



# SHREE CEMENT LIMITED

(UNIT-SHREE RAIPUR CEMENT PLANT)

Village: Khaparadih, Tehsil: Simga, Dist. Baloda Bazar-Bhatapara (C.G) Pin: 493332,  
Ph.:07727-203101, CIN No. : L26943RJ1979PLC001935



SRCP/ENV/2019-20/179

Date: - 24/05/2019

To,

**The Director**

Ministry of Environment, Forests and Climate Change,  
West Central Regional Office,  
Ground Floor, Eastern Wing,  
New Secretariat Building-Opposite Old VCA Stadium,  
Civil Lines, Nagpur – 440001, (M.H)

**Sub:- Regarding compliance for the period October, 2018 to March, 2019 to the conditions of Environment Clearance for Expansion of Integrated Cement Plant (Shree Raipur Cement Plant): 2\*1.5 to 2\*2.6 Million TPA Clinker, 2\*2.6 to 2\*3.0 million TPA Cement, 15 to 30 MW Waste Heat Recovery Power Plant, 25 MW Captive Power Plant along with Synthetic Gypsum Unit (65 TPH) and DG Sets [2000 KVA (size 1000/500/250/125)] near Village Khaparadih, Tehsil – Simga 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 5th September 2016.

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, 2018 to March, 2019 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**  
**Joint VP (Operations)**

**Enclosures: Compliance status Report period October-2018 to March-2019.**

Cc to:-

- 1) The In charge (Zonal Office), Central Pollution Control Board (CPCB), 3<sup>rd</sup> floor, Sahkar Bhawan, North T.T. Nagar, Bhopal – 462003 (M.P.).
- 2) The Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhavan, North Block, Sector 19 Naya Raipur (C.G)

**Compliance Status of Environment Clearance**

**Period from October-2018 to March -2019**

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

**Capacity & Location:** 2\*1.5 to 2\*2.6 Million TPA Clinker, 2\*2.6 to 2\*3.0 million TPA Cement, 15 to 30 MW Waste Heat Recovery Power Plant, 25 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.- Baloda Bazar - Bhatapara (Chhattisgarh)

**EC letter No.** J-11011/235/2008- IA II (I) dated 5th September 2016.

**A. Specific Conditions:**

Sr. No.	Condition	Compliance Reported
I	The project proponent should install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.	Opacity meters have been installed in unit – I & Unit-II for the continuous monitoring of dust particulate matter at the stack of Raw mill& kiln, cement mill (Unit-I), coal mill and clinker cooler. Continuous emission monitoring system (CEMS) at Raw mill & kiln stack has been also installed in Unit-I & II for on line measurement of SO <sub>2</sub> & NO <sub>x</sub> . Data of emission report being submitted to Ministry and its Regional Office on regular basis.  Unit-I &II on line data is continuously transmitting to CPCB & CECB Servers.  Data monitored by installed emission monitoring devices are enclosed as <b>Annexure – 1</b> .
II	The Standards issued by the Ministry vide G.S.R. No. 612 (E) dated 25th August, 2014 and subsequent amendment dated 9th May, 2016 and 10th May, 2016 regarding cement plants with respect to particulate matter, SO <sub>2</sub> and NO <sub>x</sub> , shall be followed.	Data of AAQMS report enclosed as <b>Annexure – 2</b> .
III	Continuous stack monitoring facilities to monitor gaseous emissions from the process stacks shall be provided. After expansion, limit of PM shall be controlled to meet prescribed standards by installing adequate air pollution control viz Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln	Opacity meters have been installed in unit – I & Unit-II for the continuous monitoring of dust particulate matter at the stack of Raw & kiln, cement mill (Unit-I), coal mill and clinker cooler. Continuous emission monitoring system (CEMS) at Raw mill & kiln stack has been also installed in Unit-I & II for on line measurement of SO <sub>2</sub> & NO <sub>x</sub> . Data of emission report being submitted to Ministry

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	and bag filters to coal mill and cement mill. Low NOx burners shall be provided to control NOx emissions. Regular calibration of the instruments must be ensured.	<p>and its Regional Office regular basis.</p> <p>Unit-I &amp; II on line data is continuously transmitting to CPCB &amp; CECB Servers.</p> <p>Data monitored by installed emission monitoring devices are enclosed as <b>Annexure – 1</b>.</p> <p>Calibration of the instruments is being done on regular basis.</p> <p>Highly efficient bag filters; ESP and Low NOx burners have been installed to control emissions.</p>																					
IV	Efforts shall be made to achieve power consumption of 70 units/tonne for Portland Pozzolona Cement (PPC) and 95 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.	<p>Efforts are being done for reduction of electrical &amp; thermal energy consumption for cement production.</p> <p>From October-18 to March-19, power consumption for cement production was 61.25 units/ton &amp; thermal energy consumption was 728 Kcal/Kg of clinker.</p>																					
V	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 shall be followed.	<p>4 numbers of AAQMS have been installed at the common boundary of plant and mine for the measurement of PM2.5, PM10, SO2 and NOx level.</p> <p>Data of AAQMS report enclosed as <b>Annexure – 2</b>.</p>																					
VI	AAQ Modelling shall be carried out based on the specific mitigative measures taken in the existing project and proposed for the expansion project to keep the emissions well below prescribed standards.	<p>Environment Management plan including mitigation measures are enclosed as <b>Annexure-3</b>.</p>																					
VII	Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines/Code of Practice issued by the CPCB in this regard shall be followed.	<p>Following measures have been taken for control of fugitive emission:</p> <table border="1"> <thead> <tr> <th>S. No.</th><th>Source</th><th>Pollution Control Measures</th></tr> </thead> <tbody> <tr> <td>1.</td><td>Coal Unloading</td><td>Covered Unloading point</td></tr> <tr> <td>2.</td><td>Limestone Unloading</td><td>Covered unloading and water spray at crusher</td></tr> <tr> <td>3.</td><td>Material Transfer Point</td><td>Cover shed &amp; Dust Collector</td></tr> <tr> <td>4.</td><td>Fly Ash Storage</td><td>Silo</td></tr> <tr> <td>5.</td><td>Gypsum Storage</td><td>Cover shed</td></tr> <tr> <td>6.</td><td>Petcoke / Coal Storage</td><td>Cover shed</td></tr> </tbody> </table>	S. No.	Source	Pollution Control Measures	1.	Coal Unloading	Covered Unloading point	2.	Limestone Unloading	Covered unloading and water spray at crusher	3.	Material Transfer Point	Cover shed & Dust Collector	4.	Fly Ash Storage	Silo	5.	Gypsum Storage	Cover shed	6.	Petcoke / Coal Storage	Cover shed
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VIII	<p>A statement on carbon budgeting including the quantum of equivalent CO<sub>2</sub> being emitted by the existing plant operations, the amount of carbon sequestered annually by the existing green belt and the proposed green belt and the quantum of equivalent CO<sub>2</sub> that will be emitted due to the proposed expansion shall be prepared by the project proponent and submitted to the Ministry and the Regional Office of the Ministry. This shall be prepared every year by the project proponent. The first such budget shall be prepared within a period of 6 months and subsequently it should be prepared every year.</p>	<p>1171.15 Ton of CO<sub>2</sub> sequestered by the trees plantation till June 2018</p> <p>CO<sub>2</sub> generation from the existing operation is 25,13,642 Tons/ Annum and carbon sequestration till June 2018 is 1171.15 Ton.</p> <p>Details of CO<sub>2</sub> generation and Carbon sequestration report- June-18 is enclosed as <b>Annexure-4</b>.</p>																																	
IX	<p>For the employees working in high temperature zones falling in the plant operation areas, the total shift duration would be 4 hrs or less per day where the temperature is more than 50°C. Moreover, the jobs of these employees will be alternated in such a way that no employee is subjected to working in high temperature area for more than 1 hr continuously. Such employees would be invariably provided with proper protective</p>	<p>All employees working in high temperature area are provided personal protective equipment's like Safety helmets, goggles, Safety Shoes, Gloves etc. and there is proper arrangement for drinking water at the site to prevent dehydration.</p>																																	

	equipments, garments and gears such as head gear, clothing, gloves, eye protection etc. There should also be an arrangement for sufficient drinking water at site to prevent dehydration etc.																					
X	Arsenic and Mercury shall be monitored in emissions, ambient air and water.	Analysis report of Hg for the period Oct-18 to Mar-19 in ambient air & water is as under: - <table><tr><td>Unit</td><td>Parameter</td><td>Norms</td><td>Value</td></tr><tr><td>CPP</td><td>Hg, mg/nm3</td><td>0.03</td><td>0.015</td></tr><tr><td>Ambient Air</td><td>As, mg/nm3</td><td>6.0</td><td>&lt;2.50</td></tr><tr><td>Ground</td><td>Hg, mg/nm3</td><td>0.001</td><td>&lt;0.001</td></tr><tr><td>Water</td><td>As, mg/nm3</td><td>0.01</td><td>&lt;0.01</td></tr></table>	Unit	Parameter	Norms	Value	CPP	Hg, mg/nm3	0.03	0.015	Ambient Air	As, mg/nm3	6.0	<2.50	Ground	Hg, mg/nm3	0.001	<0.001	Water	As, mg/nm3	0.01	<0.01
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XI	The coal yard shall be lined and covered.	Coal and pet coke is stored in covered shed.																				
XII	The project proponent shall prepare a report on impact of project on surrounding reserve forests within six months and will get it approved from the State Forest Department. A copy of the same should be submitted to the Ministry and its Regional Office.	Letter from forest Department showing “No impact of project on Dhabadih Reserved Forest” is enclosed as <b>Annexure-5</b> .																				
XIII	The project proponent shall take all precautionary measures for conservation and protection of wild fauna found in the study area. A Wildlife Conservation Plan specific to this project site shall be prepared in consultation with the State Forest and "Wildlife Department. A copy of the Conservation plan shall be submitted to the Ministry and its Regional Office.	There is no schedule-1 fauna found in core and buffer zone of project.																				
XIV	The project proponent will also provide the latest status of the environmental compliances in respect of its existing plant.	Regularly submitting half yearly Compliance report. An earlier Half yearly Compliance status report period from – April-18 to September-18, has been sent thru Mail as well as courier on dated 02.11.2018 & dated 02.11.2018 respectively. Courier receipt is enclosed as <b>Annexure - 6</b> .																				
XV	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 conveyors/rail mode of transport wherever feasible. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.	<ul style="list-style-type: none"><li>▪ Transportation of fly ash is being done in closed trucks / bulkers.</li><li>▪ All conveyor belts are covered</li><li>▪ PUC certified vehicles are used for the transportation of raw material and product.</li><li>▪ Land acquisition for the railway line is under process.</li></ul>																				

XVI	Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted.	<ul style="list-style-type: none"> <li>Unit is ZLD.</li> <li>Captive power plant is based on the air cooled condenser technology.</li> <li>Domestic waste water is being treated in sewage treatment plant of capacity 2*40 KLD and treated water being used for green belt and plantation.</li> <li>RO reject water is being used for mill spray.</li> </ul>
XVII	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	<ul style="list-style-type: none"> <li>Earthen pit of 2*1.0 Lakh KL capacity have been developed in plant area for storage of rain water.</li> <li>Mining pit of capacity 2.5Lakh KL and one pond in mine area of 2.5Lakh KL has been developed to collect rain water and recharge of ground water.</li> <li>Further in residential colony one pond of 20K KL is proposed.</li> <li>In addition, we have maintained the ponds by cleaning and deepening at Village Chandi, Karhi and Khapradih.</li> </ul> <p>Details is enclosed as <b>Annexure-7</b>.</p>
XVIII	Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986.	<ul style="list-style-type: none"> <li>No waste water is being discharged from Cement Plant as dry process technology is being used for cement manufacturing and maintaining the zero liquid discharge.</li> <li>Domestic waste water is being treated in STP and treated water is used for plantation.</li> <li>RO reject water is being used for mill spray.</li> </ul> <p>Water quality report of STP treated water &amp; ground water of surrounding area is enclosed as <b>Annexure-8</b>.</p>
XIX	All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / re-processors only.	<p>Dust collected in bag filters is being recycled in process.</p> <p>Used oil / Spent oil and used batteries are being sold to authorized recyclers / re-processors only.</p>
XX	The kiln shall be provided with a flexible fuel feeding system to enable use of hazardous wastes and other wastes including biomass, etc.	Flexible fuel feeding system has been provided with kiln. Authorization for co-processing of 20 types of waste streams by CECB Raipur on 27.02.19.

XXI	The proponent shall examine and prepare a plan for utilization of high calorific wastes such as chemical wastes, distillation residues, refuse derived fuels, etc as alternate fuels based on availability and composition. For this, the proponent shall identify suitable industries with such wastes and enter into an MOU for long-term utilization of such wastes as per the Environment (Protection) Rules, 1986 and with necessary approvals.	Authorization for co-processing of 20 types of waste streams has been obtained from CECB. Copy enclosed as <b>Annexure- 9</b> .
XXII	Efforts shall be made to use the high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly. The PP shall enter into an MOU with units with potential for generating hazardous waste and in accordance with Hazardous Waste Regulations and prior approval of the CECB.	Authorization for co-processing of 20 types of waste streams by CECB Raipur on 27.02.19.
XXIII	Green belt over 33% of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area and along road sides etc. by planting native and broad leaved species in consultation with local DFO, local community and as per the CPCB guidelines.	Presently 94559 saplings have been planted within plant premises.  Under Hariyar Chhattisgarh project. we have planted 15000 trees near School of Bharuwadih, Semradih, Khapradih, Chandi, Karahi & Parkidih villages with about 10 KM of both side of road plantation from Bharuwadih to chandi village and we have also planted about 15050 trees at Bhatapara. Apart from that, 5000 tree sapling have been also done in Railway siding 4600 trees has been planted in colony area. Hariyar plantation near villages 14524. Photographs of the same are attached as <b>Annexure-10</b> .
XXIV	The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.	Solar lights installed in plant area and is proposed in colony area.
XXV	The project proponent shall provide for LED lights in their offices and residential areas.	LED lights have been provided in offices in the plant.
XXVI	All the recommendations made in the	All actions have been taken to comply with CREP

	Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.		recommendation.
	S. No.	CREP Condition	Action Plan
	1.	The new cement kiln to be accorded NOC/ Environmental Clearance w.e.f 1/4/03 will meet the limit of 50 mg/Nm <sup>3</sup> for particulate matter emission.	PM emission level is < 30 mg/Nm <sup>3</sup> .
	2.	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.	Following measures have been taken: <ul style="list-style-type: none"> <li>• Silos for Clinker and Fly Ash and covered shed for Gypsum.</li> <li>• Water spray arrangement at raw materials like limestone, coal and pet coke.</li> <li>• Bag filters at all material transfer points.</li> <li>• Covered conveyor belts.</li> <li>• Cemented roads and three vacuum sweeping machines for road cleaning.</li> </ul>
	3.	Industries will submit the target date to enhance the utilization waste material by April 2003.	Use of fly ash for making of PPC.
	4.	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.	Authorization for co-processing of 20 types of waste streams by CECB Raipur on 27.02.19.
	5.	Cement industries will carry out feasible study and submit target dates to CPCB co-generation of power by July-2003.	Waste heat recovery system has been installed
XXVI I	At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be		All commitments made during the public hearing have been incorporated in CSR activities. An amount Rs 98.46 lakh rupees has been incurred on socio-economic activities from October- 2018 to March- 2019. Details enclose for CSR expenses as given in <b>Annexure- 11</b> .

	submitted to the Ministry's Regional Office.	
XXVI II	In addition to the above provision of ESC, the proponent shall prepare a detailed ' CSR Plan for the next 5 years including annual physical and financial targets for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Skill Development and infrastructure etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.	<p>A dedicated CSR dept. doing socio-economic development activities in the surrounding villages like community development programs, educational programs, drinking water supply and health care, sanitation, skill development and infrastructure etc.</p> <p>A five year CSR plan along with budgetary allocation is enclosed as <b>Annexure- 12</b>.</p>
XXIX	A Risk Assessment Study and Disaster Preparedness and Management Plan along with the mitigation measures shall be prepared with a focus of Disaster Prevention and a copy submitted to the Ministry's Regional Office, SPCB and CPCD within 3 months of issue of environment clearance letter.	Submitted along with EIA / EMP report.
XXX	To educate the workers, all the work places where dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.	Complying with



XXXI	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, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Housing, fuel, toilets with soak pits & septic tank, safe drinking water, medical healthcare etc. have been provided to construction labors.
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**B. General Conditions:**

i.	The project authorities must strictly adhere to the stipulations made by the Chhattisgarh Environment Conservation Board and the State Government.	Complying with.
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).	Agreed.  No further expansion in the plant will be done without prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
iii.	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, PM2.5, SO <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Nagpur and the SPCB/CPCB once in six months.	4 numbers of AAQMS have been installed for the measurement of PM2.5, PM10, SO <sub>2</sub> and NO <sub>x</sub> level.  Data on ambient air quality and stack emissions being submitted to MoEF & CC Regional Office and SPCB / CPCB once in six months and monitored data is enclosed as <b>Annexure 2</b> .
iv.	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	Two STP capacity 40 KL/day each, have been installed & being operated. Treated effluent being used in green belt development. Treated effluent analysis data sheet is enclosed as <b>Annexure 8</b> .  RO reject water being reused for cement mill spray
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 including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA	Turbines, compressors and DG set have been installed in closed building.  Plantation has been done all around the plant boundary.  Proper maintenance and lubrication is being done of all machines to maintain the noise level. Noise monitoring report being submitted to board

