



Ref: JSW Cement/ENV/05-19/002

JSW Cement Ltd

P.O. Vidyanagar, Village Toranagallu,
Dist. Bellary - 583275 Karnataka, India

Phone : 08395-241001

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Website : www.jsw.in

CIN - U26957MH2006PLC160839

To,
The Director (S),
Ministry of Environment & Forest,
Kendriya Sadan, Koramangala,
Bangalore – 560034.

Date: 27.05.2019

SUB: Submission of Six Monthly EC Compliance Report for the period of October–2018 to March -2019 for 4.0 MTPA Cement of JSW Cement Limited.

Ref: Environment Clearance No: J-11011/540/2017-IA II (I) dated 01.02.2018.

Dear Sir,

Please find the enclosed herewith the six monthly compliance reports for the period of October–2018 to March–2019 against the conditions of consolidated Environmental Clearance for 4.0 MTPA Cement for JSW, Vijayanagar works Bellary.

Thanking You,

Authorized Signatory,
For JSW Cement Limited,

Rajkumar Dhempe
Plant Head

CC:

Zonal Office, CPCB, 1st and 2nd Floor, Nisarga Bhavan, A-Block, Thimmaiah main road, 7th Cross, Shivanagar, Bengaluru – 560010.

Regional Officer, Karnataka State Pollution Control Board, Sy No. 597P, Ward No. 25, 4th Main Road, Near Dr. Vishnuvardhana Park, Kuvempunagar, Bellary – 583104.



Part of O.P. Jindal Group

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SIX MONTHLY COMPLIANCE REPORT FROM OCTOBER – 2018 TO MARCH –
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Sl. No	CONDITIONS	COMPLIANCE
A	SPECIFIC CONDITIONS	
i	The project proponent should install 24x7 air and water monitoring device to monitor air emission and effluent discharge, as provide by CPCB and submit report to ministry and its regional office.	On line continuous stack emission monitoring system at VRM bag house stack, RP mill 1&2, RP 3&4 bag house stack and monitoring data is regularly transmitted to CPCB server. No effluents generated from our cement manufacturing process. Stack emission & AAQM monitoring report is being regularly submitted to KSPCB regional office Bellary on monthly basis. Environment monitoring reports are also being submitted to CPCB Bengaluru and MoEF&CC every six month as part of EC Compliance report. <i>(Annexure-I & Annexure-II)</i>
ii	All the conditions stipulated by the standing committee of the National Board for wild life should be effectively implemented.	The EC has been transferred from JSW Steel Limited, the parent company to JSW Cement Limited. Implementation of Wildlife Conservation plan is being undertaken by JSW Steel limited and regular compliance status is being submitted to MoEF&CC by JSW Steel.
iii	The PP shall participate in a Wildlife Conservation Plan for Sloth Bears and other Schedule-I fauna found in the study area and in the Daroji Bear Sanctuary. The Conservation Plan shall be prepared in consultation with the State Wildlife Department. The Plan with various activities including creation of water bodies, elimination of weeds, eco-regeneration plan including regeneration of fruit bearing trees and improvement of ecological habitat and support to the nearby villages to minimize dependency on forest produce for fuel shall contain budgetary support with details of capital and revenue costs for various activities, the details of expenditure made on which shall be regularly submitted as part of the Compliance Report to Regional Office, Bangalore	The EC has been transferred from JSW Steel Limited, the parent company to JSW Cement Limited. Implementation of Wildlife Conservation plan is being undertaken by JSW Steel limited and regular compliance status is being submitted to MoEF&CC by JSW Steel.
iv	The PP shall obtain assured raw materials (particularly Blast Furnace slag, Clinker and coal) from designated sources for long-term supply and shall enter into long-term MOUs with producers/ setters of raw materials used, Washed coal shall he used	We have already done MOU with suppliers for long term supply of raw materials such as blast furnace slag, Clinker, Gypsum & Coal.
v	All the units of the expansion project shall operate using state-of-art energy efficient technologies, environmental pollution prevention and control technologies and energy efficient measures including the 4Rs shall be implemented at every step of the plant operation.	JSW Cement's all the units of the expansion project are operating using state-of-art energy efficient technologies, environmental pollution prevention and control technologies and



