SHREE RAIPUR CEMENT PLANT

(A UNIT OF SHREE CEMENT LIMITED)
Village : Khaparadih, Tehsil : Simga
Distt. : Baloda Bazar-Bhatapara (C.G.) Pin : 493 332, Ph. : 07727-203101
CIN No. : L26943RJ1979PLC001935

SRCP/ENV/2020-21/417

Date: - 17/11/2020

To,
Addl. Principal Chief Conservator of Forests (C),
Ministry of Env., Forest and Climate Change
Regional Office(WCZ), Ground Floor
East Wing, New Secretariat Building,
Civil Lines, Nagpur-440001

Sub:- Regarding compliance for the period April-2020 to September-2020 to the conditions of Environment Clearance for Expansion of Integrated Cement Plant (Shree Raipur Cement Plant): 2*2.6 to 3*4.5 Million TPA Clinker, 2*3.0 to 3*5.5 million TPA Cement, 30 to 100 MW Waste Heat Recovery Power Plant, 25 to 125 MW Captive Power Plant along with Synthetic Gypsum Unit (65 TPH) and DG Sets [2000 KVA (size 1000/500/250/125)] near Village Khapradih, 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 11th September 2019.

Dear Sir,

Kindly refer to the above subjected matter and referred EC letter. We are submitting herewith the point wise Half Yearly EC compliance status for the period of **April-2020 to September-2020.**

This is for your kind information & submission please.

Thanking you.

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

R. K. Vijay
Joint VP (Operations)

Enclosed: Compliance status Report period April-2020 to September-2020.

Cc to:-

1) The In charge (Zonal Office), Central Pollution Control Board (CPCB), 3rd 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)
3) The Regional Officer, Chhattisgarh Environment Conservation Board, Commercial Complex, Chhattisgarh Housing Board Colony, Kabir Nagar, Raipur (C.G.) - 492099

Compliance Status of Environment Clearance

Period from April-2020 to September -2020

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

A. Specific Conditions:

S. No	Conditions	Compliance status
i	The limestone for the project shall be sourced only from (i) Existing Captive Semradih & Bharuwadih Limestone (M.L Area - 531.126 ha) and (ii) Karhi Chandi Limestone Mine (ML area 242.127 ha) which are located adjacent to plant site. In case of any change in source of limestone, the project proponent shall obtain prior permission from MoEF&CC.	Noted. Prior permission will be taken from MoEF&CC in case of any change in source of limestone.
ii	Project proponent shall conduct health studies in all the villages covered within a radius of 2km radius of the project site for assessment of prevalence of silicosis for once in six months.	We are planning to conduct health studies in all the villages covered within a radius of 2km of the project site for assessment of prevalence of silicosis by conducting camps.
iii	Railway siding shall be completed in a time frame of five years.	Noted.
iv	CER related activities shall be completed within a time frame of three years.	CER related activities shall be completed within three years' time.
v	The project proponent shall reduce the abstraction of ground water by shifting the requirement to surface water and regular report shall be submitted to the Regional Office of the Ministry at the interval of six months.	Surface water harvested at our existing mines pit & Rain Water Harvesting pond inside plant area are being used for industrial & process water requirement, water for domestic use is being extracted from Ground water sources. Water consumption report is attached as **Annexure-1**
B. General Conditions **I Statutory compliance**		
i	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air	We have obtained Consent to Operate vide letter no. 9776/TS/CECB/2020, dated 01/02/2020 &

	(Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	Consent to Establish for expansion vide letter No. 10020/TS/CECB/2020, Dated: - 12.02.2020 from Chhattisgarh Environment Conservation Board.
ii	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.	We have obtained ground water NOC from CGWA for withdrawal of 3000 KL/ Day ground water vide Letter No. 21-4(36)/NCCR/CGWA/2008-2079, Dated: - 24.10.2018 valid up to 07.04.2023.
iii	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	We have obtained authorization under the Hazardous and other Waste Management Rules, 2016 - vide Letter No. 11176/HSMD/HO/CECB/2019, Dated:- 13.03.2020 valid up to 02.11.2023.
II Air quality monitoring and preservation		
i	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement)and 10th May, 2016(Co-processing Cement); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	We have installed Continuous Emission Monitoring System at all stacks to monitor stack emission as per prescribed standards and the data is being transmitted to both CECB & CPCB servers. Calibration of installed Continuous Emission Monitoring System are also being done on regular basis. Photographs of the same are attached as **Photo No. 1, 2 & 3.**
ii	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.	Fugitive emission monitoring is being done in the plant premises on regular basis through labs recognized under Environment (Protection) Act, 1986.

iii	The project proponent shall install system carryout to Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NOx in reference to SO_2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120ºeach), covering upwind and downwind directions.	We have Installed 4 nos. of CAAQMS for the monitoring of the parameters PM_{10}, $PM_{2.5}$, SO_2 and NOx within and outside the plant area. Photographs of the same are attached as **Photo No. 4, 5, 6 & 7.**
iv	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	Monthly summary reports attached in Annexures are as follows. 1. Continuous & Manual stack emission report **Annexure-2.** 2.Continuous & Manual Air quality monitoring report - **Annexure-3.** 3. Fugitive emissions monitoring is attached as - **Annexure- 4**
v	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Unit has installed Appropriate Air Pollution Control (APC) measures at all the dust generating points including fugitive dust from all vulnerable sources to comply with prescribed standards. List of Air Pollution Control (APC) system is attached as **Annexure-5.**
vi	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.	Installed provision for leakage detection and mechanized bag cleaning facility for better maintenance of bags.
vii	Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.	Complied as below.

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/Nm3 for particulate matter emission.	PM emission level is < 30 mg/Nm3.
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: • Silos for Clinker and Fly Ash and covered shed for Gypsum. • Water spray arrangement at raw materials like limestone, coal and pet coke. • Bag filters at all material transfer points. • Covered conveyor belts.

			• Cemented roads and Four vacuum sweeping machines for road cleaning.
	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.	We have obtained authorization under the Hazardous and other Waste Management Rules, 2016 vide Letter No. 11176/HSMD/HO/CECB/2019, Dated:- 13.03.2020 valid up to 02.11.2023.
	5.	Cement industries will carry out feasible study and submit target dates to CPCB co-generation of power by July-2003.	Provided waste heat recovery system of capacity 55 MW for power generation from the waste heat gases of kiln & cooler.
viii	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.		Provided four Numbers of heavy duty sweeping machines for regular sweeping of all plants roads, shop floors on regular basis. Photograph of sweeping machines are attached as **Photo -8 & 9**.
ix	Recycle and reuse lime fines, coal fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after agglomeration.		Dust collected from pollution control devices and vacuum cleaning devices is being totally recycled & reused in the process of cement manufacturing.
x	Ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;		All the Environment protection measures have been taken to reduce impact on surrounding environment. All raw materials are being transported in tippers/trucks covered by tarpaulin to prevent spillage and dust generation. Fly ash transportation is being done in closed bulkers. Photographs of the same is attached as **Photo no. - 10 & 11.**
xi	Provide wind shelter fence and chemical spraying on the raw material stock piles; and		Covered storage shed have been provided for stockpiles of Limestone, Coal & Gypsum. Photographs of covered stock yard is attached as **Photo no. - 12.**
xii	Provide Low NOx burners as primary measures and SCR /NSCR technologies as secondary measure to control NOx emissions. Have separate truck parking area and monitor vehicular emissions at regular interval.		Installed Low NOx burners as primary measure to control NOx emissions. And provided separate truck parking area with basic amenities and vehicles with PUC are allowed.

xiii	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport.	All the Environment protection measures has been taken to reduce impact on surrounding environment. The raw material i.e. limestone is transported to plant with help of covered conveyor belts and end product Cement & Clinker being transported in trucks covered with tarpaulin. Photographs of covered conveyor belt is attached as **Photo no. - 13 & 14** .
xiv	Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.	Ventilation system has been designed as per ACGIH specifications at all tunnels, motor houses, cement bagging/Packing plants area.
III. Water quality monitoring and preservation		
i	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement)and subsequent amendment dated 9th May, 2016 (Cement)and 10th May, 2016(in case of Co-processing Cement)as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants)as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Not applicable as no effluent is generated from the Cement plant process as the cement manufacturing is based on dry process technology. However, treated waste water from WTP is being reuse in process. Zero effluent discharge is being maintained inside/outside of plant premises.
ii	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Monitoring of ground water quality on regular basis (pre and post monsoon) through labs recognized under EPA, 1986 and NABL accredited lab. The monitoring report is attached as **Annexure-6.**
iii	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	No effluent is generated from the Cement plant process as the cement manufacturing is based on dry process technology. The monitoring report of ground water quality pre and post monsoon is attached as **Annexure-6.**
iv	Adhere to 'Zero Liquid Discharge'.	Cement manufacturing is based on dry process technology.

		Zero effluent discharge is being maintained inside/outside of plant premises.
v	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Installed 2 Nos. of STP with 40 KL capacity each for treatment of Domestic sewage which is generated from offices & canteen and treated wastewater quality is as per prescribed standards. Photographs of STP is attached as **Photo no. 15.** The STP water quality report is attached as **Annexure-7.**
vi	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off.	The raw material stock piles are kept under covered shed. So, no surface runoff is generated from stock pile.
vii	The project proponent shall practice rainwater harvesting to maximum possible extent.	For augmentation of ground water, the project has constructed 5 Nos. of Rain water harvesting ponds. 2 X 2,50,000 KL capacity ponds each in mines area, 2 X 1,00,000 KL capacity ponds each in plant area & One 35,000 KL capacity rain water harvesting pond within the plant area. The photographs of rain water harvesting ponds are attached as **Photo no. 16 & 17.**
viii	Water meters shall be provided at the inlet to all unit processes in the cement plant.	Installed digital water flow meter at the inlet of all unit processes in the plant. Photographs of digital flow meters are attached as **Photo no. 18 & 19.**
ix	The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.	Not Applicable for Cement plant.
IV. Noise monitoring and prevention		
i	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Noise Monitoring is being carried out as per the prescribed guidelines on regular basis. The noise monitoring report April, 2020 to September, 2020 is attached as **Annexure-8.**
ii	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	Regular monitoring of ambient noise levels is being carried out and the results are well within the norms. Ambient noise monitoring results during

<table>
<tr><td></td><td></td><td>the periods of April, 2020 to September, 2020 is attached as Annexure-8.</td></tr>
<tr><td colspan="3">V. Energy Conservation measures</td></tr>
<tr><td>i</td><td>Waste heat recovery system shall be provided for kiln and cooler.</td><td>Provided waste heat recovery system of capacity 55 MW for power generation from the waste heat gases of kiln & cooler.</td></tr>
<tr><td>ii</td><td>The project proponent make efforts to achieve power consumption less than 65 units/tone for Portland Pozzolona Cement (PPC) and 85 units/tone for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.</td><td>All efforts are being made to achieve power consumption & thermal energy consumption for cement & clinker production.
<table><tr><td>Year</td><td>Power consumption for cement production</td><td>Thermal energy consumption for Clinker</td></tr><tr><td>2018-19</td><td>61.99</td><td>741</td></tr><tr><td>2019-20</td><td>62.26</td><td>714</td></tr></table></td></tr>
<tr><td>iii</td><td>Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.</td><td>Provided solar light system for street lights at our colony area. Further we are planning to layout for the solar plant to be most efficient for solar powered lights for all common areas, street lights, parking around project area.</td></tr>
<tr><td>iv</td><td>Provide the project proponent for LED lights in their offices and residential areas.</td><td>Provided LED lighting fixtures in all office areas.</td></tr>
<tr><td>v</td><td>Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.</td><td>Continuous efforts have been made for use of maximum fly ash in making PPC cement as per BIS standards. During the April-2020 to September-2020 total 17,770 MT fly ash used for PPC manufacturing in existing cement plant.</td></tr>
<tr><td>vi</td><td>maximize utilization of alternate fuels and Co-processing to achieve best practice norms.</td><td>For utilization/co-processing of Hazardous wastes in Cement kiln. We have obtained the authorization for various types of hazardous waste from CECB and Co-processing of hazardous & non-hazardous waste such as ETP sludge, Organic residue, Process residue from pharmaceutical industries including RDF/MSW has been started in cement kiln.

Further we will explore the higher calorific wastes material for co-processing as AFR in our cement plant.</td></tr>
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VI. Waste management		
i	Used refractories shall be recycled as far as possible.	The used refractories are being sold to vendors for recycling.
ii	The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.	The used/spent oil generated are stored in earmarked area with concrete flooring and is only sold to CPCB/ SPCB authorized parties.
iii	Kitchen waste shall be composted or converted to biogas for further use.	Waste generated from kitchen is converted into manure which is used as bio-fertilizer in green belt development.
VII. Green Belt		
i	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant	Out of Total plant area of 159.256 hectare, Green belt has been developed on 42.1 Hectare (26.4%) area with 1,02,176 Nos. of saplings along with entire periphery of the plant. Additionally, under Hariyar Chhattisgarh project we have planted 15,000 saplings near school of Bharuwadih, Semradih, Khapradih, Chandi, Karahi & Parkidih villages. Road side plantation of about 10 KM on both side of road from Bharuwadih to Chandi village has been done. And we have also planted 15,050 saplings at Bhatapara. Apart from that 2,000 sapling has been planted near the Logistic building. Local native species viz. Neem, Karanj, Platofarm, Cassia Siamea, Shisham etc. are planted to increase the survival rate.
ii	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programmer for reduction of the same including carbon sequestration including plantation.	During the year 2019-20, 3060.27 Ton of CO2 sequestered by the trees plantation. During the year 2019-20 CO2 generation from the existing operation is 34,52,484 Tons and carbon sequestrated during the year 2019-20 is 3060.27 Ton.
VIII. Public hearing and Human health issues		
i	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	The emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan is implemented.
ii	The PP shall carry out heat stress analysis for the workmen who work in high temperature work	Being Complied

	zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	
iii	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Provided temporary housing structures with all necessary infrastructure and facilities such as fuel for cooking, toilets, STP, safe drinking water, medical health care etc. for construction workers.
iv	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational health programs are conducted on regular basis and records being maintained by the Occupation Health Center (OHC). During the period of April, 2020 to September, 2020 total 1776 Nos. health checkup conducted. A sample copy of Occupational health surveillance is attached as **Annexure-9**.
IX. Corporate Environment Responsibility		
i	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	All commitments made during the public hearing have been incorporated in CSR activities. Details of expenses for CSR activities from April- 2020 to September- 2020 enclosed as **Annexure- 10.**
ii	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholder's / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	The company has framed Environmental Policy approved by Board of Directors and system of the reporting of any infringements/ non-compliance of EC conditions. The copy of the Environmental Policy is attached as **Annexure-11**.
iii	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Established a separate Environmental Cell at project and company head quarter level with qualified person under the control of Jt. Vice President (Operation). The detailed organization chart is enclosed as **Annexure – 12.**

iv	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.	The funds earmarked for Environmental Protection measures are being utilized for the same and Total expenditure incurred during the period April-2020 to September-2020 is attached as **Annexure – 13.**
v	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Noted
vi	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.	All CREP recommendations have been implemented.
X. Miscellaneous		
i	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Advertised the environment clearance in two different newspapers with one in vernacular language **"Dainik Bhaskar" & "Times of India"** dated 14.09.2019 within the stipulated time period. The copy the EC letter has been put on the company website that can be downloaded from by the following link www.shreecement.com The copy of advertisement is attached as **Annexure-14.**
ii	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Copy of EC letters have been submitted to the respective Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government date 13.09.2019 for their information.
iii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	The status of compliance of the stipulated environment clearance conditions, including results of monitored data uploaded on the company's website www.shreecement.com i.e. on half yearly basis.
iv	The project proponent shall monitor the criteria pollutants level namely; PM10, S02, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display	The monitoring data of ambient monitoring quality & stack emission is uploaded on our company

	the same at a convenient location for disclosure to the public and put on the website of the company.	website www.shreecement.com periodically i.e. on half yearly basis . Monitoring data of existing cement plant is being displayed at main gate of the company in the public domain. Photograph of the same is attached as **Photo no. 20.**
v	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	The Six monthly compliance reports on the status of the compliance of the stipulated environmental conditions is uploaded on the website of the MoEF&CC at Environment Clearance portal.
vi	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	The Environment statement for each financial year in FORM-V is submitting regularly to the Chhattisgarh Environment Conservation Board as prescribed under the Environment (Protection) Rules, 1986, and the copy of the same is also being uploaded in the company's website i.e. www.shreecement.com
vii	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Noted
viii	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Noted
ix	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	All the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing are being complied.
x	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Noted
xi	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted

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

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 Limited)

Water Consumption Report for the period
April-2020 to September-2020

Month	Process/ Industrial Water	Domestic Water
Apr-20	3679	6146
May-20	17806	12698
Jun-20	25451	10858
Jul-20	15522	12596
Aug-20	13900	14701
Sep-20	20687	19201
Total	**97045**	**76200**
Approved Quantity		**3000 KL/ Day**

Annexure - 2

Shree Raipur Cement Plant

(A Unit of Shree Cement Ltd)

Online CEMS Stack Emission Monitoring Report (Monthly Average Values)

Name of Stacks →		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		
S. No.	Month	PM	PM	PM	PM	PM	PM	SO2	NOx	PM	SO2	NOx	PM	SO2	NOx
Norms (mg/Nm3)		30	30	30	30	30	30	100	600	30	100	600	50	600	300
1	Apr-20	8.7	SD	10.3	SD	5.5	Not in operation due to Covid-19			9.23	0.26	334.91	22.4	128.8	122.8
2	May-20	11.1	16.2	13.2	11.3	7.7	9.7	5.8	375.9	10.9	0.0	315.8	25.6	195.1	122.1
3	Jun-20	14.4	16.4	14.2	11.4	8.9	9.6	2.4	317.3	12.0	1.9	327.0	32.1	272.4	99.0
4	Jul-20	12.5	SD	15.5	SD	12.2	SD	SD	SD	12.7	28.3	400.8	35.7	248.8	121.6
5	Aug-20	15.2	SD	16.2	SD	13.1	SD	SD	SD	10.3	25.5	412.3	27.0	226.9	128.7
6	Sep-20	15.2	17.7	15.7	11.1	11.2	9.8	0.8	364.8	12.3	0.1	373.9	33.4	245.7	110.9

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client Details			Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT		Sample Code	GCI/V/20/E4/ST1
Address	(A Unit of M/s. Shree Cement Ltd), Village –Khapradih, Dist: Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001		Location	Raw mill &Kiln Line-1
			Date of Sampling	19/05/2020
Sampling Done By		VIKRAM	Date of Sample Received	22/05/2020
Date of Analysis		22/05/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion		29/05/2020	Location Co-ordinates	21°36'10" N 82°02'29" E
Time of Sampling		03:30 PM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	150
2.	Diameter	Mt.	5.0
3.	Stack Temperature	°C	90
4.	Ambient Temperature	°C	34
5.	Velocity	m/sec.	8.41
6.	Type of fuel used	-	Coal/PC
7.	Volumetric Flow Rate	$Nm^3/hr.$	365347.16
8.	Moisture	%	5.3
9.	Stack Attached to	-	RABH

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	10.84	11.85	30	IS 11255 (Part 1):1985 RA2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	0	0	100	IS 11255 (Part 2):1985 RA2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	432.23	450.12	600	IS 11255 (Part 7):2005 RA2017

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/E4/ST3
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Coal mill Line-1
		Date of Sampling	19/05/2020
Sampling Done By	VIKRAM	Date of Sample Received	22/05/2020
Date of Analysis	22/05/2020	Sampling Method0	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	29/05/2020	Location Co-ordinates	21°36'05" N 82°02'26" E
Time of Sampling	09:30 AM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	68
2.	Diameter	Mt.	1.6
3.	Stack Temperature	°C	82
4.	Ambient Temperature	°C	33
5.	Velocity	m/sec.	8.10
6.	Volumetric Flow Rate	$Nm^3/hr.$	32247.57
7.	Moisture	%	5.3
8.	Stack Attached to	-	Bag house

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	19.34	20.43	30	IS 11255 (Part 1):1985 RA 2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 **Date: 29/05/2020**