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	(daytime) and 70 dBA (nighttime).	regularly. Noise Monitored data is enclosed as <b>Annexure 13.</b>
vi.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational health programs are conducted on regular basis and records being maintained by the Occupation Health Center (OHC). Quantitative statistics and number of individual screened for occupational health surveillance from <b>October-18 to March-19</b> is enclosed as <b>Annexure-14.</b>
vii.	The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	<ul style="list-style-type: none"> <li>▪ Earthen pit of 2*1.0 Lakh KL capacity have been developed in plant area for storage of rain water.</li> <li>▪ Mining pit of capacity 2.5L KL and one pond in mine area of 2.5L KL has been developed to collect rain water and recharge of ground water.</li> <li>▪ Further in residential colony one pond of 20K KL is proposed.</li> <li>▪ In addition, we have maintained the ponds by cleaning and deepening at Village Chandi, Karhi and Khapradih.</li> <li>▪ Details is enclosed as <b>Annexure-7.</b></li> </ul>
viii.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programs, educational programs, drinking water supply and health care etc.	<p>Environmental protection measures and safeguards recommended in the EIA/EMP report have been / will be implemented.</p> <p>A dedicated CSR dept. is doing socio-economic development activities in the surrounding villages like community development programs, educational programs, drinking water supply and health care, Sanitation, Skill Development and infrastructure etc. An amount Rs 98.46 lakh rupees has been incurred on socio-economic activities from October- 2018 to March-2019. Details enclose for CSR expenses as given in <b>Annexure- 11.</b></p>
ix.	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change (MoEFCC) as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Nagpur. The funds so provided shall not be diverted for any other purpose.	Details of expenses on environmental protection measures is enclosed as <b>Annexure-15.</b>

x.	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 be put on the web site of the company by the proponent.	Copy of environment clearance letter has been sent on 16.9.2016 to the followings:- 1. Gram Panchayat, Khapradih. 2. Jila Panchayat, Balodabazar 3. Nagar Palika, Balodabazar  EC letter has been put on our web site:- <a href="http://www.shreecement.in">www.shreecement.in</a>
xi	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEFCC at Nagpur. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM 10, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Last six monthly EC compliance status report for the period of Apr-18 to Sep-18 has been uploaded on company website. We are regularly submitting half yearly Compliance reports. An earlier Half yearly Compliance status report period from – Apr-18 to Sep-18, has been sent thru Mail as well as courier on dated 02.11.2018 & dated 02.11.2018 respectively. Courier receipt is enclosed as <b>Annexure - 6</b> .  The criteria pollutant levels namely; PM 10, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels) and PM, SO <sub>2</sub> & NO <sub>x</sub> (stack emissions) are continuously displayed on the display board at the main gate of the plant.
xii.	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEFCC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Nagpur / CPCB / SPCB shall monitor the stipulated conditions.	Last six monthly EC compliance status report for the period of April-18 to September-18 has been uploaded on company website. We are regularly submitting half yearly Compliance reports. An earlier Half yearly Compliance status report period from – April-18 to September-18 , has been sent thru Mail as well as courier on dated 02.11.2018 & dated 02.11.2018 respectively. Courier receipt is enclosed as <b>Annexure - 6</b> .
xiii.	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	Environmental statement for year-2017-18 has been submitted to the Chhattisgarh Environment Conservation Board (CECB) Raipur on 03.09.2018. Environment Statement and EC compliance has been uploaded on our web site: <a href="http://www.shreecement.in">www.shreecement.in</a>

	compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEFCC at Nagpur by e-mail.	
xiv.	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEFCC) at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Nagpur.	Advertised in two local newspapers widely circulated in the region namely, Hari Bhumi and Navbharat on 11/9/2016. Copy of the same is already sent to the Regional Office MoEF & CC Nagpur. Copy of newspapers cutting enclosed as <b>Annexure-16</b>
xv.	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.	<ol style="list-style-type: none"> <li>1. 1<sup>st</sup> clinker unit (Pyro processing) enhanced capacity from 1.5 Million TPA to 2.6 Million TPA started on 04/02/2017.</li> <li>2. 2<sup>nd</sup> clinker unit (Pyro processing) having capacity of 2.6 Million TPA started on 13/12/2017.</li> <li>3. 1<sup>st</sup> clinker grinding unit enhanced capacity from 2.6 Million TPA to 3.0 Million TPA started on 04/02/2017.</li> <li>4. Waste heat power plant commissioning &amp; generation on 23.07.2015.</li> <li>5. Captive Power Plant (CPP) enhanced capacity from 15 MW to 25 MW has been started on 12/02/2017.</li> <li>6. Three DG sets capacity 250 KVA each has been installed.</li> </ol>

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

  
R K Vijay  
Joint VP (Operations)

Enclosed: - As above



Annexure - 1

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

Stack Emission Report (PM All values in mg/Nm<sup>3</sup>)

S. No.	Month	Cement Mill	Coal Mill Stack-I	Coal Mill Stack-II	Clinker Cooler Stack-I	Clinker Cooler Stack-II	Raw Mill & Kiln Stack -I			Raw Mill & Kiln Stack -II			Captive Power plant Stack		
		PM	PM	PM	PM	PM	PM	SO <sub>2</sub>	NOx	PM	SO <sub>2</sub>	NOx	PM	SO <sub>2</sub>	NOx
1	Oct-18	6.94	14.66	7.36	11.26	4.63	9.09	19.08	528.09	9.07	0.50	425.29	20.83	199.50	76.70
2	Nov-18	6.53	8.04	1.62	7.88	2.96	6.58	16.41	296.83	5.39	12.85	205.79	17.86	183.20	50.86
3	Dec-18	6.56	0.00	13.31	0.00	9.83	0.00	0.00	0.00	17.63	15.29	433.83	24.05	149.09	95.10
4	Jan-19	7.91	10.65	8.91	7.43	5.69	6.20	7.90	252.11	8.18	14.29	251.01	28.67	143.80	74.64
5	Feb-19	10.66	12.56	10.44	10.72	7.96	9.10	2.35	396.43	12.15	16.52	400.09	19.45	124.24	64.37
6	Mar-19	10.86	14.94	15.58	10.79	8.34	9.60	34.40	326.61	13.88	22.06	360.20	18.42	101.75	60.35

*Signature*

Annexure - 2

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

**AMBIENT AIR QUALITY MONITORING STATION DATA**

Location	Parameters	Unit	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
AAQMS 1 (Mines boundary towards village Bharuwadih)	PM 10	$\mu\text{g}/\text{m}^3$	70.15	54.64	51.11	45.6	58.25	61.22
	PM 2.5		21.51	22.72	25.01	24.48	32.32	38.33
	SO <sub>2</sub>		3.22	3.83	3.19	5.13	4.65	4.53
	NO <sub>2</sub>		2.15	3.06	4.85	3.08	2.79	2.72
AAQMS 2 (Mines boundary towards village Semradih)	PM 10		44.24	47.54	55.09	48.57	65.54	65.27
	PM 2.5		21.59	22.69	28.46	22.66	30.28	33.76
	SO <sub>2</sub>		4.84	5.05	6.84	9.97	8.05	8.47
	NO <sub>2</sub>		3.02	3.54	9.77	7.54	6.9	4.24
AAQMS 3 (Plant Boundary towards South Diction)	PM 10		46.61	50.58	56.63	45.31	68.55	79.65
	PM 2.5		22.29	28.08	30.5	22.87	55.22	32.76
	SO <sub>2</sub>		9.03	7.1	4.97	14.34	9.4	10.28
	NO <sub>2</sub>		4.34	4.43	8.79	6.44	7.52	8.22
AAQMS 4 (Plant Boundary towards village Khapradih)	PM 10		54.86	49.12	59.28	46.85	62.9	67.52
	PM 2.5		24.79	26.27	31.97	24.08	30.21	30.49
	SO <sub>2</sub>		5.62	8.02	8.02	8.84	7.51	18.32
	NO <sub>2</sub>		8.01	8.08	11.65	5.68	5.59	5.5

*Signature*

**MITIGATIVE MEASURES TAKEN FOR ENVIRONMENTAL  
IMPROVEMENT AT PLANT.**

1. Installed 4 numbers of online Ambient Air Quality Monitoring Stations and Continuous Emission Monitoring System at raw mill, kiln stack.
2. Real time on line data of AAQMS & CEMS are transmitting to State and Central Pollution Control Board on continuous basis.
3. In house manual monitoring of stack emission and ambient air emission, fugitive emission and water quality is being done regularly.
4. Monitoring of stack emission and ambient air emission, water quality is being done regularly through NABL approved lab.
5. Opacity meters have been installed at the stack of Kiln, Coal mill, clinker cooler and cement mill for continuous online stack emission monitoring.
6. Monitoring of SO<sub>2</sub> & NO<sub>x</sub>, O<sub>2</sub>. Gas emission is being measured through Flue gas Portable analyzer (Testo 340) on regularly basis.
7. 72 numbers of Bag filters have been installed and covered with shed at various material transfer points for control of fugitive emission.
8. Cement being manufacturing in dry process and there is no any effluent generated from the process hence maintaining Zero Effluent Discharge.
9. Waste heat recovery system has been installed.
10. Concreting at near raw mill, coal mill, cooler, cement mill, packing plant and TG building has been done.
11. Fly ash is being transported in the closed containers and bulkers.
12. Constructed two Clinker silo with fully covered tin shed to avoid fugitive dust emission.

*Abhinav*

13. All Storage Silo installed with Bag filter for controlling dust emission
14. Maintenance department is doing regular checking and scheduled maintenance of all the pollution control devices.
15. Civil department taking care for of House keeping with the help of two road sweeping machines.
16. Domestic waste water generated by unit being treated in Movable Bed Bio reactor (MBBR) based sewage treatment plant (STP). Treated STP water being used for plantation/ greenery development.
17. Horticulture Department is taking care of tree plantation and green belt development.
18. Applicable best available control measures has been adopted to minimize the fugitive dust emission from each fugitive dust source type within active operation
19. All Belt Conveyor fully covered with tin sheet
20. Constructed cover shed for storage of raw material including Coal to avoid fugitive dust emission.
21. Developed 2 Nos of Rain water harvesting Pond capacity about 1 L KL each in plant premises & mining pit of capacity 2.5L KL and one pond in mine area of 2.5L KL in mine area to collect rain water and recharge of ground water.

*Shanmugan*

# Carbon sequestration estimation for Shree Raipur cement Plant (A Unit of Shree Cement Ltd.)

2017 - 2018



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# List of abbreviations

AGB	Above Ground Biomass
dbh	diameter at breast height
GHG	Greenhouse Gas
MoEFCC	Ministry of Environment, Forests and Climate Change



# 1 Background

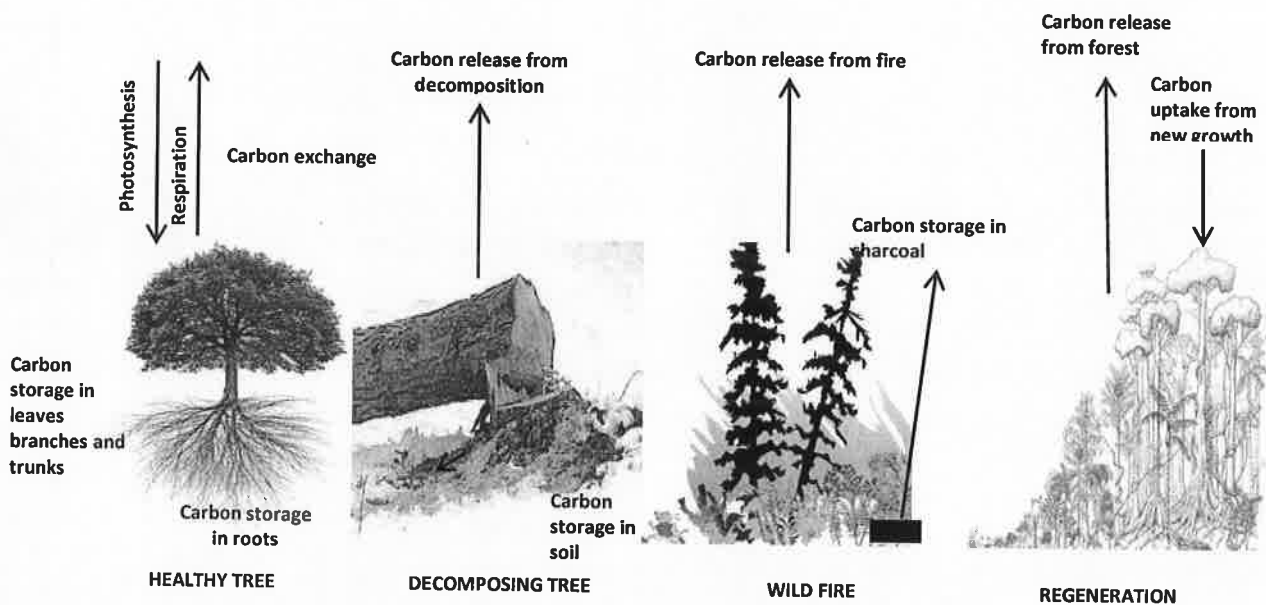
## 1.1 Carbon and trees

It is acknowledged that forests and planted areas contribute to combatting climate change. They play an important role as carbon sinks and sources, thereby maintaining the global carbon balance. Trees sequester and store carbon through the process of photosynthesis, contributing to creation of five carbon pools in the form of living biomass of trees, and under story vegetation and dead mass of litter, woody debris and soil organic matter as illustrated in Figure 1.

Figure 1: Carbon pools in planted areas

Source: Forest Carbon Report of India (2013)

These pools necessitate the growing need to quantify the stocks, sources and sinks of carbon



and other greenhouse gases (GHGs) in the context of anthropogenic impacts due to the global climate.

The carbon stored in the above ground biomass of trees is typically the largest pool, with young trees sequestering carbon at a faster rate because of their growth rate and the mature trees acting as storehouses of carbon. Thus, the forests and planted areas act as carbon sinks and when any forest fire occurs the stored carbon is released back in to the atmosphere as carbon dioxide. Furthermore, the bigger (and older) the trees, the higher is their ability to cycle and sequester carbon (Morris Bishop, 1998). This growth rate is a function of species planted the physiographic region which directly affects the decomposition rates, periods of photosynthesis.

*Morris*

It is interesting to note that even within a given area, carbon stocks will vary with elevation, rainfall and soil type. Due to which, a same species tree like Neem will not have same carbon stocking if grown in two different physiographic regions.

The areas which provide faster growing conditions to its vegetation will be more suitable for carbon stocking. For this reason tropical and sub-tropical forests have very fast growth rates giving higher productivity per unit of area and time with consequently higher potential of carbon sequestration per unit of area. However, due to unscientific management of these areas the forests/plantations may act as carbon sources only (Chaturvedi, 1994).

### **1.1.1 Biomass**

Tree biomass assessment is used to estimate the quantity of timber, fuel and fodder components in the tree (Brown, 1997). Tree biomass is defined as the net organic matter resulting from primary production through photosynthesis, out of which approximately 50% of dry forest biomass comprises of carbon (Westlake, 1966). Furthermore, biomass assessments provide information on the amount of carbon that may be lost or sequestered under different forest management regimes and plantations. The carbon in the tree biomass can be converted to carbon dioxide by multiplying the ratio of the molecular weight of CO<sub>2</sub> to the atomic weight of carbon.

### **1.1.2 Above-ground biomass**

The AGB carbon pool consists of all living biomass broadly categorised as trees and understory. There are various approaches established to estimate the carbon, the most comprehensive of which is the destructive sampling. This method includes harvesting vegetation, drying to a constant mass and establishing wet-to-dry biomass ratio. It is an expensive approach and non-intuitive for promoting carbon sequestration. More commonly applied approach includes estimating biomass through regressing equations. The default biomass regression equations have been stratified by rainfall regime and region (Brown, 1997; IPCC, 2003). These default equations are based on a large sample of trees. Their application however, tends to reduce the accuracy of the biomass estimate.

## **1.2 Objective of the study**

Understanding the critical role played by trees in carbon uptake from the atmosphere and the creation of carbon sinks as a mitigation strategy, Shree Cement Limited has undertaken plantation activity at Raipur, Chhattisgarh, since 2012. This study focusses on estimating the current carbon stock of above ground biomass at Shree Raipur Cement Plant ( A Unit of Shree Cement Limited) plantation site situated at Balodabazar- Bhatapara district in Chattisgarh state.

## 2 Methodology

Biomass is an indicator to carbon sequestered. There are numerous ways to estimate the biomass in tress/ saplings. The table below presents the estimation method that has been used for localized carbon sequestration estimation in planted areas in India.

Table 1: Methods to estimate carbon sequestered in planted areas in India.

Study Area	Estimation method	References
Himalayan region of Uttar Pradesh in India	Aerial photographs and ground survey data.	Tiwari and Singh, 1984
Western Ghats	Harvesting method	Rai and Proctor, 1986
Tropical deciduous forests of India	Forest inventory, Remote sensing estimate	Haripriya, 2000
Northern Haryana	Remote sensing and Regression models	Ravikumar et al. 2011
Different forest types in Kolli hills, Tamil Nadu	Linear regression	Mani and Parthasarathy 2007, Mohanraj et al. 2011
Western Ghats Maharashtra	Spectral modeling	Das & Singh, 2014

Source: Adapted from Das & Singh (2012)

The choice of the method is subject to access to technology like remote sensing, aerial photography, trained personnel to collect inventory data, and time.

