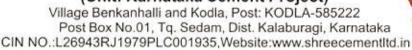


# SHREE CEMENT LTD.

(Unit: Karnataka Cement Project)





Date: 16.05.2019





SCL /KCP /EC/2019-20/ 46

The Director (Industry-I), Ministry of Environment & Forest, Indira Paryavaran Bhawan, Jor Bagh Road, Ali Gani, New Delhi-110003.

Sub: - Regarding Environment Clearance compliance of Integrated Cement Project (Clinker - 2.4 MTPA, Cement - 4.0 MTPA, Captive Power Plant - 44 MW & Captive Limestone Mine - 3.8 MTPA, ML area 517.61 ha, ML no. 2673 & 2674,) at Villages Kodla & Benkanhalli, Taluka Sedam, District: Kalaburagi, Karnataka by M/s. Shree Cement Ltd (Unit: Karnataka Cement Project).

Ref: 1) EC letter no. J-11011/458/2008-IA-II (I) dated 19th Sept. 2012

2) Amendment in EC letter no. J-11011/458/2008-IA-II (I) dated 9th Feb. 2018

Dear Sir,

Kindly refer to the above subject matter and referred letters. We are submitting herewith the compliance status of above EC conditions from October - 2018 to March - 2019.

This is for your kind information please.

Thanking you, Yours faithfully, For SHREE CEMENT LIMITED, (Unit: Karnataka Cement Project)

(Arvindkumar Patil) Unit Head

#### Copy to:

- 1. The Member Secretary, Karnataka State Pollution Control Board, "Parisara bhavan" No. 49, 4th & 5th Floor, Church Street, Bangalore - 560 001, Karnataka.
- 2. Zonal Officer, CPCB, 1st & 2nd Floors, Nisarga Bhavan, A-Block, Thimmaiah Main Road, 7th D Cross, Shivanagar, Opp. Pushpanjali Theatre, Bengaluru –560 010.
- 3. Director, Regional Office (Southern Zone), Kendariya Sadan, IVth Floor, E&F Wings, 17th Main Road, IInd block, Koramangala, Bangalore-560034.

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# Compliance Status of Environment Clearance EC letter no. J-11011/458/2008-IA-II (I) dated 19th Sept. 2012 and amendment on 9th Feb. 2018 October - 2018 to March - 2019

# Specific Conditions:

S. No.	Condition	Compliance
	Rehabilitation and Resettlement Plan for the project affected population including tribals, if applicable, shall be implemented as per the policy of the State Govt. in consultation with the State Govt. of Karnataka. Compensation paid in any case shall not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy, 2007.	There is no Rehabilitation and Resettlement in plant and lease area.
li	The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the KSPCB. At no time, particulate emissions from the cement plant including kiln, coal mill, cement mill, cooler and CPP shall not exceed 50 mg/Nm <sup>3</sup> .	Stack emission level for PM has been maintained <30 mg/Nm3 for stacks of raw mill & kiln, coal mill, cement mill and clinker cooler as per the new emission norms prescribed by the MoEF & CC.
<b>  </b>	Continuous on-line monitors for particulate emissions shall be installed. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.	(CEMS) has been installed for the measurement of PM, SO <sub>2</sub> and NOX.

iv	Data on ambient air quality (PM <sub>10</sub> , SO <sub>2</sub> , NOx) shall be regularly submitted to the Ministry including its Regional office at Bangalore and the State Pollution Control Board/Central Pollution Control Board once in six months.  Further, quality of discharged water shall also be monitored [(TDS, DO, pH) and total Suspended solids (TSS)].  The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain.	PM10, S02 and NOx) level are being monitored on regular basis and data are submitted to the Ministry including its Regional office at Bangalore and the State Pollution Control Board/ Central Pollution Control Board. NABL certified lab analysis report and our lab analysis reports are attached as Annexure-1.  RO discharge is being reused for mill spray. The wastewater generated from domestic purpose is being treated in the 25 KLD capacity STP. Treated waste water is being used in the green belt development.
V	The Company shall install low NOx burner with Kiln/calciner for control of NOx emissions.	Low NOx burners have been installed with kiln & calciner for control of NOx emissions.
vi	Secondary fugitive emissions shall be controlled within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.	<ul> <li>For the control of fugitive emissions, we have installed Bag filters at all material transfer points, silos tops, silos extraction and unloading hoppers.</li> <li>Only covered vehicle are deployed for cement and clinker transportation.</li> <li>Closed containers and bulkers are being deployed for fly ash transportation.</li> <li>All movement area is being concreted.</li> <li>Silos are used for the storage of clinker and fly ash.</li> <li>Covered Conveyor belts provided.</li> <li>The construction of closed shed for storage of raw material i.e. limestone, Laterite, slag, gypsum, pond ash and Coal is under progress.</li> <li>Vacuum Sweeping Machines are being used for better housekeeping and regular water sprinkling wherever required is being done to control the</li> </ul>

