.8 8.9 8.7 50.7 20.0 10.0 11.0 4.8 8.9 8.7 50.7 20.0 10.0 11.0 4.4.0 20.1 20.0 10.0 11.0 4.8 8.9 8.7 50.7 20.0 10.0 <t< td=""><td></td><td>as CaCO3</td><td>IS:3025(part 23)-1986</td><td>200</td><td>600</td><td>ma /2</td><td></td><td></td><td>398</td><td>772</td><td>526</td><td>746</td></t<>		as CaCO3	IS:3025(part 23)-1986	200	600	ma /2			398	772	526	746
2+) IS:3025 (part 21)+1983 200 600 mg/1 328 246 244 152 104 2+) IS:3025 (part 40)-1991 75 200 mg/1 90.5 67.9 67.9 63.4 39.5 104 5 Mg2+) IS:3025 (part 46)-1994 30 100 mg/1 24.4 18.3 20.5 12.8 8.7 8.7 4) APHA- 22nd Edition 200 400 mg/1 4.8 8.9 8.7 50.7 20.0 5 Si 3025 (part 53-2004) 0.3 NR mg/1 -0.1			-			1/9	362	224	192	330		
2+) 65:3025 (part 40)-1991 75 200 mg/1 90.5 67.9 63.4 152 104 104 8 Mg2+) 15:3025 (part 46)-1994 30 100 mg/1 24.4 18.3 20.5 12.8 8.7 27 4) APHA-22nd Edition 200 400 mg/1 4.8 8.9 8.7 50.7 20.0 5:3025 (part 53-2004) 1.0 1.5 mg/1 -0.1<	Total Hard	ness (as CaCO3)		200	009	mg/1	328			255	244	272
Mag2+) IS:3025 (part 46)-1994 30 mg/1 90.5 67.9 63.4 93.5 27 27 4) IS:3025 (part 32)-1988 250 1000 mg/1 13.0 11.0 24.0 44.0 8.7 8.7 8.7 4) APHA-22nd Edition 1.0 4.8 8.9 8.7 50.7 20.2 5:3025 (part 53-2004) 0.3 NR mg/1 <0.1	Calcium (a:	s Ca2+)	IS:3025 (part 40)-1991	1			200	246	244	152	104	707
SM82+) IS:3025 (part 46)-1994 30 100 mg/1 24.4 18.3 20.5 12.8 39.5 27 4) APHA- 22nd Edition 200 400 mg/1 4.8 8.9 8.7 50.7 50.7 20.0 4) APHA- 22nd Edition 200 400 mg/1 4.8 8.9 8.7 50.7 20.0 5:3025 (part 53-2004) 0.3 NR mg/1 0.08 0.07 0.21 0.08 0.19 0.19 APHA- 22nd Edition 45 NR mg/1 1.7 4.6 0.6 0.6 0.09 0.19 </td <td></td> <td></td> <td>1000</td> <td>73</td> <td>700</td> <td>mg/1</td> <td>90.5</td> <td>62.0</td> <td></td> <td></td> <td></td> <td>101</td>			1000	73	700	mg/1	90.5	62.0				101
4) APHA-22nd Edition 250 1000 mg/1 24.4 18.3 20.5 12.8 8.7 20.0 4) APHA-22nd Edition 200 400 mg/1 4.8 8.9 8.7 44.0 20.0 5:3025 (part 53-2004) 0.3 NR mg/1 -0.1 <t< td=""><td>Magnesiun</td><td>n (as Mg2+)</td><td>IS:3025 (part 46)- 1994</td><td>30</td><td></td><td>14</td><td></td><td></td><td>63.4</td><td>39.5</td><td>27</td><td>125.8</td></t<>	Magnesiun	n (as Mg2+)	IS:3025 (part 46)- 1994	30		14			63.4	39.5	27	125.8
Disable part 32)-1988 250 1000 mg/1 13.0 11.0 24.0 24.0 44.0 20.0	Chloride (as	e CI3			1	1/8/11	24.4	18.3	20.5	12.8		
4) APHA-22nd Edition 200 400 mg/1 4.8 8.9 8.9 8.7 50.7 20.0	100	100	l5:3025 (part 32)- 1988	250		mg/1	13.0			0.77	8.7	40.7
APHA-22nd Edition 1.0 1.5 mg/1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1	Sulphate(as	504)	APHA- 22nd Edition	200	+	-		11.0	24.0	44.0	20.0	138
APHA- 22nd Edition 1.0 1.5 mg/1 <0.1 <0.1 <0.1 <0.2 IS:3025 (part 53-2004) 0.3 NR mg/1 0.08 0.07 0.21 0.08 0.19 0.19 APHA- 22nd Edition 45 NR mg/1 1.7 4.6 0.6 2.8 6.3	Fluoride (as	a			+	mg/1	4.8	8.9	8.7	50.7		
15:3025 (part 53-2004) 0.3 NR mg/1 0.08 0.07 0.01 0.03 0.19			APHA- 22nd Edition	1.0		mg/1	<0.1				20.2	42.5
APHA-22nd Edition 45 NR mg/1 1.7 4.6 0.0 0.0 2.8 6.3	ron(as Fe)		IS:3025 (part 53-2004)	0.3	+	3		1:0	<0.1	<0.1	40.1	<0.1
APHA- 22nd Edition 45 NR mg/1 1.7 4.6 0.6 2.8 6.3	Vitrate/as NC	131			1	mg/1	0.08	0.07	0.21	0.03		
4.5 0.6 2.8 6.3			APHA- 22nd Edition	45		ng/1	17	2 0			0.19	0.13
			***************************************					4.b	9.0	2.8	6.3	1.80