The methodology applied in this study is based on the biomass regression models developed by Chave et al (2005). Chave et al (2005) has developed two models, Model I and Model II, based on the measurement parameters such as specific wood density, diameter, height and forest type - Model I uses diameter, height and forest type while Model II uses only diameter and forest type as dependent variables to estimate biomass. Here, Model II has been applied for estimating biomass of the plantation species. This equation is specific to tropical forests types namely dry, moist and mangroves; Raipur plantation sites fall under dry forest type. The step wise enumeration of carbon sequestration estimation is presented below:

1. Measuring girth (circumference) in m/inch at diameter breast height (dbh) which is 1.37m based on forest measurement principles, using measuring tape.
2. Converting girth into diameter in cm.
3. Obtaining specific wood density for species through literature review. For species where wood density has not been calibrated and published in literature, generalized wood density of 0.61gm/cm<sup>3</sup> applicable for India has been used.
4. Estimating the biomass in kg of species by applying dry forest biomass regression equations of Model II (Chave et al, 2005). The equation is:

$$\text{Above ground biomass (dry forest type)} = \rho * e^{-0.667+1.784(\ln(D))+0.207(\ln(D*D)) - 0.0281(\ln(D*D*D))}$$

Where:

$\rho$  is the wood density of the species in gm/cm<sup>3</sup>

D is the diameter of the sapling/tree in cm

5. Estimating the carbon sequestered in Tonnes in a sapling/tree from the product of biomass (kg) with carbon factor (50% or 0.50).
6. Estimating the carbon sequestered in Tonnes of carbon dioxide from the product of carbon sequestered in tonnes with molar value of carbon dioxide (3.67).

#### Sample estimation:

At site species of maximum abundance for instance Babul has been selected for illustrative estimation presented below in table 1.

Table 1: Illustrative estimation

Site	Species name (common)	Species name (scientific)	Diameter (cm)	Specific density (gm/cm <sup>3</sup> )	Biomass (kg)	Carbon sequestered (Tonnes) (Biomass*0.50/1000)	Number of saplings (same species)	Total carbon Sequestered (Tonnes)	Total carbon sequestered (Tonnes of CO <sub>2</sub> ) (Carbon sequestered in Tonnes * 3.67)
RAIPUR	Babul	<i>Acacia arabica</i>	4.85	0.70	2.56	0.005	3170.00	14.31	52.51

### 3 Data collection

The above elaborated methodology uses field data collected by us. Data collection includes sampling as complete enumerations are subject to availability of resources such as time, trained field experts and other resources. By definition, sampling infers information about an entire population by observing only a fraction of it.

#### 3.1 Data from field sampling

This study includes plantation data for one time data point i.e., 2018, and the field data that has been collected covers 100% sampling, due to availability of time and resources. The sampling design for estimating the carbon of the standing stock for the plantation sites of Shree Cement Plant are:

- 1 Plant area, Raipur, Chhattisgarh
- 2 Mines area, Raipur, Chhattisgarh
- 3 Harihar C.G. Plantation, Raipur, Chhattisgarh

At each site, the following data parameters were collected by the SRCP team:

- 1 Location of the plantation
- 2 Type of plantation (Block / line/ sporadic)
- 3 Species name (common)
- 4 Species name (scientific)
- 5 Age (years)
- 6 Girth at 1.37m (Inch/cm)
- 7 Number of saplings (same species)
- 8 Area of plantation

Equipped with this knowledge, the field team comprised of expert persons from Environment, Personnel and Administration, Land and Horticulture department who were further briefed before proceeding for data collection.

**Measurements:** Extensive exercise of field measurements was carried out at the plantation sites. The measured tree species were marked with colour codes in the sampling area.

**Sampling:** A field survey in the presence of the land surveyor was completed before the start of the sampling. Tree species were selected on the basis of canopy cover, foliage cover, height of the tree species, age of the tree species, and health of the tree species. A complete classification of the planted species was prepared.

The field area was segregated as per the density of the plantation area and was marked and boundary of the plantation area was fixed. For measurement of the girth a height of 1.37 meter from the ground level was considered.

Table 2: Plantation site specific data collection details

Field data collection parameter	Raipur, Chhattisgarh
<b>Team</b> - qualified team of expert persons from Environment and Horticulture department	4 members
<b>Measurement time period</b>	2 weeks
<b>Sampling selection criteria</b>	Min. age 1 year Max. age 4.3 year
<b>Tools used</b>	measuring tapes, calipers along with the plastic scales
<b>Total area sampled (in ha) – inclusive of all sub-sites</b>	121.58

## Plate 1: Data collection

### Key highlights

- Maximum girth measured 6.2 inch
- Minimum girth measured 1.0 inch
- Factory plantation area of 37.1 ha comprises of 91659 no of trees
- Mining plantation area is 56.51 ha comprises of 139586 no of trees
- Hariyar plantation area is 28 ha comprises of 28050 no of trees



**Plant site- Near Stacker reccaimer**



**Plant site- Near STP-1**



**Mines site- near crusher-1**



**Mines site- near pipe conveyor belt**

Measurement of girth in instances of forking and bend in pole (respectively)



**Harihar project- road side**



**Harihar project- road side**

## 4 Results

A high level summary of site-wise estimation of carbon sequestered in the standing stock (above ground biomass) for the plantations is presented as below:

Carbon estimation for above ground biomass*				
Plantation location	Type of plantation	No of saplings/trees	Tonnes of carbon sequestered	Tonnes of carbon dioxide sequestered
Plant area	Block & line	91659	97.04	356.12
Mines area	Block & line	139586	190.7	699.87
Harihar C.G. Plantation	Block & line	28050	31.38	115.16
<b>Total</b>		<b>259295</b>	<b>319.11</b>	<b>1171.15</b>

Error percentage 5% (+ -)

Standard error 19.50%

\*This estimation excludes bamboo

Table 3: Age profile of plantations

Age profile of saplings/trees	
age (years)	number of saplings (same species)
1	79052
2.0	117782
2.2	20878
3.0	20850
3.3	13733
4.3	7000
<b>Total</b>	<b>259295</b>

**Remarks:** Tonnes of carbon dioxide sequestered was **473.91** in **2016-17** and it is increased from the 473.91 MT to **1171.15 MT** in **2017-18** due to increase in total no. of trees & their diameter.

### 4.1 Quality assurance

The biomass regression equations and other parameters like specific wood density of species and carbon factor used in this study are based on secondary literature published and accepted in the research domain.-which is known to have a high reliability

### 4.2 Conclusion

During FY 2017-18 a total of **319.11** Tonnes of carbon and **1171.15** Tonnes of CO<sub>2</sub> eq. has been sequestered in the standing stock (above ground biomass) at the SRCP site.

## 5 References

Appendix 1 -List of wood densities for tree species from tropical America, Africa, and Asia.:  
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Wood density <http://www.ankurpatwardhan.com/carbonsequestration.pdf>

Wood density database: <http://db.worldagroforestry.org//wd/genus/>



## 6 Annexures

### 5.1 Plantation data:-

#### SHREE RAIPUR CEMENT PLANT

Sr no	Site name	Type of plantation (Block / line/ sporadic)	Area of plantation	Species (Common)	name (red)	Species (scientific)	name	number of saplings (same species)	Age (years)	girth * (Inch)
1	PLANT SITE	Block & Line	0.72	Peltaphorum		copper pod		1800	4.3	5.5
2			0.68	Karanj		Pongamia Pinnata		1700	4.3	5.5
3			0.56	bougainvillea color)	(red	bougainvillea spectabilis		1400	4.3	6.5
4			0.4	Moulshree		Mimusops elengi		1000	4.3	5.5
5			0.32	Amaltas		cassia fistula		800	4.3	6
6			0.12	Cassia Siamea		senna siamea		300	4.3	6.5
7			0.32	Peltaphorum		copper pod		800	3.3	4.5
8			0.36	Karanj		Pongamia Pinnata		900	3.3	4.2
9			0.24	bougainvillea color)	(red	bauhinia verigeta		600	3.3	5
10			0.4	Moulshree		Mimusops elengi		1000	3.3	4
11			0.48	Amaltas		cassia fistula		1200	3.3	4.5
12			0.16	Cassia Semiya		senna siamea		400	3.3	4.5
13			0.088	Neem		Azadirachta indica		220	3.3	4.5
14			0.8	Kachnar		bauhinia blakeana		2000	3.3	4.5
15			0.8	Gulmohar		Delonix regia		2000	3.3	5

16			1	Tecoma (yellow color)	Tecoma Stans	2500	3.3	5.2
17			0.6516	Kadam	Neolamarchia cadamba	1629	3.3	5.5
18			0.0656	Royal Palm		164	3.3	9
19			0.128	Ficus Black (Panda)	figus benjamina	320	3.3	5.5
20			0.16	Peltaphorum	copper pod	400	2.2	4
21			0.8632	Karanj	Pongamia Pinnata	2158	2.2	3.5
22			0.4	Moulshree	Mimusops elengi	1000	2.2	2.5
23			0.4	Amaltas	cassia fistula	1000	2.2	3
24			2.92	Cassia semiya	senna siamea	7300	2.2	3
25			1.968	Neem	Azadirachta indica	4920	2.2	3.5
26			0.4	Kachnar	baubhinia blakeana	1000	2.2	2.5
27			0.44	Gulmohar	Delonix regia	1100	2.2	3
28			0.4	Tecoma	Tecoma Stans	1000	2.2	3.5
29			0.4	Kadam	Neolamarchia cadamba	1000	2.2	3
30			2.414	Mahaneem		6035	1	1.5
31			0.5912	Sisam	Dalbergia latifolia	1478	1	2
32			0.4	Amaltas		1000	1	1.5
33			17.014	Cassia semiya		41535	1	1.5
			<b>37.1</b>			<b>91659</b>		

1	Mines Area	Block & Line	1.2834008	Babul	Acacia Arabica	3170	3	6
2			0.57	Safed siris	Albizzia procera	1420	3	5.5
3			0.57	Sisam	Dalbergia latifolia	1420	3	6
4			0.57	Neem	Azadirachta indica	1420	3	5.5
5			0.57	Gulmohar	Delonix regia	1420	3	6.2
6			0.809	Subabul	laucaena laucocephala	2000	3	5.2
7			2.78	Babul	Acacia Arabica	6880	2	3.5
8			3.23	Safed siris	Albizzia procera	8000	2	4
9			3.54	Sisam	Dalbergia latifolia	8780	2	3.5
10			4.75	Neem	Azadirachta indica	10758	2	3.5
11			4.75	Gulmohar	Delonix regia	11754	2	4
12			4.83	Subabul	Laucaena Leucocephala	11932	2	3.5
13			6.91	Cassiya semiya	senna siamea	17072	2	3.5
14			5.8	Peltaphorum	copper pod	14350	2	4
15			6.37	Karanj	Pongamia Pinnata	15756	2	3.5
16			3.5	Bamboo plants	Bambusa arundinaceae	9500	2	2.5
17			4.32	Cassiya semiya	senna siamea	10554	1	2
18			0.4	Peltaphorum	copper pod	1000	1	2
19			0.4	Mahaneem	Azadirachta indica	1000	1	1.5
20			0.56	Bamboo plants	Bambusa arundinaceae	1400	1	1.5
			<b>56.51</b>			<b>139586</b>		

1	Hariyar C.G. plantation	Line	2	Neem	Azadirachta indica	2000	3	4.5
2			2.5	Kadam	Neolamarchia cadamba	2500	3	5
3			2	Karanj	Pongamia Pinnata	2000	3	4
4			2	Cassia Samiya	senna siamea	2000	3	5.5
5			1.5	Peltaphorum	copper pod	1500	3	4.5
6			1	Neem	Azadirachta indica	1000	2	3.5
7			0.7	Karanj	Pongamia Pinnata	700	2	3.5
8			1.3	Cassia Samiya	senna siamea	1300	2	3
			<b>13</b>			<b>13000</b>		
1	Hariyar C.G. plantation	Line	0.8	Sisam	Dalbergia latifolia	800	1	1
2			3.1	Peltaphorum	copper pod	3034	1	1.5
3			3.35	Cassia Samiya	senna siamea	3325	1	1
4			1.85	Arjun	Terminalia arjuna	1894	1	1
5			1.15	Neem	Azadirachta indica	1297	1	1
6			0.41	Rain tree	Albizia Saman	400	1	1
7			0.85	Kachnar	baubhinia blakeana	850	1	1.5
8			1.4	Gulmohar	Delonix regia	1400	1	1.5
9			0.55	Pangara	Erythrina variegata	550	1	1.5
10			1	Karanj	Pongamia Pinnata	1000	1	1
11			0.2	Amaltas	cassia fistula	200	1	1.5
12			0.34	Moulshree	Mimusops elengi	300	1	1.5
			<b>15</b>			<b>15050</b>		

Thank you

## कार्यालय वनमण्डलाधिकारी बलौदाबाजार, वनमण्डल बलौदाबाजार

✉ Email:- dfo\_balodabazar@rediffmail.com ☎ 07727-223526



क्रमांक/व.त.अ./खनिज/ 3078

बलौदाबाजार, दिनांक 06/08/2018

प्रति,

संयंत्र प्रमुख

श्री रायपुर सीमेंट प्लांट

(A unit of Shree Cement Limited)

ग्राम- खपराडीह, तह. सिमगा,

जिला- बलौदाबाजार-माटापारा (छ.ग.)

**विषय :-** To issue letter regarding that there is no significant impact predict in surrounding Reserve Forest due to project establishment near Village Khapradih, Tehsil- Simga in District- Baloda Bazar-Bhatapara (Chhattisgarh) by Shree raipur Cement Plant (A unit of Shree Cement Limited)

**संदर्भ :-** आपका पत्र क्रमांक/ SRCP/BB/2017-18/59 दिनांक 07.07.2017

— 00 —

उपरोक्त विषयांतर्गत संदर्भित पत्र के तारतम्य में यह प्रमाणित किया जाता है कि ग्राम खपराडीह में संचालित श्री रायपुर सीमेंट प्लांट (A unit of Shree Cement Limited) एवं ग्राम भरुवाडीह-सेमराडीह में श्री लाईम स्टोन माईन के संचालित गतिविधियों से संयंत्र एवं माईन्स के आस-पास स्थित आरक्षित वन क्षेत्र एवं वन्य जीव-जन्तुओं पर किसी प्रकार का कोई दुष्प्रभाव पड़ने की संभावना नहीं है।

वनमण्डलाधिकारी

बलौदाबाजार वनमण्डल, बलौदाबाजार

पृ० क्रमांक/व.त.अ./खनिज/ 3580



बलौदाबाजार, दिनांक 06/08/2018

प्रतिलिपि :-

उप वनमण्डलाधिकारी बलौदाबाजार की ओर उनके पत्र क्रमांक/ 1088 दिनांक 31-8-2018 के संदर्भ में सूचनार्थ अग्रेषित।

वनमण्डलाधिकारी

बलौदाबाजार वनमण्डल, बलौदाबाजार

<p>CC007578235IN IVR:676700757823          RP BALODA BAZAR SO &lt;493332&gt;          Counter No:1.02/11/2018.14:34          To:DIRECTOR ,MINISTRY OF ENVI          PIN:440001. Nagpur GPO          From:ANNEESH KR..SRCP B BAZAR          Wt:300gms</p>	<p>भारतीय डाक            India Post          (882)</p>
<p>*Amt:36.00(Cash)          &lt;Track on <a href="http://www.indiapost.gov.in">www.indiapost.gov.in</a>&gt;          &lt;Dial 1800 266 6868&gt;</p>	
<p>CC007578249IN IVR:676700757824          RP BALODA BAZAR SO &lt;493332&gt;          Counter No:1.02/11/2018.14:34          To:THE IN CHARGE,INDOPAL          PIN:462003. C.T.T.Nagar H.O          From:ANNEESH KR..SRCP B BAZAR          Wt:300gms</p>	<p>भारतीय डाक            India Post          (883)</p>
<p>*Amt:36.00(Cash)          &lt;Track on <a href="http://www.indiapost.gov.in">www.indiapost.gov.in</a>&gt;          &lt;Dial 1800 266 6868&gt;</p>	

## **Avnessh chauhan**

---

**From:** Avnessh chauhan <chauhanak@shreecement.com>  
**Sent:** 02 November 2018 11:59  
**To:** 'apccfcentral-ngp-mef@gov.in'; 'cpcb.bhopal@gmail.com' (cpcb.bhopal@gmail.com); 'hocecb@gmail.com' (hocecb@gmail.com)  
**Cc:** R Bhargava (BhargavaR@shreecementltd.com); 'R K Vijay' (vijayrk@shreecementltd.com); 'Anil Jain' (environment@shreecementltd.com)  
**Subject:** Six Monthly MoEF&CC Compliance Report-plant (period- April 18-September 18)-by Shree Raipur Cement Plant-Balodabar- Bhatapara (Chhattisgarh)  
**Attachments:** Half yearly EC Compliance Report (Apr-18 to Sep-18)-Plant.pdf

Dear Sirs,

Please find enclosed herewith MoEF & CC Six Monthly Compliance Report of plant Expansion- period from April-2018 to September-2018. As per given Environment Clearance to us vide letter No.- F. No. J-11011/235/2008-IA II (I) dated 05.09.2016

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

Hope your will find this is in order.