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		energy efficient measures including the 4Rs.
vi	On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz, Electrostatic precipitator (ESP) and bag filters etc. shall be provided to keep the emission levels of particulates below 50 mg/Nrn ³ from stacks and also meet level of the 50 µg/ m ³ in work zone.	JSW Cement Limited is in the premises of JSW Steel limited 05 nos. of On line continuous ambient air quality monitoring stations (CAAQMS) are installed in JSW Steel complex for the monitoring of ambient air quality and regularly data is transmitted to CPCB. 03 Nos Bag house are provided in VRM & RP mills area to control the emission level below 30 mg/Nm ³ . 70 nos bag filters are provided at all material transfer point to control fugitive dust emission. On line continuous stack emission monitoring system are installed at Vertical roller mill bag house stack ,RP-1&2 ,RP-3&4 Bag house stack and regularly data is transmitted to CPCB server.
vii	Air Pollution control measures shall include Pulse Jet Bag Filter & DSS in yards. Vents in storage tanks	03 Nos. Bag house installed at VRM mill & Roller press mill 1&2, & Roller press mill 3&4 to control of air pollution. 70 no. pulse jet bag filters were installed at all transfer points where material movement takes place and to control fugitive dust emission.
viii	In-plant control measures like bag filters, de-dusting and dust suppression system shall be provided to control fugitive emissions from all the vulnerable sources. Water sprinkling system shall be provided to control secondary fugitive dust emissions generated during screening, loading, unloading, handling and storage of raw materials etc.	De-dusting Bag filters provided at all transfer points to control air pollution and all the bag filters are in good working condition. Regular water sprinkling is done in all dust prone areas to control fugitive dust emission.
ix	Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed	Not applicable for cement plants as the GSR 414(E) dated 30 th May 2008 is having permissible limits for Sponge Iron Plant.
x	The plant shall develop rail track for conveying slag from JSW Steel to JSW Cement.	Rail track developed for the transportation of slag from JSW Steel to JSW Cement plant.
xi	Detailed unit-wise Risk Analysis and Assessment and detailed on-site and off-site Emergency Preparedness and Disaster Management Plan (DIP) linked to District- level IJMF shall be prepared in consultation with district authorities and mock drills carried out periodically	Unit wise risk analysis and its Assessment details, on-site and off-site plan already prepared and report submitted to Department of factories Bellary. Mock drills are regularly carried out once in Six months.



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xii	Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/ hazardous waste shall be submitted to the Ministry's Regional Office at Bangalore, SP CB and CPCB.	No Solid waste generated from our cement manufacturing. Slag is transported from stacker & Reclaimer and covered belt conveyers up to mills. Hazardous waste returns regularly submitted to KSPCB Bellary.
xiii	BF Slag shall be used for cement making	BF slag is being used for the making of PSC & GGBS.
xiv	Total water requirement for the facility shall be provided from JSW Steel Ltd, and shall not exceed 565 m ³ /day. The blow down from the system shall be used for greenbelt development. The effluent from domestic sources shall also be used for green belt development after treatment in septic tank and soaking pits. No effluent shall be discharged outside the factory premises, "Zero Liquid Discharge" shall be followed strictly as proposed	Water for the unit is provided by JSW Steel Limited. Average daily water consumption for past six months, i.e. during Oct'18 to Mar'19 is 213 m ³ /day. Blow down & domestic waste water is being used for the greenbelt development after the treatment. Zero liquid discharge is being maintained.
xv	The proponent shall adopt water conservation measures to reduce requirement of make-up water. The wastewater generated from the indirect cooling circuit shall be routed through the cooling tower, The domestic wastewater shall be treated in a Sewage Treatments plant (STP) and used for dust suppression and green belt development	We have implemented rooftop rain water harvesting in our plant for the conservation of rain water. We are in the process of construction of 60 KLD STP for the treatment of domestic waste water. Treated water will be used for dust suppression and greenbelt development.
xvi	Efforts shall further be made to use maximum water from the rain water harvesting sources to reduce intake of water from Almatti and Tungabhadra Dam. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	Reservoir pond already constructed in the premises of JSW Steel Limited for the collection of rain water. We are using the same water to meet requirement of our industrial purpose as well as domestic and other purpose.
xvii	Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent. Leachate study for the effluents generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional Office at Bangalore, SPCB and CPC B_	No effluents generated from our cement manufacturing process. STP of 60 KLD for the treatment of domestic waste water is being installed and the treated water will meet standard of KSPCB & CPCB. Water analysis report shall be submitted to KSPCB and CPCB on regular basis. <i>(Annexure-III)</i>
xviii	Green belt shall be developed in 33% of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO	We have done plantation all around in our plant area, both side of the roads and vacant places in our plant area. Tree plantation report and tree plantation photographs attached as <i>(Annexure-IV)</i>
xix	The entire power requirement shall be met from the Captive Power Plant [Existing Gas based (100 MW -130 MW); 2x300 MW (coal based 50% Indian coal and 50% Imported Coal); proposed 660 MW(super critical) J of 1490 VW of M/s JSW Steel Limited	The entire Power requirement met from our JSW Energy Limited.