Shree Raipur Cement Plant

(A Unit of Shree Cement Ltd)

Pre - Monsoon (May 2016) Ground Water Quality Analysis in Buffer Zone, Year-2016

Water Street	No.		Acceptable	Acceptable / Permissible				Core Zone			
	rarameters	Ref. Method	rimit (15	Limit (15 10500:2012)		Ground Washer					The state of the s
			Desirable	Permissible	Cuit	from Pausari Village	Kukurdih Village	Ground Water from Rishda Village	Ground Water from Maldi Village	Ground water from Khapardih	from Amer
1	Н	IS:3025 (part11)-1983	6.5-8.5	NR		7.53	200			Village	village
2	TDS	IS:3025 (part 16)-1984	200	2100	mo/1	700	7.04	7.42	7.37	7.57	7.09
m	Alkalinity as CaCO3	15:3025(part 23)-1986	000	000	* 10	ton	434	704	592	478	678
	Total Hardnass for		007	one	mg/1	408	218	272	177	-	
4	-	IS:3025(part 21)-1983	200	009	mg/1	136	0.50		7/7	216	296
r2	Calcium (as Ca2+)	15:300E (and 400) 1000			3		717	264	328	252	404
1		1991-40)-1991	75	200	mg/1	35.4	57.7	68 A	6 10		
9	Magnesium (as Mg2+)	IS:3025 (part 46)- 1994	30	100	ma/1	2 - 1 - 1		200	85.3	65.5	105
_				+	T/9	11.4	16.3	22.2	27.6	21.2	000
	Cinoride (as CI)	IS:3025 (part 32)- 1988	250	1,000	mg/1	88.0	100				55.5
00	Sulphate(as SO4)	APHA- 22nd Edition	200	400	ma/1		0.04	0.86	42.0	32.0	70.0
0	1			+	1/9	4.00	9.5	37.1	19.9	24.7	
-	riuoride (as F)	APHA- 22nd Edition	1.0	1.5	mg/1	<0.1	, ,				67.3
0	10 Iron(as Fe)	IS:3025 (mart co appeal	-				1.9	<0.1	<0.1	<0.1	<0.1
+		(4007-55 Part 23-5004)	0.3	NR n	mg/1	0.08	0.07	0.15			
***	11 Nitrate(as NO3)	APHA- 22nd Edition	45	ON N	14				0.11	0.08	0.08
				-	1/8/1	23.4	2.1	15.5	23.4	73.7	1.7



Shree Raipur Cement Plant

(A Unit of Shree Cement Ltd)

Post - Monsoon (November 2016) Ground Water Quality Analysis in Core Zone, Year-2016