ANALYSIS REPORT

(For the Month of May-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/E4/ST2
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Clinker Cooler Line-1
		Date of Sampling	19/05/2020
Sampling Done By	VIKRAM	Date of Sample Received	22/05/2020
Date of Analysis	22/05/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	29/05/2020	Location Co-ordinates	21°36'11" N 82°02'31" E
Time of Sampling	11:00 AM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	55
2.	Diameter	Mt.	4.3
3.	Stack Temperature	°C	118
4.	Ambient Temperature	°C	32
5.	Velocity	m/sec.	5.87
6.	Volumetric Flow Rate	$Nm^3/hr.$	233257.4
7.	Moisture	%	3.6
8.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	11.59	12.65	30	IS 11255 (Part 1):1985 RA 2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096

Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/E4/ST4
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih, Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Cement Mill
		Date of Sampling	19/05/2020
Sampling Done By	VIKRAM	Date of Sample Received	22/05/2020
Date of Analysis	22/05/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	29/05/2020	Location Co-ordinates	21°36'11" N 82°02'29" E
Time of Sampling	12: 00 PM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	42
2.	Diameter	Mt.	2.8
3.	Stack Temperature	°C	88
4.	Ambient Temperature	°C	33
5.	Velocity	m/sec.	6.84
6.	Volumetric Flow Rate	$Nm^3/hr.$	110659.94
7.	Moisture	%	3.9
8.	Stack Attached to	-	Bag House

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	14.46	15.49	30	IS 11255 (Part 1):1985 RA 2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/E4/ST5
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Raw mill &Kiln Line-2
		Date of Sampling	20/05/2020
Sampling Done By	VIKRAM	Date of Sample Received	22/05/2020
Date of Analysis	22/05/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	29/05/2020	Location Co-ordinates	21°36'07" N 82°02'29" E
Time of Sampling	12:00 PM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	175
2.	Diameter	Mt.	5.6
3.	Stack Temperature	°C	75
4.	Ambient Temperature	°C	33
5.	Velocity	m/sec.	5.15
6.	Type of fuel used	-	Coal/PC
7.	Volumetric Flow Rate	$Nm^3/hr.$	346050.49
8.	Moisture	%	5.0
9.	Stack Attached to	-	RABH

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	9.23	10.05	30	IS 11255 (Part 1):1985 RA2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	0	0	100	IS 11255 (Part 2):1985 RA2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	380.02	405.03	600	IS 11255 (Part 7):2005 RA2017

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/E4/ST7
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Coal Mill -II
		Date of Sampling	20/05/2020
Sampling Done By	VIKRAM	Date of Sample Received	22/05/2020
Date of Analysis	22/05/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	29/05/2020	Location Co-ordinates	21°36'02" N 82°02'27" E
Time of Sampling	09:30 AM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	68
2.	Diameter	Mt.	1.6
3.	Stack Temperature	°C	68
4.	Ambient Temperature	°C	35
5.	Velocity	m/sec.	8.40
6.	Volumetric Flow Rate	Nm3/hr.	46973
7.	Moisture	%	4.6
8.	Stack Attached to	-	Bag House

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm³	17.5	19.15	30	IS 11255 (Part 1):1985 RA 2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096

Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/E4/ST6
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Clinker Cooler Line-2
		Date of Sampling	20/05/2020
Sampling Done By	VIKRAM	Date of Sample Received	22/05/2020
Date of Analysis	22/05/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	29/05/2020	Location Co-ordinates	21°36'06" N 82°02'32" E
Time of Sampling	04:30 PM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	60
2.	Diameter	Mt.	4.3
3.	Stack Temperature	°C	87
4.	Ambient Temperature	°C	34
5.	Velocity	m/sec.	6.12
6.	Volumetric Flow Rate	$Nm^3/hr.$	164314.51
7.	Moisture	%	4.3
8.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	Opacity Meter Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	8.46	9.28	30	IS 11255 (Part 1):1985 RA2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/E4/ST8
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	CPP 25 MW
		Date of Sampling	19/05/2020
Sampling Done By	VIKRAM	Date of Sample Received	22/05/2020
Date of Analysis	22/05/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	29/05/2020	Location Co-ordinates	21°36'10" N 82°02'29" E
Time of Sampling	12:45 PM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	92.0
2.	Diameter	Mt.	3.67
3.	Stack Temperature	°C	115
4.	Ambient Temperature	°C	35
5.	Velocity	m/sec.	5.70
6.	Type of fuel used	-	Coal
7.	Volumetric Flow Rate	$Nm^3/hr.$	147368.58
8.	Moisture	%	5.0
9.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	Opacity Meter Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	23.71	25.7	50	IS 11255 (Part 1): 1985 RA 2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	461.6	507.4	600	IS 11255 (Part2): 1985 RA 2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	98.44	108.15	300	IS 11255 (Part 7): 2005 RA 2014
4.	Mercury (as Hg)	mg/Nm^3	-	0.002	0.03	LATS/80/2013-14 CPCB

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/JUNE-00/0158 **Date: 20/06/2020**

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/F2/SSP/ST7
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Raw mill &Kiln Line-1
		Date of Sampling	09/06/2020
Sampling Done By	Vikram	**Date of Sample Received**	11/06/2020
Date of Analysis	11/06/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	20/06/2020	**Location Co-ordinates**	21°36'10" N 82°02'29" E
Time of Sampling	12:00 PM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	150
2.	Diameter	Mt.	5.0
3.	Stack Temperature	°C	77
4.	Ambient Temperature	°C	33
5.	Velocity	m/sec.	5.52
6.	Type of fuel used	-	Coal/PC
7.	Volumetric Flow Rate	$Nm^3/hr.$	293828.86
8.	Moisture	%	5.3
9.	Stack Attached to	-	RABH

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	10.14	10.75	30	IS 11255 (Part 1):1985 RA2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	0	0	100	IS 11255 (Part 2):1985 RA2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	331.26	350.39	600	IS 11255 (Part 7):2005 RA2017

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GCI/V/LAB/EM-G0121/19-SP/19-20/June-00/0/0158 Date: 20/06/2020

ANALYSIS REPORT

(For the Month of June-2020)

Client Details			Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT		Sample Code	GCI/V/20/F2/SSP/ST6
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001		Location	Coal mill Line-1
			Date of Sampling	09/06/2020
Sampling Done By		Vikram	Date of Sample Received	11/06/2020
Date of Analysis		11/06/2020	Sampling Method0	Isokinetic Sampling, IS:11255, PART-1
Date of Completion		20/06/2020	Location Co-ordinates	21°36'05" N 82°02'26" E
Time of Sampling		11:00 AM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	68
2.	Diameter	Mt.	1.6
3.	Stack Temperature	°C	64
4.	Ambient Temperature	°C	24
5.	Velocity	m/sec.	7.61
6.	Volumetric Flow Rate	$Nm^3/hr.$	42214.26
7.	Moisture	%	5.3
8.	Stack Attached to	-	Bag house

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	18.3	19.06	30	IS 11255 (Part 1):1985 RA 2014

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GCI/V/LAB/EM-G0121/19-SP/19-20/June-00/0158

Date: 20/06/2020

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/F2/SSP /ST5
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Clinker Cooler Line-1
		Date of Sampling	09/06/2020
Sampling Done By	Vikram	Date of Sample Received	11/06/2020
Date of Analysis	11/06/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	20/06/2020	Location Co-ordinates	21°36'11" N 82°02'31" E
Time of Sampling	04:25 PM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	55
2.	Diameter	Mt.	4.3
3.	Stack Temperature	°C	104
4.	Ambient Temperature	°C	37
5.	Velocity	m/sec.	4.92
6.	Volumetric Flow Rate	$Nm^3/hr.$	180092.09
7.	Moisture	%	3.6
8.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	11.93	13.10	30	IS 11255 (Part I):1985 RA 2014

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GCI/V/LAB/EM-G0121/19-SP/19-20/June-00/0/0158

Date: 20/06/2020

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/F2/SSP /ST2
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Cement Mill
		Date of Sampling	10/06/2020
Sampling Done By	Vikram	Date of Sample Received	12/06/2020
Date of Analysis	12/06/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-I
Date of Completion	20/06/2020	Location Co-ordinates	21°36'11" N 82°02'29" E
Time of Sampling	11: 00 AM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	42
2.	Diameter	Mt.	2.8
3.	Stack Temperature	°C	95
4.	Ambient Temperature	°C	31
5.	Velocity	m/sec.	6.92
6.	Volumetric Flow Rate	$Nm^3/hr.$	109859.04
7.	Moisture	%	3.9
8.	Stack Attached to	-	Bag House

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	16.7	16.89	30	IS 11255 (Part 1):1985 RA 2014

GREEN CIRCLE INC. BARODA

Authorized Signatory

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GCI/V/LAB/EM-G0121/19-SP/19-20/June-00/0/0158

Date: 20/06/2020

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/F2/SSP /ST9
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Raw mill &Kiln Line-2
		Date of Sampling	12/06/2020
Sampling Done By	Vikram	Date of Sample Received	15/06/2020
Date of Analysis	15/06/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	20/06/2020	Location Co-ordinates	21°36'07" N 82°02'29" E
Time of Sampling	12:15 PM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	175
2.	Diameter	Mt.	5.6
3.	Stack Temperature	°C	130
4.	Ambient Temperature	°C	30
5.	Velocity	m/sec.	8.23
6.	Type of fuel used	-	Coal/PC
7.	Volumetric Flow Rate	$Nm^3/hr.$	476588.55
8.	Moisture	%	5.0
9.	Stack Attached to	-	RABH

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	15.17	15.81	30	IS 11255 (Part 1):1985 RA2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	0	0	100	IS 11255 (Part 2):1985 RA2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	407.4	430.92	600	IS 11255 (Part 7):2005 RA2017

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GCI/V/LAB/EM-G0121/19-SP/19-20/June-00/0158

Date: 20/06/2020

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/F2/SSP /ST1
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Coal Mill –II
		Date of Sampling	12/06/2020
Sampling Done By	Vikram	Date of Sample Received	15/06/2020
Date of Analysis	15/06/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	20/06/2020	Location Co-ordinates	21°36'02" N 82°02'27" E
Time of Sampling	02:50 PM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	68
2.	Diameter	Mt.	1.6
3.	Stack Temperature	°C	60
4.	Ambient Temperature	°C	33
5.	Velocity	m/sec.	6.32
6.	Volumetric Flow Rate	Nm3/hr.	35361.31
7.	Moisture	%	4.6
8.	Stack Attached to	-	Bag House

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm³	18.33	20.09	30	IS 11255 (Part 1):1985 RA 2014

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GCI/V/LAB/EM-G0121/19-SP/19-20/June-00/0158

Date: 20/06/2020

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/F2/SSP/ST8
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih, Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Clinker Cooler Line-2
		Date of Sampling	11/06/2020
Sampling Done By	Vikram	Date of Sample Received	13/06/2020
Date of Analysis	13/06/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	20/06/2020	Location Co-ordinates	21°36'06" N 82°02'32" E
Time of Sampling	09:00 AM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	60
2.	Diameter	Mt.	4.3
3.	Stack Temperature	°C	70
4.	Ambient Temperature	°C	29
5.	Velocity	m/sec.	4.74
6.	Volumetric Flow Rate	$Nm^3/hr.$	190507.80
7.	Moisture	%	4.3
8.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	Opacity Meter Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	12.17	12.92	30	IS 11255 (Part 1):1985 RA2014

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GCI/V/LAB/EM-G0121/19-SP/19-20/June-00/0158

Date: 20/06/2020

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/F2/SSP/ST10
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	CPP 25 MW
		Date of Sampling	12/06/2020
Sampling Done By	Vikram	Date of Sample Received	15/06/2020
Date of Analysis	15/06/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	20/06/2020	Location Co-ordinates	21°36'10" N 82°02'29" E
Time of Sampling	09:30 AM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	92.0
2.	Diameter	Mt.	3.67
3.	Stack Temperature	°C	110
4.	Ambient Temperature	°C	28
5.	Velocity	m/sec.	5.52
6.	Type of fuel used	-	Coal
7.	Volumetric Flow Rate	$Nm^3/hr.$	147438.51
8.	Moisture	%	5.0
9.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	Opacity Meter Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	26.29	27.92	50	IS 11255 (Part 1): 1985 RA 2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	408.24	440.24	600	IS 11255 (Part2): 1985 RA 2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	128.4	135.15	300	IS 11255 (Part 7): 2005 RA 2014
4.	Mercury (as Hg)	mg/Nm^3	-	0.002	0.03	LATS/80/2013-14 CPCB

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/July-00/0207 Date: 16/07/2020

ANALYSIS REPORT

(For the Month of July-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/G2/SSP /ST9
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Location	Raw mill &Kiln Line-2
		Date of Sampling	08/07/2020
Sampling Done By	GCI REPRESENTATIVE	Date of Sample Received	11/07/2020
Date of Analysis	11/07/2020	Sampling Method	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	16/07/2020	Location Co-ordinates	21°36'07" N 82°02'29" E
Time of Sampling	03:00 PM	Stack Shape at Top	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	175
2.	Diameter	Mt.	5.6
3.	Stack Temperature	°C	130
4.	Ambient Temperature	°C	30
5.	Velocity	m/sec.	8.23
6.	Type of fuel used	-	Coal/PC
7.	Volumetric Flow Rate	$Nm^3/hr.$	476588.55
8.	Moisture	%	5.0
9.	Stack Attached to	-	RABH

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	13.14	14.18	30	IS 11255 (Part 1):1985 RA2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	0	0	100	IS 11255 (Part 2):1985 RA2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	337.01	369.45	600	IS 11255 (Part 7):2005 RA2017

GREEN CIRCLE INC. BALODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/July-00/0207 **Date: 16/07/2020**

ANALYSIS REPORT

(For the Month of July-2020)

Client Details			Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT		**Sample Code**	GCI/V/20/G2/SSP/ST1
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001		**Location**	Coal Mill -II
			Date of Sampling	09/07/2020
Sampling Done By		GCI REPRESENTATIVE	**Date of Sample Received**	11/07/2020
Date of Analysis		11/07/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1
Date of Completion		16/07/2020	**Location Co-ordinates**	21°36'02" N 82°02'27" E
Time of Sampling		10:00 AM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	68
2.	Diameter	Mt.	1.6
3.	Stack Temperature	°C	60
4.	Ambient Temperature	°C	33
5.	Velocity	m/sec.	6.32
6.	Volumetric Flow Rate	Nm3/hr.	35361.31
7.	Moisture	%	4.6
8.	Stack Attached to	-	Bag House

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm³	19.7	18.36	30	IS 11255 (Part 1):1985 RA 2014

GREEN CIRCLE INC. AHMEDABAD

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/July-00/0207 **Date: 16/07/2020**

ANALYSIS REPORT

(For the Month of July-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/G2/SSP/ST8
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Clinker Cooler Line-2
		Date of Sampling	08/07/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	11/07/2020
Date of Analysis	11/07/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	16/07/2020	**Location Co-ordinates**	21°36'06" N 82°02'32" E
Time of Sampling	11:30 AM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	60
2.	Diameter	Mt.	4.3
3.	Stack Temperature	°C	70
4.	Ambient Temperature	°C	29
5.	Velocity	m/sec.	4.74
6.	Volumetric Flow Rate	$Nm^3/hr.$	190507.80
7.	Moisture	%	4.3
8.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	Opacity Meter Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	10.5	11.47	30	IS 11255 (Part 1):1985 RA2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/July-00/0207 **Date: 16/07/2020**

ANALYSIS REPORT

(For the Month of July-2020)

Client Details			Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT		**Sample Code**	GCI/V/20/G2/SSP/ST2
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001		**Location**	Cement Mill
			Date of Sampling	09/07/2020
Sampling Done By		GCI REPRESENTATIVE	**Date of Sample Received**	11/07/2020
Date of Analysis		11/07/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1
Date of Completion		16/07/2020	**Location Co-ordinates**	21°36'11" N 82°02'29" E
Time of Sampling		09: 00 AM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	42
2.	Diameter	Mt.	2.8
3.	Stack Temperature	°C	95
4.	Ambient Temperature	°C	31
5.	Velocity	m/sec.	6.92
6.	Volumetric Flow Rate	$Nm^3/hr.$	109859.04
7.	Moisture	%	3.9
8.	Stack Attached to	-	Bag House

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	17.41	18.36	30	IS 11255 (Part 1):1985 RA 2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/July-00/ 0207 **Date: 16/07/2020**

ANALYSIS REPORT

(For the Month of July-2020)

Client Details			Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT		**Sample Code**	GCI/V/20/G2/SSP /ST10
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001		**Location**	CPP 25 MW
			Date of Sampling	08/07/2020
Sampling Done By		GCI REPRESENTATIVE	**Date of Sample Received**	11/07/2020
Date of Analysis		11/07/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion		16/07/2020	**Location Co-ordinates**	21°36'10" N 82°02'29" E
Time of Sampling		09:45 AM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	92.0
2.	Diameter	Mt.	3.67
3.	Stack Temperature	°C	110
4.	Ambient Temperature	°C	28
5.	Velocity	m/sec.	5.52
6.	Type of fuel used	-	Coal
7.	Volumetric Flow Rate	$Nm^3/hr.$	147438.51
8.	Moisture	%	5.0
9.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	Opacity Meter Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	37.16	38.17	50	IS 11255 (Part 1): 1985 RA 2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	358.12	370.21	600	IS 11255 (Part2): 1985 RA 2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	160.41	165.71	300	IS 11255 (Part 7): 2005 RA 2014
4.	Mercury (as Hg)	mg/Nm^3	-	0.004	0.03	LATS/80/2013-14 CPCB

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/August-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client Details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/H4/SSP /ST2
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Cement Mill
		Date of Sampling	20/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Date of Analysis	23/08/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	28/08/2020	**Location Co-ordinates**	21°36'11" N 82°02'29" E
Time of Sampling	10: 00 AM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	42
2.	Diameter	Mt.	2.8
3.	Stack Temperature	°C	91
4.	Ambient Temperature	°C	28
5.	Velocity	m/sec.	6.60
6.	Volumetric Flow Rate	$Nm^3/hr.$	106022.33
7.	Moisture	%	2.8
8.	Stack Attached to	-	Bag House

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	18.01	17.36	30	IS 11255 (Part 1):1985 RA 2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/August-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/H4/SSP /ST9
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Raw mill &Kiln Line-2
		Date of Sampling	20/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Date of Analysis	23/08/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	28/08/2020	**Location Co-ordinates**	21°36'07" N 82°02'29" E
Time of Sampling	11:15 AM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	175
2.	Diameter	Mt.	5.6
3.	Stack Temperature	°C	125
4.	Ambient Temperature	°C	25
5.	Velocity	m/sec.	9.47
6.	Type of fuel used	-	Coal/PC
7.	Volumetric Flow Rate	$Nm^3/hr.$	446721.32
8.	Moisture	%	4.0
9.	Stack Attached to	-	RABH

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	8.36	9.2	30	IS 11255 (Part 1):1985 RA2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	0	0	100	IS 11255 (Part 2):1985 RA2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	436.73	470.4	600	IS 11255 (Part 7):2005 RA2017

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/August-00/219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/H4/SSP /ST8
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Clinker Cooler Line-2
		Date of Sampling	20/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Date of Analysis	23/08/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	28/08/2020	**Location Co-ordinates**	21°36'06" N 82°02'32" E
Time of Sampling	03:30 PM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	60
2.	Diameter	Mt.	4.3
3.	Stack Temperature	°C	70
4.	Ambient Temperature	°C	24
5.	Velocity	m/sec.	5.75
6.	Volumetric Flow Rate	$Nm^3/hr.$	230991.08
7.	Moisture	%	3.3
8.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	Opacity Meter Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	16.32	15.34	30	IS 11255 (Part 1):1985 RA2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/August-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client Details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/H4/SSP /ST1
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Coal Mill -II
		Date of Sampling	20/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Date of Analysis	23/08/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	28/08/2020	**Location Co-ordinates**	21°36'02" N 82°02'27" E
Time of Sampling	09:30 AM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	68
2.	Diameter	Mt.	1.6
3.	Stack Temperature	°C	72
4.	Ambient Temperature	°C	30
5.	Velocity	m/sec.	6.03
6.	Volumetric Flow Rate	Nm3/hr.	33378.92
7.	Moisture	%	3.1
8.	Stack Attached to	-	Bag House