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xx	<p>The environment wing of the company and for this Plant as well as of the company shall be strengthened with qualified personnel, state-of art laboratory, infrastructure, etc and regular records of the environmental data including on-line monitoring-of emissions shall be maintained.</p>	<p>JSW Cement Limited, Vijayanagar has established an Environment Management Cell which is responsible for day to day environment and pollution monitoring activities. A well-equipped laboratory is in place for carrying out emission / effluent /noise monitoring in the plant premises. The Environmental Management cell also co-ordinates with all the related activities such as checking of performance of pollution control equipment installed in plant, Sewage treatment plant, and green belt development.</p>
xxi	<p>Company shall develop an HSE Policy. All the permanent workers shall be covered under ESI Scheme. The company shall have the provision for treatment of its workers at the local sub-committee Nursing Homes & Hospitals in case of emergency. Annual Medical Check-up on some medical parameters like Blood test, Chest X-Ray, Eye test_ Audiometry, Spirometry etc. shall be regularly conducted amongst the employees of the Company and records maintained thereof</p>	<p>JSW Cement Limited has HSE Policy in place. All permanent works are covered under ESI scheme and health insurance policy. JSW steel limited, Vijayanagar is having multi super specialty hospital for the treatment of employees, worker & nearby villagers. Annual medical check-up records of the employees are maintained.</p>
xxii	<p>A CSR Plan shall be prepared and implemented in consultation with the local villages and administration. Issues raised/covered during public hearing and incorporated in the EMP and CSR Plan. During construction phase of the expansion project, an expenditure of about minimum 5% of the capital expenditure shall be earmarked for CSR activity covering the broad areas of education, health, infrastructure, water and power spread over 5 years/period of construction of project. During operation phase of the project, the CSR activity will be funded based on 2% of the profit during operation phase of the project. 70% of the employment shall be made from_ the local population, The activities. shall include skill development, education for the girl child, common infrastructure, alternate livelihood schemes and creation of SHGs, etc. The PP shall as part of the CSR Plan meet the drinking water requirements (pipeline) of neighboring villages from the State authorities. In addition, villages such as Dharmasagara and Bandri, which have a fluoride problem shall also be provided drinking water. All the commitments made to the public during the Public Hearing/Public Consultation meeting held on 05.10.2010 shall be satisfactorily implemented and details of which shall be furnished as part of CSR. A separate budget for implementing the same shall be allocated made. The annual</p>	<p>Implementation of the Enterprise Social Responsibility and CSR Shall be the responsibility of JSW steel, the parent company as per point no. 8 of F. No. J-11011/489/2009-IA-II(I), dated 22/01/2018. Regular reports related to ESC and CSR are being submitted to the Ministry by JSW Steel limited.</p>