		fugitive emissions.  Plantation has been developed to further reduce any fugitive emissions.  Fugitive emissions are within limit. Emission level is enclosed as Annexure-II
vii.	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 shall be followed.	The National Ambient Air Quality Emission Standards are being followed and the emission levels are maintained
	To the Person of the Control of the	Stack emission monitoring report is enclosed as <b>Annexure-III</b> .
viii.	Measures shall be taken to mitigate impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash shall be transported in the closed containers only and shall not be overloaded. Vehicular emissions should be	flyash, clinker are transported through covered belts. All the material transfer points are equipped with dust bag filters.  Fly ash is being transported in closed trucks & bulkers. Cement, clinker and other raw material are being
ix	regularly monitored.  Fly ash shall be utilized as per the provisions of Fly Ash Notification, 1999, subsequently amended in 2009. Fly ash shall be stored in ash silo and 100% used in the cement manufacturing.	Portland Pozollona Cement (PPC).
x.	The company shall make the efforts to utilize the high calorific hazardous waste in the cement kiln and necessary provisions shall be made accordingly.  The company shall keep the record of the waste utilized and shall submit the details to Ministry's Regional	Authorization from the KSPCB has been obtained on 18/02/2019 for coprocessing of hazardous waste. Following waste are being coprocessed in cement Kiln.  Organic Residue Spent Carbon Pre-processed Waste
	Office at Bangalore, CPCB and SPCB.	ETP Sludge
хi	Rainwater harvesting measures shall be adopted for the augmentation of ground water at cement plant, colony including check dams at	<ul> <li>Rain water recharge measures such as construction of check dams, recharge structures, roof top harvesting etc. shall be implemented in and around the</li> </ul>

xii.	mine site. The company must also collect rain water in the mined out pits of captive lime stone mine and use the same water for the various activities of the project to conserve fresh water and reduce the water requirement from the ground water. An action plan shall be submitted to Ministry's Regional Office at Bangalore within 3 months from date of issue of this letter. Efforts should be made to make use of rain water harvested. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.  Total requirement shall not exceed 2,000 m³/day. The water stored in the artificial reservoir made in the mine pit shall be used maximum to reduce ground water consumption. No effluent should be discharged from	<ul> <li>Following rain water harvesting measures are being developed at site:</li> <li>Initially one pit of 5 Lakh litre water capacity in mines area is being developed to collect rain water.</li> <li>Water conservation activities such as water harvesting by connecting all the storm water drains to water harvesting pond of capacity 2.6 lakhs litters is completed in plant premises.</li> <li>Recharge structures are being developed at withdrawal wells.</li> </ul>
vIII	the mine to any water body or nearby river.	
xiii.	Top soil, if any, shall be stacked with proper slope at earmarked site(s) only with adequate measures and shall be used for reclamation and rehabilitation of mined out areas.	Separate stacking of Top soil with proper slope at earmarked site is under process and will be used for reclamation and rehabilitation of mined out areas and plantation whenever required.
xiv.	The project proponent shall ensure that no natural water course shall be obstructed due to any mining and plant operations. The company shall make the plan for protection of the natural water course passing through the plant and mine area premises and submit to the Ministry's Regional Office at Bangalore.	There is no natural water body in mining area.

XV.	The inter burden and other waste generated shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The total height of the dumps shall not exceed 30 m in three terraces of 10 m each and the overall slope of the dump shall be maintained to 28°. The inter burden dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office, Bangalore on six monthly basis.	
xvi.	The void left unfilled shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation to be done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.	Excavation is in Initial stage, will be complied as and when required.
xvii.	Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, inter burden and mineral dumps to arrest flow of silt and sediment. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted, particularly after monsoon and maintained properly.	Siltation pond will be constructed during development of working pit.
xviii.	Garland drain of appropriate size,	No inter burden dumps. Siltation pond will be constructed

	constructed for both mine pit and inter burden dumps and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.	during development of working pit.
xix.	Dimension of the retaining wall at the toe of inter burden dumps and inter burden benches within the mine to check run-off and siltation shall be based on the rain fall data.	
XX.	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers at suitable locations by the project proponent in and around project area in consultation with Regional Director, Central Ground Water Board. The frequency of monitoring shall be four times a year-pre-monsoon (April / May), monsoon (August), post-monsoon (November), and winter (January). Data thus collected shall be sent at regular intervals to Ministry of Environment and Forests and its Regional Office at Bangalore, Central Ground Water Board.	level and quality is being carried out. The monitoring frequency is as per new CGWA guidelines Nov. 2015 to monitor monthly ground water level & quarterly water quality by NABL certified lab. Copy of the monitoring report and ground water level is enclosed as Annexure-IV & Annexure-V.
xxi.	Wet drilling sequential and controlled blasting method and provision for the control air emissions during blasting using dust collectors etc. shall be used. The mitigate measures for control of ground vibrations and to arrest fly rocks and boulders shall be implemented.	10g : 10g

xxi	Bench height, width and slope for individual bench shall be properly assessed and implemented. Adequate measures should be adopted to stabilize the slope before abandonment. The fencing around the reservoir should be provided to prevent accidents.	Bench height, width and slope for individual bench is maintained as per Mining Plan.  Adequate measures will be adopted to stabilize the slope before abandonment.  Excavation of mine pit is in Initial stage which will be used to harvest rain water. Fencing around the same will be complied as and when required.
xxiii	Action plan for the mining, management of over burden (removal, storage, disposal etc.), reclamation of the mined out area and mine closure should be submitted to the Ministry and its Regional Office at Bangalore.	Submitted on 23/10/2012.
xxiv	As proposed, green belt shall be developed in 33% of the plant and mine area as per the CPCB guidelines in consultation with DFO.	Plantation work is being carried out inside the plant premises. Sapling are planted in phase wise manner. About 30581 sapling have been planted in the plant area. In the mine area 4270 sapling have been planted along the boundary. Further saplings will be planted all along the plant and mines boundary.
XXV.		All CREP recommendation shall be implemented as follows.
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.	
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 coa storage areas. The NTF shall submit its recommendations within months.	shade. The construction of closed shed for storage of limestone, Laterite, slag, gypsum, pond ash and Coal is under