Ref. Method Desirable Desirable Desirable Permissible Signature Annial Desirable Desirable Permissible Desirable Des	Parameters		Acceptable 11	Acceptable / Permissible				Cor	Core Zone	*	
Signost part Sign		Ref. Mathod	2)	(7107:00001		Ground Water from	-				
15.3025 (part11)			Desirable	Permissible	Unit	Bore Well (within		Ground Water from	Ground Water from	Ground water from	Ground Water
Si3025 part 16]- 500 mg/1 556 584 516 7.26 7.26 7.24 7		IS:3025 (part11)-	6.5-8.5	NR		right	I (Mines Area)	oral awaum village	Dhabadih Village	Champa Village	fromSarseni village
Signost Signature Signatur	S	IS:3025 (part 16)-	000			7.43	7.06	7.19	7.26	7.24	CC T
Signostipart 230- Signostipart 230- Signostipart 230- Signostipart 230- Signostipart 230- Signostipart 230- Signostipart 231- Signostipart 231- Signostipart 231- Signostipart 231- Signostipart 231- Signostipart 400- Sign		1984	2000	7100	mg/1	556	584	210			77''
Si3025 part 21- 200 mg/1 288 336 228 320 232	ralinity as CaCO3	15:3025(part 230-	200	009	mo/1	100		OTC	724	528	931
2+) IS3025 (part 40)- 1933 200 600 mg/1 73.7 87.4 63.5 248 356 160 2+) IS3025 (part 40)- 1991 75 20 mg/1 73.7 87.4 63.5 92.6 41 IMg2+ IS3025 (part 450)- 1994 30 100 mg/1 24.9 28.2 21.4 29.9 41 IMg2+ IS3025 (part 32)- 1988 30 100 mg/1 47.0 20.0 24.0 56.0 29.9 13.8 APHA- 22nd Edition 1.0 1.5 mg/1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1					1/9	761	228	228	320	400	
2+) IS:3025 (part 40)- a size state) 75 20 mg/1 73.7 87.4 63.5 248 356 160 41 ING2+ IS:3025 (part 450)- a size state state) 30 100 mg/1 24.9 28.2 21.4 29.9 41 INS:3025 (part 32)- a size state state) 250 1000 mg/1 47.0 20.0 24.0 56.0 22.0 APHA- 22nd Edition 1.0 1.5 mg/1 <0.1	al Hardness (as C.		200	009	mg/1	288				797	314
Mg2+) IS3025 (part 460)- 1994 75 20 mg/1 73.7 87.4 63.5 92.6 41 IS3025 (part 32)- 1988 30 100 mg/1 47.0 28.2 21.4 29.9 13.8 4) APHA-22nd Edition 200 400 mg/1 47.0 20.0 24.0 56.0 22.0 APHA-22nd Edition 1.0 1.5 mg/1 <0.1	cium (as Ca2+)	IS:3025 (part 40)-	12		+		330	248	356	160	000
Mg2+) 15:3025 part 460)- 30 100 mg/1 24.9 28.2 21.4 29.6 41 4) S:3025 (part 32)- 250 1000 mg/1 47.0 20.0 24.0 56.0 13.8 13.8 4) APHA-22nd Edition 200 400 mg/1 85.7 104.7 43.4 35.9 41.8 12.0 5:3025 (part 53- 0.3 NR mg/1 <0.1		+	5	20	mg/1	73.7	87.4	53.5			238
4) APHA-22nd Edition 2.0 1.0 mg/1 47.0 28.2 21.4 29.9 13.8 4) APHA-22nd Edition 2.0 400 mg/1 47.0 20.0 24.0 56.0 22.0 22.0 APHA-22nd Edition 1.0 1.5 mg/1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <t< td=""><td>nesium (as Mg2+</td><td></td><td>30</td><td>100</td><td>ma/1</td><td>2.50</td><td></td><td>03.5</td><td>92.6</td><td>41</td><td>139.9</td></t<>	nesium (as Mg2+		30	100	ma/1	2.50		03.5	92.6	41	139.9
4) APHA-22nd Edition 250 1000 mg/1 47.0 20.0 24.0 56.0 56.0 22.0 APHA-22nd Edition 1.0 1.5 mg/1 <0.1	ride (ac CI)	IS:3025 (part 32)-			1/8/1	6.42	28.2	21.4	29.9	2 67	
4) APHA-22nd Edition 200 400 mg/1 85.7 104.7 43.4 56.0 22.0 22.0 APHA-22nd Edition 1.0 1.5 mg/1											



Shree Raipur Cement Plant

(A Unit of Shree Cement Ltd)

Post - Monsoon (November 2016) Ground Water Quality Analysis in Buffer Zone, Year-2016