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	capital and recurring expenditure on CSR -village-wise and activity-wise shall be uploaded on the company website and also included in the Annual Report of the company to the Ministry's Regional Office at Bangalore.	
xxiii	The Company shall submit within three months its policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/ procedure to bring into focus a infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of noncompliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders	We have submitted Corporate Environment Responsibility to MoEF &CC regional office Bengaluru vide our letter no. JSWCL/ENV/ MoEF /2017-18 on dated 05.03.2018. Our latest and revised policy towards Corporate Environment Responsibility is attached as (<i>Annexure –V</i>)
xxiv	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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	All necessary infrastructure / facility was provided to construction labor during construction phase of the project and also removed temporary houses after completion of project.
B	GENERAL CONDITIONS	
i	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEFCC).	Noted and will be complied.
ii	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, PM2,5, SO2 and NOx are anticipated in consultation with the SPC13. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bangalore and the SPCB/CPCB once in six months	Regular ambient air quality monitoring is being carried out by JSW Steel Environment Department. Data of the same regularly submitted to SPCB, CPCB & MoEF every once in six months. Six monthly AAQM and Stack emission report attached as (<i>Annexure-I & Annexure-II</i>)
iii	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	No industrial wastewater generated from our cement manufacturing process.
iv	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 should conform to the standards prescribed under EPA Rules, 1989 viz, 75 dBA (daytime) and 70 dBA (nighttime).	Noise level are maintained within standard norms. Enclosures are provided at plant equipment's; regular maintenance is being carried of plant machineries to reduces the noise level in plant. Regular ambient noise level monitoring around the plant is done and monitoring results are regularly submitted to KSPCB on monthly basis. Six monthly noise level monitoring reports are attached as (<i>Annexure-VI</i>)



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v	Vehicular transportation of raw materials and finished products shall be kept to minimum. Dust suppression systems shall be in place at transfer points. All internal roads shall be black topped. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using native species shall be developed along the roads.	All internal roads are paved where raw material and product movement takes place. Tree plantation also done on both side of the roads. Regular housekeeping is done on the roads. <i>(Photographs attached as Annexure – VII)</i> . 70 nos. bag filters are provided at all transfer points where material movement takes place to control fugitive emission.
vi	Requisite funds shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change (MoEF&CC) as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bangalore. The funds so provided shall not be diverted for any other purpose	JSW Cement Limited has invested INR 31.69 crores as Capital expenditure on pollution control measures up to March 2018. Capital cost & Recurring cost investment on Pollution control measures is attached as <i>(Annexure-VIII)</i>
vii	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 be put. on the web site of the company by the proponent	EC receipt intimation was given to all the concerned authorities. EC letter was uploaded on our company website. http://www.jswcement.in/wp-content/uploads/EC-Transfer-4.0-MTPA-Cement-Vijayanagar.pdf
viii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEFCC at Bangalore. The respective Zonal Office of CPCB and the SPCB, The criteria pollutant levels namely; PMIO S02,NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	EC compliance report is being regularly uploaded on company official website www.jswcement.in along with Environment monitoring report. The Environment monitoring data are also regularly submitted to KSPCB, Regional office Bellary. Stack emission monitoring data are also displayed at factory main gate.
ix	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by-mail) to the Regional, Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bangalore/CPCB/SPCB shall monitor the stipulated conditions.	Six monthly compliance reports are regularly submitted to Regional Office MOEF&CC, Zonal office CPCB and SPCB in both hard copies as well as through mail.
x	The environmental statement for each financial year ending 31 st 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	Last Environment Statement (Form -V) for the year 2017-2018 submitted to KSPCB vide our letter no. JSW/VDNR/KSPCB on dated 15.09.2018. Environment statement is also uploaded



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	also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEFCC at Bangalore by e-mail	on the company website and also submitted to Regional office MOEFCC at Bangalore by email. (Annexure-IX)
xi	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEFCC) at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the regional office at Bangalore.	We have advertised our Environmental Clearance in local new papers (Kanada Prabha, Deccan Herald) which are widely circulated in the region and copy of the same was submitted to regional office, MOEFCC. Newspaper advertisement is attached as per (Annexure-X).
xii	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.	Date of financial closure:31.03.2018 Date of final approval:07.05.2018 Date of commencement of land development work: Nov.2006
14	M/s JSW Cement limited shall abide by all the commitments and recommendations made in the EIA/EMP report and that during presentation to the EAC; commitments made during the Public hearing held on 30.12.2010 for Integrated Steel Plant	Noted and will be complied
15	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory	Noted and Agreed
16	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions	Noted and Agreed
17	The PP shall ensure no change in the pollution load; and no conflict in sharing in common facilities in day to day operations	Noted and Agreed
18	All the liabilities regarding environmental issues of slag grinding unit will be the responsibility of the new company i.e. M/s JSW Cement Limited.	Noted and Agreed
19	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.	Noted and Agreed
20	This Environmental Clearance is transfer of slag grinding and mixing unit (4.0 MTPA) which was part of Environmental Clearance vide J11011/489/2009-IA,II(I) dated 1 st October 2015 read with amendment in the EC vide letter of even no. dated 09 th June, 2016.	Noted