	Industries will submit the target date to enhance the utilization waste material by April 2003.	Fly ash and slag will be utilized in cement manufacturing and other available waste will be utilized.
2000	NCBM will carry out a study on hazardous waste utilization cement kiln by December 2003.	in Authorization from the KSPCB has been obtained on 18/02/2019 for co-processing of hazardous waste. Following waste are being co-processed in cement Kiln.  Organic Residue Spent Carbon Pre-processed Waste ETP Sludge
	Cement industries will carry out feasible study and submit targ dates to CPCB co-generation of power by July-2003.	et 30 MW waste heat recovery power plant is under installation
xxvi.	The company shall adopt well laid down corporate environment policy and identified and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with environmental clearance,	been adopted and submitted or 23/10/2012. Full fledge team having expertise or environment, horticulture, emission control are being deputed to carry out day to day activities for compliance or
xxvii.		environment condition. PUC certified vehicles are allowed at the site.
xxviii.		Submitted along with EIA/EMP report.
xxix.		Submitted on 23/10/2012.
xxx.	The company shall comply with the commitments made during public	All commitments made during the oublic hearing have been incorporated n CSR activities.

	Bangalore.	
xxxi.	At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Bangalore. Implementation of such program should be ensured accordingly in a time bound manner.	already earmarked and time bond
xxxii.	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	tank, safe drinking water, medical healthcare etc. have been provided to construction labors.

# General conditions:

S. No.	Condition	Compliance
i	The project authority shall adhere to the stipulations made by Karnataka State Pollution Control Board (KSPCB) and State Government.	Karnataka State Pollution Control
ii	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.	HE STATE OF THE PROPERTY OF TH
	At least four ambient air quality monitoring stations shall be established in the down wind direction as well as where maximum ground level concentration of PM <sub>10</sub> , SO <sub>2</sub> and NO <sub>X</sub> are anticipated in consultation with the SPCB. Data on ambient air quality and stack emissions shall be regularly submitted to this	monitoring stations at 4 locations has been installed. 1. AAQMS-1 West side plant and mine boundary. 2. AAQMS-2 East side plant and mine boundary.

	Ministry including its Regional Office and SPCB / CPCB once in six months.	4. AAQMS-4 South mine boundary (Khasara No. 898).
		Four continuous ambient air quality monitoring stations established at the boundary of plant and mines for the measurement of PM2.5, PM10, SO2 and NOX.
		Data on ambient air quality and stack emissions of cement mill are being submitted to the MOEF including its Regional Office and SPCB / CPCB on regular basis.
		Presently ambient air quality monitoring is being carried out by the NABL certified laboratory once in six months.
İv	Industrial wastewater shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	cement manufacturing process. RO reject water is being utilised in mill spray. The wastewater generated from domestic purpose is being
		Analysis of STP treated water is enclosed as <b>Annexure-VI</b> .
`	The overall noise levels in and around the plant area shall be kept well within the standards 85 dB(A) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dB(A) (day time) and 70 dB(A) (night time).	<ul> <li>Personnel protective equipment have been provided. Acoustic enclosures have been provided at high noise area.</li> <li>Plantation is being carried out at all around the plant boundary.</li> </ul>
vi	Proper housekeeping and adequate occupational health programmes shall be taken up. Occupational Health	Proper housekeeping of the entire plant area is being maintained.

	Surveillance programme shall be done on a regular basis and records maintained properly for at least 30-40 years. The programme shall include lung function and sputum analysis tests once in six months. Sufficient preventive measures shall be adopted to avoid direct exposure to dust etc.	<ul> <li>basis and records are maintained.</li> <li>Pre-employment and periodical medical examination of all the employees is being carried out. PPEs are provided to all the workmen</li> </ul>
vii.	The company shall undertake eco- development measures including community welfare measures in the project area.	area has been started. Various
viii.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP.	Environmental protection measures and safeguards recommended in EIA/ EMP is being implemented.
ix	A separate environmental management cell with full-fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of Senior Executive.	A separate environmental management cell with full-fledged laboratory facilities has been set up to carry out various management and monitoring functions under the control of unit head.
х.	Adequate fund shall be allocated to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. Time bound implementation schedule for implementing all the conditions stipulated herein shall be submitted. The funds so provided shall not be diverted for any other purpose.	implementation of the conditions stipulated by the Ministry of Environment Forests and Climate Change as well as the State Government. All recommendation shall be implemented along with the
xi	The Regional Office of this Ministry / CPCB /KSPCB shall monitor the stipulated conditions. The project authorities shall extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	the officer (s) of the Regional Office of this Ministry / CPCB / KSPCB.