Figure Parameters Ref. Method Desirable Permissible Permissi	Sr. No.			Acceptable	Acceptable / Permissible				Core Zone			
Si3025 (part11)-1983 65-85 NR 7,12 7,08 7,115 7,08 7,115 7,117		Parameters	Ref. Method	Desirable	1	Unit	Ground Water fromPausari Village	Ground Water from	Ground Water from	Ground Water from	Ground water	Ground Water from Amer
Higher Hole	Н		IS:3025 (part11)-1983		4			29	monda vinage	Maldi Village	Village	(Balodabazar) village
Alkalinity as CaCO3 S.3025(part 23)-1986 200 600 mg/1 304 772 988 574 468 7.17 468 468 468 468 400	1	1	15-3035 (mart 16)		NR		7.12	7.08	7.15	773		
	7		1984 16)-	200	2100	mg/1	874	CLL		77.1	7.17	7.13
Signost part 21) Signost part 40] Signost par	m		IS:3025(part 23)-1986		000			7//	988	574	468	946
Signozs (part 21)-1983 200 mg/1 572 328 420 280 204 208 208 204 208 20					900	mg/1	304	274	400	350		
2+) IS:3025 (part 40)- 100 75 200 mg/1 148.7 85.3 420 280 280 288 Mg2+1 15:3025 (part 46)- 1991 30 100 mg/1 48.0 27.6 35.3 71.7 74.9 74.9 15:3025 (part 46)- 1984 250 1000 mg/1 104.0 132.0 100.0 37.0 24.2 24.2 4) APHA- 22nd Edition 200 400 mg/1 98.0 51.0 71.4 26.0 36.0 36.0 APHA- 22nd Edition 1.0 1.5 mg/1 <0.1	#		IS:3025(part 21)-1983		009	mg/1	577	200		007	204	312
Mg2+) IS:3025 (part 46)- 1994 30 100 mg/1 48.0 27.6 35.3 109.2 71.7 74.9 4) IS:3025 (part 32)- 1988 250 1000 mg/1 48.0 27.6 35.3 24.2 24.2 4) APHA- 22nd Edition 200 400 mg/1 98.0 51.0 71.4 26.0 34.0 5 APHA- 22nd Edition 1.0 1.5 mg/1 <0.1	2	Calcium (as Ca2+)	IS:3025 (part 40)-	75	000	,		975	420	280	288	296
Mg24) IS:3025 (part 46)- 1994 30 100 mg/1 48.0 27.6 35.3 24.2 71.7 74.9 4) IS:3025 (part 32)- 1988 250 1000 mg/1 104.0 132.0 100.0 37.0 24.2 24.2 4) APHA- 22nd Edition 200 400 mg/1 98.0 51.0 71.4 26.0 36.0 36.0 APHA- 22nd Edition 1.0 1.5 mg/1 <0.1	1		1991	?	7007	mg/1	148.7	85.3	2001			
15:3025 (part 32)- 250 1000 mg/1 104.0 132.0 100.0 37.0 34.0	9	Magnesium (as Mg2+)	IS:3025 (part 46)- 1994	30	100	mg/1	48.0	200	103.2	71.7	74.9	77
4) APHA-22nd Edition 200 400 mg/1 98.0 51.0 71.4 26.0 37.0 34.0 APHA-22nd Edition 1.0 1.5 mg/1 <0.1		Chloride (as CI)	IS:3025 (part 32)-	250	+	mo/1	0.707	9.77	35.3	24.2	24.2	24.9
APHA-22nd Edition 1.0 1.5 mg/1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1	11177	Sulphate(as SO4)	APHA- 22nd Edition	200	1	na li	0.40	132.0	100.0	37.0	34.0	142.0
No. No.		Fluoride (as F)	THE PACE VHOV		+	1/9/1	28.0	51.0	71.4	26.0	36.0	1120
NS MS Mg/1 CO.1 CO.1	T		DUILLY ZZIIG EGITION	1.0		mg/1	<0.1	<0.1	107			0.7
APHA- 22nd Edition 45 NR mg/1 4 6.4 5.6 3.2 10.2	0	fron(as Fe)	IS:3025 (part 53- 2004)	0.3		mg/1	100		- CO.1	<0.1	<0.1	<0.1
4 6.4 5.6 3.2 10.2	7	Vitrate(as NO3)	APHA- 22nd Edition	45	1	5	1.00	<0.1	<0.1	<0.1	<0.1	<0.1
				Ç	1	mg/1	4	6.4	5.6	3.2	103	



5.3

Ground Water Level Monitoring, Year-2016 (Winter - January 16)