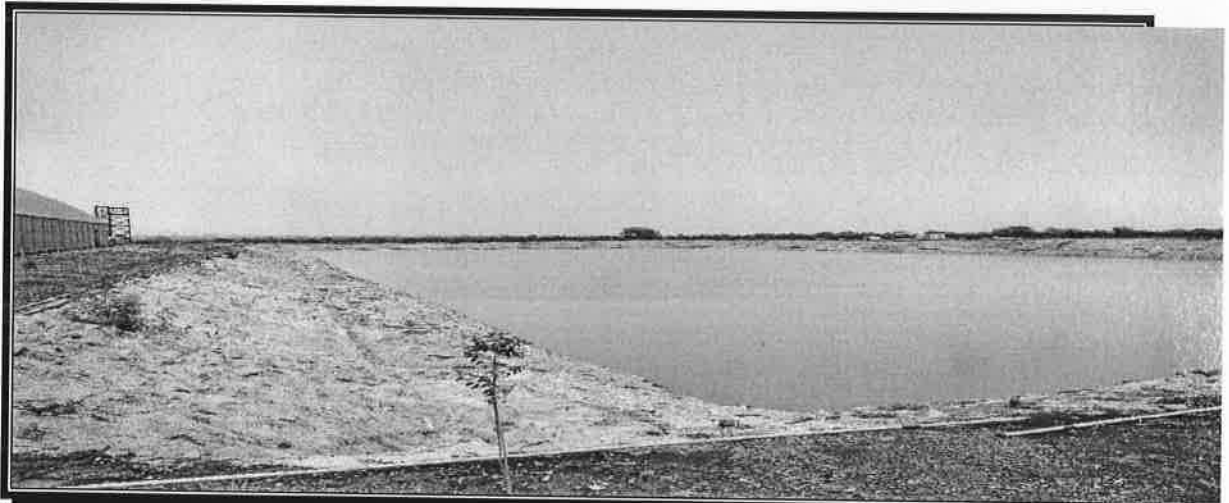
Thanks & Regards

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

**Photographs of Rain water Harvesting Ponds.**



**Rain Water Harvesting Pond Near New CCR of 1 Lac. KI Capacity.**

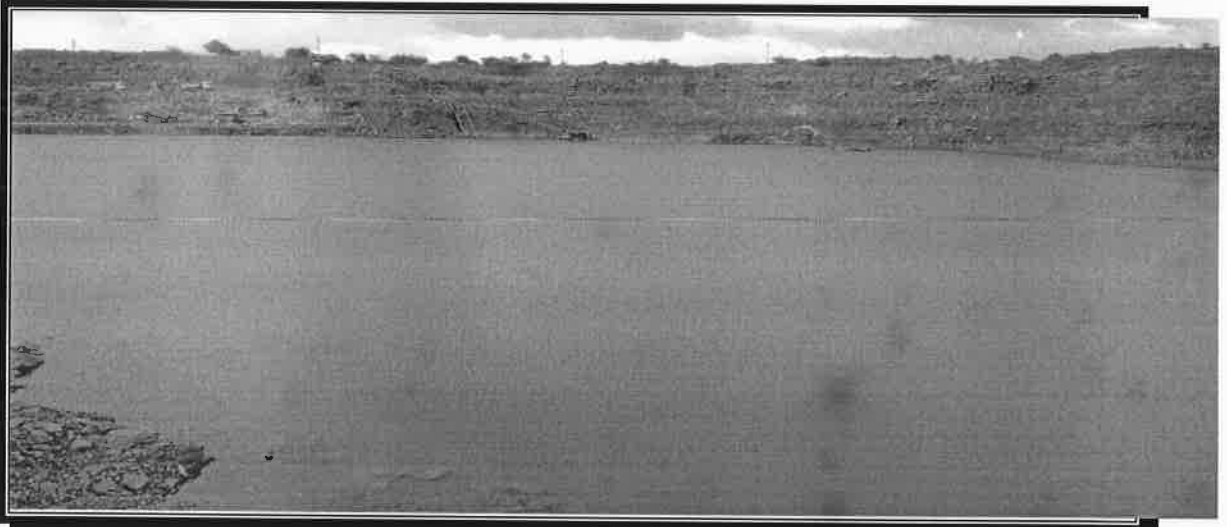


**Rain Water Harvesting Pond Near Reclaiimer of 1 Lac KL Capacity.**

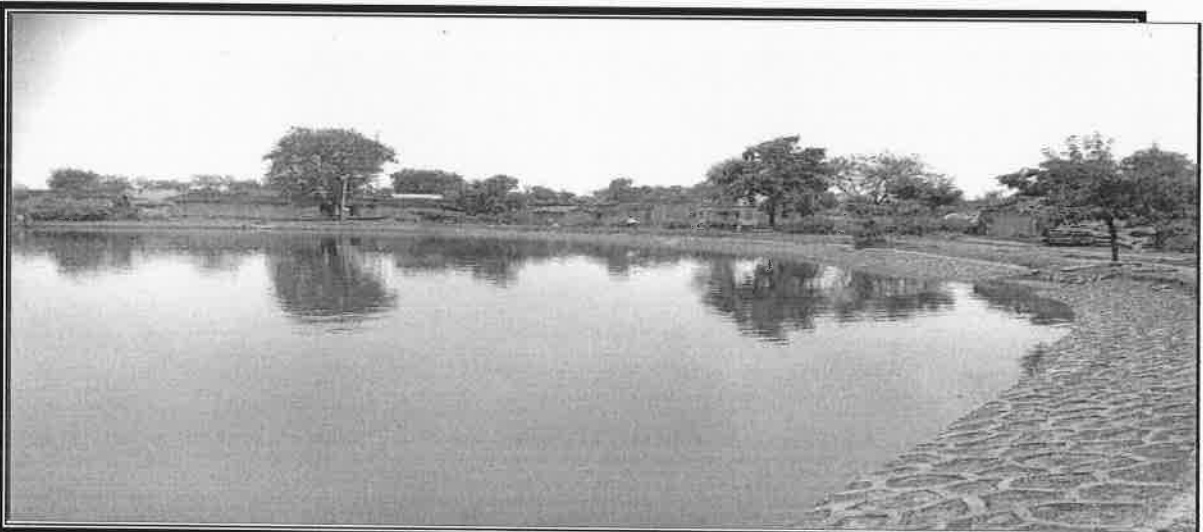


**Rain Water Harvesting Pond in Mines of 2.5 Lac KI capacity**

*Shim*



Rain Water Harvesting Pit in Mines of 2.5 Lac KI capacity



Pond bund development at Village- Karhi



Pond cleaning at Khapradih

*Abhinav*



Pond deeping at Chandhi village

*Alvin*

## STP treated water analysis report

Parameter	Oct-18		Nov-18		Dec-18		Jan-19		Feb-19		Mar-19	
	STP -1	STP -2	STP -1	STP -2	STP -1	STP -2	STP -1	STP -2	STP -1	STP -2	STP -1	STP -2
pH	7.26	7.34	7.89	8.12	7.6	7.72	7.11	6.78	6.92	7.01	7.18	7.56
BOD (3 day at 27 deg), mg/l	8.16	4.19	12	10.5	4.2	3.8	8	19	17	15	12.00	17.00
COD, mg/l	24.52	16.52	56	52	52	48	44.1	100.4	84.6	72.6	68.5	104.8
Total Suspended Solids, mg/l	less then 10	less then 10	4.8	3.6	4.4	3.2	14	52	51.2	24.8	12.8	20
Oil & Grease, mg/l	less then 4	less then 4	less then 2	less then 2	less then 2	less then 2	less then 2	0.2	less then 2	less then 2	less then 2	less then 2



# EARTHCARE LABS PRIVATE LIMITED

(Laboratory Division)

## Environmental Laboratory & EIA Consultant Organization

(NABL QCI Accredited, MoEF Recognized, NABET QCI Accredited, ISO 9001, ISO 14001 & OHSAS 18001)

C-11, Amar Enclave Commercial Wing, Jog Layout, Prashant Nagar, Near Ajni Square, Nagpur - 440 015, Tel & Fax: (0712) 2251470, Cell: 9766616862  
Email: earthcare2000@gmail.com, Website: www.earthcarenagpur.com

### Test Report Water Quality

Report No. : ELPL/QD4/TRD/5.10/W/Jan-19/19	Report Date : 25-01-2019
Name & Address of the Customer : M/s. SHREE RAIPUR CEMENT PLANT, (A Unit of M/s Shree Cement Ltd ) Village- Khapradih, Dist. - Baloda Bazar - Bhatapara, Raipur (Chhattisgarh)	
Ref. No.: Your Work Order No. SCL/SRCP/BB/18-19/409 dtd. 03-11-2018	
Sample Description : Ground Water	Sampling Location : Borewell Water Near Fabrication Yard
Sampling Ref Method : IS 3025 (Part 1): 1987 RA 2009	Environment Condition: Sunny (during sampling)
Sample Inward No. : ELPL/Jan-19/96/28/W-19	Sampled By: ELPL Representative
Sampling Date : 15-01-19	
Sample Receipt Date : 15-01-19	
Period of Analysis: From 16-01-19 to 25-01-19	

### Results of Analysis

Sr. No.	Parameters	Unit	Norms*	Result	Method of Analysis
1.	Colour*	Hazen Units	5/15	1.0	IS 3025 (Part 4): 1983 RA 2017 (Clause 2.0)
2.	Odour*	-	Agreeable	Agreeable	IS 3025 (Part 6): 1983 RA 2017
3.	pH value*	-	6.5 to 8.5	7.74	IS 3025 (Part 11): 1983 RA 2017 (Clause 2.0)
4.	Taste	-	Agreeable	Agreeable	IS 3025 (Part 8): 1984 RA 2017
5.	Turbidity*	NTU	1/5	78.2	IS 3025 (Part 10): 1984 RA 2017
6.	Total Dissolved Solids*	mg/l	500/2000	555.0	IS 3025 (Part 16): 1984 RA 2017
7.	Aluminium (as Al)	mg/l	0.03/0.2	0.02	IS 3025 (Part 2): 2004 RA 2014
8.	Total Ammonical Nitrogen (as N)*	mg/l	0.5	0.45	IS 3025 (Part 34): 1988 RA 2014 (Clause 2.3)
9.	Anionic Detergent (as MBAS)	mg/l	0.2/1.0	<0.1	IS 13428 (Annex K): 2005 RA 2014
10.	Barium (as Ba)	mg/l	0.7	<0.04	IS 3025 (Part 2): 2004 RA 2014
11.	Boron (as B)	mg/l	0.5/1.0	<0.06	IS 3025 (Part 2): 2004 RA 2014
12.	Calcium (as Ca)*	mg/l	75/200	108.0	IS 3025 (Part 40): 1991 RA 2014 (Clause 5.0)
13.	Chloramines (as Cl <sub>2</sub> )	mg/l	4.0	<0.1	IS 3025 (Part 26) 1986 RA 2014
14.	Chloride (as Cl)*	mg/l	250/1000	30.4	IS 3025 (Part 32): 1988 RA 2014 (Clause 2.0)
15.	Copper (as Cu)	mg/l	0.05/1.5	<0.01	IS 3025 (Part 2): 2004 RA 2014
16.	Fluoride (as F), mg/l*	mg/l	1.0/1.5	<0.2	IS 3025 (Part 60): 2008 RA 2013 (Clause 6.0)



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Email: earthcare2000@gmail.com, Website: www.earthcarenagpur.com

Certificate No.: TC 7572

Report No. : ELPL/QD4/TRD/5.10/W/Jan-19/19				Report Date : 25-01-2019	
Sr. No.	Parameters	Unit	Norms*	Result	Method of Analysis
17.	Free Residual Chlorine, mg/l (Min)	mg/l	0.2/1.0	<0.1	IS 3025 (Part 26) 1986 RA 2014
18.	Iron (as Fe) mg/l*	mg/l	1.0	0.04	IS 3025 (Part 2): 2004 RA 2014
19.	Magnesium (as Mg) mg/l*	mg/l	30/100	31.6	IS 3025 (Part 46): 1994 RA 2014 (Clause 6.0)
20.	Manganese (as Mn), mg/l	mg/l	0.1/0.13	<0.02	IS 3025 (Part 2): 2004 RA 2014
21.	Nitrate (as NO <sub>3</sub> ) mg/l*	mg/l	45	<0.2	APHA -23 <sup>rd</sup> Ed -4500 (NO <sub>3</sub> ) (B)
22.	Mineral Oil, mg/l	mg/l	0.5	<0.2	IS 3025(Part 39): 1991 RA 2014
23.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l	mg/l	0.001/0.002	<0.001	IS 3025 (Part 43): 1992 RA 2014
24.	Selenium (as Se), mg/l	mg/l	0.01	<0.01	IS 3025 (Part 2): 2004 RA 2014
25.	Silver (as Ag), mg/l	mg/l	0.1	<0.06	IS 3025 (Part 2): 2004 RA 2014
26.	Sulphate (as SO <sub>4</sub> ), mg/l*	mg/l	200/400	91.6	APHA 23 <sup>rd</sup> Ed -4500 SO <sub>4</sub> <sup>2-</sup> (E)
27.	Sulphide (as H <sub>2</sub> S), mg/l	mg/l	0.05	<0.04	IS 3025 (Part 29):2003 RA 2014
28.	Total Alkalinity (as CaCO <sub>3</sub> ) mg/l*	mg/l	200/600	220.0	IS 3025 (Part 23): 1986 RA 2014
29.	Total Hardness( as CaCO <sub>3</sub> ) mg/l*	mg/l	200/600	400.0	IS 3025 (Part 21): 2009 RA 2014 (Clause 5.0)
30.	Zinc (as Zn), mg/l	mg/l	5/15	<0.04	IS 3025 (Part 2): 2004 RA 2014
31.	Cadmium (as Cd), mg/l	mg/l	0.003	<0.003	IS 3025 (Part 2): 2004 RA 2014
32.	Lead (as Pb), mg/l	mg/l	0.01	<0.01	IS 3025 (Part 2): 2004 RA 2014
33.	Mercury (as Hg), mg/l	mg/l	0.001	<0.001	IS 3025 (Part 2): 2004 RA 2014
34.	Molybdenum (as Mo)	mg/l	0.07	<0.04	IS 3025 (Part 2): 2004 RA 2014
35.	Nickel (as Ni), mg/l	mg/l	0.02	<0.02	IS 3025 (Part 2): 2004 RA 2014
36.	Total Arsenic (as As), mg/l	mg/l	0.01	<0.01	IS 3025 (Part 2): 2004 RA 2014
37.	Total Chromium (as Cr), mg/l	mg/l	0.05	<0.01	IS 3025 (Part 2): 2004 RA 2014
Remarks : 1. * indicates IS 10500 : 2012 RA 2012 Drinking Water – Specification as Requirement (Acceptable Limit) / Permissible Limit in the Absence of Alternate Sources meeting Acceptable Limit					
2. Water is meeting the drinking water norms for above parameters					
Remarks : Water is meeting the norms for above parameters					
				 <p>For Earthcare Labs Pvt. Ltd. (K.L. Jadhav) Authorized Signatory &amp; CEO</p>	



Certificate No.: TC-7572

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Email: earthcare2000@gmail.com, Website: www.earthcarenagpur.com

### Test Report Water Quality

Report No. : ELPL/QD4/TRD/5.10/W/Jan-19/23	Report Date : 25-01-2019
Name & Address of the Customer : M/s. SHREE RAIPUR CEMENT PLANT, (A Unit of M/s Shree Cement Ltd) Village- Khapradih, Dist. - Baloda Bazar - Bhatapara, Raipur (Chhattisgarh).	
Ref. No.: Your Work Order No. SCL/SRCP/BB/18-19/409 dtd. 03-11-2018	
Sample Description : Ground Water (Drinking)	Sampling Location : Near Ashok Sharma Borewell Water Khapradih
Sampling Ref Method : IS 3025 (Part 1): 1987 RA 2009	Environment Condition: Sunny (during sampling)
Sample Inward No. : ELPL/Jan-19/96/28/W-23	Sampled By: ELPL Representative
Sampling Date : 15-01-19	
Sample Receipt Date : 15-01-19	
Period of Analysis: From 16-01-19 to 25-01-19	