xii.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both on hard copies as well as by email) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the KSPCB.	Six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both hard copies as well as by e-mail) is being sent to the MOEF & CC & CPCB regional Offices and the KSPCB.
xiii.	The Project Authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	<ul> <li>We have informed the MoEF &amp; CC Head office, Delhi &amp; Regional office Bangalore and KSPCB Bangalore on 04.05.2017 that the start date of construction activities as well as land development work of project (industry) is 03.12.2016.</li> <li>We have informed the DGMS, IBM, Dy. Commissioner (Gulbarga) regarding date of opening of captive mine on 5.12.2016.</li> </ul>
xiv.	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests. No change in the calendar plan including excavation, quantum of limestone and waste shall be made.	<ul> <li>No change in mining technology and scope of working shall be done without prior approval of the MOEF.</li> </ul>
xv.	Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM etc. shall be provided with ear plugs/ muffs.	<ul> <li>Personnel protective equipment have been provided. Acoustic enclosure have been provided at high noise area.</li> <li>Plantation is being carried out all around the plant boundary.</li> </ul>
xvi.	Industrial waste water (workshop and waste water from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	utilized in crusher after separation of oil and grease.
xvii.	Personnel working in dusty areas shall wear protective respiratory devices and	<ul> <li>Personnel protective equipment's such as Safety helmet, ear muffs,</li> </ul>

	thou shall size be assisted in	
	they shall also be provided with adequate training and information or safety and health aspects. Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, it needed.	to all.  Adequate training and information on safety and health aspects will be provided to all.  Occupational health surveillance program for workers and staff is
xviii.	The project authorities shall inform to the Regional Office located regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	<ul> <li>We have informed the MoEF &amp; CC Head office, Delhi &amp; Regional office Bangalore and KSPCB Bangalore on 04.05.2017 that the date of start the</li> </ul>
xix	A copy of clearance letter shall be marked to concerned Panchayat / local NGO, if any, from whom suggestion/representation, if any, was received while processing the proposal.	<ul> <li>Copy of environment clearance letter has been sent on 04.10.2012.</li> <li>EC letter has been put on our web site:- www.shreecement.in</li> </ul>
xx.	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, ZilaParishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations if any were received while processing the proposal. The clearance letter shall also put up on the website of the Company by the proponent.	letter has been sent on 04.10.2012. to panchayath, zillaprishath.  • EC letter has been put on our web
xxi.	The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the	Advertised in two local newspapers widely circulated in the region namely, The Hindu on 29/09/2012 and Vijay Karnataka on 30/09/2012 (copy already submitted).

	Karnataka State Pollution Control Board and also at web site of the Ministry of Environment and Forests at "http://envfor.nic.in and a copy of the same shall be forwarded to the Regional Office of this Ministry.	
xxii.	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986 as amended subsequently, shall also be put on the website of the Company along with the status of compliance of EC conditions and shall also be sent to the respective regional Office of the MoEF by e-mail.	Environmental statement for each financial year ending 31stMarch in Form-V is being submitted to the concerned State Pollution Control Board on 20/11/2018. The status of compliance of EC conditions is sent to the respective regional Office of the MoEF and is put on the website of the Company

# SCL AAQ analysis report:

# Annexure-I

Location Name	Month	PM2.5	PM10	SO <sub>2</sub>	NO <sub>x</sub>
		(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
	Oct-18	38.1	60.3	10.3	12.4
AAO 1 Noor Most	Nov-18	37.1	59.2	10.1	11.9
AAQ-1 Near West Plant and Mine	LDEC-18	40.8	63.6	9.8	11.3
Plant and Mine Boundary	Jan-19	38.9	62.8	9.2	10.4
booridary	Feb-19	40.1	64.3	10.1	11.2
	March-19	37.2	62.6	9.8	11.6
	Oct-18	34.5	57.3	8.6	10.4
	Nov-18	33.8	56.1	8.1	9.8
AAQ-2 Near East Side	Dec-18	36.4	60.8	9.2	10.6
Plant and Mine Boundary	Jan-19	35.1	62.6	9.7	11.3
booridary	Feb-19	36.8	61.2	9.1	10.8
	March-19	32.8	59.7	8.9	10.5
	Oct-18	26.8	51.3	8.9	11.8
,	Nov-18	27.9	51.8	9.1	12.1
AAQ-3 Near North	Dec-18	29.1	53.7	9.9	11.7
side Boundary wall	Jan-19	28.3	55.2	9.2	10.4
	Feb-19	30.8	58.7	8.9	10.8
	March-19	29.2	56.5	9.1	11.3
	Oct-18	22.3	47.8	8.6	10.5
•	Nov-18	23.1	48.6	9.1	11.6
AAQ-4 Near South	Dec-18	25.4	54.2	9.4	10.8
Mine Boundary	Jan-19	23.2	51.6	8.3	9.4
	Feb-19	25.1	53.6	8.9	10.1
	March-19	24.8	51.7	8.2	9.9

Registered Office 142, IDA Phase II, Cherlapally Hyderabad-500 051, India T: +91 40 2726 4141 F: +91 40 2726 3657



ISSUED TO:

SHREE CEMENT LIMITED

(UNIT KARNATAKA CEMENT PROJECT)

VILLAGE KODLA,

TALUKA SEDAM KALABURAGI,

KARNATAKA.

Report Number : VLL/VLS/18/11824/007

Issued Date : 2019-01-05

Your Ref

SCL/CC/ARC/KODLA/18-19/WO-4188.

And Date

: 2018-06-15

Kind Attn. : Mr. J. SUNIL

Designation : Sr. Engineer-Environment

Page 1 of 1

SAMPLE PARTICULARS

: AMBIENT AIR QUALITY MONITORING

Sampling Date

2018-12-28

Sample Registration Date Analysis Starting Date

2018-12-31 2018-12-31

Analysis Completion Date

2019-01-05

Test Required

PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub>, and CO.