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21	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
22	The applicant shall Continue the self-monitoring system for monitoring the effluents and emissions.	Noted and Agreed
23	The applicant shall maintain register recording the ambient air quality, stack monitoring and analysis report of treated effluents. The register shall be open for inspection by the board officers at all time.	Noted and Agreed
24	An inspection Book shall be opened and made available to the Board Officers during their visit to the factory	Noted and Agreed
25	The industry shall transport and store the raw materials in a manner so as not to cause any damage to environment, life and property. The applicant shall be solely responsible for any damages to environment.	Noted



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Annexure - I

Ambient Air Quality Average Report (Oct-2018 to Mar-2019)													
Location	Months	PM - 10 (100µg/m ³)			PM - 2.5 (60µg/m ³)			SO ₂ (80µg/m ³)			NO _x (80µg/m ³)		
		Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
Near Vidyanagar Colony (A1)	01-10-2018 to 31.03.2019	54.4	82.4	60.13	15.8	20.1	17.64	5.66	12.1	9.73	8.56	18.4	14.34
		52.8	66.2	60.47	17.7	22.6	20.38	10.1	12.0	10.73	16.7	22.1	18.17
		70.4	86.6	74.2	20.4	41	25.62	11.2	13.5	12.57	19.4	23.6	21.6
Near Toranagallu Village (A2)	01-10-2018 to 31.03.2019	54.4	65.9	62.3	16.5	21.9	19.4	10.3	13.4	11.4	16.2	19.2	19.34
		52.8	66.2	60.47	17.7	22.6	20.38	10.1	12.0	10.73	16.7	22.1	18.17
		70.4	86.6	74.2	20.4	41	25.62	11.2	13.5	12.57	19.4	23.6	21.6
Near Sulthanpura Village (A4)	01-10-2018 to 31.03.2019	54.4	65.9	62.3	16.5	21.9	19.4	10.3	13.4	11.4	16.2	19.2	19.34
		52.8	66.2	60.47	17.7	22.6	20.38	10.1	12.0	10.73	16.7	22.1	18.17
		70.4	86.6	74.2	20.4	41	25.62	11.2	13.5	12.57	19.4	23.6	21.6



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Annexure - II

Stack Emission Monitoring Report (Oct-2018 to Mar-2019)										
Stack	Parameters	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Avg		
VRM Bag House Stack	Particulate Matter (mg/Nm ³)	20.3	19.6	20.8	13.7	14.7	20.7	18.3		
RP 1&2 Bag House Stack	Particulate Matter (mg/Nm ³)	22.8	21.3	22.8	17.8	16.7	20.8	20.4		
RP 3&4 Bag House Stack	Particulate Matter (mg/Nm ³)	23.1	24.2	25.8	19.4	17.7	23.6	22.3		