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	16.51	17.21	30	IS 11255 (Part 1):1985 RA 2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/August-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client Details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/H4/SSP /ST10
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	CPP 25 MW
		Date of Sampling	20/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Date of Analysis	23/08/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	28/08/2020	**Location Co-ordinates**	21°36'10" N 82°02'29" E
Time of Sampling	03:00 PM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	92.0
2.	Diameter	Mt.	3.67
3.	Stack Temperature	°C	115
4.	Ambient Temperature	°C	27
5.	Velocity	m/sec.	5.93
6.	Type of fuel used	-	Coal
7.	Volumetric Flow Rate	$Nm^3/hr.$	143499.51
8.	Moisture	%	4.1
9.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	Opacity Meter Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	23.70	25.41	50	IS 11255 (Part 1): 1985 RA 2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	245.11	267.55	600	IS 11255 (Part2): 1985 RA 2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	161.51	170.67	300	IS 11255 (Part 7): 2005 RA 2014
4.	Mercury (as Hg)	mg/Nm^3	-	0.003	0.03	LATS/80/2013-14 CPCB

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/ September -000258/ **Date: 19/09/2020**

ANALYSIS REPORT

(For the Month of September- 2020)

Client Details			Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT		**Sample Code**	GCI/V/20/I2/SSP/ST7
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001		**Location**	Raw mill &Kiln Line-1
			Date of Sampling	09/09/2020
Sampling Done By		GCI REPRESENTATIVE	**Date of Sample Received**	12/09/2020
Date of Analysis		12/09/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion		19/09/2020	**Location Co-ordinates**	21°36'10" N 82°02'29" E
Time of Sampling		10:00 AM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	150
2.	Diameter	Mt.	5.0
3.	Stack Temperature	°C	75
4.	Ambient Temperature	°C	30
5.	Velocity	m/sec.	5.65
6.	Type of fuel used	-	Coal/PC
7.	Volumetric Flow Rate	$Nm^3/hr.$	302488.24
8.	Moisture	%	4.3
9.	Stack Attached to	-	RABH

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	9.57	10.49	30	IS 11255 (Part 1):1985 RA2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	0	0	100	IS 11255 (Part 2):1985 RA2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	436.0	450.30	600	IS 11255 (Part 7):2005 RA2017

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/ September -000258/ **Date: 19/09/2020**

ANALYSIS REPORT

(For the Month of September- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/I2/SSP/ST5
Address	(A Unit of M/s.Shree Cement Ltd), Village – Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Clinker Cooler Line-1
		Date of Sampling	09/09/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	12/09/2020
Date of Analysis	12/09/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	19/09/2020	**Location Co-ordinates**	21°36'11" N 82°02'31" E
Time of Sampling	12:00 PM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	55
2.	Diameter	Mt.	4.3
3.	Stack Temperature	°C	130
4.	Ambient Temperature	°C	30
5.	Velocity	m/sec.	6.95
6.	Volumetric Flow Rate	$Nm^3/hr.$	211514.15
7.	Moisture	%	3.7
8.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	11.12	12.20	30	IS 11255 (Part 1):1985 RA 2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/ September -000258/ **Date: 19/09/2020**

ANALYSIS REPORT

(For the Month of September- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/I2/SSP/ST6
Address	(A Unit of M/s.Shree Cement Ltd), Village – Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Coal mill Line-1
		Date of Sampling	09/09/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	12/09/2020
Date of Analysis	12/09/2020	**Sampling Method0**	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	19/09/2020	**Location Co-ordinates**	21°36'05" N 82°02'26" E
Time of Sampling	11:00 AM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	68
2.	Diameter	Mt.	1.6
3.	Stack Temperature	°C	64
4.	Ambient Temperature	°C	24
5.	Velocity	m/sec.	5.85
6.	Volumetric Flow Rate	$Nm^3/hr.$	32494.71
7.	Moisture	%	4.3
8.	Stack Attached to	-	Bag house

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	19.14	20.15	30	IS 11255 (Part 1):1985 RA 2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/ September -000258/ **Date: 19/09/2020**

ANALYSIS REPORT

(For the Month of September- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/I2/SSP /ST2
Address	(A Unit of M/s.Shree Cement Ltd), Village – Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Cement Mill
		Date of Sampling	09/09/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	12/09/2020
Date of Analysis	12/09/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	19/09/2020	**'Location Co-ordinates**	21°36'11" N 82°02'29" E
Time of Sampling	03: 30 PM	**Stack Shape at Top**	Round-

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	42
2.	Diameter	Mt.	2.8
3.	Stack Temperature	°C	92
4.	Ambient Temperature	°C	22
5.	Velocity	m/sec.	5.99
6.	Volumetric Flow Rate	$Nm^3/hr.$	95874.92
7.	Moisture	%	3.1
8.	Stack Attached to	-	Bag House

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	16.13	17.24	30	IS 11255 (Part 1):1985 RA 2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/ September -000258/ **Date: 19/09/2020**

ANALYSIS REPORT

(For the Month of September- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/I2/SSP /ST9
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Raw mill &Kiln Line-2
		Date of Sampling	10/09/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	12/09/2020
Date of Analysis	12/09/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	19/09/2020	**Location Co-ordinates**	21°36'07" N 82°02'29" E
Time of Sampling	11:10 AM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	175
2.	Diameter	Mt.	5.6
3.	Stack Temperature	°C	72
4.	Ambient Temperature	°C	32
5.	Velocity	m/sec.	5.17
6.	Type of fuel used	-	Coal/PC
7.	Volumetric Flow Rate	$Nm^3/hr.$	350184.70
8.	Moisture	%	4.0
9.	Stack Attached to	-	RABH

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	13.25	14.50	30	IS 11255 (Part 1):1985 RA2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	0	0	100	IS 11255 (Part 2):1985 RA2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	329.28	355.64	600	IS 11255 (Part 7):2005 RA2017

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/ September -000258/ **Date: 19/09/2020**

ANALYSIS REPORT

(For the Month of September- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/I2/SSP/ST8
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Clinker Cooler Line-2
		Date of Sampling	10/09/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	12/09/2020
Date of Analysis	12/09/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	19/09/2020	**Location Co-ordinates**	21°36'06" N 82°02'32" E
Time of Sampling	12:30 PM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	60
2.	Diameter	Mt.	4.3
3.	Stack Temperature	°C	112
4.	Ambient Temperature	°C	25
5.	Velocity	m/sec.	6.44
6.	Volumetric Flow Rate	$Nm^3/hr.$	230727.39
7.	Moisture	%	3.3
8.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	Opacity Meter Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	11.34	11.80	30	IS 11255 (Part 1):1985 RA2014

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ANALYSIS REPORT

(For the Month of September- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/I2/SSP /ST1
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	Coal Mill -II
		Date of Sampling	10/09/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	12/09/2020
Date of Analysis	12/09/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1
Date of Completion	19/09/2020	**Location Co-ordinates**	21°36'02" N 82°02'27" E
Time of Sampling	04:00 PM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	68
2.	Diameter	Mt.	1.6
3.	Stack Temperature	°C	72
4.	Ambient Temperature	°C	24
5.	Velocity	m/sec.	6.35
6.	Volumetric Flow Rate	Nm3/hr.	35083.39
7.	Moisture	%	3.6
8.	Stack Attached to	-	Bag House

Sr. No.	Parameters	Unit	CEMS Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm³	18.44	19.15	30	IS 11255 (Part 1):1985 RA 2014

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/ September -000258/ **Date: 19/09/2020**

ANALYSIS REPORT

(For the Month of September- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/I2/SSP/ST10
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Location**	CPP 25 MW
		Date of Sampling	09/09/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	12/09/2020
Date of Analysis	12/09/2020	**Sampling Method**	Isokinetic Sampling, IS:11255, PART-1,2,3
Date of Completion	19/09/2020	**Location Co-ordinates**	21°36'10" N 82°02'29" E
Time of Sampling	09:30 AM	**Stack Shape at Top**	Round

STACK MONITORING ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results
1.	Stack Height	Mt.	92.0
2.	Diameter	Mt.	3.67
3.	Stack Temperature	°C	131
4.	Ambient Temperature	°C	30
5.	Velocity	m/sec.	4.67
6.	Type of fuel used	-	Coal
7.	Volumetric Flow Rate	$Nm^3/hr.$	116062.78
8.	Moisture	%	2.9.0
9.	Stack Attached to	-	ESP

Sr. No.	Parameters	Unit	Opacity Meter Reading	Results	Norms	Reference Method
1.	Particulate Matter	mg/Nm^3	33.9	35.42	50	IS 11255 (Part 1): 1985 RA 2014
2.	Sulphur Dioxide (as SO_2)	mg/Nm^3	318.3	349.23	600	IS 11255 (Part2): 1985 RA 2014
3.	Oxides of Nitrogen (as NO_2)	mg/Nm^3	102.17	111.58	300	IS 11255 (Part 7): 2005 RA 2014
4.	Mercury (as Hg)	mg/Nm^3	-	0.002	0.03	LATS/80/2013-14 CPCB

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Annexure - 3

Shree Raipur Cement Plant
(A Unit of Shree Cement ltd)
CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT (MONTHLY AVERAGE)

Location	Parameters	Norms	Unit	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
AAQMS 1 (Mines boundary towards village Bharuwadih)	PM_{10}	100	µg/m3	57.40	54.02	45.64	37.49	28.29	43.12
	$PM_{2.5}$	60		24.83	26.27	24.96	18.43	14.05	24.16
	SO_2	80		12.06	11.81	10.36	10.22	10.60	10.66
	NO_2	80		11.13	10.90	9.56	9.44	9.77	9.84
AAQMS 2 (Mines boundary towards villageSemradih)	PM_{10}	100		22.65	55.61	Not in Operation			
	$PM_{2.5}$	60		13.18	26.53				
	SO_2	80		22.10	11.76				
	NO_2	80		20.51	7.84				
AAQMS 3 (Plant Boundary towards South Diection)	PM_{10}	100		46.64	58.77	42.58	30.30	21.99	38.63
	$PM_{2.5}$	60		21.85	29.56	25.55	18.97	11.35	21.38
	SO_2	80		12.14	12.35	12.59	12.39	12.61	12.69
	NO_2	80		9.11	9.26	9.45	9.30	9.46	9.52
AAQMS 4 (Plant Boundary towards village Khapradih)	PM_{10}	100		42.07	41.22	30.02	37.68	28.69	43.69
	$PM_{2.5}$	60		22.77	24.78	22.09	18.22	13.45	23.26
	SO_2	80		10.04	9.12	22.04	7.71	5.36	5.21
	NO_2	80		6.45	6.13	6.22	6.23	3.93	0.96

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(ISO 9001, 14001 & OHSAS 18001 Certified Organisation)

Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/JUNE-00/0158 **Date: 20/06/2020**

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/F2/AA1
		Location	Nr. Bharuadih
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Quantity**	N/A
		Instrument	RDS, FPS, Bladder
		Sampling duration	24 Hrs.
Sampling Done By	Mr. Vikram	**Date of Sampling**	10/06/2020
Analysis Started Date	12/06/2020	**Date of Sample Receiving**	12/06/2020
Analysis Completion Date	20/06/2020	**Sampling Method**	IS 5182: Part – 5: 1975

AMBIENT AIR QUALITY MONITORING RESULTS

Sr. No	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1.	Particulate Matter (PM_{10})	$\mu g/m^3$	57.12	100	Gravimetric Method
2.	Particulate Matter ($PM_{2.5}$)	$\mu g/m^3$	32.6	60	Gravimetric Method
3.	Sulphur dioxide (SO_2)	$\mu g/m^3$	11.08	80	Improved West and Geake
4.	Nitrogen Dioxide (NO2)	$\mu g/m^3$	10.23	80	Modified Jacob and Hoehheiser
5.	Carbon Monoxide CO	mg/m^3	0.51	2.0	Non Dispersive infra-red spectroscope
6.	Ozone as O_3	$\mu g/m^3$	<1.0	100	Chemical Method (By U.V Visible Spectrophotometer)
7.	Lead as Pb	$\mu g/m^3$	<0.05	1.0	By AAS method
8.	Nickel as Ni	ng/m^3	<1.0	20	By AAS method
9.	Arsenic as As	ng/m^3	<5.0	6.0	By AAS method
10.	Ammonia as NH_3	$\mu g/m^3$	<10	400	Indophenol Blue Method (By U.V Visible Spectrophotometer)
11.	Benzene , C_6H_6	$\mu g/m^3$	<0.5	5.0	Gas Chromatography
12.	Benzo (a) Pyrene	ng/m^3	<0.05	1.0	Solvent extraction followed by GC

Remark: Results are within limit as per NAAQS Guideline.

Authorized Signatory

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/JUNE-00/0158 Date: 20/06/2020

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/F2/AA2
		Location	Nr. Semaradih
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Quantity	N/A
		Instrument	RDS, FPS, Bladder
		Sampling duration	24 Hrs.
Sampling Done By	Mr. Pragnesh	Date of Sampling	10/06/2020
Analysis Started Date	12/06/2020	Date of Sample Receiving	12/06/2020
Analysis Completion Date	20/06/2020	Sampling Method	IS 5182: Part – 5: 1975

AMBIENT AIR QUALITY MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1.	Particulate Matter (PM_{10})	$\mu g/m^3$	60.2	100	Gravimetric Method
2.	Particulate Matter ($PM_{2.5}$)	$\mu g/m^3$	29.3	60	Gravimetric Method
3.	Sulphur dioxide (SO_2)	$\mu g/m^3$	8.6	80	Improved West and Geake
4.	Nitrogen Dioxide (NO2)	$\mu g/m^3$	10.5	80	Modified Jacob and Hoehheiser
5.	Carbon Monoxide CO	mg/m^3	0.26	2.0	Non Dispersive infra-red spectroscope
6.	Ozone as O_3	$\mu g/m^3$	<1.0	100	Chemical Method (By U.V Visible Spectrophotometer)
7.	Lead as Pb	$\mu g/m^3$	<0.05	1.0	By AAS method
8.	Nickel as Ni	ng/m^3	<1.0	20	By AAS method
9.	Arsenic as As	ng/m^3	<5.0	6.0	By AAS method
10.	Ammonia as NH_3	$\mu g/m^3$	<10	400	Indophenol Blue Method (By U.V Visible Spectrophotometer)
11.	Benzene , C_6H_6	$\mu g/m^3$	<0.5	5.0	Gas Chromatography
12.	Benzo (a) Pyrene	ng/m^3	<0.05	1.0	Solvent extraction followed by GC

Remark: Results are within limit as per NAAQS Guideline.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/JUNE-00/0158

Date: 20/06/2020

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/F2/AA3
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Location	Nr. RMS
		Quantity	N/A
		Instrument	RDS, FPS, Bladder
		Sampling duration	24 Hrs.
Sampling Done By	Mr. Pragnesh	Date of Sampling	10/06/2020
Analysis Started Date	12/06/2020	Date of Sample Receiving	12/06/2020
Analysis Completion Date	20/06/2020	Sampling Method	IS 5182: Part – 5: 1975

AMBIENT AIR QUALITY MONITORING RESULTS

Sr. No	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1.	Particulate Matter (PM_{10})	$\mu g/m^3$	55.6	100	Gravimetric Method
2.	Particulate Matter ($PM_{2.5}$)	$\mu g/m^3$	30.1	60	Gravimetric Method
3.	Sulphur dioxide (SO_2)	$\mu g/m^3$	8.14	80	Improved West and Geake
4.	Nitrogen Dioxide (NO_2)	$\mu g/m^3$	12.4	80	Modified Jacob and Hoehheiser
5.	Carbon Monoxide CO	mg/m^3	0.51	2.0	Non Dispersive infra-red spectroscope
6.	Ozone as O_3	$\mu g/m^3$	<1.0	100	Chemical Method (By U.V Visible Spectrophotometer)
7.	Lead as Pb	$\mu g/m^3$	<0.05	1.0	By AAS method
8.	Nickel as Ni	ng/m^3	<1.0	20	By AAS method
9.	Arsenic as As	ng/m^3	<5.0	6.0	By AAS method
10.	Ammonia as NH_3	$\mu g/m^3$	<10	400	Indophenol Blue Method (By U.V Visible Spectrophotometer)
11.	Benzene , C_6H_6	$\mu g/m^3$	<0.5	5.0	Gas Chromatography
12.	Benzo (a) Pyrene	ng/m^3	<0.05	1.0	Solvent extraction followed by GC

Remark: Results are within limit as per NAAQS Guideline.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/JUNE-00/0158 Date: 20/06/2020

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/F2/AA4
		Location	Nr. Kharpradih
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Quantity	N/A
		Instrument	RDS, FPS, Bladder
		Sampling duration	24 Hrs.
Sampling Done By	Mr. Vikram	Date of Sampling	10/06/2020
Analysis Started Date	12/06/2020	Date of Sample Receiving	12/06/2020
Analysis Completion Date	20/06/2020	Sampling Method	IS 5182: Part – 5: 1975

AMBIENT AIR QUALITY MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1.	Particulate Matter (PM_{10})	$\mu g/m^3$	60.35	100	Gravimetric Method
2.	Particulate Matter ($PM_{2.5}$)	$\mu g/m^3$	29.62	60	Gravimetric Method
3.	Sulphur dioxide (SO_2)	$\mu g/m^3$	12.31	80	Improved West and Geake
4.	Nitrogen Dioxide (NO2)	$\mu g/m^3$	7.68	80	Modified Jacob and Hoehheiser
5.	Carbon Monoxide CO	mg/m^3	0.31	2.0	Non Dispersive infra-red spectroscope
6.	Ozone as O_3	$\mu g/m^3$	<1.0	100	Chemical Method (By U.V Visible Spectrophotometer)
7.	Lead as Pb	$\mu g/m^3$	<0.05	1.0	By AAS method
8.	Nickel as Ni	ng/m^3	<1.0	20	By AAS method
9.	Arsenic as As	ng/m^3	<5.0	6.0	By AAS method
10.	Ammonia as NH_3	$\mu g/m^3$	<10	400	Indophenol Blue Method (By U.V Visible Spectrophotometer)
11.	Benzene , C_6H_6	$\mu g/m^3$	<0.5	5.0	Gas Chromatography
12.	Benzo (a) Pyrene	ng/m^3	<0.05	1.0	Solvent extraction followed by GC

Remark: Results are within limit as per NAAQS Guideline.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/August-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August-2020)

Client Details			Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)		**Sample Code**	GCI/V/20/H4/AA1
			Location	Nr. Bharuadih
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332		**Quantity**	N/A
			Instrument	RDS, FPS, Bladder
			Sampling duration	24 Hrs.
Sampling Done By		Mr. Kartik	**Date of Sampling**	21/08/2020
Analysis Started Date		23/08/2020	**Date of Sample Receiving**	23/08/2020
Analysis Completion Date		28/08/2020	**Sampling Method**	IS 5182: Part – 5: 1975

AMBIENT AIR QUALITY MONITORING RESULTS

Sr. No	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1.	Particulate Matter (PM_{10})	$\mu g/m^3$	30.2	100	Gravimetric Method
2.	Particulate Matter ($PM_{2.5}$)	$\mu g/m^3$	13.24	60	Gravimetric Method
3.	Sulphur dioxide (SO_2)	$\mu g/m^3$	10.7	80	Improved West and Geake
4.	Nitrogen Dioxide (NO2)	$\mu g/m^3$	9.88	80	Modified Jacob and Hoehheiser
5.	Carbon Monoxide CO	mg/m^3	0.49	2.0	Non Dispersive infra-red spectroscope
6.	Ozone as O_3	$\mu g/m^3$	<1.0	100	Chemical Method (By U.V Visible Spectrophotometer)
7.	Lead as Pb	$\mu g/m^3$	<0.05	1.0	By AAS method
8.	Nickel as Ni	ng/m^3	<1.0	20	By AAS method
9.	Arsenic as As	ng/m^3	<5.0	6.0	By AAS method
10.	Ammonia as NH_3	$\mu g/m^3$	<10	400	Indophenol Blue Method (By U.V Visible Spectrophotometer)
11.	Benzene , C_6H_6	$\mu g/m^3$	<0.5	5.0	Gas Chromatography
12.	Benzo (a) Pyrene	ng/m^3	<0.05	1.0	Solvent extraction followed by GC