### Results of Analysis

Sr. No.	Parameters	Unit	Norms*	Result	Method of Analysis
1.	Colour*	Hazen Units	5/15	1.0	IS 3025 (Part 4):1983 RA 2017 (Clause 2.0).
2.	Odour*	-	Agreeable	Agreeable	IS 3025 (Part 6): 1983 RA 2017
3.	pH value*	-	6.5 to 8.5	7.25	IS 3025 (Part 11): 1983 RA 2017 (Clause 2.0)
4.	Taste	-	Agreeable	Agreeable	IS 3025 (Part 8): 1984 RA 2017
5.	Turbidity*	NTU	1/5	0.38	IS 3025 (Part 10): 1984 RA 2017
6.	Total Dissolved Solids*	mg/l	500/2000	642.0	IS 3025 (Part 16): 1984 RA 2017
7.	Aluminium (as Al)	mg/l	0.03/0.2	0.02	IS 3025 (Part 2): 2004 RA 2014
8.	Total Ammonical Nitrogen (as N)*	mg/l	0.5	0.25	IS 3025 (Part 34): 1988 RA 2014 (Clause 2.3)
9.	Anionic Detergent (as MBAS)	mg/l	0.2/1.0	<0.1	IS 13428 (Annex K): 2005 RA 2014
10.	Barium (as Ba)	mg/l	0.7	0.05	IS 3025 (Part 2): 2004 RA 2014
11.	Boron (as B)	mg/l	0.5/1.0	<0.06	IS 3025 (Part 2): 2004 RA 2014
12.	Calcium (as Ca)*	mg/l	75/200	112.0	IS 3025 (Part 40): 1991 RA 2014 (Clause 5.0)
13.	Chloramines (as Cl <sub>2</sub> )	mg/l	4.0	<0.1	IS 3025 (Part 26) 1986 RA 2014
14.	Chloride (as Cl)*	mg/l	250/1000	51.9	IS 3025 (Part 32): 1988 RA 2014 (Clause 2.0)
15.	Copper (as Cu)	mg/l	0.05/1.5	<0.01	IS 3025 (Part 2): 2004 RA 2014
16.	Fluoride (as F). mg/l*	mg/l	1.0/1.5	<0.2	IS 3025 (Part 60): 2008 RA 2013 (Clause 6.0)



Certificate No.: TC 7572

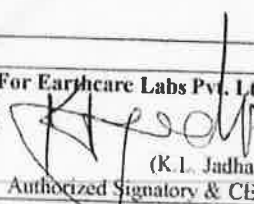
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Email: earthcare2000@gmail.com, Website: www.earthcarenagpur.com

Report No. : ELPL/QD4/TRD/5.10/W/Jan-19/23				Report Date : 25-01-2019	
Sr. No.	Parameters	Unit	Norms*	Result	Method of Analysis
17.	Free Residual Chlorine, mg/l (Min)	mg/l	0.2/1.0	<0.1	IS 3025 (Part 26) 1986 RA 2014
18.	Iron (as Fe) mg/l*	mg/l	1.0	0.032	IS 3025 (Part 2): 2004 RA 2014
19.	Magnesium (as Mg) mg/l*	mg/l	30/100	7.70	IS 3025 (Part 46): 1994 RA 2014 (Clause 6.0)
20.	Manganese (as Mn), mg/l	mg/l	0.1/0.13	<0.02	IS 3025 (Part 2): 2004 RA 2014
21.	Nitrate (as NO <sub>3</sub> ) mg/l*	mg/l	45	3.30	APHA -23 <sup>rd</sup> Ed. -4500 (NO <sub>3</sub> ) (B)
22.	Mineral Oil, mg/l	mg/l	0.5	<0.2	IS 3025 (Part 39): 1991 RA 2014
23.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l	mg/l	0.001/0.002	<0.001	IS 3025 (Part 43): 1992 RA 2014
24.	Selenium (as Se), mg/l	mg/l	0.01	<0.01	IS 3025 (Part 2): 2004 RA 2014
25.	Silver (as Ag), mg/l	mg/l	0.1	<0.06	IS 3025 (Part 2): 2004 RA 2014
26.	Sulphate (as SO <sub>4</sub> ) ,mg/l*	mg/l	200/400	74.1	APHA 23 <sup>rd</sup> Ed - 4500 SO <sub>4</sub> <sup>2-</sup> (E)
27.	Sulphide (as H <sub>2</sub> S), mg/l	mg/l	0.05	<0.04	IS 3025 (Part 29): 2003 RA 2014
28.	Total Alkalinity (as CaCO <sub>3</sub> ) mg/l*	mg/l	200/600	215.0	IS 3025 (Part 23): 1986 RA 2014
29.	Total Hardness (as CaCO <sub>3</sub> ) mg/l*	mg/l	200/600	312	IS 3025 (Part 21): 2009 RA 2014 (Clause 5.0)
30.	Zinc (as Zn), mg/l	mg/l	5/15	<0.04	IS 3025 (Part 2): 2004 RA 2014
31.	Cadmium (as Cd), mg/l	mg/l	0.003	<0.003	IS 3025 (Part 2): 2004 RA 2014
32.	Lead (as Pb), mg/l	mg/l	0.01	<0.01	IS 3025 (Part 2): 2004 RA 2014
33.	Mercury (as Hg), mg/l	mg/l	0.001	<0.001	IS 3025 (Part 2): 2004 RA 2014
34.	Molybdenum (as Mo)	mg/l	0.07	<0.04	IS 3025 (Part 2): 2004 RA 2014
35.	Nickel (as Ni), mg/l	mg/l	0.02	<0.02	IS 3025 (Part 2): 2004 RA 2014
36.	Total Arsenic (as As), mg/l	mg/l	0.01	<0.01	IS 3025 (Part 2): 2004 RA 2014
37.	Total Chromium (as Cr), mg/l	mg/l	0.05	<0.01	IS 3025 (Part 2): 2004 RA 2014
Remarks : 1. * indicates IS 10500 : 2012 RA 2012 Drinking Water - Specification as Requirement (Acceptable Limit) / Permissible Limit in the Absence of Alternate Sources meeting Acceptable Limit 2. Water is meeting the drinking water norms for above parameters					
Remarks : Water is meeting the norms for above parameters					
				For Earthcare Labs Pvt. Ltd.  (K.L. Jadhav) Authorized Signatory & CEO	



छत्तीसगढ़ पर्यावरण संरक्षण मंडल, रायपुर  
CHHATTISGARH ENVIRONMENT CONSERVATION BOARD, RAIPUR

No. 314-3 /HO/HSMD/CECB/2017

Naya Raipur, Date 4-17/2017

To,

M/s Shree Raipur Cement Plant,  
(Unit of Shree Cement Limited)  
Village-Khapradih, Tehsil-Simga,  
Distt.-Balodabazar Bhatapara (C.G.)

Sub:- Grant of authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

Ref:- Your Online application no. 286786 dated 14/09/2016 & Subsequent correspondence ending dated 05/07/2017.

-----1001-----

The authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 is hereby granted for **Five Years** from date of issue of this letter. The terms & conditions of the authorization are given in the enclosed authorization letter.

Please acknowledge the receipt of this letter

Encl :-As above

  
Member Secretary  
C.G. Environment Conservation Board  
Naya Raipur (C.G.)

Encl. No. /H.O./HSMD/CECB/2017

Naya Raipur, Date 1 / /2017

Copy to:-

1. HSMD Section, Chhattisgarh Environment Conservation Board, H.O. Raipur (C.G.).
2. Regional Officer, Regional office, Chhattisgarh Environment Conservation Board, Raipur (C.G.) please ensure compliance and report, if any condition/conditions are violated by the industry.

  
Member Secretary  
C.G. Environment Conservation Board  
Naya Raipur (C.G.)

**FORM 2**  
[See rule 6 (2)]

FORM FOR GRANT OR RENEWAL OF AUTHORIZATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

1. Number of authorization 167 HO/HSMD/CECB/RAIPUR and date of issue 01/09/2017
2. Reference of Online application no. 286786 dated 14/09/2016 & Subsequent correspondence ending dated 05/07/2017.
3. The operator of facility i.e. occupier M/s Shree Raipur Cement Plant, (Unit of Shree Cement Limited), Village-Khapradih, Tehsil-Singa, Distt.-Balodabazar Bhatapara (C.G.) is hereby granted an authorization based on the enclosed signed inspection report for collection, storage, transport & co-processing of hazardous wastes in the premises situated at Village-Khapradih, Tehsil-Singa, Distt.-Balodabazar Bhatapara (C.G.).

Detail of Authorisation

S.No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorized mode of disposal or recycling or utilization or co-processing etc.	Quantity (Tonnes/Annum)
1.	Acid Tar Sludge (M/s Bhilai Steel Plant, Durg) / Similar industries/ Sectors	co-processing	2000 MT/Year

- (1) The authorization shall be valid for a period of **Five Years** from date of issue of this letter.
- (2) The authorization is subject to the following conditions.

**TERMS & CONDITIONS OF AUTHORIZATION**

1. The authorization shall comply with the provisions of Environment (protection) Act, 1986 and the rules made there-under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the Chhattisgarh Environment Conservation Board.
3. The person authorized shall not rent, lend, sell transfer or otherwise transport the hazardous wastes without obtaining prior permission of the Chhattisgarh Environment Conservation Board.
4. Any unauthorized change in personnel, equipment, or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty".
7. It is the duty of the authorized person to take prior permission of the Chhattisgarh Environment Conservation Board to close down the facility




## छत्तीसगढ़ पर्यावरण संरक्षण मंडल, रायपुर

CHHATTISGARH ENVIRONMENT CONSERVATION BOARD, RAIPUR

8. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
9. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per rule. Flue gas dust and other particulates and process residue shall be sold to only authorized reprocessing units. Failing which this authorization shall be treated as cancelled.
10. An application for the renewal of an authorisation shall be made as laid down under these Rules.
11. Annual return in form IV shall be filed by June 30th for the period ending 31st March of the previous year.
12. The wastes shall be collected and stored properly with adequate safety measures as per rule.
13. Authorized person shall comply with the provisions of rule 17, 18 and 19 for packing, labeling and transport of Hazardous Waste.
14. The authorized person should maintain the record of Hazardous Waste as per Form-3 of Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
15. The occupier shall follow the guidelines of Central Pollution Control Board & MoEF & CC issued from time to time for management of Hazardous and other waste.
16. The industry shall display data out side factory gate on quantity and nature of hazardous chemicals and wastes being used in the plant, water and air emissions and solid wastes generated within the factory premises.
17. Industry shall comply all the provision incorporated in the guideline for pre-processing and co-processing of Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 published in July 2017.
18. Industry shall comply the stack emission norms prescribed in the notification G.S.R. 497 (E) dated 10 May 2016 issued by MoEF & CC for cement industry.
19. The waste must be given thermal/biological/physico-chemical treatment; the waste should be completely dewatered, detoxified, and proper conditioned and any possible recovery is made before their disposal.
20. The industry should constitute a hazardous waste management cell to take care of the management aspect of the hazardous waste generated in the plant.
21. An on-site storage of the hazardous wastes for a maximum period of 90 days should be provided and it shall be ensured that there is no leakage or seepage from the surrounding walls or bottom. The site should be covered and properly protected to prevent the entry of rain water in storage area.
22. At least four nos. of piezometric points should be provided around the storage site of H.W. to monitor the leaching of the waste. Each type of waste shall be stored in a separate storage cell.
23. The discarded containers of Hazardous waste and chemical shall not be used for storage of food grade products. At the storage site "Hazardous waste storage site & danger signboard" shall be provided with all safety devices.

24. Industry shall give priority for co-processing of hazardous waste generated within the Chhattisgarh State as mentioned in the authorization.
25. In the event of any accident due to handling of hazardous waste the authorized person must inform immediately to the Concerned Regional Office and H.O. Raipur of the Board by fax/telephone or by E-mail about the incident and details report be sent in form no. 11 [see rule 22].
26. The authorization obtained by the Chhattisgarh Environment Conservation Board should be prominently displayed.
27. Used batteries shall be disposed of as per the Batteries (Management & Handling) Rules, 2001
28. Board reserves the right to cancel/amend the above condition and add new conditions as and when deemed necessary.

  
**Member Secretary**  
C.C. Environment Conservation Board  
Naya Raipur (C.G.)



## **CHHATTISGARH ENVIRONMENT CONSERVATION BOARD**

**PARYAVAS BHAWAN, NORTH BLOCK, SECTOR -19,**

**ATAL NAGAR, RAIPUR (C.G.) 492002**

**E-mail : hocecb@gmail.com, Ph. No. 0771-2512220**

No. 7883 /HSMD/HO/CECB/2019

Raipur, Date 27 / 02 /2019

To,

**M/s Shree Cement Limited,  
Village-Khapradih, Tehsil-Simga,  
Distt. - Balodabazar Bhatapara (C.G.)**

Sub:- Grant of authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

Ref:- Your Online application no. 1705615 dated 07/10/2018 & Subsequent correspondence ending dated 16/11/2018.

----:00:----

The authorization under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 is hereby granted for the period of **Five Years** i.e. from **04/02/2019 to 03/02/2024**. The details of authorization along with terms & conditions are given as per below:-

### **FORM 2**

**[See rule 6 (2)]**

**FOR GRANT OF AUTHORISATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES**

1. Number of authorization **349/HO/HSMD/CECB/ATAL NAGAR, RAIPUR.**
2. Reference of Online application no. **1705615 dated 07/10/2018 & Subsequent correspondence ending dated 16/11/2018.**
3. The operator of facility i.e. occupier **M/s Shree Cement Limited, Village-Khapradih, Tehsil-Simga, Distt. - Balodabazar Bhatapara (C.G.)** is hereby granted an authorization based on the signed inspection report from RO for collection, storage, transport, reception, co-processing & disposal of hazardous wastes in the premises situated at **Village-Khapradih, Tehsil-Simga, Distt. - Balodabazar Bhatapara (C.G.).**

### Detail of Authorisation

S.No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilization or co-processing etc.	Quantity (Tonnes/Annum)
1.	Chemical sludge from waste water treatment (Schedule-I, Cat. No. 35.3)	Co-processing	1000 MT/Year
2.	Spent Pot Liners (Schedule-I, Cat. No. 11.2)	-----do-----	3000 MT/Year
3.	Spent Catalyst (Schedule-I, Cat. No. 4.2)	-----do-----	2000 MT/Year
4.	Organic residue from processes (Schedule-I, Cat. No. 4.4)	-----do-----	300 MT/Year
5.	Wastes or residues containing oil (Schedule-I, Cat. No. 5.2)	-----do-----	3000 MT/Year
6.	Sludge and filters contaminated with oil (Schedule-I, Cat. No. 3.3)	-----do-----	500 MT/Year
7.	Contaminated cotton rags or other cleaning materials (Schedule-I, Cat. No. 33.2)	-----do-----	500 MT/Year
8.	Spent Solvent (Schedule-I, Cat. No. 21.2)	-----do-----	200 MT/Year
9.	Spent Catalyst (Schedule-I, Cat. No. 1.6)	-----do-----	300 MT/Year
10.	Tarry Waste (Schedule-I, Cat. No. 1.2/35.1)	-----do-----	1000 MT/Year
11.	Organic Residues (Schedule-I, Cat. No. 1.4)	-----do-----	200 MT/Year
12.	Spent Clay containing oil (Schedule-I, Cat. No. 4.5)	-----do-----	200 MT/Year
13.	Sludge from Acid Recovery unit (Schedule-I, Cat. No. 13.2)	-----do-----	200 MT/Year

14.	Cargo residue and sludge containing chemicals (Schedule-I, Cat. No. 3.2)	-----do-----	200 MT/Year
15.	Oily Sludge (Schedule-I, Cat. No. 4.1)	-----do-----	500 MT/Year
16.	Distillation Residue (Schedule-I, Cat. No. 20.3)	-----do-----	50 MT/Year
17.	Waste Mix/Preprocessed Feed	-----do-----	9000 MT/Year
18.	Decanter Tar Sludge (Schedule-I, Cat. No. 13.4)	-----do-----	500 MT/Year
19.	Resin waste (Schedule-I, Cat. No. 35.2)	-----do-----	200 MT/Year

- (1) The authorization shall be valid for the period of **Five Years** i.e. from **04/02/2019** to **03/02/2024**.
- (2) The authorization is subject to the following conditions:

#### **TERMS & CONDITIONS OF AUTHORIZATION**

1. The person authorised shall comply with the provisions of Environment (protection) Act, 1986 and the rules made there-under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the Chhattisgarh Environment Conservation Board.
3. The person authorised shall not rent, lend, sell transfer or otherwise transport the hazardous wastes without obtaining prior permission of the Chhattisgarh Environment Conservation Board.
4. Any unauthorized change in personnel, equipment, or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty".
7. It is the duty of the authorized person to take prior permission of the Chhattisgarh Environment Conservation Board to close down the facility.
8. Industry shall prepare emergency response plan (ERP) and ensure implementation the same at the event of any accident occurs due to handling and transporting of hazardous waste as per CPCB guideline.
9. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per standard operating procedures/guidelines issued by CPCB from time to time.
10. An application for the renewal of an authorisation shall be made three months before the expiry of authorization as laid down in the Rules.