Annexure - III

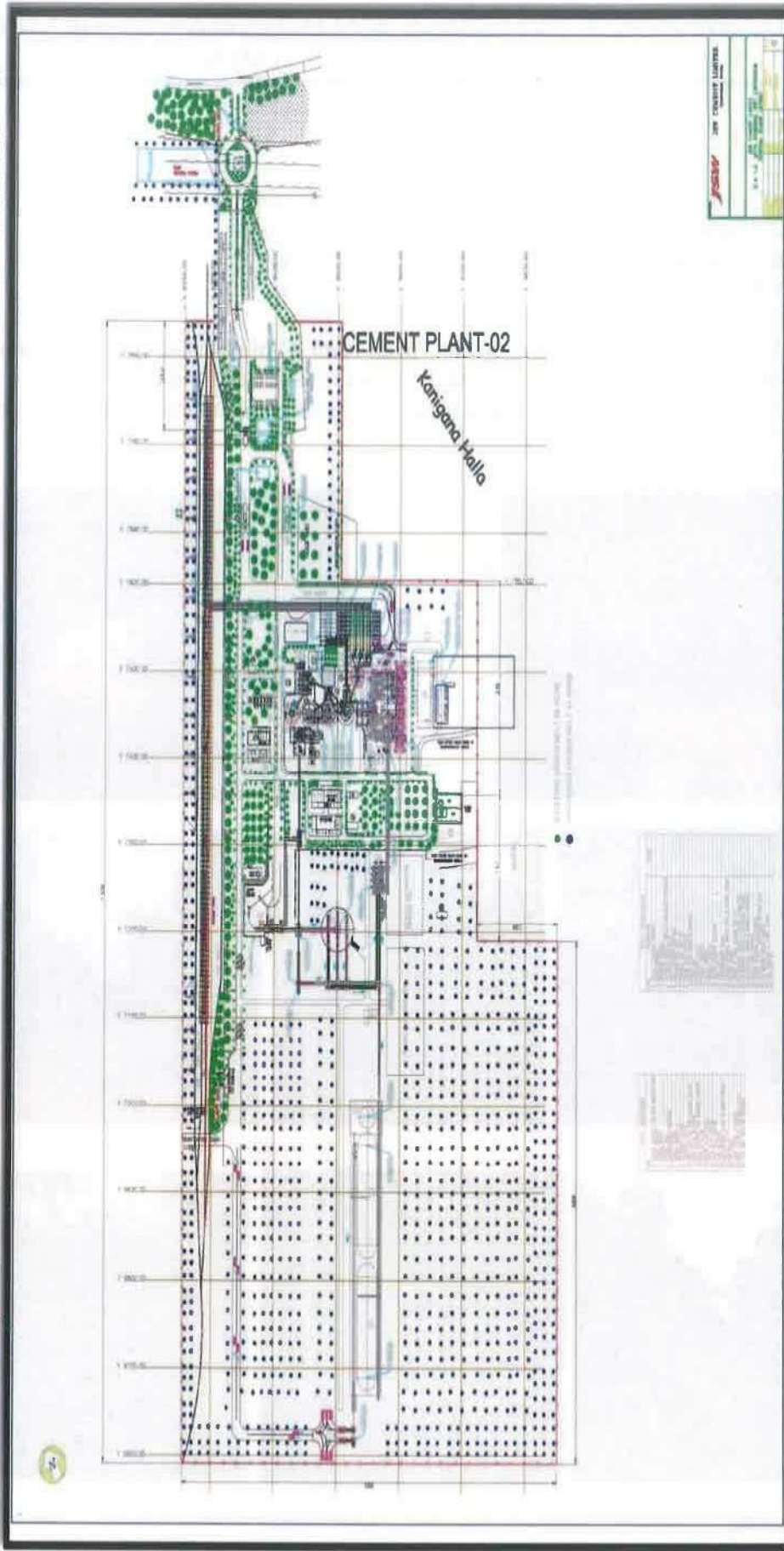
Sewage Treated Water Report - (Oct-2018 to Mar-2019)										
Sl. No	Parameters	Limits	Units	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Avg
1	pH (at 25 °C)	6.5 - 8.5		8.24	7.91	7.25	7.91	7.45	7.7	7.74
2	Biological Oxygen Demand	20	mg/l	4.0	5.0	8.0	18.0	15.0	19.0	11.5
3	Suspended Solids	30	mg/l	2.0	2.0	4.0	4.0	6.0	6.0	4.0



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Green Belt Development

Annexure - IV



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Green Belt Development (Oct-18 to Mar-19)

Total No of Tress Planted : 4150 Nos
Total No of Shrubs Planted : 3500 Nos
Greenbelt development acres : 05 acres
Total GBD Area : 35 acres

Name of saplings planted: -

Trees: Pheltophorum, Ficus regenald, Neem, Areca Plam, Tabibia Rosea, Gulimor, Concarpus, Cardia, Banumia, Ficus banjamine, Tree Jasmine, Raintree, Teak, Alstonia.

Shrubs: - Tecomo goudichoudi, Nerium pink oberoy, tabernamopntana single, Cizelpenia, Alstonia.