Remark: Results are within limit as per NAAQS Guideline.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/August-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/AA2
		Location	Nr. Semaradih
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Quantity**	N/A
		Instrument	RDS, FPS, Bladder
		Sampling duration	24 Hrs.
Sampling Done By	Mr. Kartik	**Date of Sampling**	21/08/2020
Analysis Started Date	23/08/2020	**Date of Sample Receiving**	23/08/2020
Analysis Completion Date	28/08/2020	**Sampling Method**	IS 5182: Part – 5: 1975

AMBIENT AIR QUALITY MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1.	Particulate Matter (PM_{10})	µg/m³	32.4	100	Gravimetric Method
2.	Particulate Matter ($PM_{2.5}$)	µg/m³	15.4	60	Gravimetric Method
3.	Sulphur dioxide (SO_2)	µg/m³	7.6	80	Improved West and Geake
4.	Nitrogen Dioxide (NO2)	µg/m³	9.5	80	Modified Jacob and Hoehheiser
5.	Carbon Monoxide CO	mg/m³	0.35	2.0	Non Dispersive infra-red spectroscope
6.	Ozone as O_3	µg/m³	<1.0	100	Chemical Method (By U.V Visible Spectrophotometer)
7.	Lead as Pb	µg/m³	<0.05	1.0	By AAS method
8.	Nickel as Ni	ng/m³	<1.0	20	By AAS method
9.	Arsenic as As	ng/m³	<5.0	6.0	By AAS method
10.	Ammonia as NH_3	µg/m³	<10	400	Indophenol Blue Method (By U.V Visible Spectrophotometer)
11.	Benzene , C_6H_6	µg/m³	<0.5	5.0	Gas Chromatography
12.	Benzo (a) Pyrene	ng/m³	<0.05	1.0	Solvent extraction followed by GC

Remark: Results are within limit as per NAAQS Guideline.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/August-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August-2020)

Client Details			**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)		**Sample Code**	GCI/V/20/H4/AA3
			Location	Nr. RMS
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332		**Quantity**	N/A
			Instrument	RDS, FPS, Bladder
			Sampling duration	24 Hrs.
Sampling Done By		Mr. Kartik	**Date of Sampling**	21/08/2020
			Date of Sample Receiving	23/08/2020
Analysis Started Date		23/08/2020		
Analysis Completion Date		28/08/2020	**Sampling Method**	IS 5182: Part – 5: 1975

AMBIENT AIR QUALITY MONITORING RESULTS

Sr. No	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1.	Particulate Matter (PM_{10})	µg/m³	32.4	100	Gravimetric Method
2.	Particulate Matter ($PM_{2.5}$)	µg/m³	15.9	60	Gravimetric Method
3.	Sulphur dioxide (SO_2)	µg/m³	7.41	80	Improved West and Geake
4.	Nitrogen Dioxide (NO_2)	µg/m³	9.61	80	Modified Jacob and Hoehheiser
5.	Carbon Monoxide CO	mg/m³	0.82	2.0	Non Dispersive infra-red spectroscope
6.	Ozone as O_3	µg/m³	<1.0	100	Chemical Method (By U.V Visible Spectrophotometer)
7.	Lead as Pb	µg/m³	<0.05	1.0	By AAS method
8.	Nickel as Ni	ng/m³	<1.0	20	By AAS method
9.	Arsenic as As	ng/m³	<5.0	6.0	By AAS method
10.	Ammonia as NH_3	µg/m³	<10	400	Indophenol Blue Method (By U.V Visible Spectrophotometer)
11.	Benzene , C_6H_6	µg/m³	<0.5	5.0	Gas Chromatography
12.	Benzo (a) Pyrene	ng/m³	<0.05	1.0	Solvent extraction followed by GC

Remark: Results are within limit as per NAAQS Guideline.

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ANALYSIS REPORT

(For the Month of August-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/AA4
		Location	Nr. Kharpradih
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Quantity**	N/A
		Instrument	RDS, FPS, Bladder
		Sampling duration	24 Hrs.
Sampling Done By	Mr. Kartik	**Date of Sampling**	21/08/2020
		Date of Sample Receiving	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	IS 5182: Part – 5: 1975

AMBIENT AIR QUALITY MONITORING RESULTS

Sr. No.	Parameters	Unit	Results	National Ambient Air Quality Standards (NAAQS) amended 2009	Reference Method
1.	Particulate Matter (PM_{10})	$\mu g/m^3$	36.86	100	Gravimetric Method
2.	Particulate Matter ($PM_{2.5}$)	$\mu g/m^3$	17.42	60	Gravimetric Method
3.	Sulphur dioxide (SO_2)	$\mu g/m^3$	5.36	80	Improved West and Geake
4.	Nitrogen Dioxide (NO2)	$\mu g/m^3$	6.47	80	Modified Jacob and Hoehheiser
5.	Carbon Monoxide CO	mg/m^3	0.35	2.0	Non Dispersive infra-red spectroscope
6.	Ozone as O_3	$\mu g/m^3$	<1.0	100	Chemical Method (By U.V Visible Spectrophotometer)
7.	Lead as Pb	$\mu g/m^3$	<0.05	1.0	By AAS method
8.	Nickel as Ni	ng/m^3	<1.0	20	By AAS method
9.	Arsenic as As	ng/m^3	<5.0	6.0	By AAS method
10.	Ammonia as NH_3	$\mu g/m^3$	<10	400	Indophenol Blue Method (By U.V Visible Spectrophotometer)
11.	Benzene , C_6H_6	$\mu g/m^3$	<0.5	5.0	Gas Chromatography
12.	Benzo (a) Pyrene	ng/m^3	<0.05	1.0	Solvent extraction followed by GC

Remark: Results are within limit as per NAAQS Guideline.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/JUNE-00/0158 Date: 20/06/2020

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/F2/FD1-FD4
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Location	As per table
		Date of Sampling	10/06/2020
Sample Received Date	12/06/2020	Sampling Instrument	High Volume Sampler
Analysis Starts on	12/06/2020	Sampling Method	IS 5182: Part – 5: 1975
Analysis Completion On	20/06/2020	Sampling Done By	GCI REPRESENTATIVE

FUGITIVE DUST MONITORING RESULTS

Sr. No.	Locations	Parameters	Results	Permissible Limit (µg/m3)
1.	L.S Crusher Load Center	Fugitive Dust (SPM)	2557	5,000
2.	Nr. Mines Way Bridge		2342	
3.	Nr. Packing Plant		3056	
4.	Nr. Coal Crusher Building		1241	2,000

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CORP. OFFICE & R & D : Green Empire (Anupushpam), Above AXIS Bank, Nr. Yash Complex, Gotri Main Road, Vadodara - 390 021 (Gujarat), INDIA.
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Annexure – 5

Shree Raipur Cement Plant
(A Unit of Shree Cement Ltd)
Installed Appropriate Air Pollution Control Devices

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

Annexure- 6

Shree Raipur Cement Plant
(A Unit of Shree Cement Ltd)
GROUND WATER LEVEL MONITORING REPORT (April-2020 to September-2020)

S.No.	Location → / Month ↓	Piezometer-1 AWLR-Near Old Mines Gate Level (M)	Piezometer-2 AWLR-Near Khapradih Gate (M)	Piezometer-3 AWLR-Near AAQMS-2 (Semradih Village) (M)	Piezometer-4 AWLR-Near AAQMS 3 (M)	Piezometer-5 AWLR-Near Crusher -1 (M)	Piezometer-6 AWLR-Near AAQMS-4 (Khapradih Village) (M)
1	Apr-20	12.69	17.04	19.10	10.53	14.00	28.19
2	May-20	12.42	17.20	19.82	10.85	13.45	26.20
3	Jun-20	10.25	15.25	16.35	11.20	11.73	23.96
4	Jul-20	1.97	5.47	15.80	9.54	5.63	14.35
5	Aug-20	1.18	4.30	4.63	8.32	5.16	12.24
6	Sep-20	0.79	2.22	1.36	8.41	5.01	8.49

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/May-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/E4/ DW1
Address	(A Unit of M/s. Shree Cement Ltd), Village – Khapradih, Dist: Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Batch/Location	Bore well Water Near CCR Building (B1)
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.4	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	134	600	APHA 2340 C
7	Iron as Fe	mg/L	0.06	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	82	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.1	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	418	2000	APHA 2540 C
12	Calcium	mg/L	93.6	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	42.7	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	89.6	600	APHA 2320
16	Ammonia Total	mg/L	0.13	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	3.1	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water specification.

GREEN CIRCLE INC. Shital

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/May-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/E4/DW1
Address	(A Unit of M/s. Shree Cement Ltd), Village –Khapradih, Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Batch/Location	Bore well Water Near CCR Building (B1)
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	0.05	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.001	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.01	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.02	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	11.8	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit, ND: Not detected

All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May- 2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW2
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Bore well Water Near Packing Plant (B2)
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.45	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	125	600	APHA 2340 C
7	Iron as Fe	mg/L	0.03	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	93.9	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	510	2000	APHA 2540 C
12	Calcium	mg/L	82.7	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	35.9	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	100	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	4.2	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW2
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Bore well Water Near Packing Plant (B2)
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	1.9	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit,ND: Not detected

All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC.

Authorized Signatory

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May- 2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW4
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Bore well Piezometer (P3) Near AAQMS 3
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.11	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	150	600	APHA 2340 C
7	Iron as Fe	mg/L	0.03	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	102.5	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	487	2000	APHA 2540 C
12	Calcium	mg/L	77.4	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	35.9	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	109	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	2.26	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW4
Address	Village –Khapradih, Tehsil – Simga, Dist: Balada Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Bore well Piezometer (P3) Near AAQMS 3
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	1.9	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit, ND: Not detected

All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC.

Authorized Signatory

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May- 2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW6
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Bore well Piezometer (P6) Near AAQMS-4 (Khapradih Village)
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	6.99	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	135	600	APHA 2340 C
7	Iron as Fe	mg/L	0.03	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	105.7	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	481	2000	APHA 2540 C
12	Calcium	mg/L	90.2	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	45.7	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	90.8	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	4.6	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. RAIPUR

Authorized Signatory

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GREEN CIRCLE, INC.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW6
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Bore well Piezometer (P6) Near AAQMS-4 (Khapradih Village)
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	1.9	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit, ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

GREEN CIRCLE, INC.

Integrated HSEQR Consulting Engineers, Scientists & Trainers
(Recognised By Ministry of Environment, Forest and Climate Change, New Delhi Under EPA 1986)
(No. Q - 1508 / 32 / 2007 - CPW)
(ISO 9001, 14001 & OHSAS 18001 Certified Organisation)

Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May- 2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW7
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Near Gram panchayat Bharuadih Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.74	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	167	600	APHA 2340 C
7	Iron as Fe	mg/L	0.03	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	95.2	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	504	2000	APHA 2540 C
12	Calcium	mg/L	85.4	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	47.1	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	95.5	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	4.19	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC

Authorized Signatory

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GREEN CIRCLE, INC.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 **Date: 29/05/2020**

ANALYSIS REPORT

(For the Month of May-2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/E4/DW7
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Bharuadih Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	**Date of Sample Received**	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	1.9	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit, ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC.

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 **Date: 29/05/2020**

ANALYSIS REPORT

(For the Month of May- 2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/E4/DW8
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Khapradih Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	**Date of Sample Received**	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	8.01	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	174	600	APHA 2340 C
7	Iron as Fe	mg/L	0.03	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	111	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	474	2000	APHA 2540 C
12	Calcium	mg/L	98.3	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	42.1	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	120	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	3.47	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW8
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Near Gram panchayat Khapradih Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	1.9	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit, ND: Not detected

All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 **Date: 29/05/2020**

ANALYSIS REPORT

(For the Month of May- 2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/E4/DW9
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Champa Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	**Date of Sample Received**	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	8.11	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	160	600	APHA 2340 C
7	Iron as Fe	mg/L	0.03	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	115	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	496	2000	APHA 2540 C
12	Calcium	mg/L	95.2	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	49.8	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	130	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	3.35	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW9
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Near Gram panchayat Champa Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	1.9	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit,ND: Not detected

All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

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- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
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GREEN CIRCLE, INC.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 **Date: 29/05/2020**

ANALYSIS REPORT

(For the Month of May- 2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/E4/DW10
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Sarseni Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	**Date of Sample Received**	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	8.25	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	172	600	APHA 2340 C
7	Iron as Fe	mg/L	0.03	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	200	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	520	2000	APHA 2540 C
12	Calcium	mg/L	106	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	54.7	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	154	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	2.69	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW10
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Near Gram panchayat Sarseni Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	1.9	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit, ND: Not detected

All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. RAIPUR

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
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GREEN CIRCLE, INC.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May- 2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW11
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Near Gram panchayat Semaradih Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.95	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	180	600	APHA 2340 C
7	Iron as Fe	mg/L	0.03	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	192	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	489	2000	APHA 2540 C
12	Calcium	mg/L	113	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	52.5	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	145	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	4.21	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

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(No. Q - 1508 / 32 / 2007 - CPW)
(ISO 9001, 14001 & OHSAS 18001 Certified Organisation)

Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW11
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Near Gram panchayat Semaradih Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	1.9	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit,ND: Not detected

All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May- 2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW12
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Near Gram panchayat Chandi Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.81	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	163	600	APHA 2340 C
7	Iron as Fe	mg/L	0.03	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	152	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	448	2000	APHA 2540 C
12	Calcium	mg/L	103	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	35.7	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	221	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	4.41	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/MAY-00/0096

Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	Sample Code	GCI/V/20/E4/DW12
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	Batch/Location	Near Gram panchayat Chandi Village
		Date of Sampling	20/05/2020
Sampling Done By	Pragnesh	Date of Sample Received	22/05/2020
Analysis Started Date	22/05/2020		
Analysis Completion Date	29/05/2020	Sampling Method	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	1.9	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit,ND: Not detected

All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/H4/SSP/ DW1
Address	(A Unit of M/s. Shree Cement Ltd), Village –Khapradih, Dist: Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Batch/Location**	Bore well Water Near CCR Building (B1)
		Date of Sampling	19/08/2020
Sampling Done By	GCI Representative	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.49	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	155	600	APHA 2340 C
7	Iron as Fe	mg/L	0.05	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	84	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.1	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	464	2000	APHA 2540 C
12	Calcium	mg/L	95.1	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	58.8	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	108	600	APHA 2320
16	Ammonia Total	mg/L	0.12	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	4.0	45	APHA4500 NO3- - B

ND: Note Detected
Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/H4/SSP /DW1
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Batch/Location**	Bore well Water Near CCR Building (B1)
		Date of Sampling	19/08/2020
Sampling Done By	GCI Representative	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.001	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.01	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.02	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	12.5	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit, ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client details			**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)		**Sample Code**	GCI/V/20/H4/SSP/DW2
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332		**Batch/Location**	Bore well Water Near Packing Plant (B2)
			Date of Sampling	19/08/2020
Sampling Done By		**GCI Representative**	**Date of Sample Received**	23/08/2020
Analysis Started Date		23/08/2020		
Analysis Completion Date		28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.75	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	136	600	APHA 2340 C
7	Iron as Fe	mg/L	0.02	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	99.9	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	528	2000	APHA 2540 C
12	Calcium	mg/L	89.7	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	41.5	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	119	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	5.0	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August-2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW2
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Bore well Water Near Packing Plant (B2)
		Date of Sampling	19/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	2.0	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit,ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW4
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Bore well Piezometer (P3) Near AAQMS 3
		Date of Sampling	19/08/2020
Sampling Done By	**GCI Representative**	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.58	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	164	600	APHA 2340 C
7	Iron as Fe	mg/L	0.02	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	106.5	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	564	2000	APHA 2540 C
12	Calcium	mg/L	85.4	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	45.3	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	115	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	2.52	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
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- Sample will be retained till one month from the date of sampling.

GREEN CIRCLE, INC.

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(No. Q - 1508 / 32 / 2007 - CPW)
(ISO 9001, 14001 & OHSAS 18001 Certified Organisation)

Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August-2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW4
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Bore well Piezometer (P3) Near AAQMS 3
		Date of Sampling	19/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	2.5	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit, ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
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GREEN CIRCLE, INC.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW5
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Bore well Piezometer (P5) Near Crusher -1
		Date of Sampling	19/08/2020
Sampling Done By	**GCI Representative**	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.54	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	172	600	APHA 2340 C
7	Iron as Fe	mg/L	0.01	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	124.9	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	439	2000	APHA 2540 C
12	Calcium	mg/L	86.3	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	61.3	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	105	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	3.92	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August-2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW5
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Bore well Piezometer (P5) Near Crusher -1
		Date of Sampling	19/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	2.5	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit,ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW6
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Bore well Piezometer (P6) Near AAQMS-4 (Khapradih Village)
		Date of Sampling	19/08/2020
Sampling Done By	**GCI Representative**	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.62	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	151	600	APHA 2340 C
7	Iron as Fe	mg/L	0.05	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	114.3	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	489	2000	APHA 2540 C
12	Calcium	mg/L	105.8	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	58.6	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	118	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	1.2	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August-2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW6
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Bore well Piezometer (P6) Near AAQMS-4 (Khapradih Village)
		Date of Sampling	19/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	2.7	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit, ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 26/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW7
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Bharuadih Village
		Date of Sampling	19/08/2020
Sampling Done By	**GCI Representative**	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.49	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	168	600	APHA 2340 C
7	Iron as Fe	mg/L	0.02	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	98.5	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	518	2000	APHA 2540 C
12	Calcium	mg/L	85.7	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	50.3	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	103.4	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	4.3	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August-2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW7
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Bharuadih Village
		Date of Sampling	19/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	2.9	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit, ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

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- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
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CORP. OFFICE & R & D : Green Empire (Anupushpam), Above AXIS Bank, Nr. Yash Complex, Gotri Main Road, Vadodara - 390 021 (Gujarat), INDIA.
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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW8
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Khapradih Village
		Date of Sampling	19/08/2020
Sampling Done By	**GCI Representative**	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.56	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	194	600	APHA 2340 C
7	Iron as Fe	mg/L	0.02	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	129	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	462	2000	APHA 2540 C
12	Calcium	mg/L	100.5	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	42.5	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	135	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	3.4	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August-2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW8
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Khapradih Village
		Date of Sampling	19/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	2.2	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit,ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
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- Sample will be retained till one month from the date of sampling.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW9
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Champa Village
		Date of Sampling	19/08/2020
Sampling Done By	**GCI Representative**	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.45	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	179	600	APHA 2340 C
7	Iron as Fe	mg/L	0.03	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	129	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	492	2000	APHA 2540 C
12	Calcium	mg/L	104.5	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	42.2	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	146	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	3.10	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August-2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW9
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Champa Village
		Date of Sampling	19/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	2.8	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit,ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client details			**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)		**Sample Code**	GCI/V/20/H4/DW10
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332		**Batch/Location**	Near Gram panchayat Sarseni Village
			Date of Sampling	19/08/2020
Sampling Done By		**GCI Representative**	**Date of Sample Received**	23/08/2020
Analysis Started Date		23/08/2020		
Analysis Completion Date		28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.35	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	188	600	APHA 2340 C
7	Iron as Fe	mg/L	0.02	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	216	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	518	2000	APHA 2540 C
12	Calcium	mg/L	106	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	65.2	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	162	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	3.62	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

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ANALYSIS REPORT

(For the Month of August-2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW10
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Sarseni Village
		Date of Sampling	19/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	3.2	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit,ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

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ANALYSIS REPORT

(For the Month of August- 2020)

Client details			Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)		**Sample Code**	GCI/V/20/H4/DW11
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332		**Batch/Location**	Near Gram panchayat Semaradih Village
			Date of Sampling	19/08/2020
Sampling Done By		**GCI Representative**	**Date of Sample Received**	23/08/2020
Analysis Started Date		23/08/2020		
Analysis Completion Date		28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.71	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	198	600	APHA 2340 C
7	Iron as Fe	mg/L	0.02	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	209	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	524	2000	APHA 2540 C
12	Calcium	mg/L	118	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	56.7	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	162	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	5.2	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August-2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW11
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Semaradih Village
		Date of Sampling	19/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	2.5	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit,ND: Not detected
All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/AUGUST-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW12
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Chandi Village
		Date of Sampling	19/08/2020
Sampling Done By	**GCI Representative**	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
1	Color	Hazen	<5	15	APHA 2120
2	Odour	-	Agreeable	Agreeable	APHA 2150
3	Turbidity	NTU	<1	5	APHA 2130
4	Taste	-	Agreeable	Agreeable	APHA 2160
5	pH	-	7.49	6.5-8.5	APHA 4500
6	Total Hardness as $CaCO_3$	mg/L	187	600	APHA 2340 C
7	Iron as Fe	mg/L	0.03	0.3	APHA 3111 – B
8	Chloride as Cl	mg/L	166	1000	APHA 4500 - Cl-
9	Residual Chlorine	mg/L	<0.5	1	APHA 4500 – Cl
10	Fluoride as F	mg/L	<0.5	1.5	APHA 4500 – F- - D
11	Total Dissolved Solids	mg/L	568	2000	APHA 2540 C
12	Calcium	mg/L	95	200	APHA 3500 –Ca– B
13	Magnesium	mg/L	47.8	100	APHA 3500 –Mg– B
14	Copper	mg/L	<0.2	1.5	APHA 3111 – B
15	Alkalinity	mg/L	214	600	APHA 2320
16	Ammonia Total	mg/L	ND	0.5	APHA 4500 - NH3
17	Nitrates	mg/L	2.7	45	APHA4500 NO3- - B

ND: Note Detected

Remarks: All above parameters are within limit as per IS 10500:2012 drinking water Specification.