11. Annual return in form IV shall be filed by June 30<sup>th</sup> for the period ending 31<sup>st</sup> March of the last financial year.
12. The wastes shall be collected and stored properly with adequate safety measures as per rule.
13. Person authorised shall comply with the provisions of rule 17, 18 and 19 for packing, labeling and transport of Hazardous Waste.
14. The person authorised should maintain the record of Hazardous Waste as per Form-3 of Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
15. The occupier shall follow the guidelines (if any) issued by Central Pollution Control Board or MoEF & CC for management of Hazardous waste from time to time.
16. The industry shall display data outside factory gate on quantity and nature of hazardous chemicals and wastes being used in the plant, water and air emissions and solid wastes generated within the factory premises.
17. Industry shall ensure disposal of hazardous waste through authorized recycler/co-processing in cement plant/captive disposal facility/arrangement for sharing of authorized disposal facility/common TSDF as per rule. Failing which this authorization shall be treated as cancelled and appropriate action would be initiated against the industry.
18. Industry shall comply all the provision incorporated in the guideline for pre-processing and co-processing of Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 published on 07 July 2017.
19. At a time only one type/category of hazardous waste shall be Co-processed in the cement kiln. A log book of the waste Co-processed shall be maintained including emission monitoring result during Co-processing.
20. Industry shall comply the stack emission norms prescribed in the notification G.S.R. 497 (E) dated 10 May 2016 issued by MoEF & CC for cement industry.
21. Industry shall give priority for co-processing of hazardous waste generated within the Chhattisgarh State as mentioned in the authorization.
22. The waste must be given thermal/biological/physico-chemical treatment. The waste should be completely dewatered, detoxified, and proper conditioned and any possible recovery is made before their disposal.
23. The industry should constitute a hazardous waste management cell to take care of the management aspect to the hazardous waste generated in the plant.
24. An on-site storage of the hazardous wastes for a maximum period of 90 Years should be provided and it shall be ensured that there is no leakage or seepage from the surrounding walls or bottom. The site should be covered and properly protected to prevent the entry of rain water in storage area.
25. At least four nos. of peizometric points should be provided around the storage site of H.W. to monitor the leaching of the waste and monitoring report shall be submitted to the board in every six months. Each type of waste shall be stored in a separate storage cell.
26. The discarded containers of Hazardous waste and chemical shall not be used for storage of food grade products. At the storage site "Hazardous waste storage site & danger signboard" shall be provided with all safety devices.
27. In the event of any accident due to handling of hazardous waste the person authorised must inform immediately to the Concerned Regional Office and H.O., Atal Nagar, Raipur of the Board by fax/telephone or by E-mail about the incident and details report be sent in form no. 11 [see rule 22].

28. The authorization obtained by the Chhattisgarh Environment Conservation Board should be prominently displayed.
29. Used batteries shall be disposed of as per the Batteries (Management & Handling) Rules, 2001.
30. Board reserves the right to cancel/amend the above condition and add new conditions as and when deemed necessary.

**Member Secretary**  
C.G. Environment Conservation Board  
Atal Nagar, Raipur (C.G.)

No. 7884 /HSMD/HO/CECB/2019

Raipur, Date 27 /02 /2019

Copy to :- Regional Officer, Regional office, Chhattisgarh Environment Conservation Board, Raipur (C.G.) please ensure compliance and report, if any condition/conditions are violated by the industry.

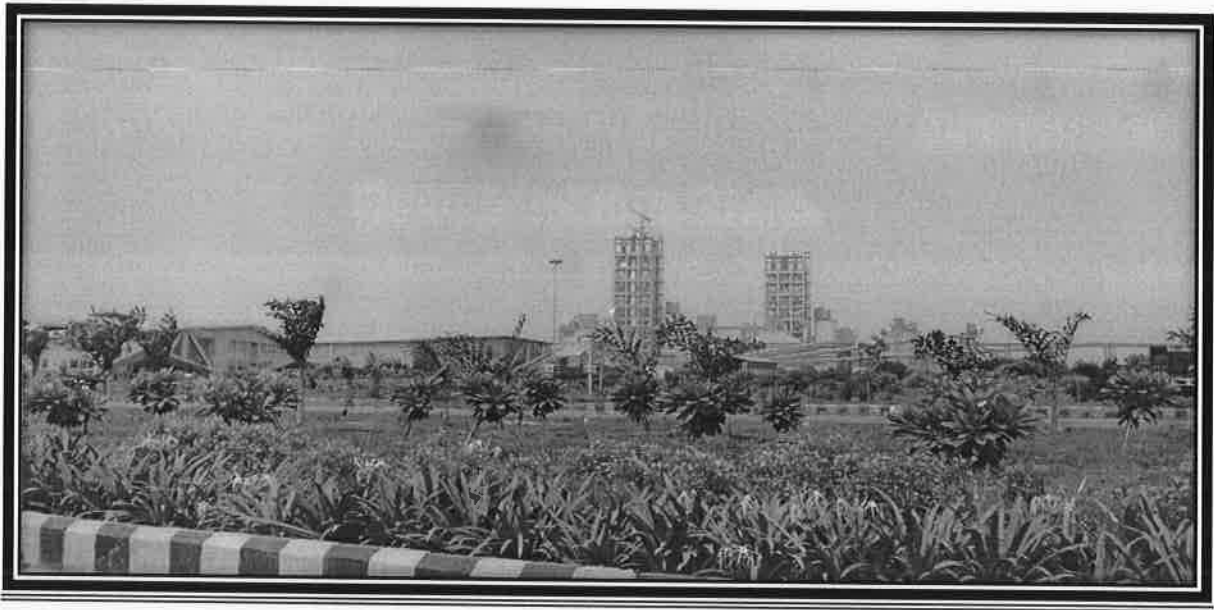
Sd/-  
**Member Secretary**  
C.G. Environment Conservation Board  
Atal Nagar, Raipur (C.G.)

**Signature valid**

Digitally Signed by : M R P  
Tiwari MS

Date: 2019.02.27 14:19:11 IST

Plant Plantation Photo.



*Abin*

**Annexure-11**  
**Shree Raipur Cement Plant**  
(A unit of Shree Cement Limited), Khapradih, Distt- Balodabazar  
CSR Work Done (October 2018 to March 2019)

S No		Particulars of CSR activity undertaken	Expenditure (in Rupees)
<b>A</b>		<b><u>Eradicating hunger, poverty and malnutrition, promoting preventive health care and sanitation and making available safe drinking water</u></b>	
	<b>A1A</b>	Arranging health camps and provisions of medicines and other facilities including financial assistance for arranging health camps	12,333
	<b>A3A</b>	Arrangement of Surgical bed, surgical instruments, weight machines, glucometer, dustbins at Village- Khapradih	15,075
	<b>A6A</b>	Sweet Distribution on occasion of Deepawali to needy people	5,86,629
	<b>A8A</b>	Arranging supply of drinking water through installation of water tanks and water huts and construction/ repairing of existing water systems	53,024
	<b>A</b>	<b>TOTAL EXPENDITURE (SUB-HEAD- A)-CSR001</b>	<b>6,67,061</b>
	<b>A</b>		
<b>B</b>	<b>BA</b>	<b><u>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)</u></b>	
	<b>B7A</b>	School Bags for students of nearby schools	6,000
	<b>B8A</b>	Supply of Bench-Desk, Office table, dari, wall clock, sports items etc to schools at nearby Villages.	1,30,319
	<b>B13A</b>	Promoting and creating awareness among general public about CSR works at nearby areas	35,949
	<b>A</b>	<b>TOTAL EXPENDITURE (SUB-HEAD- B)-CSR002 &amp; 007</b>	<b>1,72,268.30</b>
	<b>A</b>		
<b>C</b>	<b>CA</b>	<b><u>Promoting gender equality, empowering women, setting up homes and hostels for women and orphans; setting up old age homes, day care centers and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups</u></b>	
	<b>C3A</b>	Distributing of earning equipments like Sewing machine / Tools / instruments etc to needy people	32,048
	<b>C5A</b>	Bhagwat path by women of near by villages	21,000
	<b>C8A</b>	Construction of Vrudhashram (old age home) at Balodabazar	1,18,106
	<b>A</b>	<b>TOTAL EXPENDITURE (SUB-HEAD - C)-CSR003</b>	<b>1,71,154.42</b>
	<b>A</b>		
<b>D</b>	<b>DA</b>	<b><u>Ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water</u></b>	
	<b>D1A</b>	Expenses on purchase of saplings/ plants for distribution to villagers/ nearby localities / schools for plantation with tree guards and labour expenses.	20,98,870

*Abhinav*

S No		Particulars of CSR activity undertaken	Expenditure (in Rupees)
	A	<b>TOTAL EXPENDITURE (SUB-HEAD - D)-CSR006</b>	<b>20,98,869.89</b>
E	EA	<u>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;</u>	
	E8A	Other Expenses on promotion of Art and Culture by associating with various agencies by sponsorship, support, contribution, etc.	3,42,534
	A	<b>TOTAL EXPENDITURE (SUB-HEAD - E)-CSR013</b>	<b>3,42,534.00</b>
F	FA	<u>Training to promote rural sports, nationally recognized sports, Paralympic sports and Olympic sports</u>	
	A	<b>TOTAL EXPENDITURE (SUB-HEAD - F)-CSR012</b>	<b>-</b>
G	GA	<b>Rural development projects</b>	
	G1A	Construction of community halls and muktidhams at nearby villages	15,11,807
	G2A	Construction and leveling of CC/Murum roads of nearby villages	27,29,645
	G4A	Construction of retaining boundary of pond ladder, pond cleaning	26,298
	G5A	Construction of various structures like boundary walls, school boundary, toilets, stay rooms, street lights etc. in nearby villages	5,42,100
	G6A	Construction of Waiting Sheds, school walls, temples etc	1,43,143
	G6B	Bus stop upgradation to nearby areas	-
	G7A	Construction of Shani Temple at Banjari Dham	1,60,762
	G8B	Expenses on construction of Shiv Mandir boundary wall at Balodabazar as per request of Collector	2,16,950
	A	<b>TOTAL EXPENDITURE (SUB-HEAD - G)-CSR008</b>	<b>53,30,705</b>
H	HA	<b>Overheads related to CSR activities (maximum upto 5% of total CSR expenses)</b>	
	H1A	Salaries paid to employees engaged in CSR work	10,23,206
	H2A	Gate installation during CM visit	40,000
		<b>TOTAL EXPENDITURE (SUB-HEAD - H)-CSR010</b>	<b>10,63,206</b>
			<b>98,45,799</b>

*Handwritten signature*

**Shree Raipur Cement Plant**  
**Five Year Proposed Budget of CSR Activities**

S.no.	Proposed Areas	Budget in Lakh				
		2018-19	2019-20	2020-21	2021-22	2022-23
1	Eradicating hunger, poverty and malnutrition, promoting preventive health care and sanitation and making available safe drinking water	10.00	11.00	12.10	13.31	14.64
2	Promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly, and the differently able and livelihood enhancement projects	8.00	8.80	9.68	10.65	11.71
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	3.00	3.30	3.63	3.99	4.39
4	Ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agro forestry, conservation of natural resources and maintaining quality of soil, air and water	40.00	44.00	48.40	53.24	58.56
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.	5.00	5.50	6.05	6.66	7.33
6	Training to promote rural sports, nationally recognized sports, Paralympics sports and Olympic sports	7.00	7.70	8.47	9.32	10.25
7	Rural Development Projects	130.00	143.00	157.30	173.03	190.33
	<b>Grand Total in Lakh</b>	<b>203.00</b>	<b>223.30</b>	<b>245.63</b>	<b>270.19</b>	<b>297.22</b>

*Shree*

**Shree Raipur Cement Plant**  
(A unit of Shree Cement Ltd)  
**Noise Monitoring Report**

Annexure-13

Sr. No	Location	Oct-18		Nov-18		Dec-18		Jan-19		Feb-19		Mar-19	
		Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
1	AAQMS-1(Near Bharuadih ) (SE)	53.26	47.2	39.82	34.72	47.02	41.5	52.42	40.26	38.9	34.4	54.38	44.46
2	AAQMS-2 (Near Semaradih ) ( NE)	54.62	49.38	54.08	47.16	50.08	45.7	50.34	44.94	41.54	36.76	51.50	44.12
3	AAQMS-3 ( Near RMS) ( SE)	54.72	49.46	45.94	40.76	51.14	41.86	51.74	41.12	44.08	39.22	51.88	44.23
4	AAQMS-4 (Near Kharpradih) (SW)	53.12	47.9	56.4	51.24	54.56	47.34	54.54	46.6	55.88	51.02	55.71	48.39
5	Near Store office	65.42	60.16	60.12	54.94	57.7	52.72	57.18	51.58	64.3	59.5	65.75	57.81
6	Near Raw Mill	71.48	66.3	71.24	66.06	66.36	61.34	66.82	60.34	73.22	68.26	71.27	64.77
7	kiln area (Infront of Mechanical Office)	71.58	66.32	70.76	65.58	75.92	62.28	73.9	62.84	73.02	68.16	71.59	64.95
8	Near Cooler Stack	68.54	62.68	71.14	65.98	66.88	58.26	65.28	54.64	70.28	65.58	69.90	62.96
9	Near Fly Ash Silo	63.2	56.32	72.56	67.38	66.08	61.22	64.96	60.4	72.28	67.42	68.92	63.13
10	Near Truck Loading area (Packing plant)	71.06	65.34	71.06	65.88	70.84	53.68	70.84	53.04	71.16	66	67.87	60.38
11	Near Turbine (GPP Plant)	70.48	65.22	70.28	65.1	68.58	59.86	67.94	60.12	70.18	65.32	71.97	64.65
12	Near Lime stone Slacker	71.82	66.06	71.06	65.94	56.14	51.75	57.1	52.16	71.92	67.06	69.24	58.42
13	In front of CCR Building	68.64	63.4	56.92	51.74	57.28	45.74	56.08	46.3	67.16	62.3	65.25	55.27
14	Near Main Gate	70.22	64.96	59.76	54.58	56.44	45.52	55.5	49.36	63.22	58.46	65.16	55.23
15	Near Truck Parking (Logistic Office)	69.84	64.58	61.2	56.02	58.22	50.04	58.12	51.66	58.1	53.24	67.94	57.51
16	Near Mine Work shop	72.04	66.78	57.32	52.14	60.28	54.6	62.3	53.86	69.36	64.54	67.19	58.36
17	Near Crusher Area (Mines)	71.54	66.28	49.14	44.02	74.02	57.72	73.64	56.5	43.44	38.58	68.89	59.82
18	Near Open Cast mines	69.88	64.62	60.44	55.26	57.62	51.52	61.04	53.84	68.16	63.34	68.45	58.26
19	DG Set 1(Near Kiln area)	71.02	65.76	71.62	66.44	73.56	63.28	72.98	62.98	71.86	67	72.12	64.03
20	DG Set 2 (Near ACC Building)	71.52	66.3	70.56	65.38	71.92	59.92	70.92	58.96	72.6	67.74	72.63	64.07

*Shree*

Annexure-14

Year-2018-19 ( Oct-18 to March 19)

## Spirometry

Name of Dept.	Total Employees	New Joining	FVC (litres)	FEV 1	FEV 1/ FVC %	PEFR	Conclusi on	Chest X- Ray
						(litres/sec)		
Civil	13	NIL	WNL	WNL	WNL	WNL	WNL	WNL
Commercial	1	NIL	WNL	WNL	WNL	WNL	WNL	WNL
Process	43	1	WNL	WNL	WNL	WNL	WNL	WNL
Drawing & Design	4	NIL	WNL	WNL	WNL	WNL	WNL	WNL
Electrical	42	2	WNL	WNL	WNL	WNL	WNL	WNL
Techno-commercial	177	9	WNL	WNL	WNL	WNL	WNL	WNL
Lab and QC	17	NIL	WNL	WNL	WNL	WNL	WNL	WNL
Medical	7	NIL	WNL	WNL	WNL	WNL	WNL	WNL
Instrumentation	30	NIL	WNL	WNL	WNL	WNL	WNL	WNL
Mines	205	5	WNL	WNL	WNL	WNL	WNL	WNL
Mechanical	69	NIL	WNL	WNL	WNL	WNL	WNL	WNL
P & A	18	NIL	WNL	WNL	WNL	WNL	WNL	WNL
Total No. of employees	626	17	Normal	Normal	Normal	Normal	100 % Normal	100 % Normal

Note :- Total man power is 664 Up to ( Oct-18 to March 19) Health Checkup being done as per Schedule.

Year-2018-19 ( Oct-18 to March 19)				
Audiometry				
Name of Dept.	Total Employees	New Joining	Right Ear	Left Ear
Civil	13	NIL	WNL	WNL
Commercial	1	NIL	WNL	WNL
Process	43	1	WNL	WNL
Drawing & Design	4	NIL	WNL	WNL
Electrical	42	2	WNL	WNL
Techno-commercial	177	9	WNL	WNL
Lab and QC	17	NIL	WNL	WNL
Medical	7	NIL	WNL	WNL
Instrumentation	30	NIL	WNL	WNL
Mines	205	5	WNL	WNL
Mechanical	69	NIL	WNL	WNL
P & A	18	NIL	WNL	WNL
Total No. of employees	626	17	Normal	Normal

Note :- Total man power is 664 Up to( Oct-18 to March 19) Health Checkup being done as per Schedule.

*Alvin*

Year-2018-19 ( Oct-18 to March 19)							
Biochemical parameter ( Urine)							
Name of Dept.	Total Employees	New Joining	Sp. gravity	pH	RBC	Protein	Sugur
Civil	13	NIL	WNL	WNL	Nil	Nil	Nil
Commercial	1	NIL	WNL	WNL	Nil	Nil	Nil
Process	43	1	WNL	WNL	Nil	Nil	Nil
Drawing & Design	4	NIL	WNL	WNL	Nil	Nil	Nil
Electrical	42	2	WNL	WNL	Nil	Nil	Nil
Techno-commercial	177	9	WNL	WNL	Nil	Nil	Nil
Lab and QC	17	NIL	WNL	WNL	Nil	Nil	Nil
Medical	7	NIL	WNL	WNL	Nil	Nil	Nil
Instrumentation	30	NIL	WNL	WNL	Nil	Nil	Nil
Mines	205	5	WNL	WNL	Nil	Nil	Nil
Mechanical	69	NIL	WNL	WNL	Nil	Nil	Nil
P & A	18	NIL	WNL	WNL	Nil	Nil	Nil
Total No. of employees	626	17	Normal	Normal	Normal	Normal	Normal

Note :- Total man power is 664 Up to( Oct-18 to March 19) Health Checkup being done as per Schedule.