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Annexure - VI

Noise Level Monitoring Report (Oct-2018 to Mar-2019)													
Locations	Oct-18		Nov-18		Dec-18		Jan-19		Feb-19		Mar-19		Avg in dB(A) Leq
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	
VRM Mill Area	67	66.2	66.1	60.1	62.5	64.9	71.5	65.1	70.1	66.1	64.5	68.2	
RP 1&2 Mill Area	70.8	62.7	67.4	63.1	66.2	66.3	73.4	68.2	72.8	68.5	68.2	64.2	
RP 3&4 Mill Area	68.4	64.8	64.9	60.6	67.7	68.8	71.9	66.2	71.6	68.3	69.2	67.2	
Old Packing Plant Area	64.5	62.2	68.6	66.9	61.7	60.4	70.6	62.4	70.3	63.4	62.1	59.8	
New Packing Plant Area	65.4	64.4	67.5	65.7	51.8	65	68.2	69.5	68.1	66.9	57.9	66	
CCR Area	62.9	62.8	64.8	59.4	66.6	65.9	66.1	63.2	65.3	61.1	54.3	68.7	
CSP Area	69.4	65	63.9	57.9	48.6	66.2	71.2	65.2	71.3	67	58.5	62.8	
Main Gate	70.5	65.3	54.9	52	52.1	50.7	65.2	55.6	65.5	63.7	56.3	69.9	
Near JSSL	66.5	62.9	52.2	48.9	46.5	52.5	69	53.5	69.1	64.6	55.6	60.4	
Store Area	67.7	60.8	61	50	48.5	49.9	67.8	52.6	67.3	62.4	54.5	64.1	



**JSW CEMENT LIMITED
(JSWCL)**

CORPORATE ENVIRONMENT POLICY

DOCUMENT CONTROL

Document version:

This Corporate Environment Policy (Policy) document is version 1.2

Preparation/Revision History

SR. No.	Date of preparation / modification	Version No.	Modified by	Reviewed by	Approved by
1	06/01/2015	1.1	Company Secretary	Executive Director	Board of Directors
2	25/10/2018	1.2	Company Secretary	Executive Director	Board of Directors

Issuing Authority

This policy is approved by the Board of the Company

Author and Responsible Official

This policy is to be maintained and updated by way of additions, deletions and modifications only by the Company Secretary after approval of the Board of Directors. Every time the policy document is edited, the version increases by one unit and the version is to be mentioned on every page.

Applicability and Usage

This policy applies to **JSW Cement Limited**. The Executive Director of the organization shall be authorised by Board to ensure the proper use of this document.



PREFACE

JSW Group, the \$13 billion conglomerate, is a part of the O.P. Jindal Group. With verticals that are exploring innovative and sustainable avenues in Steel, Energy, Infrastructure and Cement, JSW Group is paving the way for India's development as a global superpower.

- The company, JSW Cement Ltd. recognises its joint responsibility with the Government and the Public to protect environment and is committed to regulate all its activities so as to follow best practicable means for minimising adverse environmental impact arising out of its operations.
- The company is committed to making its products environmentally acceptable, on a scientifically established basis, while fulfilling consumers' requirements for excellent quality, performance and safety.
- The aim of the Policy is to do all that is reasonably practicable to prevent or minimise, encompassing all available knowledge and information, the risk of an adverse environmental impact arising from manufacturing and supply of our products.
- This Policy document reflects the continuing commitment of the Board for sound Environment Management of its operations. The Policy is applicable to all company operations covering manufacturing, mining, power generation, sales & distribution and other offices. This document defines the aims and scope of the Policy as well as responsibilities for the achievement of the objectives laid down.

The Vision

Our vision is to continue to be an environmentally responsible organisation making continuous improvements in the management of the environmental impact of our operations.

We will achieve this through an Integrated Environment Management approach which focuses on Technology & Best Practices and is supported by Management Commitment as the prime driver.