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ANALYSIS REPORT

(For the Month of August-2020)

Client details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT (A Unit of Shree Cement Ltd)	**Sample Code**	GCI/V/20/H4/DW12
Address	Village –Khapradih, Tehsil – Simga, Dist: Baloda Bazar-Bhatapara, Chhattisgarh-493332	**Batch/Location**	Near Gram panchayat Chandi Village
		Date of Sampling	19/08/2020
Sampling Done By	GCI REPRESENTATIVE	**Date of Sample Received**	23/08/2020
Analysis Started Date	23/08/2020		
Analysis Completion Date	28/08/2020	**Sampling Method**	APHA 1060

GROUND WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Permissible Limits as per IS 10500:2012 for Drinking Water	Reference Method
18	Mercury	mg/L	ND	0.001	APHA 3112 – B
19	Total Chromium	mg/L	ND	2	APHA 3500 - B
20	Barium	mg/L	ND	0.7	APHA 3500 - Ba
21	Zinc	mg/L	<0.1	15	APHA 3111 – B
22	Arsenic	mg/L	ND	0.05	APHA 3500-As
23	Cadmium	mg/L	<0.002	0.003	APHA 3111 – B
24	Aluminum	mg/L	<0.1	0.2	APHA 3500 – Al – B
25	Selenium	mg/L	ND	0.01	APHA 3500 - Sn
26	Silver	mg/L	ND	0.1	APHA 3500 – Ag
27	Lead	mg/L	ND	0.01	APHA 3111 – B
28	Nickle	mg/L	ND	0.02	APHA 3111 - B
29	Boron	mg/L	<0.1	1.0	APHA 3500 - B
30	Manganese	mg/L	<0.01	0.3	APHA 3111 – B
31	Chloramines	mg/L	ND	4	APHA 4500- ClO2 - D
32	Sulphates	mg/L	2.2	400	APHA 4500 SO4 – E
33	Sulphide	mg/L	ND	0.05	APHA 4500 S2
34	Molybdenum	mg/L	ND	0.07	APHA 3500- Mo
35	Phenolic Compound	mg/L	<0.001	0.002	APHA 5530
36	E-Coli	MPN/100 ml	ND	Absent	APHA 9221 F
37	Mineral Oil	mg/L	ND	0.5	APHA 5520
38	Anionic Detergent as MBAS	mg/L	<0.1	1.0	APHA 5540 – C

Limit,ND: Not detected

All above parameters are within limit as per IS 10500:2012 drinking water Specification.

GREEN CIRCLE INC. BARODA

Authorized Signatory

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- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

CORP. OFFICE & R & D : Green Empire (Anupushpam), Above AXIS Bank, Nr. Yash Complex, Gotri Main Road, Vadodara - 390 021 (Gujarat), INDIA.
Tel.: +91 - 265 - 2371269 Cell: +91 93265 83835 Email: info@greencircleinc.com Website: www.greencircleinc.com

ANNEXURE-7

GREEN CIRCLE, INC.

Integrated HSEQR Consulting Engineers, Scientists & Trainers
(Recognised By Ministry of Environment, Forest and Climate Change, New Delhi Under EPA 1986)
(No. Q - 1508 / 32 / 2007 - CPW)
(ISO 9001, 14001 & OHSAS 18001 Certified Organisation)

Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/May-00/0096 Date: 29/05/2020

ANALYSIS REPORT

(For the Month of May-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/E4/WW1
		Location	STP-I OUTLET (Nr. Packing Area)
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Quantity	1000 ml
		Date of Sampling	18/05/2020
Sampling Done By	Vikram	Date of Sample Received	22/05/2020
Analysis Starts on	22/05/2020		
Analysis Completion On	29/05/2020	Sampling Method	APHA 1060

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Prescribed Limits	Reference Method
1.	pH	--	8.06	6.5 - 9.0	APHA 4500 H^+
2.	Total Suspended Solids (TSS)	mg/L	35	100	APHA 2540 D
3.	Biochemical Oxygen Demand (BOD)	mg/L	14	30	APHA 5210
4.	Chemical Oxygen Demand (COD)	mg/L	80	250	APHA 5220
5.	Oil & Grease	mg/L	0.4	10	APHA 5220

GREEN CIRCLE INC. Authorized Signatory

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/May-00/0096 **Date: 29/05/2020**

ANALYSIS REPORT

(For the Month of May-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/E4/WW2
		Location	STP-2 OUTLET (Nr. CCR Building)
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Quantity	1000 ml
		Date of Sampling	18/05/2020
Sampling Done By	Vikram	Date of Sample Received	22/05/2020
Analysis Starts on	22/05/2020		
Analysis Completion On	29/05/2020	Sampling Method	APHA 1060

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Prescribed Limits	Reference Method
1.	pH	--	8.25	6.5 - 9.0	APHA 4500 H^+
2.	Total Suspended Solids (TSS)	mg/L	20	100	APHA 2540 D
3.	Biochemical Oxygen Demand (BOD)	mg/L	12	30	APHA 5210
4.	Chemical Oxygen Demand (COD)	mg/L	74	250	APHA 5220
5.	Oil & Grease	mg/L	0.3	10	APHA 5220

GREEN CIRCLE INC. BARODA

Authorized Signatory

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- Sample will be retained till one month from the date of sampling.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/June-00/0158 **Date: 20/06/2020**

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/F2/SSP/WW1
		Location	STP-1 OUTLET (Nr. Packing Area)
Address	(A Unit of M/s. Shree Cement Ltd), Village –Khapradih, Dist: Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Quantity**	1000 ml
		Date of Sampling	11/06/2020
Sampling Done By	Pragnesh	**Date of Sample Received**	13/06/2020
Analysis Starts on	13/06/2020		
Analysis Completion On	20/06/2020	**Sampling Method**	APHA 1060

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Prescribed Limits	Reference Method
1.	pH	--	8.60	6.5 - 9.0	APHA 4500 H^+
2.	Total Suspended Solids (TSS)	mg/L	36	100	APHA 2540 D
3.	Biochemical Oxygen Demand (BOD)	mg/L	12	30	APHA 5210
4.	Chemical Oxygen Demand (COD)	mg/L	72	250	APHA 5220
5.	Oil & Grease	mg/L	0.4	10	APHA 5220

GREEN CIRCLE INC. VADODARA

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
- Reports cannot be used as evidence anywhere including judiciary purpose without our prior permission.
- Sample will be retained till one month from the date of sampling.

GREEN CIRCLE, INC.

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(ISO 9001, 14001 & OHSAS 18001 Certified Organisation)

Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/June-00/0158 **Date: 20/06/2020**

ANALYSIS REPORT

(For the Month of June-2020)

Client Details		**Sample Details**	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/F2/WW2
		Location	STP-2 OUTLET (Nr. CCR Building)
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Quantity**	1000 ml
		Date of Sampling	11/06/2020
Sampling Done By	Vikram	**Date of Sample Received**	13/06/2020
Analysis **Starts on**	13/06/2020		
Analysis Completion On	20/06/2020	**Sampling Method**	APHA 1060

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Prescribed Limits	Reference Method
1.	pH	--	7.49	6.5 - 9.0	APHA 4500 H^+
2.	Total Suspended Solids (TSS)	mg/L	29	100	APHA 2540 D
3.	Biochemical Oxygen Demand (BOD)	mg/L	18	30	APHA 5210
4.	Chemical Oxygen Demand (COD)	mg/L	86	250	APHA 5220
5.	Oil & Grease	mg/L	0.3	10	APHA 5220

Authorized Signatory

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/July-00/0207 **Date: 16/07/2020**

ANALYSIS REPORT

(For the Month of July-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/G2/SSP /WW1
		Location	STP-1 OUTLET (Nr. Packing Area)
Address	(A Unit of M/s. Shree Cement Ltd), Village –Khapradih, Dist: Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Quantity**	1000 ml
		Date of Sampling	09/07/2020
Sampling Done By	GCI Representative	**Date of Sample Received**	11/07/2020
Analysis Starts on	11/07/2020		
Analysis Completion On	16/07/2020	**Sampling Method**	APHA 1060

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Prescribed Limits	Reference Method
1.	pH	--	8.70	6.5 - 9.0	APHA 4500 H^+
2.	Total Suspended Solids (TSS)	mg/L	40	100	APHA 2540 D
3.	Biochemical Oxygen Demand (BOD)	mg/L	15	30	APHA 5210
4.	Chemical Oxygen Demand (COD)	mg/L	92	250	APHA 5220
5.	Oil & Grease	mg/L	0.5	10	APHA 5220

GREEN CIRCLE INC. BARODA

Authorized Signatory

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- Sample will be retained till one month from the date of sampling.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/July-00/0207 Date: 16/07/2020

ANALYSIS REPORT

(For the Month of July-2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/G2/SSP/WW2
		Location	STP-2 OUTLET (Nr. CCR Building)
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Quantity	1000 ml
		Date of Sampling	09/07/2020
Sampling Done By	GCI Representative	Date of Sample Received	11/07/2020
Analysis Starts on	11/07/2020		
Analysis Completion On	16/07/2020	Sampling Method	APHA 1060

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Prescribed Limits	Reference Method
1.	pH	–	8.49	6.5 - 9.0	APHA 4500 H^+
2.	Total Suspended Solids (TSS)	mg/L	45	100	APHA 2540 D
3.	Biochemical Oxygen Demand (BOD)	mg/L	20	30	APHA 5210
4.	Chemical Oxygen Demand (COD)	mg/L	100	250	APHA 5220
5.	Oil & Grease	mg/L	0.6	10	APHA 5220

GREEN CIRCLE INC. BARODA

Authorized Signatory

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/August-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/H4/SSP/WW1
		Location	STP-1 OUTLET (Nr. Packing Area)
Address	(A Unit of M/s. Shree Cement Ltd), Village –Khapradih, Dist: Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Quantity**	1000 ml
		Date of Sampling	21/08/2020
Sampling Done By	GCI Representative	**Date of Sample Received**	23/08/2020
Analysis Starts on	23/08/2020		
Analysis Completion On	28/08/2020	**Sampling Method**	APHA 1060

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Prescribed Limits	Reference Method
1.	pH	–	8.16	6.5 - 9.0	APHA 4500 H^+
2.	Total Suspended Solids (TSS)	mg/L	36	100	APHA 2540 D
3.	Biochemical Oxygen Demand (BOD)	mg/L	18	30	APHA 5210
4.	Chemical Oxygen Demand (COD)	mg/L	88	250	APHA 5220
5.	Oil & Grease	mg/L	0.6	10	APHA 5220

GREEN CIRCLE INC. BARODA

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/August-00/0219 **Date: 28/08/2020**

ANALYSIS REPORT

(For the Month of August- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/H4/SSP/WW2
		Location	STP-2 OUTLET (Nr. CCR Building)
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Quantity**	1000 ml
		Date of Sampling	21/08/2020
Sampling Done By	GCI Representative	**Date of Sample Received**	23/08/2020
Analysis Starts on	23/08/2020		
Analysis Completion On	28/08/2020	**Sampling Method**	APHA 1060

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Prescribed Limits	Reference Method
1.	pH	--	8.14	6.5 - 9.0	APHA 4500 H^+
2.	Total Suspended Solids (TSS)	mg/L	32	100	APHA 2540 D
3.	Biochemical Oxygen Demand (BOD)	mg/L	20	30	APHA 5210
4.	Chemical Oxygen Demand (COD)	mg/L	96	250	APHA 5220
5.	Oil & Grease	mg/L	0.5	10	APHA 5220

GREEN CIRCLE INC. BARODA

Authorized Signatory

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GREEN CIRCLE, INC.

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(ISO 9001, 14001 & OHSAS 18001 Certified Organisation)

Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/ September -000258/ **Date: 19/09/2020**

ANALYSIS REPORT

(For the Month of September- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	**Sample Code**	GCI/V/20/I2/SSP/WW1
		Location	STP-1 OUTLET (Nr. Packing Area)
Address	(A Unit of M/s. Shree Cement Ltd), Village –Khapradih, Dist: Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	**Quantity**	1000 ml
		Date of Sampling	10/09/2020
Sampling Done By	GCI Representative	**Date of Sample Received**	14/09/2020
Analysis Starts on	14/09/2020		
Analysis Completion On	19/09/2020	**Sampling Method**	APHA 1060

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Prescribed Limits	Reference Method
1.	pH	--	8.45	6.5 - 9.0	APHA 4500 H^+
2.	Total Suspended Solids (TSS)	mg/L	45	100	APHA 2540 D
3.	Biochemical Oxygen Demand (BOD)	mg/L	18	30	APHA 5210
4.	Chemical Oxygen Demand (COD)	mg/L	110	250	APHA 5220
5.	Oil & Grease	mg/L	0.4	10	APHA 5220

GREEN CIRCLE INC. BARODA

Authorized Signatory

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GREEN CIRCLE, INC.

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Report No:-GCI/V/LAB/EM-G0121/19-SP/19-20/ September -000258/ **Date: 19/09/2020**

ANALYSIS REPORT

(For the Month of September- 2020)

Client Details		Sample Details	
Name	M/s. SHREE RAIPUR CEMENT PLANT	Sample Code	GCI/V/20/I2/WW2
		Location	STP-2 OUTLET (Nr. CCR Building)
Address	(A Unit of M/s.Shree Cement Ltd), Village –Khapradih,Dist:Baloda Bazar-Bhatapara, Raipur, Chattisgarh-492001	Quantity	1000 ml
		Date of Sampling	10/09/2020
Sampling Done By	GCI Representative	Date of Sample Received	14/09/2020
Analysis Starts on	14/09/2020		
Analysis Completion On	19/09/2020	Sampling Method	APHA 1060

WASTE WATER ANALYSIS RESULTS

Sr. No.	Parameters	Unit	Results	Prescribed Limits	Reference Method
1.	pH	--	8.28	6.5 - 9.0	APHA 4500 H^+
2.	Total Suspended Solids (TSS)	mg/L	43	100	APHA 2540 D
3.	Biochemical Oxygen Demand (BOD)	mg/L	20	30	APHA 5210
4.	Chemical Oxygen Demand (COD)	mg/L	108	250	APHA 5220
5.	Oil & Grease	mg/L	0.3	10	APHA 5220

GREEN CIRCLE INC. BARODA

Authorized Signatory

- Analysis is subject to the condition in which the sample is received at our Laboratory.
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Annexure- 8

Shree Raipur Cement Plant
(A Unit of Shree Cement Ltd)
Ambient Noise monitoring report

Prescribed Limit - Day Time - 75 dB(A), Night Time - 70 dB(A)

S.No.	Location →	AAQMS-1(Near Bharuadih) (SE)		AAQMS-2 (Near Semaradih) (NE)		AAQMS-3 (Near RMS) (SE)		AAQMS-4 (Near Kharpradih) (SW)	
	Month ↓	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
1	Apr-20	58	42	59	43	57	41	55	40
2	May-20	60	45	56	42	61	44	59	42
3	Jun-20	62	44	55	40	61	42	62	45
4	Jul-20	60	40	52	37	60	46	59	43
5	Aug-20	58	43	60	40	58	43	60	40
6	Sep-20	58	40	59	41	63	48	64	47

ANNEXURE-9

AUDIOGRAM

DOCTOR / AUDIOLOGIST

Name: _____

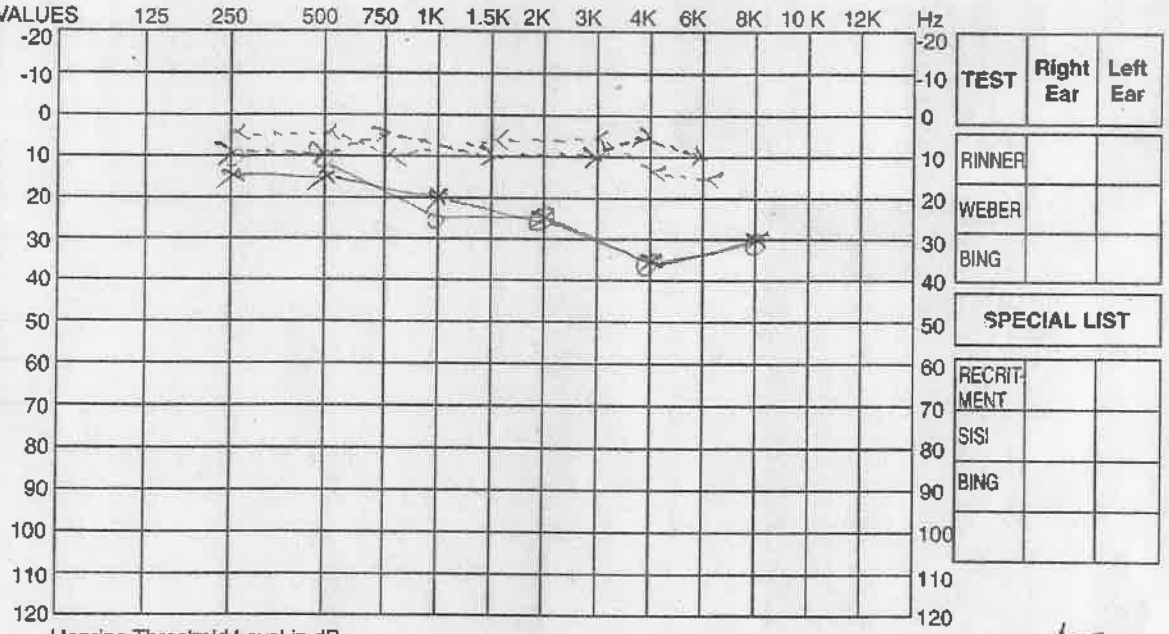
Address: SRCP

PATIANT NAME: Jayant Jain SEX: M AGE: 32 Yrs.

ADDRESS: _____ DATE: 26/08/2020

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

HEARING EVALUATION		
AVE P.T.	RE:	20 dB
STR	LE:	20 dB
PB% CORRECT		
MCL	NO	



TEST	Right Ear	Left Ear
RINNER		
WEBER		
BING		

SPECIAL LIST		
RECRIT-MENT		
SISI		
BING		

Remarks: ~~Bl~~ Normal Hearing Sensitivity

FACTORY MEDICAL OFFICER

SHREE RAIPUR CEMENT PLANT

(A UNIT OF SHREE CEMENT LTD)

KHAPRADIH DIST BALODABAZAR –BHATAPARA (C.G.)

Date :- 26.08.2020

Emp. / CLC Code :- .....