SAMPLE COLLECTED BY VIMTA LABS LTD

#### **TEST REPORT**

Sr. No.	Location Details	PM 2.5	PM <sub>10</sub>	so,	NO <sub>2</sub>	c	:O µg/m <sup>1</sup>	
IVO.		(µg/m³)	(µg/m³)	(μg/m³)	(μg/m³)	L	H.o	H
1	Near Switch Yard-1	28.7	65.8	14.1	17.1	251	336	267
2	Near east side plant & mine boundary	26.3	63,4	13.7	15.7	228	327	284
3	Near Crusher	31.5	68.7	14.2	17.8	237	371	294
4	Near Mines south side	30.6	70.1	15.7	19.5	242	351	276
L	imits As Per NAAQS	60	100	80	80		2000	
	Test Methods	Gravimetri	Method	Improved West & Geake	Modified Jacob & Hochheiser Method	NDIR sp	ectroscopy	metho

PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub>, is monitored on 24 hrs. Basis & CO is monitored on 8 hrs basis.

Location Month	Packing Plant	Near Clinker Silo	Near Lime Stone Crusher
Norms	5000	5000	5000
Oct-18	3526	3126	3726
Nov-18	3628	3216	3861
Dec-18	3426	3567	4023
Jan-19	3591	3428	3826
Feb-19	3678	3625	3912
March-19	3826	3748	4112

# M/s Vimta Lab Limited Stack Analysis Report:

## Annexure-III

## **Cement Mill Stack**

Vimta Labs Limited

Registered Office
142, IDA Phase II, Cherlapally
Hyderabad-500 051, India
T:+91.40 2726 4141
F:+9151552 203657

SHREE CEMENT LIMITED

(UNIT KARNATAKA CEMENT PROJECT)

VILLAGE KODLA,

TALUKA SEDAM KALABURAGI,

KARNATAKA.

VLL/VLS/18/08043/003 Report Number :

Page 1 of 1

Issued Date

2018-11-05 Your Ref

: SCL/CC/ARC/KODLA/18-19/WO-4188.

And Date : 2018-06-15

SAMPLE PARTICULARS : STACK ATTACHED TO CEMENT MILL

Test Required : Particulate Matter

Sample Collected date : 2018/10/07 SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT** 

#### Parameter **UOM** Method Adopted RESULTS Diameter of Stack m 4.0 Area of stack m2 12.57 Flue Gas Temperature °C 98 Velocity m/sec IS:11255 PART (III) 6.7 Moisture Content, V/V % IS:11255 PART (III) 3.2 Particulate Matter mg/Nm3 IS: 11255 PART (I) 1985 15.2

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2018-12-04

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2018-06-15

SAMPLE PARTICULARS

STACK ATTACHED TO CEMENT MILL

**Test Required** 

Particulate Matter

Sample Collected date

: 2018/11/22

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### TEST REPORT

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	960	4.0
Area of stack	m <sup>2</sup>	\$### D	12.57
Flue Gas Temperature	°C	(*)	91
Velocity	m/sec	IS:11255 PART (III)	7.1
Moisture Content, V/V	%	IS:11255 PART (III)	3.1
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	14.2

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Issued Date :

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SAMPLE PARTICULARS

: STACK ATTACHED TO CEMENT MILL

Test Required

: Particulate Matter

Sample Collected date

2018/12/18

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### TEST REPORT

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m		4.0
Area of stack	m <sup>2</sup>	85	12.56
Flue Gas Temperature	°C		55
Velocity	m/sec	IS:11255 PART (III)	5.56
Moisture Content, V/V	%	IS:11255 PART (III)	4.2
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	5.8

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: 2018-06-15

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Designation: Sr. Engineer-Environment

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SAMPLE PARTICULARS

: STACK ATTACHED TO CEMENT MILL

Test Required

: Particulate Matter

Sample Collected date

: 2019/01/30

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	4.0
Area of stack	m²	-	12.56
Flue Gas Temperature	°C	-	66
Velocity	m/sec	IS:11255 PART (III)	7.92
Moisture Content, V/V	%	IS:11255 PART (III)	3.5
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	10.2

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Issued Date : 2019-03-11

Your Ref And Date

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2018-06-15

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SAMPLE PARTICULARS

: STACK ATTACHED TO CEMENT MILL

Test Required

: Particulate Matter

Sample Collected date

: 2019/02/20

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	4.0
Area of stack	m <sup>2</sup>	-	12.56
Flue Gas Temperature	°C	-	77
Velocity	m/sec	IS:11255 PART (III)	5.0
Moisture Content, V/V	%	IS:11255 PART (III)	4.5
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	8.2

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Issued Date 2019-04-12

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And Date

: 2018-06-15

Kind Attn. : Mr. J. Sunil

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SAMPLE PARTICULARS

: STACK ATTACHED TO CEMENT MILL

**Test Required** 

: Particulate Matter

Sample Collected date

: 2019/03/30

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	4.0
Area of stack	m <sup>2</sup>	-	12.56
Flue Gas Temperature	°C	-	61
Velocity	m/sec	IS:11255 PART (III)	7.84
Moisture Content, V/V	%	IS:11255 PART (III)	3.8
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	6.9

## Raw Mill Stack

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2018-12-10

Page 1 of 1

SAMPLE PARTICULARS

: STACK ATTACHED TO RAW MILL KILN

Test Required

Particulate Matter, Sulphur dioxide, Oxide of Nitrogen;

Sample Collected date

: 2018/12/28

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### TEST REPORT

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	2 22	5.6
Area of stack	m <sup>2</sup>		24.64
Flue Gas Temperature	°C	25	141
Velocity	m/sec	IS:11255 PART (III)	17.36
Flow	Nm³/Sec	IS:11255 PART (III)	305.15
Oxygen	%	Flue Gas Analyzer	9.2
Moisture Content, V/V	%	IS:11255 PART (III)	2.2
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	7.4
Sulphur dioxide	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	<3.4
Oxide of Nitrogen	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	532