Depth to ground water level monitoring data in core zone

Sr. No.	Location	Longitude	Latitude	January 2016 (Winter)depth to water leve (mbgl)
1	Ground Water from Bore Well (within Plant)	21.599	82.044	27,6
2	Ground Water from Plezometer (Mines Area)	21.612	82.07	25.52
3	Ground Water from Bharuwadih Village	21.603	82.091	5.85
4	Ground Water from Dhabadih Village	21.625	82.109	6.15
5	Ground water from Bore well water Champa Village	21.587	82.091	6
6	Ground Water from Sarseni village	21.581	82.058	7.12



Ground Water Level Monitoring, Year-2016 (Winter - January 16)

Depth to ground water level monitoring data in buffer zone

Sr. No.	Location	Longitude	Latitude	January 2016 (Winter) depth to water leve (mbgl)
1	Ground Water fromPausari Village	21.687	82.1	9.1
2	Ground Water from Kukurdih Village	21.652	82.109	6,9
3	Ground Water from Rishda Village	21.629	82.123	6.75
4	Ground Water from Maldi Village	21.666	82.053	6
5	Ground water from Khapardih Village	21.6	82.022	8
6	Ground Water from Amer (Balodabazar) village	21.595	82.178	4



Ground Water Level Monitoring, Year-2016 (Pre Monsoon - May 16)

Depth to ground water level monitoring data in core zone

Sr. No.	Location	Longitude	Catitude	May 2016 (Pre Monsoon) depth to water leve (mbg!)
1	Ground Water from Bore Well (within Plant)	n 21.599	82.044	35,5
2	Ground Water from Piezometer (Mine Area)	21.612	82.07	32.42
3	Ground Water from Bharuwadih Village	21.603	82.091	9.2
4	Ground Water from Dhabadih VIIIage	21.625	82.109	8.35
5	Ground water from Bore well water Champa Village	21.587	82.091	7.62
6	Ground Water from Sarseni village	21.581	82.058	10.21



Ground Water Level Monitoring, Year-2016 (Pre Monsoon - May-2016)

Depth to ground water level monitoring data in buffer zone

Sr. No.	Location	Longitude	Latitude	May-2016 (Pre Monsoon) depth to wate level (mbgl)
1	Ground Water fromPausari Village	21.687	82.1	10.15
2	Ground Water from Kukurdih Village	21.652	82.109	10.2
3	Ground Water from Rishda Village	21.629	82.123	10.7
4	Ground Water from Maldi Village	21.666	82.053	9,43
5	Ground water from Khapardih Village	21.6	82.022	9.6
6	Ground Water from Amera (Balodabazar) Village	21.595	82.178	6.4



Ground Water Level Monitoring, Year-2016 (Monsoon - August 16)

Depth to ground water level monitoring data in core zone

Sr. No.	Locati			August 2016 (Monsoon)depth to water leve
1	Ground Water from Bore Well (within Plant)	21.599	82.044	16.8
2	Ground Water from Piezometer (Mines Area)	21.612	82.07	14.57
3	Ground Water from Bharuwadih Village	21.603	82.091	1.05
4	Ground Water from Dhabadih Village	21.625	82.109	1.25
5	Ground water from Bore well water Champa Village	21.587	82.091	0.3
6	Ground Water fromSarseni village	21.581	82.058	0.5



Ground Water Level Monitoring, Year-2016 (Monsoon - August 16) Depth to ground water level monitoring data in buffer zone

Sr. No.		ocation	nonitoring data in b	August 2016 (Monsoon)depth to water level (mbgl)
1	Ground Water fromPausari Village	21.687	82.1	0.3
2	Ground Water from Kukurdih Village	21.652	82.109	2.8
3	Ground Water from Rishda Village	21.629	82.123	1.6
4	Ground Water from Maldi Village	21.666	82.053	1.75
5	Ground water from Khapardih Village	21.6	82.022	2.55
6	Ground Water from Amera (Balodabazar) village	21.595	82.178	0.9



Ground Water Level Monitoring, Year-2016 (Post Monsoon - November 16)

Depth to ground water level monitoring data in core zone

Sr. No.	Local			November 2016 (Post Monsoon)depth to water level (mbgl)
1	Ground Water from Bore Well (within Plant)	21.599	82.044	16.07
2	Ground Water from Piezometer (Mines Area)	21.612	82.07	16.78
3	Ground Water from Bharuwadih Village	21.603	82.091	4.6
4	Ground Water from Dhabadih Village	21.625	82.109	3.9
5	Ground water from Bore well water Champa Village	21.587	82.091	4.2
5	Ground Water from Sarseni village	21.581	82.058	4.55