PATIENT NAME :- ..... MR. JAYANT JAIN

AGE/SEX :- ..... 32 YRS /MALE

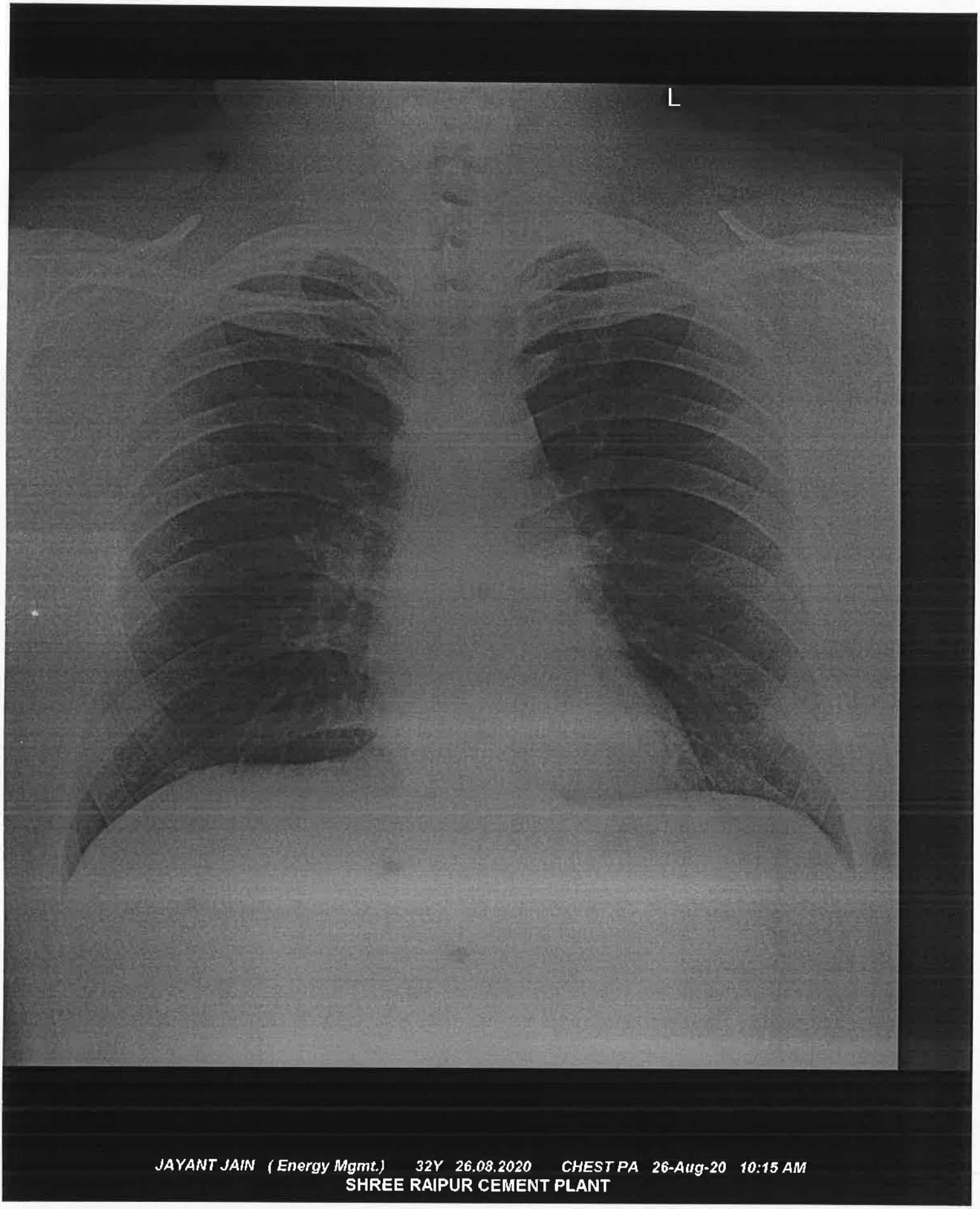
X-RAY CHEST PA VIEW

- 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: SANTOSH KUMAR

Digitally signed by SANTOSH KUMAR
Date: 2020.08.26 11:59:48 +05'30'


L
JAYANT JAIN (Energy Mgmt.) 32Y 26.08.2020 CHEST PA 26-Aug-20 10:15 AM
SHREE RAIPUR CEMENT PLANT

SHREE RAIPUR CEMENT PLANT 12 LEAD ECG REPORT

Jayant Jain | Male | 32Years | ID:ENERGY MGMT. 1 D26-08-2020 | Department:ENERGY MGMT. (E) DEAPARTMENT | Ward No.:

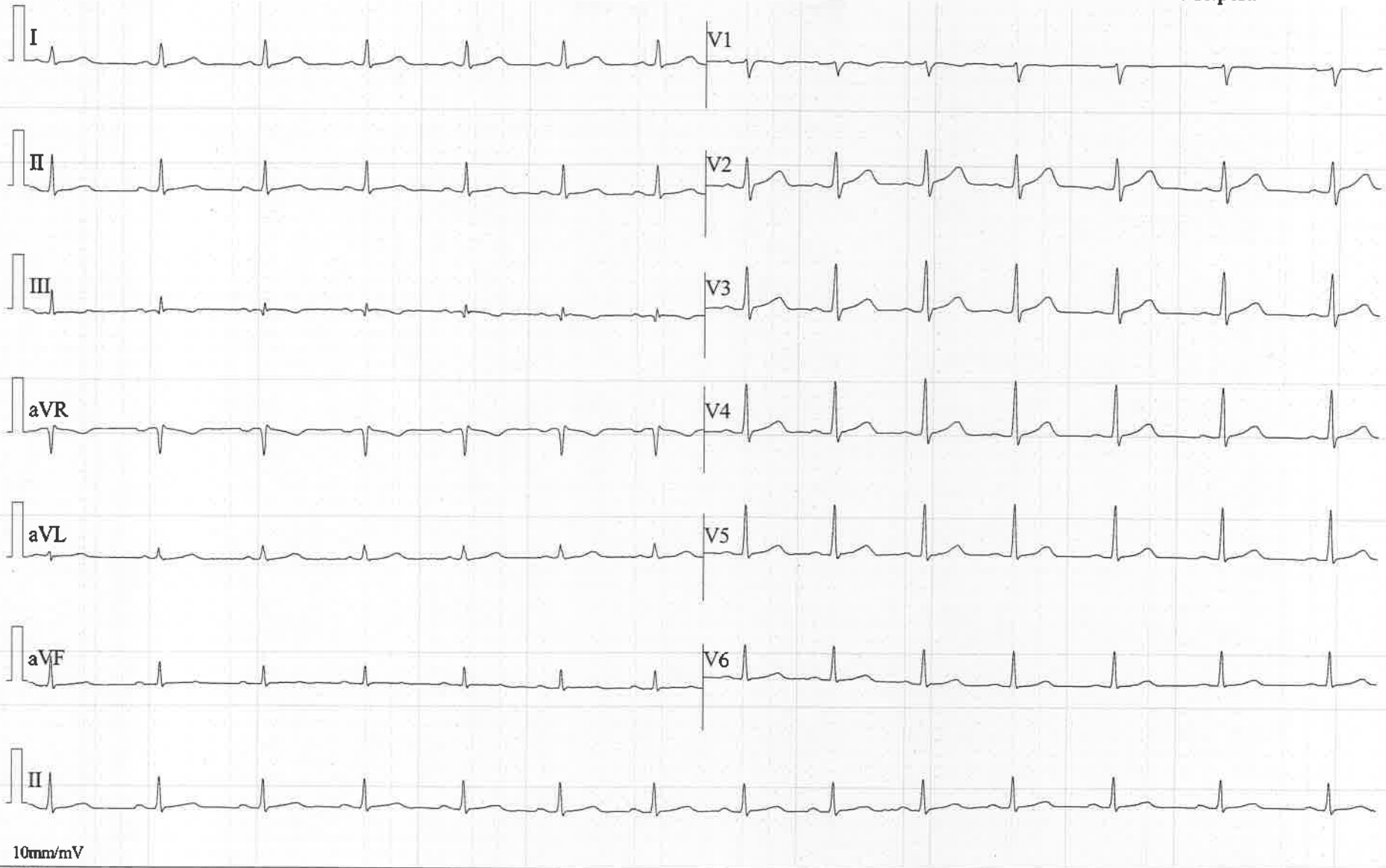
HR	:	83 bpm
P	:	99 ms
PR	:	151 ms
QRS	:	82 ms
QT/QTc	:	342/404 ms
P/QRS/T	:	36/31/14 deg.
RV5/SV1	:	0.927/0.280 mV

Diagnosis Information:
800: Sinus Rhythm
Normal ECG

SANTOSH KUMAR

Digitally signed by SANTOSH KUMAR
Date: 2020.10.21 12:00:20 +05'30'

Unconfirmed Report.



25mm/s 10mm/mV
0.05-35Hz AC50

Exam :26/08/2020 13:38 Print :26/08/2020 10:07 Smart ECG Viewer V2.43

Annexure-10

Shree Raipur Cement Plant

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

CSR Work Done (April 2020 to September 2020)

S No	Particulars of CSR activity undertaken	Expenditure (in Rupees)
A	Eradicating hunger, poverty and malnutrition, promoting preventive health care and sanitation and making available safe drinking water	55,21,176
B	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)	0.0
C	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	0.0
D	Ensuing environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water	0.0
E	Protection of national heritage, art and culture including restoration of buildings and: sites of historical importance and works of art; setting up public libraries; promotion and development of traditional arts and handicrafts;	0.0
F	Training to promote rural sports, nationally recognized sports, Paralympic sports and Olympic sports	0.0
G	Rural development projects	1,86,137
H	Overheads related to CSR activities (maximum upto 5% of total CSR expenses)	13,59,661
	TOTAL EXPENDITURE	70,66,974

ANNEXURE-II

Shree Cement

SHREE CEMENT LIMITED

BANGUR NAGAR, BEAWAR, RAJASTHAN

ENVIRONMENT POLICY

➢ To ensure Clean, Green and Healthy Environment through:

- ✓ Efficient use of natural resources, energy, plant & equipment.
- ✓ Reduction in emissions, noise, waste and greenhouse gases.
- ✓ Promotion to reuse and recycling wastes.
- ✓ Continual improvement in environment management with proper systems to prevent, mitigate and control environmental impacts due to operations across the value chain and in local community.
- ✓ Building awareness amongst all stakeholders including employees, customers, vendors etc. on environmental issues.
- ✓ Compliance of relevant environmental legislations by implementing the Environmental Management System
- ✓ Green belt development for local biodiversity management and conservation in coalition with local communities, authorities and other stakeholders.
- ✓ Reporting of material non-compliances (if any) of the conditions of environment clearance / consent / NOC/ authorization and permission etc. relevant to the environmental conditions, wherever required, to the Whole Time Director by the respective Unit Head and Functional Head (Environment) so as to fulfil the deviation from the compliances as and when required.

Signature Rajasthan 4-3-19

(P.N. Chhangani)
Whole Time Director

Date: 1ST March, 2019

Shree Cement

ENVIRONMENT MANAGEMENT SYSTEM

1. LEGAL & OTHER REQUIREMENTS

a. We have established and maintained a procedure to identify, access and update legal and other requirements to which we subscribe, that are applicable to the environmental aspects / impacts and Occupational Health and Safety Hazards (OHS) / Risks of our products, activities and services respectively. The list of legal and other requirements applicable to our operations are maintained separately and are communicated to our stakeholders. Main legal requirements are as follows:

- ✓ Environmental acts & rules
- ✓ Mines acts & rules
- ✓ Factory acts & rules
- ✓ Boiler acts & rules

2. OPERATIONAL CONTROL PROCEDURES

a. We have identified our operations and activities that are associated with Environmental aspects and OHS risks in line with our Environmental Policy. We plan these activities, including maintenance in order to ensure they are carried out under specified conditions by:

- ✓ Establishing and maintaining SOPs to check out the deviations from EMS.
- ✓ These procedures define the criteria to ensure that activities are performed under specified conditions, complying to legal and other requirements also:
- Communication of SOPs related to significant environmental aspects / OH&S risk of operations, goods, equipment and services purchased and/or used, to our stakeholders.
- To reduce Environment Impact / OH&S Hazard with the application of SOPs considering their adaptation to the human capabilities by proper designing of work place, process and to take precaution while installation of machinery.
- To review Control Measures and SOPs on regular intervals, effectiveness and to bring in changes that are identified & necessary to implement.

Signature _____

(P.N.Chhangani)
Whole Time Director

Date: 1ST March, 2019

b. Relevant Operation Control Measures

- ✓ **Limestone mines operation-** Water sprinkling on the haulage ro and at unloading point (crusher), raw material transportation covered belt and emission control system at transfer points.
- ✓ **Clinkerization- Covered s**torage of raw materials, petcoke a coal, clinker in silos, use of high efficient pollution control measu such as ESP, Bag house, bag filters at all transfer points, cov conveyors and De-NOx system etc.
- ✓ **Cement Grinding & Packing-** Bag Filters at all transfer poin storage of fly ash in silo and pneumatic Fly ash handling, automa bag filing machines, use of tarpaulin to each truck and wagon a vacuum sweeping.
- ✓ **Storage in yard-** Covering by tarpaulin.
- ✓ **Utility operation-** Management of waste/used oil, oily wastes a industrial waste water management by 100% recycling in proce to maintain ZLD and treatment of sewage water in STP to use t plantation.
- ✓ **General-** Dust control by good housekeeping & maintenance, u of dust extraction and recycling systems to remove dust from wo areas, contractor activities and task observations.
- ✓ Use of proper personal protective equipment (PPE).
- ✓ Minimum 33 % plantation in the project area with native species a time bound manner.

3. ROLES & RESPONSIBILITIES

We have established, implemented and maintained EMS to meet requirements at all of our locations within the organizational boundarie Roles and responsibilities of various personnel, who manage, perform a verify the activities and their impacts on environment and/or OH&S hav been defined by the top management.

a. **Whole Time Director (WTD)** - He will review and ensure th implementation of EMS related activities as per the schedules & SOP In case of material issues related to EMS and status of compliance an non-compliance (in any) of the conditions of environment clearanc consent, authorization, NOC of ground water withdrawal and surfac water permission and new legislative requirements, he will, apprise th Board of Directors, as and when required.

Signature
(P.N.Chhangani)
Whole Time Director

Date: 1ST March, 2019

Shree Cement

b. **Unit Heads-** They will ensure the implementation of EMS and conditions of environment clearance, consents, authorization, NOC of ground water withdrawal and surface water permission and new legislative requirements within schedule time. They will report the progress of EMS and non-compliance (in any) of the conditions of environment clearance / consent / NOC/ authorization and permission etc to the WTD and Functional Head (Environment) as and when occurs and ensure to fulfill the deviation from conditions in time bound manner.

c. **Functional Head (Environment)-** He will ensure all the compliances as per environment legislation including conditions of environment clearance, consent, authorization, NOC of ground water withdrawal and surface water permission and new legislative requirements on daily basis.

   He'll discuss with respective unit head and submit the report to the WTD about the new legislative requirements and non-compliances (if any) of the conditions of environment clearance / consent / NOC/ authorization and permission etc as and when occurs and ensure implementation within the prescribed time line.

d. **EMS / Environmental Conditions Implementation Team-** It'll be comprising of multi-disciplinary professionals from all departments (civil, electrical, mechanical, Instrument, horticulture and environment) who'll prepare the action plan for implementation of conditions of environment clearance, consent, authorization, NOC of ground water withdrawal and surface water permission and new legislative requirements under the overall control and super vision of unit head.

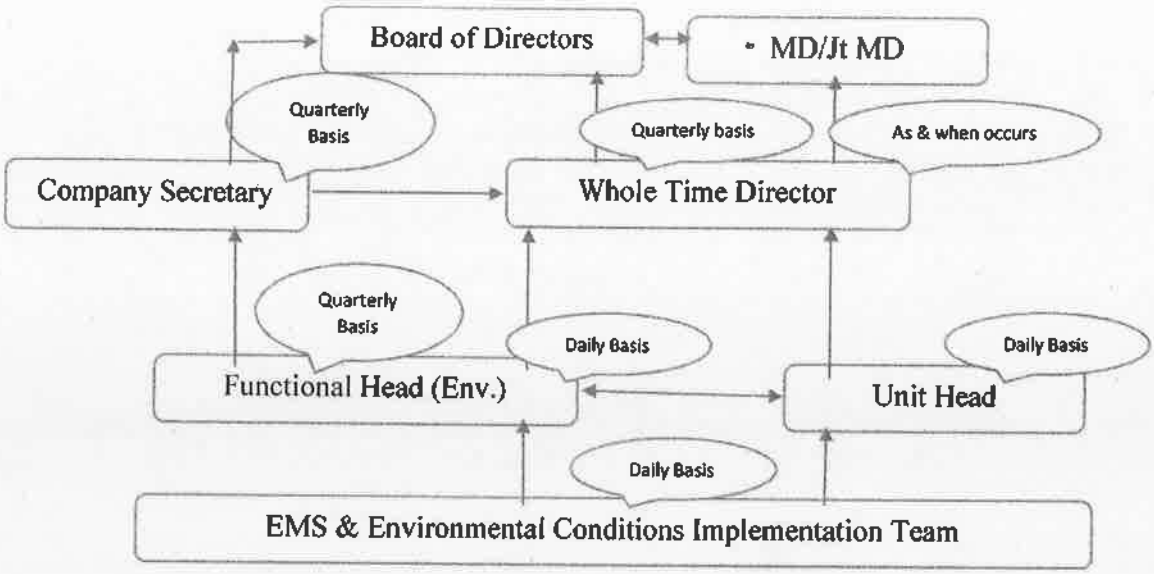
Signature _____

(P.N.Chhangani)
Whole Time Director

Date: 1ST March, 2019

Shree Cement

ORGANIZATIONAL STRUCUTRE



4. COMMUNICATION

a. Communication with Board of Directors

WTD will apprise the material issues related to EMS, new legislative requirements and non-compliances (if any) of the conditions of environment clearance / consent / NOC/ authorization and permission etc, wherever required, to the Board / MD / Jt MD of the company.

b. Internal Communication

It is ensured by the WTD of the company that appropriate internal communication are established and maintained within the organization. Communication is done through phone call, e-mail, sms, whatsapp, & in written etc.