PM, SO<sub>2</sub> and NOx corrected to 10% oxygen

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Kind Attn. : Mr. J. Sunil

Designation: Sr. Engineer-Environment

Page 1 of 1

SAMPLE PARTICULARS

: STACK ATTACHED TO RAW MILL KILN

Test Required

: Particulate Matter, Sulphur dioxide, Oxide of Nitrogen;

Sample Collected date

: 2019/01/31

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	5.6
Area of stack	m <sup>2</sup>	-	24.64
Flue Gas Temperature	°C	-	160
Velocity	m/sec	IS:11255 PART (III)	18.72
Flow	Nm³/Sec	IS:11255 PART (III)	319.05
Oxygen	%	Flue Gas Analyzer	8.8
Moisture Content, V/V	%	IS:11255 PART (III)	2.6
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	8.4
Sulphur dioxide	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	<3.4
Oxide of Nitrogen	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	578

PM, SO<sub>2</sub> and NOx corrected to 10% oxygen

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SAMPLE PARTICULARS

: STACK ATTACHED TO RAW MILL KILN

Test Required

: Particulate Matter, Sulphur dioxide, Oxide of Nitrogen;

Sample Collected date

: 2019/02/27

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	5.6
Area of stack	m <sup>2</sup>	-	24.64
Flue Gas Temperature	°C	-	149
Velocity	m/sec	IS:11255 PART (III)	15.4
Flow	Nm³/Sec	IS:11255 PART (III)	294.56
Oxygen	%	Flue Gas Analyzer	9.8
Moisture Content, V/V	%	IS:11255 PART (III)	2.7
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	6.5
Sulphur dioxide	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	<3.4
Oxide of Nitrogen	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	551

PM, SO<sub>2</sub> and NOx corrected to 10% oxygen

Dr. Subba Reddy Mallampati **Group Leader- Environment** 

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And Date

2018-12-10

Kind Attn. : Mr. J. Sunil

Designation: Sr. Engineer-Environment

Page 1 of 1

SAMPLE PARTICULARS : STACK ATTACHED TO RAW MILL KILN

Test Required : Particulate Matter, Sulphur dioxide, Oxide of Nitrogen;

: 2019/03/28 Sample Collected date SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	5.6
Area of stack	m <sup>2</sup>	-	24.64
Flue Gas Temperature	°C	-	151
Velocity	m/sec	IS:11255 PART (III)	18.58
Flow	Nm³/Sec	IS:11255 PART (III)	318.96
Oxygen	%	Flue Gas Analyzer	8.6
Moisture Content, V/V	%	IS:11255 PART (III)	2.8
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	8.9
Sulphur dioxide	mg/Nm³	IS: 11255 PART (I) 1985	<3.4
Oxide of Nitrogen	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	596

PM, SO<sub>2</sub> and NOx corrected to 10% oxygen

# **Coal Mill Stack**

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SAMPLE PARTICULARS

: STACK ATTACHED TO COAL MILL

Test Required

: Particulate Matter

Sample Collected date

: 2018/12/29

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### TEST REPORT

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m		1.6
Area of stack	m²	/	2.01
Flue Gas Temperature	°C		68
Velocity	m/sec	IS:11255 PART (III)	13.2
Flow	Nm³/Sec	IS:11255 PART (III)	23.127
Moisture Content, V/V	%	IS:11255 PART (III)	1.5
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	9.6

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Kind Attn. : Mr. J. Sunil Designation: Sr. Engineer-Environment Report Number :

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SAMPLE PARTICULARS

: STACK ATTACHED TO COAL MILL

Test Required

: Particulate Matter

Sample Collected date

: 2019/01/31

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	1.6
Area of stack	m <sup>2</sup>	-	2.01
Flue Gas Temperature	°C	-	81
Velocity	m/sec	IS:11255 PART (III)	14.9
Flow	Nm³/Sec	IS:11255 PART (III)	24.65
Moisture Content, V/V	%	IS:11255 PART (III)	2.12
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	13.7

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SAMPLE PARTICULARS

: STACK ATTACHED TO COAL MILL

Test Required

: Particulate Matter

Sample Collected date

: 2019/02/27

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	1.6
Area of stack	m <sup>2</sup>	-	2.01
Flue Gas Temperature	°C	-	71
Velocity	m/sec	IS:11255 PART (III)	11.7
Flow	Nm³/Sec	IS:11255 PART (III)	21.654
Moisture Content, V/V	%	IS:11255 PART (III)	1.4
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	7.6

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Kind Attn. : Mr. J. Sunil

Designation: Sr. Engineer-Environment

Page 1 of 1

SAMPLE PARTICULARS

: STACK ATTACHED TO COAL MILL

Test Required

: Particulate Matter

Sample Collected date

: 2019/03/29

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	1.6
Area of stack	m <sup>2</sup>	-	2.01
Flue Gas Temperature	°C	-	78
Velocity	m/sec	IS:11255 PART (III)	14.4
Flow	Nm³/Sec	IS:11255 PART (III)	24.48
Moisture Content, V/V	%	IS:11255 PART (III)	1.67
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	11.4

# **Cooler Stack**

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SAMPLE PARTICULARS

: STACK ATTACHED TO ESP COOLER

**Test Required** 

: Particulate Matter

Sample Collected date SAMPLE COLLECTED BY VIMTA LABS LTD.