Ground Water Level Monitoring, Year-2016 (Post Monsoon - November 16)

Depth to ground water level monitoring data in buffer zone

Sr. No.	L	ocation		Noveber 2016 (Post Monsoon)depth to wate
1	Ground Water fromPausari Village	21.687	82.1	4.5
2	Ground Water from Kukurdih Village	21.652	82.109	4.15
3	Ground Water from Rishda Village	21.629	82.123	4.97
4	Ground Water from Maldi Village	21.666	82.053	4
5	Ground water from Khapardih Village	21.6	82.022	6.5
6	Ground Water from Amera (Balodabazar) village	21.595	82.178	1.75



Shree Raipur Cement Plant

(A unit of Shree Cement Limited), Khapradih, Distt-Balodabazar

CSR Work Done (October 2016 to March 2017)

A	CSR Work Done (October 2016 to March 2017) Particulars of CSR activity undertaken	
A	undertaken	Amount in Rupe
	Eradicating hunger, poverty and malnutrition, promoting preventive health care and sanitation and making available safe drinking water	учности каре
	Arranging health camps and provisions of medicines and attack	
		24,6
	Expenses of AIDS day Celebration including awareness of disease and their preventive measures.	
		6,73
	Arranging supply of drinking water through installation of water tanks and water huts and	
В	Promoting education, including special education and	174,96
	Providing financial support to schools to promote useing differently abled and livelihood	
	1 y or oddentor	65
	Providing support to Anganwadi centres /schools for building / upgrading infrastructure (by undertaking or supporting construction work	0.5
С	education education education education education education	10,000
-	Promoting gender equality, empowering women, setting up homes and hostels for women and orphans; setting up old age homes.	
	women and orphans; setting up old age homes, day care centers and such other	
	and measures for reducing income	
Telephone and the later of the	, and groups	
	Construction of Vrudhashram (old age home) at Balodabazar	
		374,893
	Ensuing environmental sustainability, ecological balance, protection of flora and fauna,	
	of soil, air and water	
	Expenses on purchase of saplings/ plants for distribution to villagers/ nearby localities /	
	That the guards and labour expenses.	2,546,882
5	Support for development / construction of living space for livestock (Goshala expenses)	2,540,002
		100,259
E E	Protection of national heritage, art and culture including restoration of buildings and:	100,259
	miportune dilu works of atte cotting	
- Contract of the Contract of	The state of the s	
t	expenses on promotion of Indian Tradition and Culture they be a life of the control of the contr	
0	occasions (expenses incurred on Sobha yatra & Laddi Show, Prasad, and lighting and	
d	ecoration)	9,445
O	Other Expenses on promotion of Art and Culture by associating with various agencies by	
F T	ponsership, support, contribution, etc.	277,100
- 1	raining to promote rural sports, nationally recognized sports, Paralympic sports and	
E	Nonses on Stree Vivol Make the 2009	
G R	xpenses on Shree Khel Mahotsav 2017 (Winter Olympiard) ural development projects	341,302
C	continued of	- Julion
C	construction of community halls and centers at nearby villages	544.004
	onstruction and leveling of CC roads of nearby villages	544,871
C	onstruction of retaining boundary of pond ladder, pond cleaning	1,524,912
CC	Distruction of various structures like boundary walls school houndary	1,133,937
Str	reet lights etc. in nearby villages	582,594
ctr	ther Maintenance, Renovation and painting work at various roads, speed breakers,	
	ructures, pump and projects ruance of Steel & Cement under CSR	261,304
1 Ov	Jerhands related to CCP.	439,023
. 00	verheads related to CSR activities (maximum upto 5% of total CSR expenses)	439,023
0.1	artes paid to employees engaged in CSR work	
- 50.	xes related to CSR activities	1,750,945
Tax		36,208
Tax	her CSR programme coordination expenses including expenses on break	30,208
Tax Oth	her CSR programme coordination expenses including expenses on brochures, painting, flets, CSR documentary film, display boards inauguration function etc	25,037



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Shree Raipur Cement Plant (A unit of Shree Cement Ltd)