Year-2018-19 ( Oct-18 to March 19)							
Biochemical parameter (Blood)							
Name of Dept.	Total Employees	New Joining	CBC	Lipid Profile	Renel Profile	Liver Function Test	Blood Sugar
Civil	13	NIL	WNL	WNL	WNL	WNL	WNL
Commercial	1	NIL	WNL	WNL	WNL	WNL	WNL
Process	43	1	WNL	WNL	WNL	WNL	WNL
Drawing & Design	4	NIL	WNL	WNL	WNL	WNL	WNL
Electrical	42	2	WNL	WNL	WNL	WNL	WNL
Techno-commercial	177	9	WNL	WNL	WNL	WNL	WNL
Lab and QC	17	NIL	WNL	WNL	WNL	WNL	WNL
Medical	7	NIL	WNL	WNL	WNL	WNL	WNL
Instrumentation	30	NIL	WNL	WNL	WNL	WNL	WNL
Mines	205	5	WNL	WNL	WNL	WNL	WNL
Mechanical	69	NIL	WNL	WNL	WNL	WNL	WNL
P & A	18	NIL	WNL	WNL	WNL	WNL	WNL
Total No. of employees	626	17	Normal	Normal	Normal	Normal	Normal

Note :- Total man power is 664 Up to( Oct-18 to March 19) Health Checkup being done as per Schedule.

*Admin*

Year-2018-19 ( Oct-18 to March 19)

**Circulatory system Vision**

Name of Dept.	Total Employees	New Joining	Pulse	ECG	BP	Right Eye	Left Eye	Color Blindness	Squint
Civil	13	NIL	Normal	WNL	Normal	Normal	Normal	Nil	Normal
Commercial	1	NIL	Normal	WNL	Normal	Normal	Normal	Nil	Normal
Process	43	1	Normal	WNL	Normal	Normal	Normal	Nil	Normal
Drawing & Design	4	NIL	Normal	WNL	Normal	Normal	Normal	Nil	Normal
Electrical	42	2	Normal	WNL	Normal	Normal	Normal	Nil	Normal
Techno-commercial	177	9	Normal	WNL	Normal	Normal	Normal	Nil	Normal
Lab and QC	17	NIL	Normal	WNL	Normal	Normal	Normal	Nil	Normal
Medical	7	NIL	Normal	WNL	Normal	Normal	Normal	Nil	Normal
Instrumentation	30	NIL	Normal	WNL	Normal	Normal	Normal	Nil	Normal
Mines	205	5	Normal	WNL	Normal	Normal	Normal	Nil	Normal
Mechanical	69	NIL	Normal	WNL	Normal	Normal	Normal	Nil	Normal
P & A	18	NIL	Normal	WNL	Normal	Normal	Normal	Nil	Normal
Total No. of employees	626	17	Normal	WNL	Normal	Normal	Normal	Nil	Normal

Note :- Total man power is 664 Up to( Oct-18 to March 19) Health Checkup being done as per Schedule.

# SHREE RAIPUR CEMENT PLANT

KHAPARADIH, BALODA BAZAR

Patient: Panchu ram verma

Refd. By:

Pred.Eqns: RECORDERS

Date : 13-Oct-2018 09:54 AM

Age : 37 Years

Height : 160 Cms

Weight : 63 Kgs

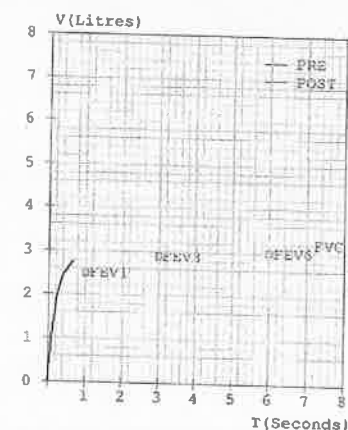
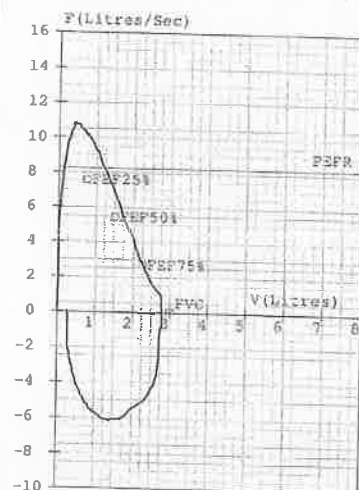
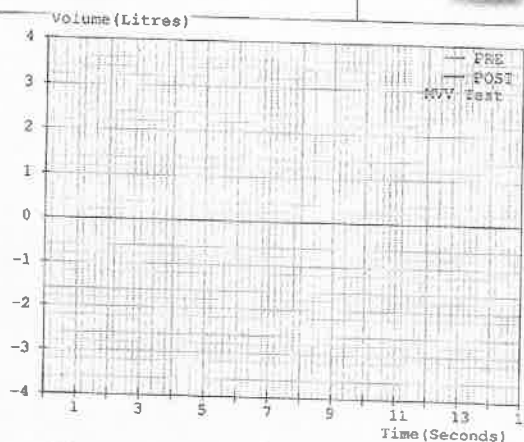
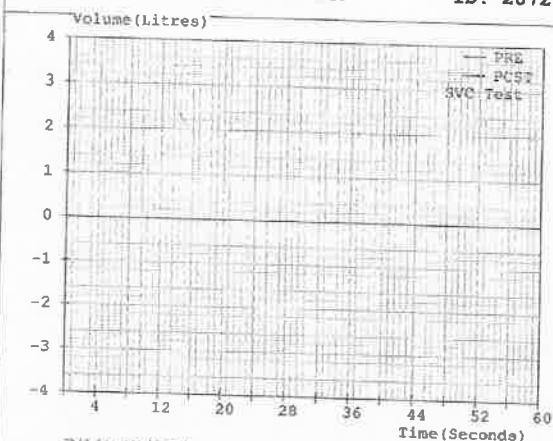
ID: 20727

Gender : Male

Smoker : No

Eth. Corr: 100

Temp :



Spirometry Results						
Parameter	Pred	M.Pre	%Pred	M.Post	%Pred	%Imp
FVC (L)	02.99	02.77	093			
FEV1 (L)	02.49	02.77	111			
FEV1/FVC (%)	83.28	100.00	120			
FEF25-75 (L/s)	03.88	06.54	169			
PEFR (L/s)	08.24	10.70	130			
FIVC (L)		02.53				
FEV.5 (L)		02.58				
FEV3 (L)	02.90	02.77	096			
PIFR (L/s)		06.11				
FEF75-85 (L/s)		02.74				
FEF.2-1.2 (L/s)	06.58	09.67	147			
FEF 25% (L/s)	07.59	10.26	135			
FEF 50% (L/s)	05.45	07.38	135			
FEF 75% (L/s)	02.70	03.55	131			
FEV.5/FVC (%)		93.14				
FEV3/FVC (%)	96.99	100.00	103			
FEV (Sec)		00.68				
ExptTime (Sec)		00.04				
Lung Age (Yrs)	037	033	089			
FEV6 (L)	02.99					
FIF 25% (L/s)		04.80				
FIF 50% (L/s)		05.93				
FIF 75% (L/s)		05.87				
SVC (L)						
ERV (L)	01.31					
IRV (L)						
VE (L/min)						
RI (l/min)						
Ti (sec)						
Te (sec)						
VT (L)						
VT/Ti						
Ti/Ttot						
IC (L)						
MVV (L/min)	124					
MRE (l/min)						
MVT (L)						

Pre Medication Report Indicates  
Spirometry within normal limits as (FEV1/FVC)%Pred >95 and FVC%Pred >80.

Factory Medical Officer

The contents of this report require clinical co-relation before any clinical action.

<http://www.rmsindia.com> © RMS Spirometer (Helios\_v3.1.85)

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**SHREE RAIPUR CEMENT PLANT**

(A UNIT OF SHREE CEMENT LTD)

KHAPRA DIH DIST BALODABAZAR -BHATAPARA (C.G. )

Sr.No-

PATIENT NAME ..... MR. PANCHU RAM VERMA

AGE/SEX ..... 35 YRS /MALE

**X-RAY CHEST PA VIEW**

- Both the lung fields are clear
- Trachea central in position
- Both costo-phrenic angles are clear
- The cardiac shadow is within normal limits
- The bony thorax is normal

OPINION:- NORMAL STUDY

Signature:



(DR. SANTOSH KUMAR)  
Sr.Manager (Health Services)





# AUDIOGRAM

DOCTOR / AUDIOLOGIST

Name: \_\_\_\_\_

Address: S. R. C. P.

PATIENT NAME: Panche Sona Veng

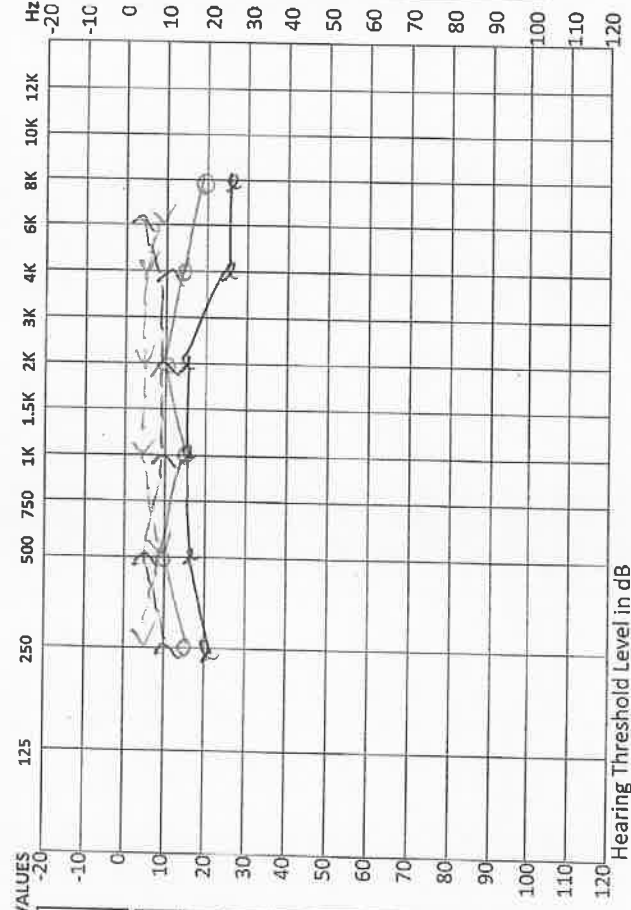
AGE: 37 Yrs. DATE: 13/10/18

SEX: M

TEST	1964	ISO	Right Ear (Red)	Left Ear (Blue)
AIR			O - O	X - X
AIR OPP EAR MASKED			D - D	□ - □
NO RESPONSE			0	X
BONE			<	>
BONE OPP EAR MASKED			[	]

## HEARING EVALUATION

AVE P.T.	
SRT	REF = 11.6 db
PB% CORRECT	LE = 15 db
MCL	NO



TEST	Right Ear	Left Ear
RINNER		
WEBER		
BING		
SPECIAL TEST		
RECR-ITMENT		
SISI		
T.T.S.		

Remarks:

B/C normal Hearing Sensing

FACTORY MEDICAL OFFICER

SHREE RAIPUR CEMENT PLANT  
KHAPRA DIH, BALODA BAZAR  
Form -21

[Prescribed Under Rule(19)]

**HEALTH REGISTER**

(In respect of persons employed in occupations declared to be dangerous operations  
under section 87)

PRE-EMPLOYMENT & PERIODICAL MEDICAL EXAMINATION

NAME	<b><u>PANCHU VERMA</u></b>	DATE	<b><u>06-Mar-2019</u></b>
C/O	<b><u>TIRITH RAM</u></b>	A/S/R	<b><u>49 YEARS /</u></b> <b><u>MALE</u></b>
Department	<b><u>GPP - MECH.</u></b>		
<b>1 GENERAL EXAMINATION</b>			
HEIGHT	<b><u>160(in cm)</u></b>	WEIGHT	<b><u>63(in KG)</u></b> BMI <b><u>24.60</u></b>
CHEST:	INSPIRATION (in cm): <b><u>96</u></b>		EXPIRATION (in cm): <b><u>91</u></b>
BUILT:	AVERAGE / STRONG / POOR		
PALLOR	<b><u>NAD</u></b>	TONGUE	<b><u>NAD</u></b> TONSILS <b><u>NA</u></b> <b><u>D</u></b>
ICTERUS	<b><u>NAD</u></b>	GUMS	<b><u>NAD</u></b> THYROID <b><u>NA</u></b> <b><u>D</u></b>
CLUBBING	<b><u>NAD</u></b>	THROAT	<b><u>NAD</u></b> SKIN <b><u>NA</u></b> <b><u>D</u></b>
OEDEMA	<b><u>NAD</u></b>	TEETH	<b><u>NAD</u></b>
LYMPHNODES	<b><u>NAD</u></b>		
ADDITIONAL FINDINGS	<b><u>NAD</u></b>		
<b>2 CARDIO-VASCULAR SYSTEM</b>			
PULSE(per min.)	<b><u>88</u></b>	BP(mm of Hg)	<b><u>140/80</u></b>
HEART SOUND	<b><u>NORMAL</u></b>	MURMUR, I F ANY	<b><u>NAD</u></b>
ADDITIONAL FINDINGS, IF ANY	<b><u>NAD</u></b>		
<b>3 RESPIRATORY SYSTEM</b>			
SHAPE OF CHEST	<b><u>Bil. Sym.</u></b>	CHEST MOVEMENTS	<b><u>Normal</u></b>
TRACHEA	Central/Deviated	BREADTH SOUNDS	<b><u>Normal</u></b>
ANY ADDITIONAL SOUND	<b><u>--</u></b>		
<b>4 G I SYSTEM</b>			
ANY ABDOMINAL LUMP	<b><u>No</u></b>		
LIVER	<b><u>NAD</u></b>	KIDNEY	<b><u>NAD</u></b> SPLEEN <b><u>NA</u></b> <b><u>D</u></b>
<b>5 EXAMINATION OF EYES</b>			

*[Signature]*

EXTERNAL EXAM	<u>NAD</u>		SQUINT	<u>No</u>
NYSTAGMUS	<u>NIL</u>			
COLOUR VISION	<u>NORMAL</u>			
FUNDUS		LEFT: <u>NR</u>	RIGHT: <u>NR</u>	
INDIVIDUAL COLOUR IDENTIFICATION	<u>NORMAL</u>			
<b>DISTANT VISION</b>				
(WITHOUT GLASS)		RIGHT <u>6/6</u>	LEFT <u>6/6</u>	
(WITH GLASS)		RIGHT <u>--</u>	LEFT <u>--</u>	
<b>NEAR VISION</b>				
(WITHOUT GLASS)		RIGHT <u>6/6</u>	LEFT <u>6/6</u>	
(WITH GLASS)		RIGHT <u>--</u>	LEFT <u>--</u>	
NIGHT BLINDNESS(NYCTALOPIA)	<u>NORMAL</u>			
<b>6 EXAMINATION OF EARNOSE &amp; THROAT</b>				
EXTERNAL EXAM	<u>NAD</u>			
<b>7 GENITO URINARY SYSTEM</b>				
HERNIA	<u>Absent</u>	HYDROCOEL/VARICOC ELE	<u>Absent</u>	
CRYPTORCHIDISM	Y / N	PHIMOSIS	Y / N	
VARICOSE VEIN	Y / N	SIGN OF STD	Y / N	
<b>OTHER EXAMINATION OF FEMALE</b>				
MENARCHY AT	<u>--</u> Yrs	MENSTRUAL HISTORY	<u>--</u>	
OBSTETRICAL HISTORY	LMP: <u>--</u>	GRAVIDA: <u>--</u>	PARA: <u>--</u>	
INVESTIGATIONS	<u>--</u>			
<b>8 LAB INVESTIGATION</b>				
URINE LBUMIN:	A <u>NIL</u>	SUGAR:	<u>NIL</u>	MICROSCO PY: <u>--</u>
HEMOGRAM	Blood grouping & Rh typing: <u>--</u>	Hb%	<u>15.5</u>	
TLC	<u>--</u>	DLC(%)	P: <u>60</u> L: <u>30</u> E: <u>05</u> M: <u>05</u> B: <u>--</u>	
PLATELET COUNT	<u>255</u>			
STOOL		Ova/Cyst	<u>-- / --</u>	Microscopy <u>--</u>
<b>LIPID PROFILE</b>				
SERUM CHOLESTEROL	<u>119</u>	HDL	<u>45</u>	
S.TRIGLYCERIDE	<u>150</u>	LDL	<u>44</u>	
<b>HEPATIC PROFILE</b>				
SGPT	<u>21</u>	SGOT	<u>19</u>	ALKALINE PHOSPHAT ASE <u>54</u>
<b>RENAL PROFILE</b>				

*Abhinav*

BLOOD UREA 31

S.CREATI 1.1  
NINE

METABOLIC --

BLOOD SUGAR

FASTING --

PP --

RANDOM 120

S.URIC ACID --

9 **OTHER INVESTIGATIONS**

CHEST X-RAY NAD

ECG NAD

ULTRASOUND WHOLE  
ABDOMEN --

1 **PULMONAY FUNCTION TEST**

0

Parameters	Predicted Value	Performed value	% of Predicted
Forced Vital Capacity (FEV)	02.99	02.77	093
Forced Vital Capacity 1 (FEV 1)	02.49	02.49	02.49
Peak Expiratory Flow	08.24	10.70	130

1 **AUDIOMETRY TEST**

1

IMPRESSION: NOR

1 **MEDICAL EXAMINATION OF CANTEEN STAFF**

2

- Blood examination for venereal disease and routine examination of blood
- Stool and urine examination for worm infestation
- Screening for skin diseases(scabies and others)
- X ray and another tests for TB

1 **rule 107 of C.G Factory rules 1962-**

3

COMMENTS: FIT FOR JOB

Suggestions if any: --



Signature & LTI of Candidate

SANTOSH  
KUMAR

Digitally signed by  
SANTOSH KUMAR  
Date: 2019.05.13 14:27:34  
+05'30'

Signature(wlth date) of certifying  
surgeon

DOCTOR SANTOSH KUMAR, 06-Mar-  
2019

Signature (with Date) of factory medical  
officer





# Occupational Health Centre

Shree Raipur Cement Plant  
Khapradih, Baloda bazar



Ref. No  
Patient Name  
C/o  
Ref. By Dr.