: 2018/12/29

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	( Fo)	4.3
Area of stack	m <sup>2</sup>	348	14.52
Flue Gas Temperature	°C	(#s)	245
Velocity	m/sec	IS:11255 PART (III)	21.48
Flow	Nm³/sec	IS:11255 PART (III)	177.16
Moisture Content, V/V	%	IS:11255 PART (III)	3.2
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	6.3

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Designation: Sr. Engineer-Environment

Page 1 of 1

SAMPLE PARTICULARS

: STACK ATTACHED TO ESP COOLER

Test Required

: Particulate Matter

Sample Collected date

: 2019/01/31

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	4.3
Area of stack	m <sup>2</sup>	-	14.52
Flue Gas Temperature	°C	-	249
Velocity	m/sec	IS:11255 PART (III)	18.62
Flow	Nm³/sec	IS:11255 PART (III)	152.89
Moisture Content, V/V	%	IS:11255 PART (III)	2.7
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	8.9

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SAMPLE PARTICULARS

: STACK ATTACHED TO ESP COOLER

Test Required

: Particulate Matter

Sample Collected date

: 2019/02/28

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	4.3
Area of stack	m <sup>2</sup>	-	14.52
Flue Gas Temperature	°C	-	259
Velocity	m/sec	IS:11255 PART (III)	19.4
Flow	Nm³/sec	IS:11255 PART (III)	166.8
Moisture Content, V/V	%	IS:11255 PART (III)	3.9
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	7.3

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Designation: Sr. Engineer-Environment

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SAMPLE PARTICULARS

: STACK ATTACHED TO ESP COOLER

Test Required

: Particulate Matter

Sample Collected date

: 2019/03/29

SAMPLE COLLECTED BY VIMTA LABS LTD.

#### **TEST REPORT**

Parameter	UOM	Method Adopted	RESULTS
Diameter of Stack	m	-	4.3
Area of stack	m <sup>2</sup>	-	14.52
Flue Gas Temperature	°C	-	257
Velocity	m/sec	IS:11255 PART (III)	19.03
Flow	Nm³/sec	IS:11255 PART (III)	153.85
Moisture Content, V/V	%	IS:11255 PART (III)	2.9
Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 PART (I) 1985	5.4

Dr. Subba Reddy Mallampati **Group Leader- Environment** 

A Buy

# Annexure-IV

# **Ground water level Report**

Sr.	Year-2018	Locat	ion
No.		Piezometer towards Plant boundary near main gate	Piezometer near Plant and mine boundary
1	October	41.8	54.3
2	November	42.5	55.7
3	December	44.1	55.1
4	January	42.8	54.2
5	February	43.1	54.8
6	March	43.9	55.2

# November-2018

#### Vimta Labs Limited

Registered Office
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Page 1 of 2

ISSUED TO:

SHREE CEMENT LIMITED

(UNIT KARNATAKA CEMENT PROJECT)

VILLAGE KODLA, TALUKA SEDAM KALABURAGI,

KARNATAKA.

Sample Details

(

Kind Attn. : Mr. J. SUNIL

Designation : Sr. Engineer-Environment

Report Number : VLL/VLS/18/10006/004

Issued Date : 2018-12-04

Your Ref : SCL/CC/ARC/KODLA/18-19/WO-4188.

: 2018-06-15

2018-11-22

2018-12-03

SAMPLE PARTICULARS **GROUND WATER QUALITY** 

Sample Registration Date 2018-11-23

Sampling Date
Analysis Completion Date Analysis Starting Date 2018-11-23

W1: Near 360 Survey Land / 92 Seater Area; W2:Permanent Town Ship west Boundary wall;

And Date

W3:Permanent Town Ship east Boundary wall;

W4:Sand Plant Back Side;

#### SAMPLE COLLECTED BY VIMTA LABS LTD

#### **TEST REPORT**

S.No	Parameters	Unit	IS: 10500 Limits	W1	W2	w3	W4
1	pН	-	6.5 - 8.5(NR)	7.23	7.52	7.14	6.89
2	TSS	mg/l		<1.0	<1.0	<1.0	<1.0
3	TDS	mg/l	500(2000)	628	438	518	396
4	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	378.3	261.7	318.4	129.7
5	Total Alkalinity	mg/l	200(600)	318	213	248	231
6	Calcium as Ca	mg/l	75(200)	81.6	64.3	78.6	32.3
7	Magnesium as Mg	mg/l	30(100)	42.3	24.6	29.7	12.4
8	Chlorides as Cl	mg/l	250(1000)	56.7	68.4	87.8	38.6
9	Sulphates as SO <sub>4</sub>	mg/l	200(400)	74.6	25.7	41.3	16.6
10	Fluorides as F	mg/l	1.0(1.5)	1.1	0.9	0.8	1.0
11	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	18.6	12.5	10.7	13.1
12	Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
13	Manganese as Mn	mg/l	0.1 (0.3)	<0.01	<0.01	<0.01	<0.01
14	Iron as Fe	mg/l	0.3(NR)	0.08	0.03	0.09	0.06
15	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001

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#### **ISSUED TO:**

SHREE CEMENT LIMITED

(UNIT KARNATAKA CEMENT PROJECT)

VILLAGE KODLA,

TALUKA SEDAM KALABURAGI,

KARNATAKA.