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					Noise Monitoring Report	intoring Ker	DOLL						
Sr. No	location	0	Oct-16	No	Nov-16	De	Dec-16	Jan	Jan-17	Feb	Feb-17	Z	Mar-17
	10000000	Day Time	Night Time	Day Time	Night Time	-	Day Time Night Time	Day Time	Day Time Night Time	Day Time	Day Time Night Time	Day Time	Nieht Time
-	AAQMS-1 (Near Bharuadih) (SE)	47.8	41.6	45.8	39.6	-	37.4	44.3	38.16	50.9	39.2		41.84
2	AAQMS-2 (Near Semaradih) (NE)	46.3	42.7	43.8	40.7	44.6	36.8	47.66	40.94	50.8	40.7	49.64	45.36
8	AAQMS-3 (Near RMS) (SE)	48.8	41.7	45.0	39.7	44.0	38.4	45.62	38.26	51.3	41.1	51.04	45.42
4	AAQMS-4 (Near Kharpradih) (SW)	47.6	41.7	45.6	39.7	47.2	41.8	50.2	42.38	51.3	40.5	53.06	47.22
5	Near Store office	63.3	54.2	61.3	52.2	57.0	49.1	65.26	55.5	62.9	55.9	67.74	61.5
9	Near Raw Mill	73.3	63.2	71.3	61.2	62.3	61.9	66.22	58.04	69.5	62.8	78.92	71.88
7	kiln area (Infront of Mechanical Office)	74.8	65.1	72.8	63.1	8.69	61.2	68.08	61.54	67.8	59.0	77.98	70.42
89	Near Cooler Stack	71.8	63.1	8.69	61.0	68.1	61.4	70.02	63.96	68.8	6.09	75.7	68.4
6	Near Fly Ash Silo	72.0	64.1	70.0	62.1	7.07	65.3	7.1	63.92	62.9	56.6	73.16	67.08
10	Near Truck Loading area (Packing plant)	74.3	63.4	72.5	61.6	70.5	64.2	70.54	64.36	68.9	61.4	65.2	59.04
11	Near Turbine (GPP Plant)	76.3	68.4	74.3	65.6	8.69	61.9	67.4	61.26	67.5	60.2	70.38	65.64
12	Near Lime stone Stacker	72.7	63.3	70.1	61.1	78.5	65.6	50.66	42.38	62.9	55.7	63.62	56.52
13	In front of CCR Building	62.9	54.8	6.09	52.6	9.09	54.0	70.76	64.24	52.4	45.0	50.24	46.16
14	Near Main Gate	64.3	54.0	62.3	51.8	67.7	60.1	63.92	54.94	67.2	54.2	69.5	63.6
15	Near Truck Parking (Logistic Office)	72.4	63.1	68.6	61.1	72.3	64.6	72.38	64.62	64.4	54.7	57.54	51.32
16	Near Mine Work shop	63.7	55.0	61.7	52.3	53.7	43.3	57.5	50.5	. 61.6	52.9	55.78	48.44
17	Near Crusher Area (Mines)	62.8	53.8	8.09	51.8	78.0	69.2	63.84	52.62	71.1	61.8	60.76	53.42
18	Near Open Cast mines	72.7	65.8	71.1	63.6	57.9	51.3	63.7	51.02	5.99	57.0	55.26	50.22



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From: Avneesh kumar chauhan [mailto:chauhanak@shreecementltd.com] Sent: 24 October 2016 13:41

To: 'moefregionalofficenagpur@gmail.com'; 'cpcb.bhopal@gmail.com'; 'hocecb@gmail.com'

Cc: 'R Bhargava'; 'vijayrk@shreecement|td.com'; 'Anil Jain'

Subject: Six Monthly MoEF&CC Compliance Report (period -April 16- September 16)- by Shree

Raipur Cement Plant - Balodabaaar- Bhatapara (Chhattisgarh)

Dear Sirs,

Please find enclosed herewith MoEF& CC Six Monthly Compliance Report period from April-2016 to September-2016. As per given Environment Clearance to us vide letter No.- F. No. J-11011/235/2008-IA II (I) dated 07.03.2011

Hard copy of this MoEF& CC Compliance report being send to all thru courier.

Hope your will find this is in order.

Thanks & Regards

Avneesh Kumar Chauhan Manager- Environment Dept. Shree Raipur Cement Plant (A unit of Shree Cement Ltd.) Village- khaparadih, Tehsil – Simga Dist.- Baloda Bazar- Bhatapara (C.G.) Pin- 493332 Mobile no - 7024260999