MR. PANCHU RAM VERMA  
DR. SANTOSH KUMAR

Date  
A/S/R  
Dept/E.Code

13-10-2018

## BIO-CHEMISTRY & HEAMATOLOGY

Test	Result	Normal Ref Range
<b>LIPID PROFILE</b>		
TOTAL CHOLESTEROL	119	140-250 mg/dl
S. TRIGLYCERIDE	150	25-160 mg/dl
HDL	45	42-79.5 mg/dl
LDL	44	50-150 mg/dl
VLDL	30	10-30 mg/dl

## **LIVER FUNCTION TEST**

S. BILIRUBIN		
	TOTAL	0.1-1.0 mg/dl
	DIRECT	0.1-0.2 mg/dl
	INDIRECT	0.1-0.4 mg/dl
SGOT	19	5-34 IU/L
SGPT	21	5-40 IU/L
ALK.PHOSPHATASE	54	15-112 IU/L

## **RENAL FUNCTION TEST**

B.UREA	31	13-45 mg/dl
S.CREATININE	1.1	0.4-1.4 mg/dl

## **BLOOD SUGAR**

FASTING	101	60-110 mg/dl
P P		110-140 mg/dl
RANDOM		60-140 mg/dl

S. URIC ACID		3.4-7.0 mg/dl
--------------	--	---------------

## **BLOOD GROUPING & Rh TYPING**

### **CBC**

HB %	15.5	10-17 gm%
PLATELET COUNT	2,55,000	1,50000-4,00000 /cumm
MCV		86-111 /cu
MCH		29-35 micro/g
MCHC		31-37 %
RDW-CV		11-16 %
<b>TLC (TOTAL WBC COUNT)</b>	7,100	4000-12000/cumm
POLYMORPHS	60	40-80 %
LYMHOCYTES	30	20-50 %
MONOCYTES	05	1-8 %
EOSONOPHIL	05	1-8 %
<b>BASOPHILS</b>	00	0-1 %

## **URINE RM**

Urine -Glucose	NIL	Colour	PALE YELLOW
Urine -Albumin	NIL	Apperance	
Pus cells	0-1/hpf	Specific Gravity	
Red Blood Cells	NIL	Reaction(pH)	
Epithelial Cells	NIL	Crystals	
Casts	NIL		

  
Tech. Signature

Signature of  
Doctor

SANTOSH  
KUMAR

Digitally signed by  
SANTOSH KUMAR  
Date: 2019.05.13  
14:28:20 +05'30'

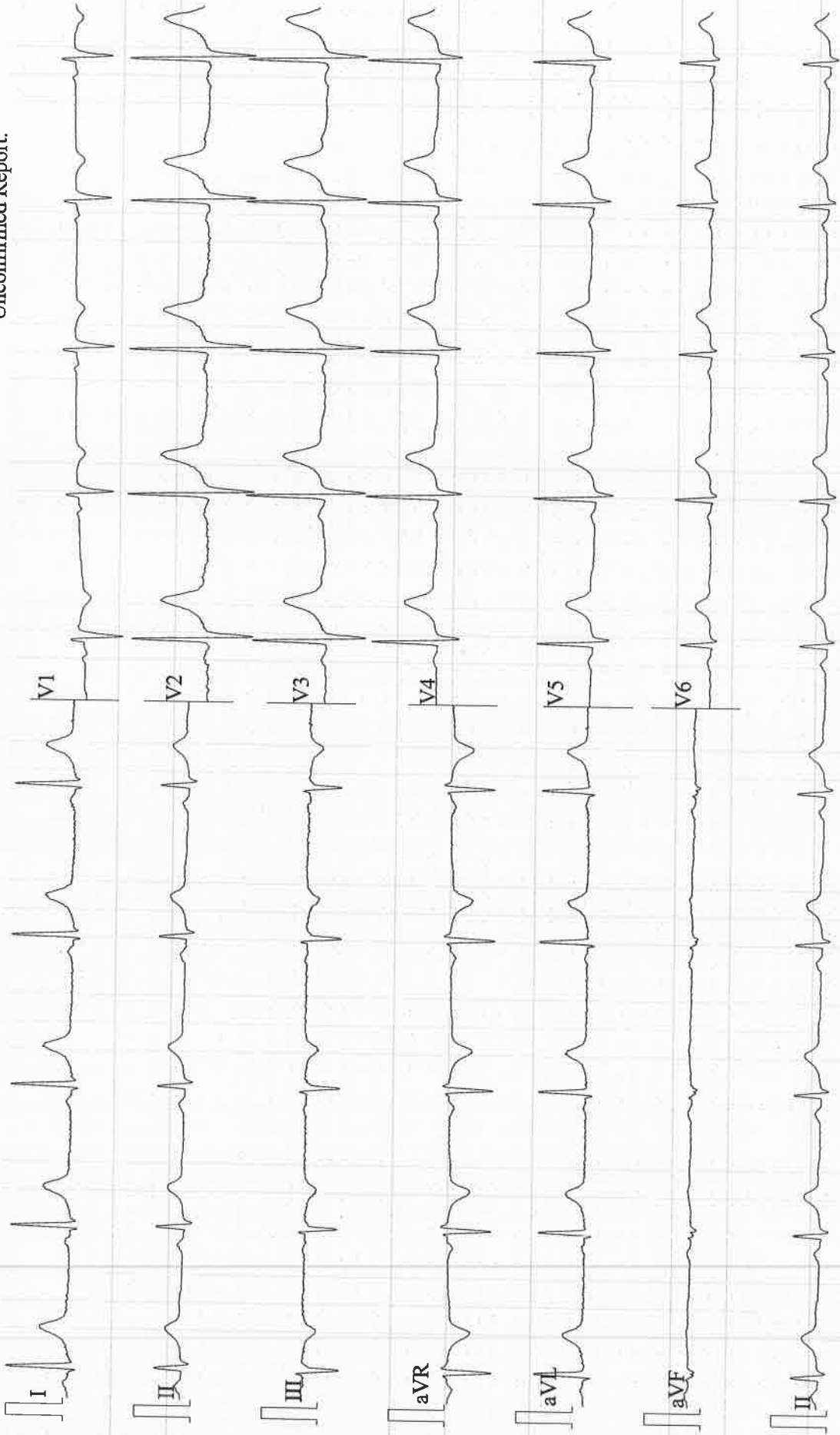
SHREE RAIPUR CEMENT PLANT 12 LEAD ECG REPORT

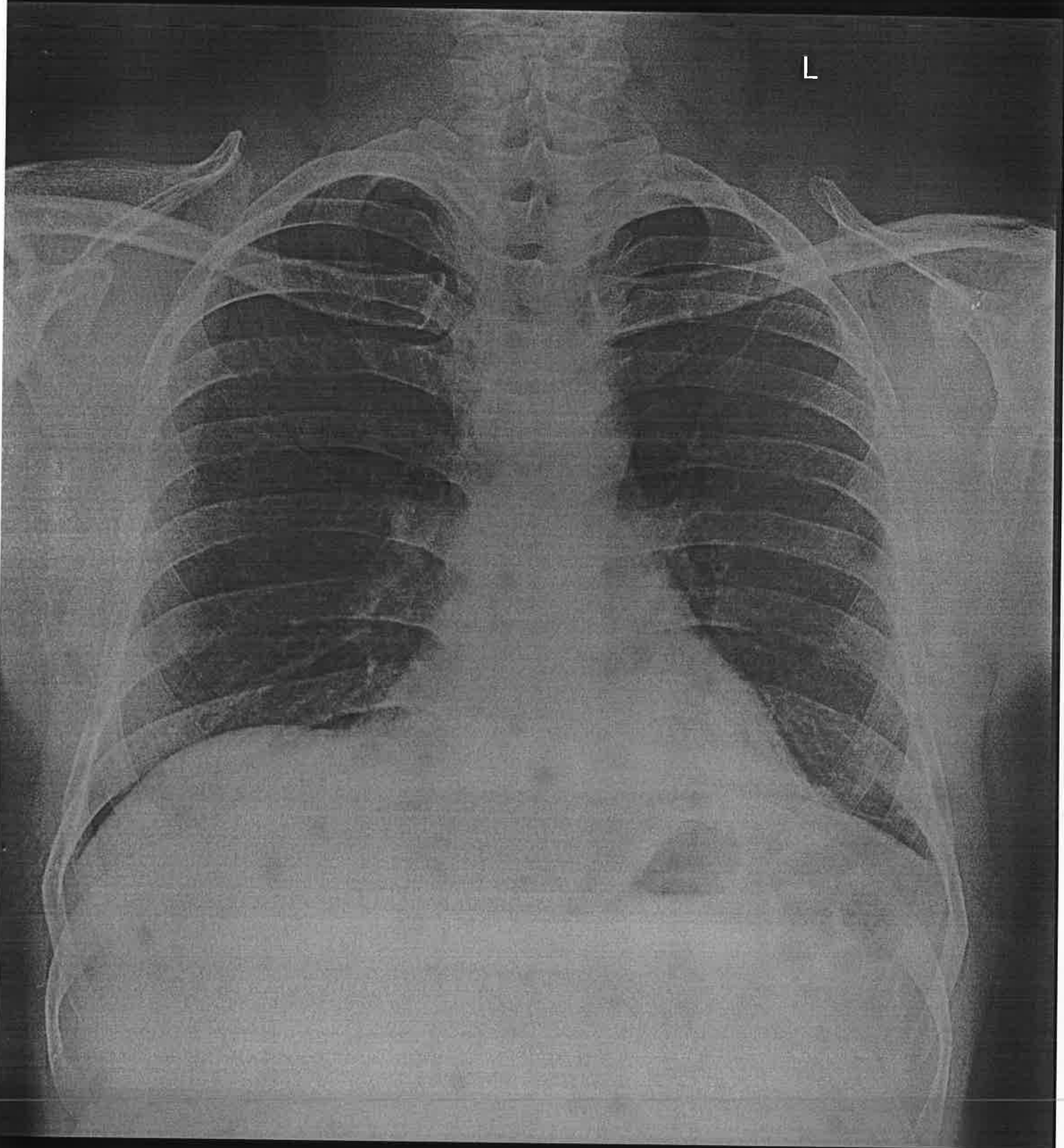
Panchu Ram Verma      37Years      ID:SAI1 D13-10-18      Department:SAI CONSTRUCTION      Ward No.:

HR : 57 bpm  
P : 117 ms  
PR : 151 ms  
QRS : 97 ms  
QT/QTc : 404/395 ms  
P/QRS/T : 45/-5/9 deg.  
RV5/SV1 : 1.045/0.650 mV

Diagnosis Information:  
811: Sinus Bradycardia  
\*\*\*Normal ECG\*\*\*

Unconfirmed Report.





PANCHU RAM VERMA 35Y 10.03.17 CHEST PA 10-Mar-17 11:10 AM  
SHREE RAIPUR CEMENT PLANT

*Abhinav*

**Annexure-15**

<b>Shree Raipur Cement Plant (A Unit of Shree Cement Limited) Environment Expenses for the Period October 2018 to March 2019</b>		
<b>Sl No.</b>	<b>Description</b>	<b>Amount (in Rs)</b>
1	STP	136495.00
2	WTP	2854838.51
3	Technical Consultancy	150000.00
4	Air Pollution Maintenance	856971.00
5	Env. Monitoring	70015.00
6	Plantation	1307256.82
7	Plantation CSR	2036813.96
8	Vacuum Sweeping m/c	39037467.58
	<b>Total</b>	<b>46449857.87</b>

रमपुर, तद्विषय, 11 दिसंबर 2016

मध्याह्नक भूमि हरिभूमि 13

गणेशाय नमः

राज्य के प्रशासन कार्यक्रम में कलेक्टर डॉ. सुरेश चर्मा ने जिला के चार...

मेला

## विख्यात रामायणी दाऊद खान को दी श्रद्धांजलि

मैनपुरी। प्रख्यात रामायणी दाऊद खान के निधन पर तहसील मुख्यालय मैनपुरी में सद्भावना संच द्वारा श्रद्धांजलि अर्पित की गई। संच के सदस्यों ने कहा कि दाऊद खान सामाजिक सद्भाव की जीवी धारता मिलाते थे। रामायण के प्रचार-प्रसार में उनका धर्म कभी आड़े नहीं आया और वे लोगों के बीच पूरी सिद्धांत के साथ श्रीराम कथा का विस्तृत व्याख्यान कर सद्भाव का संदेश देते थे। बहुत समय पहले उन्होंने मैनपुरी में श्री रामायण कथा का वाचन कर लोगों को नम्रगुण कर दिया था। दाऊद खान के निधन पर सद्भावना संच के संस्थापक लक्ष्मण ताम्र, अध्यक्ष नरेशचंद्र भुज, संस्थापक महाराम ताम्र, खल्लू रामदेव, कैलाश मुन्द, रामकृष्ण मुख, अलीम अली, जैकल खोली, विभूजन परेल, अलीम राव, प्रदीप मानोई, गुलाब बसन, शोभन पटेल, प्रकाश, मुरली साहू, रोहन पटेल, जयदीप न्येस राहुल राधक सहाय मंत्री संस्था में लोगों ने श्रद्धांजलि अर्पित की।

## मैसर्स श्री सीमेन्ट लिमिटेड

(श्री रामपुर सीमेंट फाट)

गाँव-खजराडीह, तहसील-सिमरग

जिला-बलिया बजार-भाटापारा (जलोरागढ़)

## सार्वजनिक सूचना

श्री साधारण को सूचित किया जाता है कि मैसर्स श्री सीमेन्ट लिमिटेड के इन्टीग्रेटेड सीमेन्ट फाट का विस्तार क्षमता 2 x 1.5 मिलियन टन से 2 x 2.6 मिलियन टन प्रतिवर्ष विलकर, 2 x 2.6 मिलियन टन से 2 x 3.0 मिलियन टन प्रतिवर्ष सीमेन्ट, क्लिंक बाल्ट पावर प्लांट 26 मेगावाट, डेस्ट होट रिकवरी पावर प्लांट 16 मेगावाट से 30 मेगावाट, सिन्थेटिक गैसफाट 68 टन प्रति घंटा तथा सी.सी. सेट 2000 KVA (सर्वज 1000/800/250/125) जो गाँव-खजराडीह, तहसील-सिमरग जिला-बलिया बजार-भाटापारा, जलोरागढ़ में स्थापित किये जा रहे हैं, जो भारत सरकार के पर्यावरण एवं वन मंत्रालय में दिल्ली द्वारा पर्यावरणीय स्वीकृति पत्र क्रमांक No. J-11011/235/2008-IA II (I) दिनांक 05 सितम्बर 2016 से प्राप्त हो गई है।

पर्यावरण स्वीकृति पत्र की प्रतिलिपि जलोरागढ़ पर्यावरण संरक्षण मण्डल, रामपुर पर उपलब्ध है तथा पर्यावरण एवं वन मंत्रालय भारत सरकार की वेबसाइट "www.environment.in" एवं श्री सीमेन्ट की वेबसाइट "www.shreecementltd.in" पर भी उपलब्ध है।

## NiceDicer Plus (सच्ची कटर)

- जर्मन त्वालिटी के ब्रेडेड।
- अनटूकेबल प्लास्टिक।
- सुपर ABS त्वालिटी से बना।
- मल्टीपर्स कटेनर बाक्स।
- 11 अलग-अलग शेप रजि करंटिंग करता है।

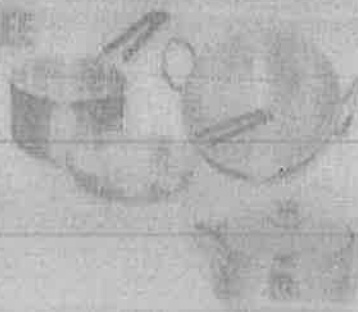
पिकन में हरिभूमि

• जाली सच्ची कटर

• बर्तन सेट (कढ़ाई, चिल्लू पैल,

काई पैल, लोड़ी, बकल)

एल्यूमिनियम कटलेट



ALUMINUM WARE

विशेषी के समय मुफ्तान करें।

SMS

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