Kind Attn. : Mr. J. SUNIL

Designation : Sr. Engineer-Environment

Report Number : VLL/VLS/18/10006/004 Issued Date : 2018-12-04

Your Ref And Date SCL/CC/ARC/KODLA/18-19/WO-4188.

2018-06-15

Page 2 of 2

#### SAMPLE PARTICULARS Sample Registration Date

: GROUND WATER QUALITY

2018-11-23

2018-11-23

Sampling Date Analysis Completion Date

2018-11-22 2018-12-03

Analysis Starting Date Sample Details

W5: Permanent Township Near canteen side; W6:Bricks plant Back Side Near Security Tower;

W7: Back Side Of Bricks Plant; and W8: Bricks plant Near tanker Filling.

SAMPLE COLLECTED BY VIMTA LABS LTD

#### **TEST REPORT**

S.No	Parameters	Unit	IS: 10500 Limits	W5	W6	W7	W8
1	рН	-	6.5 - 8.5(NR)	7.46	7.46	7.9	7.59
2	TSS	mg/l		<1.0	<1.0	<1.0	<1.0
3	TDS	mg/l	500(2000)	535	329	627	71
4	Total Hardness as CaCO₃	mg/l	200(600)	169.4	247.5	143.8	23.5
5	Total Alkalinity	mg/l	200(600)	164	231	230	17.8
6	Calcium as Ca	mg/l	75(200)	43.5	54.7	46.4	3.7
7	Magnesium as Mg	mg/l	30(100)	21.8	18.9	26.6	2.3
8	Chlorides as Cl	mg/l	250(1000)	174.2	34.1	149.7	26.4
9	Sulphates as SO <sub>4</sub>	mg/l	200(400)	54.7	38.7	72.4	4.8
10	Fluorides as F	mg/l	1.0(1.5)	1.1	1.3	0.8	1.1
11	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	19.7	2.7	0.6	2.9
12	Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
13	Manganese as Mn	mg/l	0.1 (0.3)	<0.01	<0.01	<0.01	<0.01
14	Iron as Fe	mg/l	0.3(NR)	0.06	0.02	0.06	0.01
15	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001

**STP Report:** Annexure-VI

#### Vimta Labs Limited

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#### **ISSUED TO:**

SHREE CEMENT LIMITED

(UNIT KARNATAKA CEMENT PROJECT)

VILLAGE KODLA,

TALUKA SEDAM KALABURAGI,

KARNATAKA.

Report Number : VLL/VLS/18-19/16018/05

Issued Date : 2019-04-12

Your Ref

: SCL/CC/ARC/KODLA/18-19/WO-4188.

And Date

: 2018-06-15

Kind Attn. : Mr. J. SUNIL

Designation : Sr. Engineer-Environment

Page 1 of 1

SAMPLE PARTICULARS Sample Registration Date

Analysis Starting Date

**STP Wastewater** 

2019-03-30 : 2019-04-01

Sampling Date Analysis Completion Date 2019-03-29 2019-04-12

SAMPLE COLLECTED BY VIMTA LABS LTD

#### **TEST REPORT**

S.No	Parameters	Unit	STP Outlet @ Canteen	STPOutlet @ 92 Seater at Plant
1	рН	-	7.46	7.31
2	Total Suspended Solids	mg/l	26	15
3	Total Dissolved Solids	mg/l	1356	1156
4	Dissolved oxygen	mg/l	5.2	3.8
5	Chemical Oxygen Demand	mg/l	92	86
5	Biological Oxygen Demand	mg/l	20	15
6	Fecal Coliform	mg/l	2.9 x 10 <sup>4</sup>	2.2 x 10 <sup>4</sup>
7	Ammonical Nitrogen as NH3	mg/l	16.9	18.5
8	Total Nitrogen as N	mg/l	25.8	23.7
9	Sulphide as S	mg/l	<0.01	<0.01
10	Chloride as Cl	mg/l	456.4	425.1
11	Total Residual Chlorine	mg/l	<0.2	<0.2
12	Oil& Grease	mg/l	<1.0	<1.0

Dr. SubbaReddy Mallampati **Group Leader-Environment** 

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ISSUED TO:

SHREE CEMENT LIMITED

(UNIT KARNATAKA CEMENT PROJECT)

VILLAGE KODLA,

TALUKA SEDAM KALABURAGI,

KARNATAKA.

Report Number : VLL/VLS/18/11824/006

Issued Date : 2019-01-05

Your Ref : SCL/CC/ARC/KODLA/18-19/WO-4188. And Date : 2018-06-15

Kind Attn. : Mr. J. SUNIL

Designation : Sr. Engineer-Environment

Page 1 of 1

SAMPLE PARTICULARS Sample Registration Date

: AMBIENT NOISE MONITORING

: 2018-12-31

2018-12-28 & 2018-12-29

Test Required

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: L10, L50, L90, Leq, Lday, Lnight & Ldn.

SAMPLE COLLECTED BY VIMTA LABS LTD

TEST	R	FΡ	n	RT

S.No.	Location Details	L10	L50	L90	Leq	Lday	Lnight	Ldn
1	Near Switch Yard-1	52.7	48.8	45.1	49.8	50.6	46.9	54.1
2	Near east side plant & mine boundary	50.2	46.3	42.9	47.2	48.3	44.5	51.7
3	Near Crusher	62.7	58.8	55.4	59.7	60.8	57.0	64.2
4	Near Cement Mill	60.9	57.0	53.6	57.9	59.0	55.2	62.4
5	Near CCR Building	57.9	54.0	50.6	54.9	56.0	52.2	59.4