Signature

(P.N.Chhangani)
Whole Time Director

Date: 1ST March, 2019

c. Participation and consultation

- ✓ Unit head ensures consultation with the employees and workers, over changes in work place such as introduction of new & modified equipment, materials etc.
- ✓ All employees and workers are to be involved and represented in development, implementation and review of EMS policy, its objectives and decisions on implementation of SOPs to manage & control environmental aspects and OH&S risks as per the mode and nature of activity and incident / accident investigations.
- ✓ Contractors shall be consulted wherever the changes affect their OH&S.

d. External Communication

Functional Head (Environment) / Unit Head is responsible for receiving, documentation and respond to the communications from external parties such as MOEF&CC, SPCB, CPCB, CGWA etc to attend their concerns / suggestions and dealing with public authorities for emergency preparedness and other relevant environmental issues.

e. List of Company Management Team

1. Whole Time Director: Sh. P.N. Chhangani
   Address: Shree Cements Ltd, Bangur Nagar,
   Beawar – 305901, District - Ajmer, Rajasthan
   Contact No. Phone: (91)1462-228101-064.
2. Functional Head (Environment)
   Sh. Rakesh Bhargava
   bhargavar@shreecement.com
   Contact No. 9214337571, 01462-228101-06, ext-3205

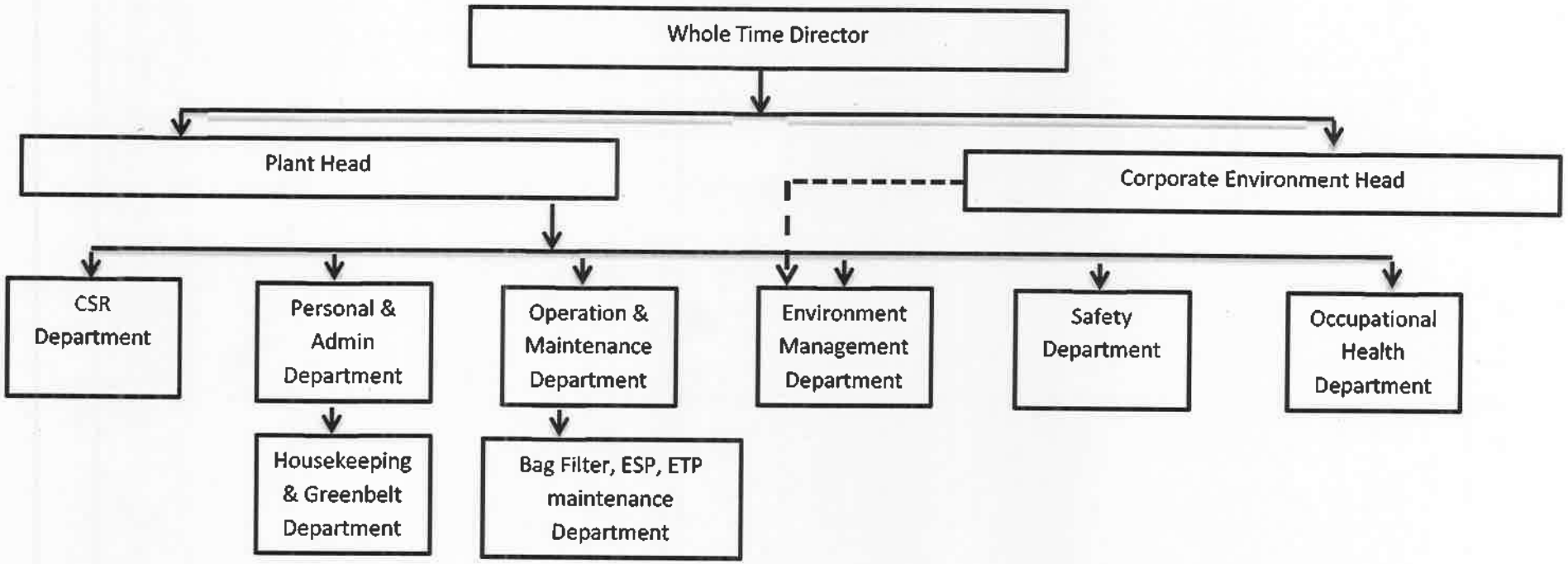
Signature

(P.N. Chhangani)
Whole Time Director

Date: 1ST March, 2019

Annexure- 12

Structure of Environment Management Cell



Annexure-13

Environment Expenditure (Apr-2020 to Sep-2020)	
Description	**Amount (in Lakh)**
Sewage treatment plant	1.14
Water treatment plant	15.24
Technical Consultancy charges for Env. Monitoring	10.22
Env. Monitoring (Ambient, Stack emission, Ground Water & STP water etc.)	0.50
Plantation (Cement plant & Mines area)	14.33
Plantation through CSR	1.82
House keeping & Vacuum Sweeping m/c	176.25
Total	**219.50**

ANNEXURE-14

मैसर्स श्री रायपुर सीमेंट प्लांट

(इकाई श्री सीमेन्ट लिमिटेड)

गांव– खपराडीह, तहसील– सिमगा,
जिला–बलौदाबाजार–भाटापारा (छत्तीसगढ़)

सार्वजनिक सूचना

सर्व साधारण को सूचित किया जाता है कि मैसर्स श्री रायपुर सीमेंट प्लांट (इकाई श्री सीमेन्ट लिमिटेड) के इन्टीग्रेटेड सीमेन्ट प्लांट का विस्तार, क्षमता 2 x 26 लाख टन प्रतिवर्ष से 3 x 45 लाख टन प्रतिवर्ष क्लिंकर, 2 x 30 लाख टन प्रतिवर्ष से 3 x 55 लाख टन प्रतिवर्ष सीमेन्ट, कैप्टिव पावर प्लांट 25 मेगावाट से 125 मेगावाट, वेस्ट हीट रिकवरी पावर प्लांट 30 मेगावाट से 100 मेगावाट, सिंथेटिक जिप्सम 65 टन प्रतिघंटा तथा डीजी सेट 2000 केवीए, जो कि गांव– खपराडीह, तहसील– सिमगा, जिला–बलौदाबाजार–भाटापारा (छत्तीसगढ़) में स्थापित किये जा रहे हैं, को भारत सरकार के पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली द्वारा पर्यावरणीय स्वीकृति पत्र क्रमांक **F. No. J-11011/235/2008-IA-II (I)** दिनांक **11 सितंबर 2019** के द्वारा दी गई है।

पर्यावरण स्वीकृति पत्र की प्रतिलिपि छत्तीसगढ पर्यावरण संरक्षण मण्डल, रायपुर मे उपलब्ध है तथा पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार की वेबसाइट **"www.moef.nic.in"** एवं श्री सीमेन्ट लिमिटेड़ की वेबसाइट **"www.shreecement.in"** पर भी उपलब्ध हैं।

Dainik Bhaskar - 14/09/19
Raipur

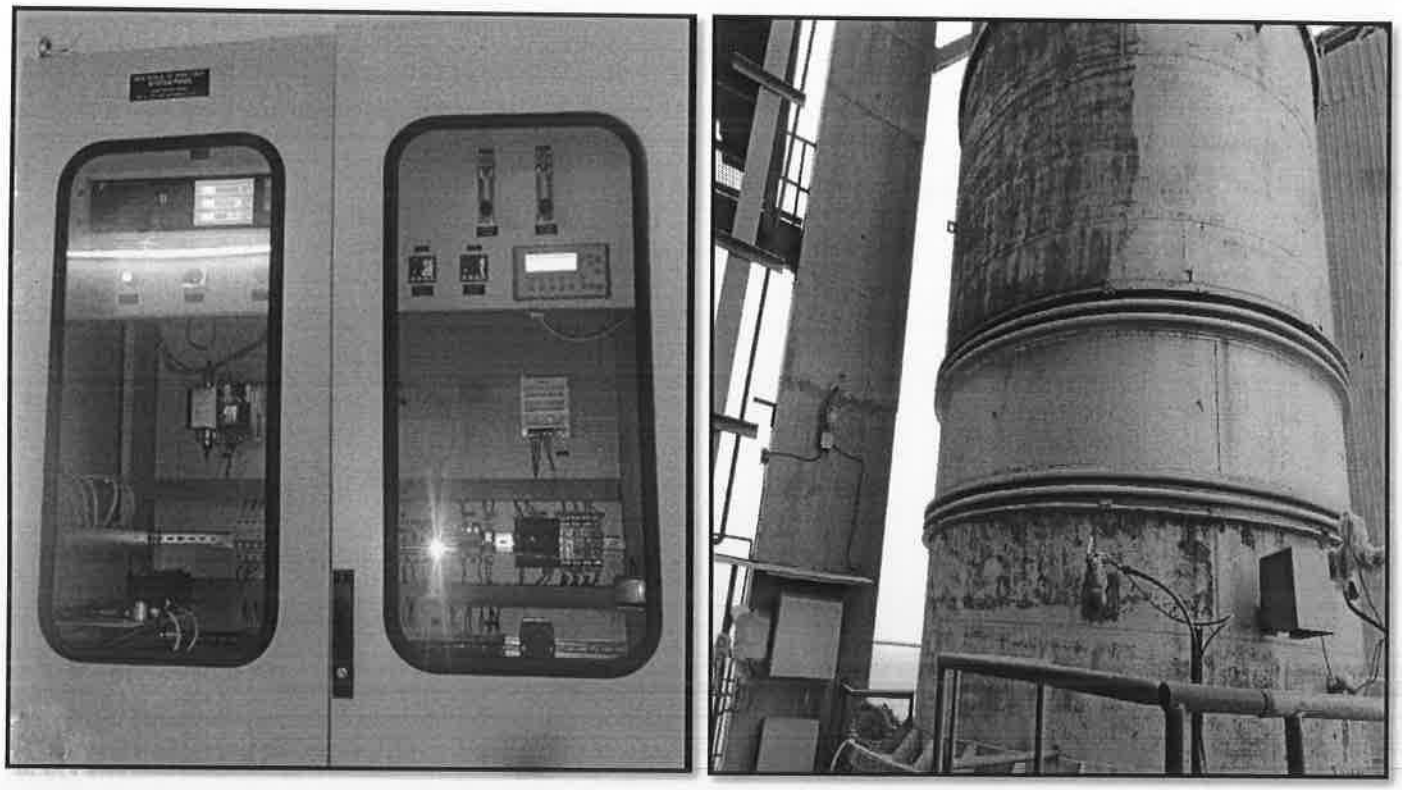


Photo no. 1 - Showing CEMS installed at Raw Mill Kiln Stack Unit-1

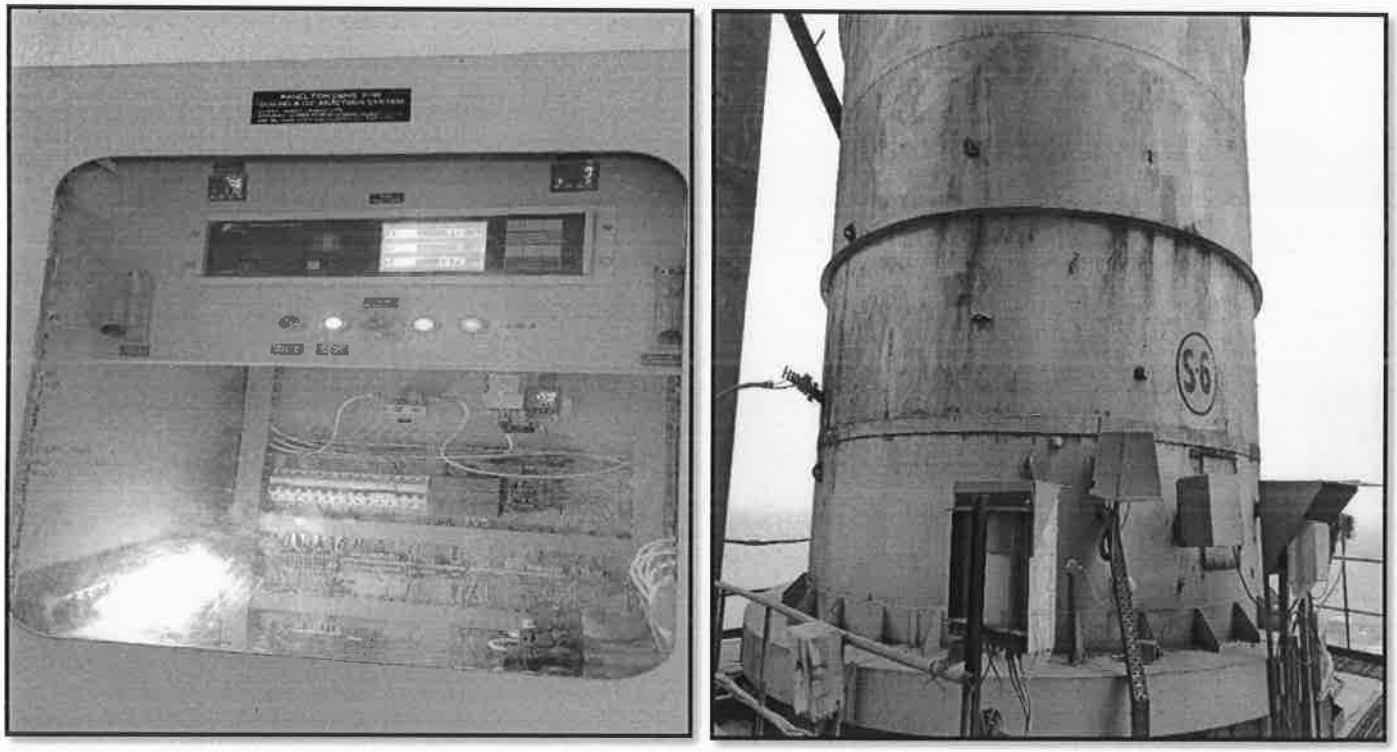


Photo no. 2 - Showing CEMS installed at Raw Mill Kiln Stack Unit-2

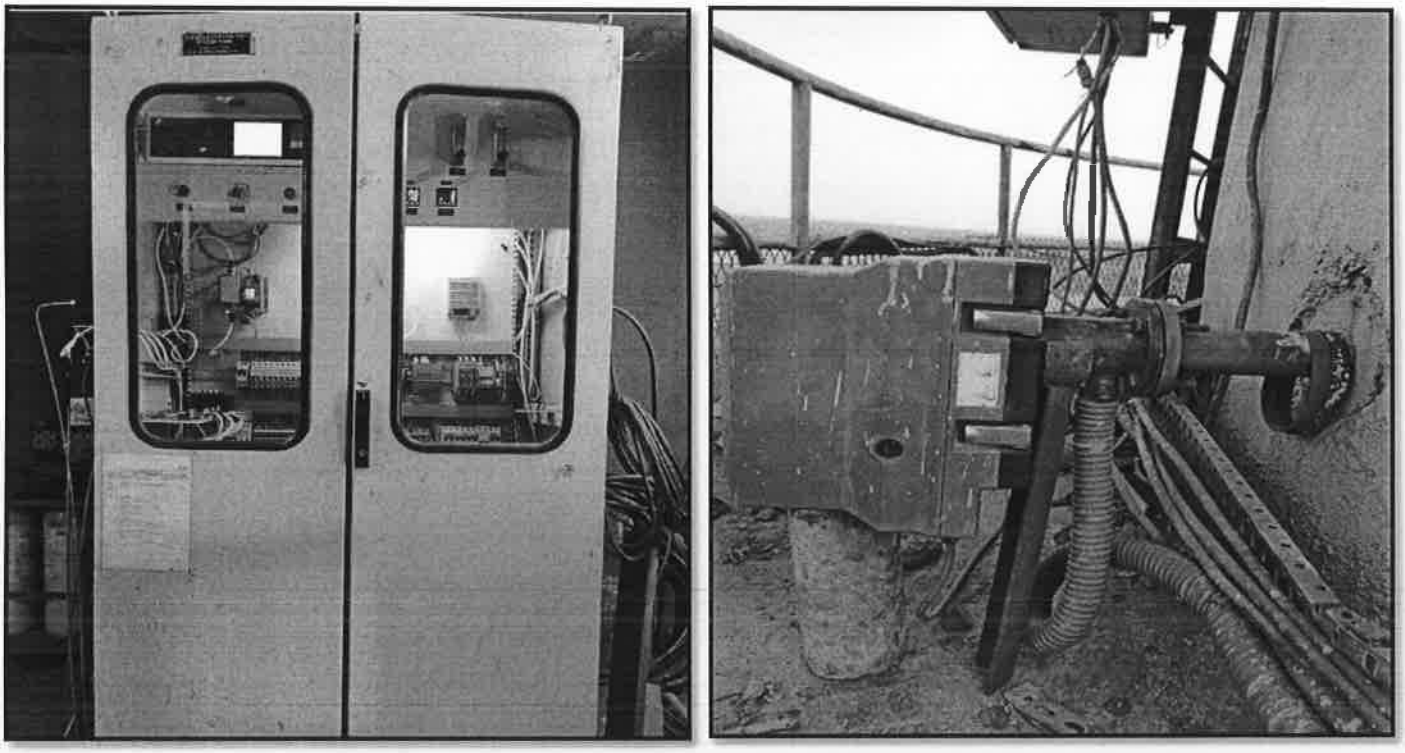


Photo no. 3 - Showing CEMS installed at Captive Power Plant

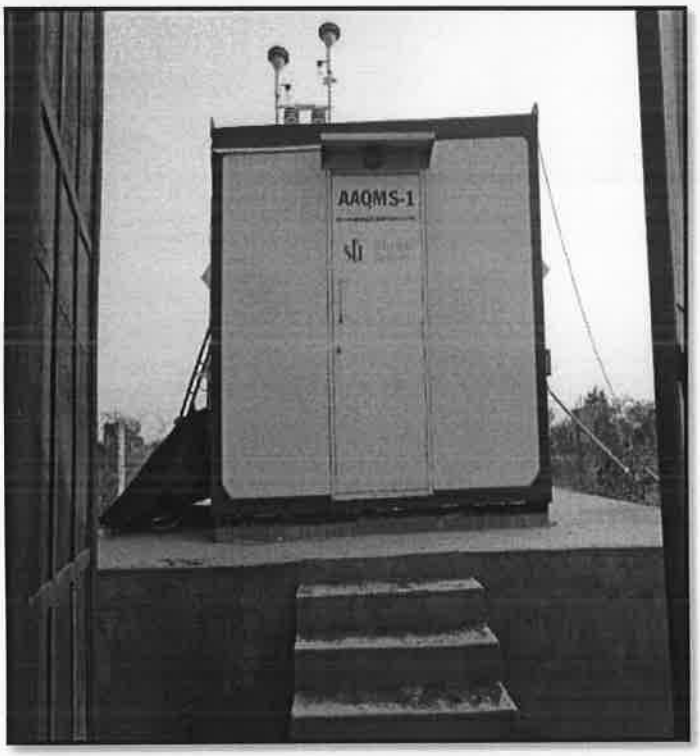


Photo no. 4 - Showing CAAQMS- 1

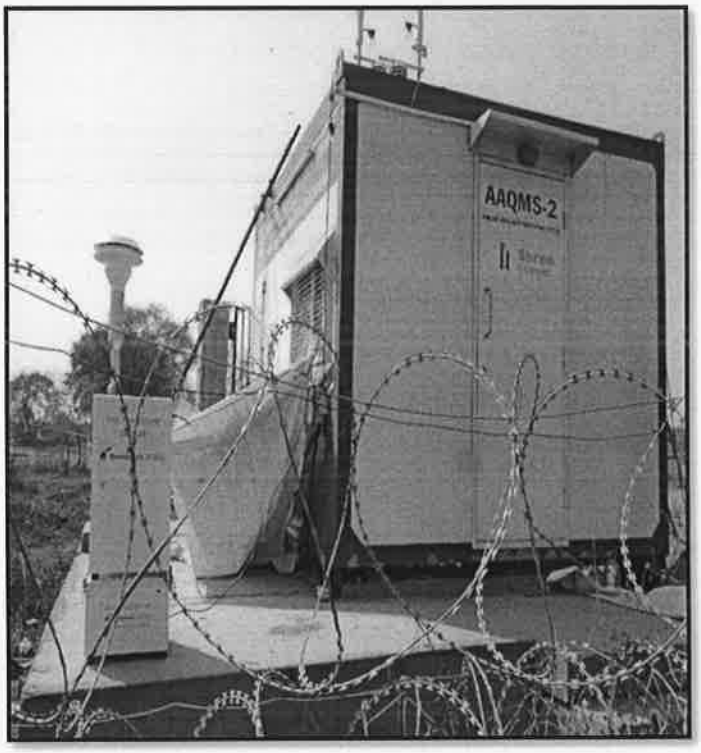


Photo no. 5 – Showing CAAQMS- 2

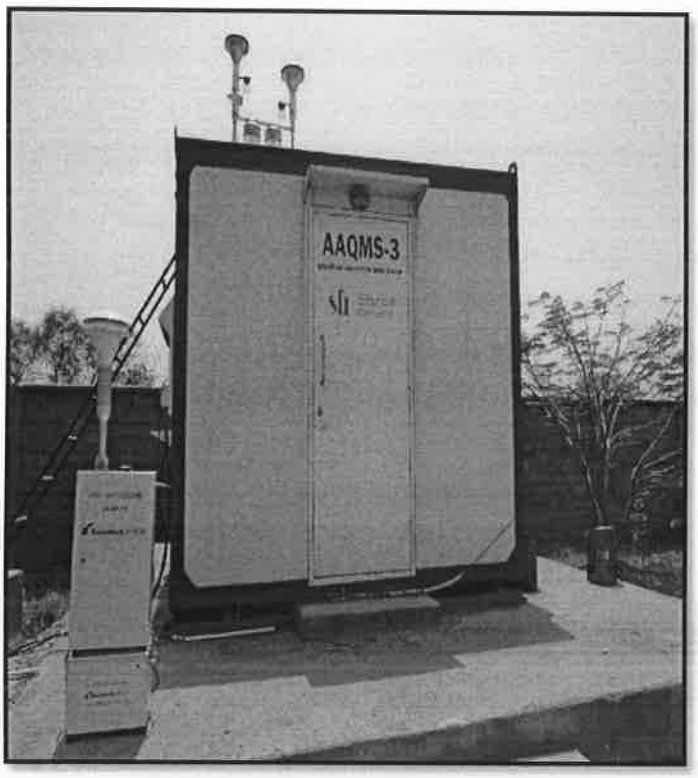


Photo no. 6 – Showing CAAQMS- 3

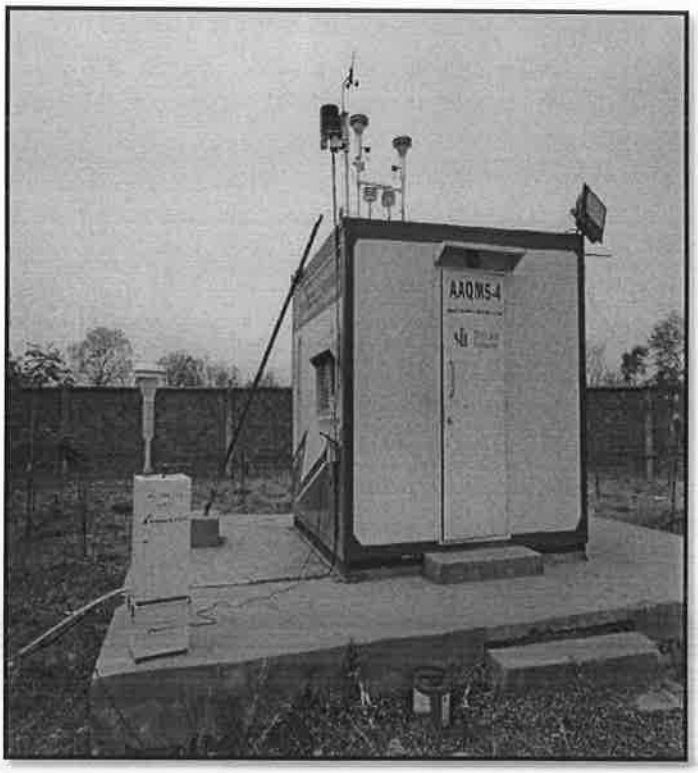


Photo no. 7 – Showing CAAQMS- 4

Photo no. 8 – Showing Sweeping Machine

Photo no. 9 – Showing Sweeping Machine

Photo no. 10 – Transportation through bulkers

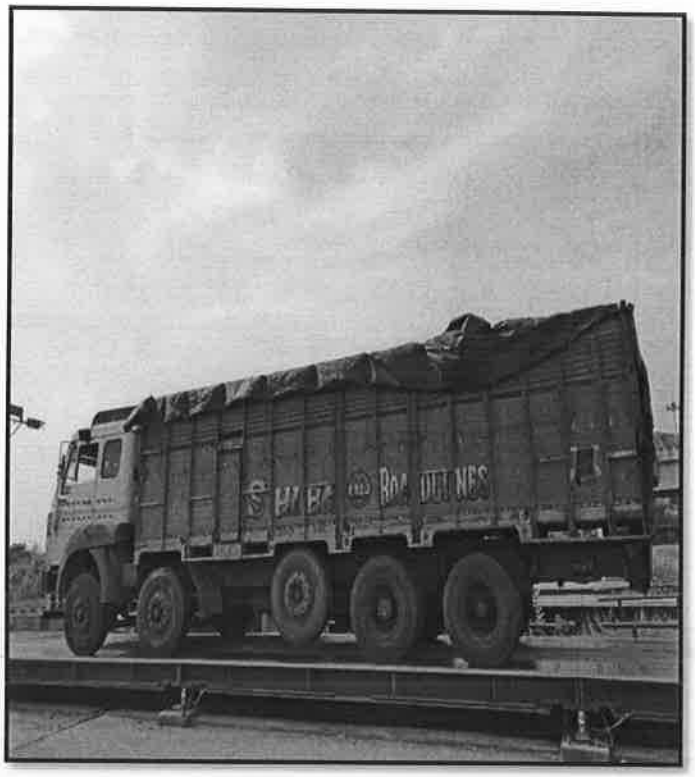


Photo no. 11. – Tarpaulin covered trucks

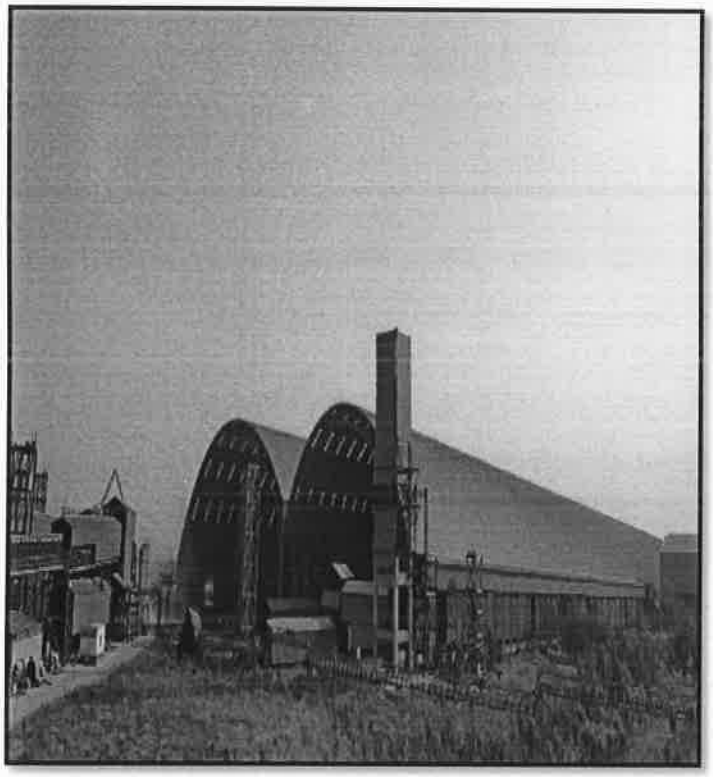


Photo no. 12 – Covered Shed for stock yard

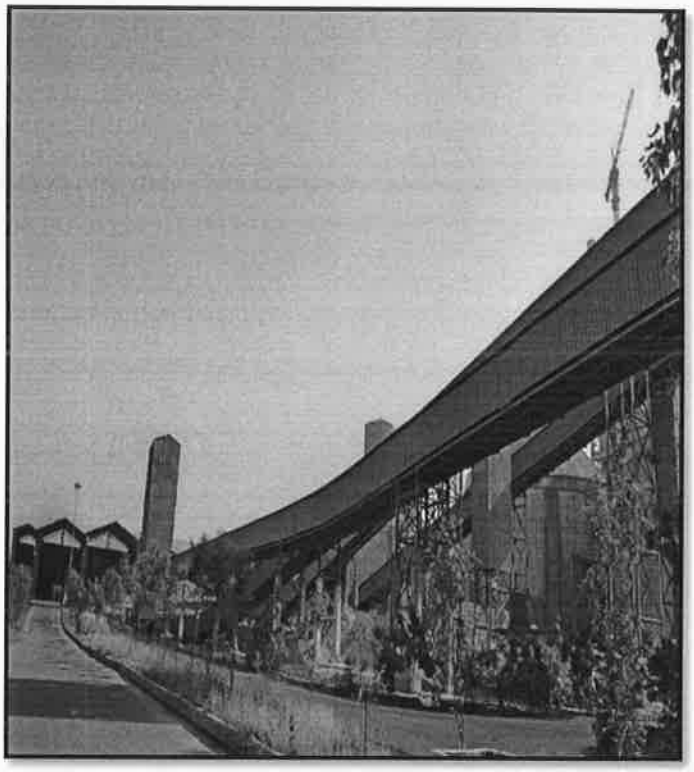


Photo no. 13 – Covered conveyor belt

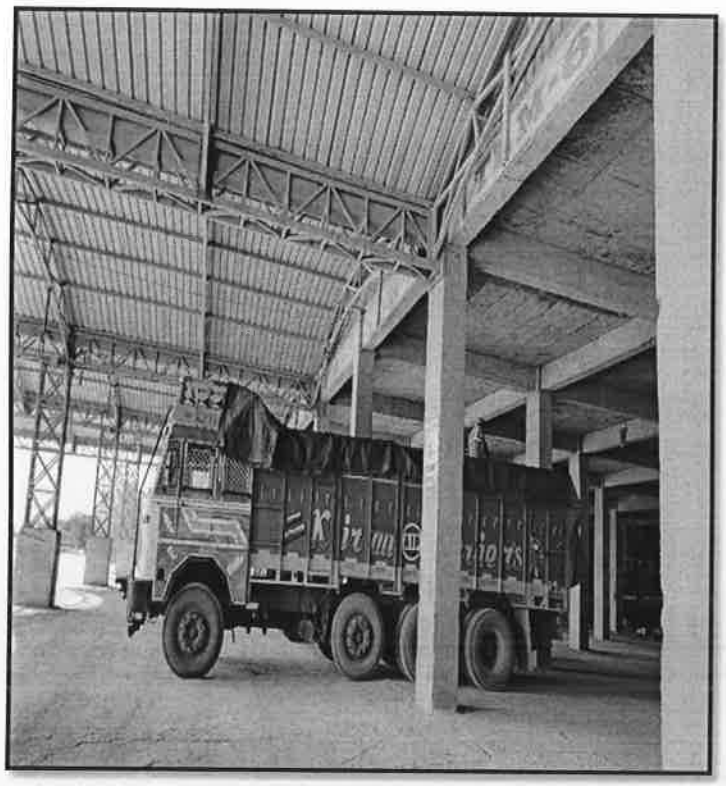


Photo no. 14 – Trucks covered with tarpaulin

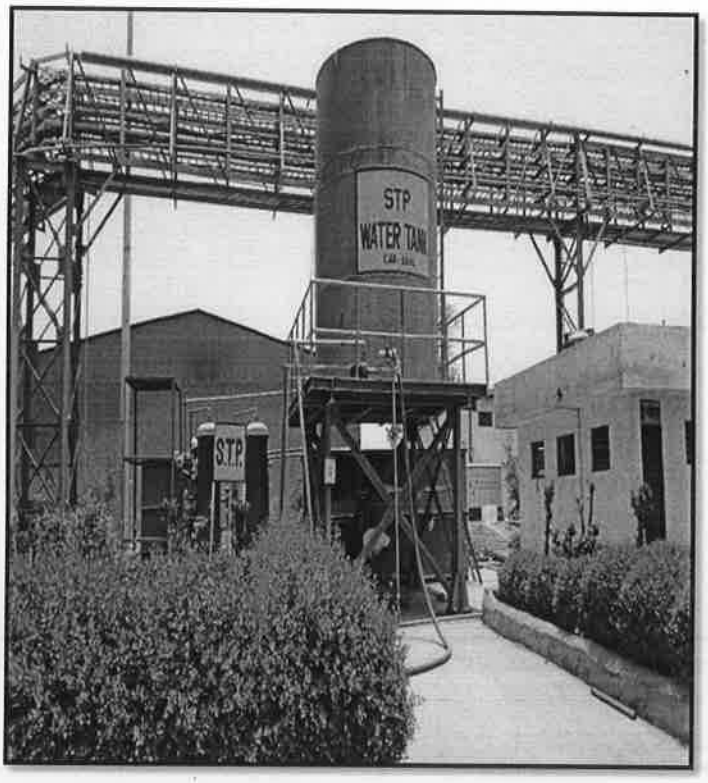


Photo no. 15 – Photo showing STP

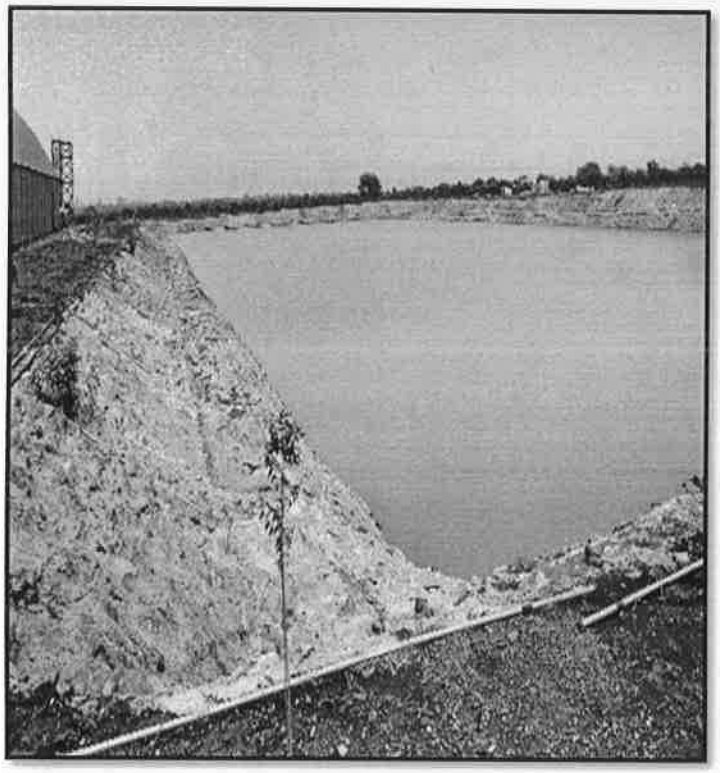


Photo no. 16 – Rain water harvesting pond-1

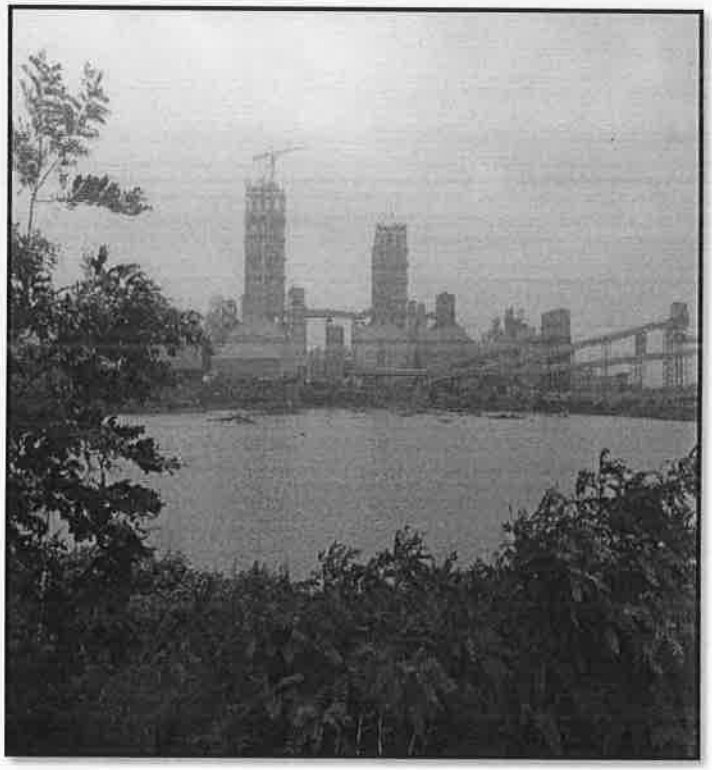


Photo no. 17 – Rain water harvesting pond-2

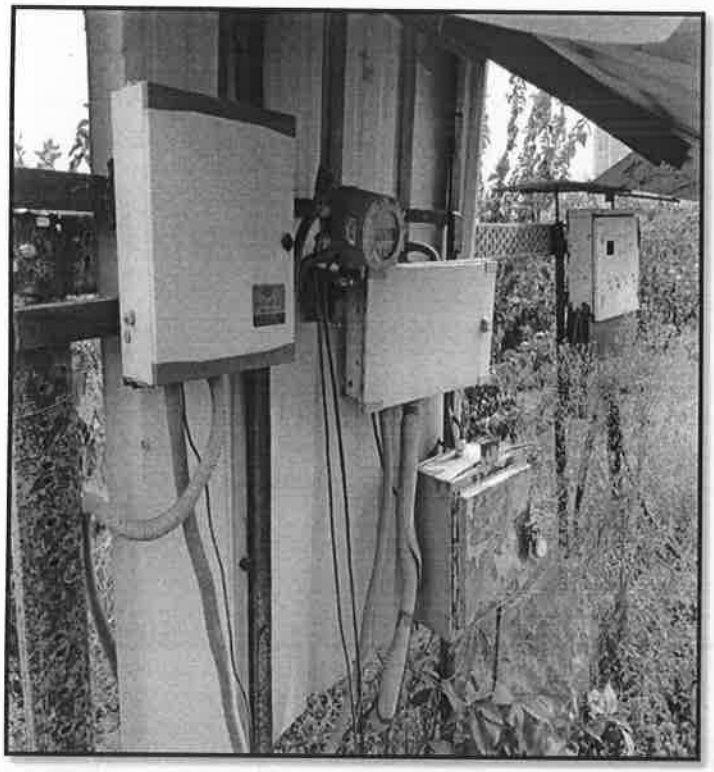


Photo no. 18 – Showing digital flow meter

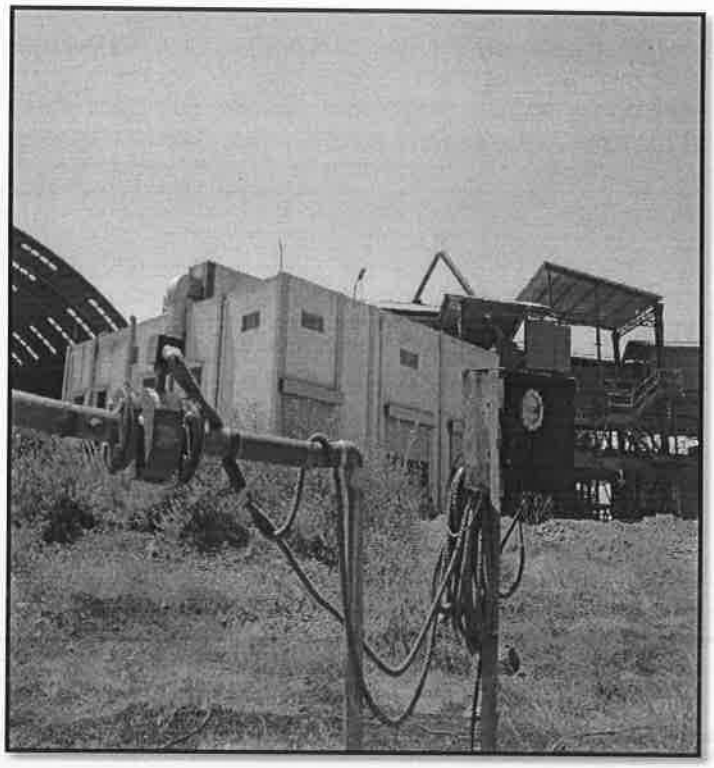


Photo no. 19 – Showing digital flow meter

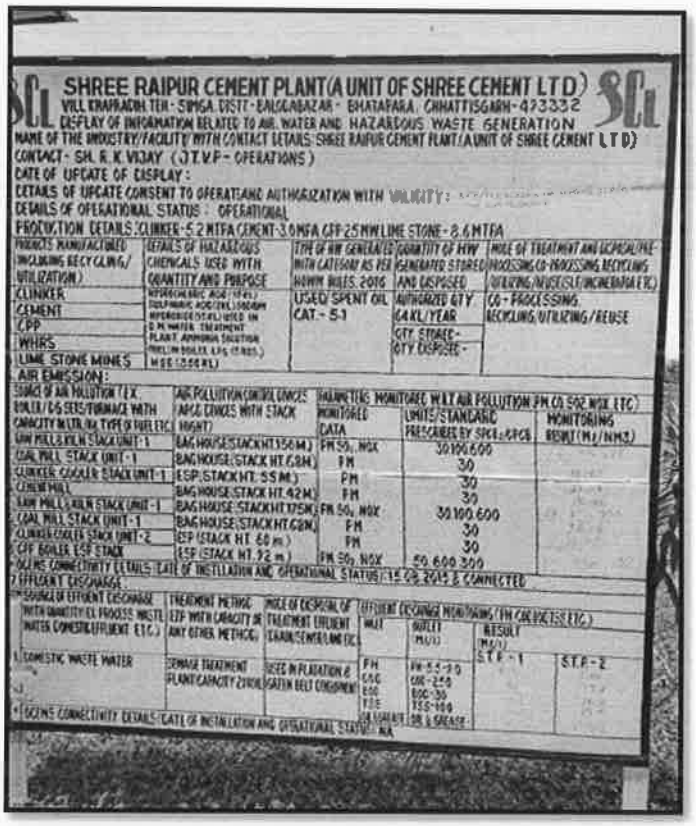


Photo no. 20 – Showing display board