Environment Policy

JSW Cement Ltd. (JSWCL) is committed to meeting the needs of customers and other stakeholders at large in an environmentally sound manner, through continuous improvement in environmental performance in all its activities. Management at all levels, jointly with

employees, is responsible and will be held accountable for company's environmental performance

Accordingly, JSWCL aims to:

- Protect the environment and prevent pollution through implementing Best Available technologies and practices
- Ensure safety of its products and operations for the environment by using standards of environmental safety, which are scientifically sustainable and commonly acceptable.
- Develop, introduce and maintain environmental management systems across the company to meet the company standards as well as statutory requirements relating to environment and verify compliance with these standards through regular auditing.
- Assess environmental impact of all its activities and set continual improvement objectives and targets and review these periodically to ensure that these are being met at the individual unit and corporate level.
- Reduce waste, conserve energy and explore opportunities for reuse and recycle.
- Optimum utilization of industrial waste as alternative raw materials and fuel to conserve natural resources
- Encourage efficient use of natural resources including energy, water and utilities, fuels, raw materials and food.
- Promote use of renewable energy
- Be a water positive unit by adopting rainwater harvesting in and around the facilities
- Integrate the consideration of environmental concerns and impacts at the design, planning and operational stages of our activities.
- Develop and maintain procedures/ processes to bring into focus any infringement/ deviation/ violation of the environmental or forest norms/ conditions to the Board of Directors and stakeholders at large
- Involve all employees in the implementation of this Policy and provide appropriate training. Provide for dissemination of information to employees on environmental objectives and performance through suitable communication networks.
- Encourage suppliers & service providers to develop and employ environmentally superior processes and ingredients and co-operate with other members of the supply chain to improve overall environmental performance.



- Work in partnership with external bodies and Government agencies to promote environmental care, increase understanding of environmental issues and disseminate good practices.

CORPORATE RESPONSIBILITIES

The Executive Director of the Company is responsible for the Compliance of the Policy. The Executive Director may constitute a Committee called as Corporate Environment Committee (hereinafter called as Committee). The Committee is committed to conduct the company operations in an environmentally sound manner. The Committee will:

- Set standards and establish environmental improvement objectives and targets for JSWCL as a whole and for individual units, and ensure these are included in the annual operating plans.
- Formally review environment performance of the company once every quarter.
- Review environment performance when visiting units and recognise exemplary performance.
- Nominate a unit head or senior employee as coordinator for compliance of environmental performance at the site.

The Committee, through the nominated coordinator will:

- Ensure implementation of Policy on environment and compliance with the Company's environmental standards and the standards stipulated under relevant national / local legislation. Where appropriate, apply more stringent criteria than those required by law.
- Assess environmental impact of JSWCL operations and establish strategies for sound environment management and key implementation steps.
- Encourage development of cleaner manufacturing processes to further raise the standards of environment performance.
- Establish appropriate management systems for environment management and ensure regular auditing to verify compliance.
- Establish systems for appropriate training in implementation of Environment Management Systems at work.
- Ensure that all employees are made aware of individual and collective responsibilities towards environment.
- Arrange for expert advice on all aspects of environment management.



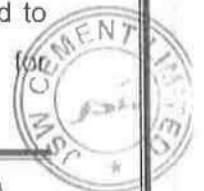
- Participate, wherever possible, with appropriate industry and Government bodies advising on environmental legislation and interact with national and local authorities concerned with protection of environment.

INDIVIDUAL UNITS RESPONSIBILITIES

The overall responsibility for environment management at each unit will rest with the unit head or senior employee, who will ensure implementation of Policy on environment at unit level and report to Executive Director or Committee as the case may be. Concerned line managers / heads of departments are responsible for environmental performance at department levels.

In order to full fill the requirements of the Policy at each site, the Unit Head will:

- Designate a unit environment coordinator who will be responsible for co-ordinating environmental activities at unit, collating environmental data and providing / arranging for expert advice.
- Agree with the coordinator responsible for the unit specific environmental improvement objectives and targets for the unit and ensure that these are incorporated in the annual objectives of the concerned managers and officers and are reviewed periodically.
- Ensure that the unit complies with JSWCL's environmental standards and the relevant national and state regulations with respect to environment.
- Ensure formal environmental risk assessment to identify associated environmental aspects and take appropriate steps to control risks at acceptable levels.
- Ensure that all new operations are subjected to a systematic and formal analysis to assess environmental impact. Findings of such exercises should be implemented prior to commencement of the activity.
- Manage change in people, technology and processes through a planned approach based on training, risk assessment, pre-commissioning audits and adherence to design norms.
- Regularly review environment performance of the unit against set objectives and targets and strive for continual improvement.
- Sustain a high degree of environmental awareness through regular promotional campaigns and employee participation through training, safety committees, emergency drills etc.
- Ensure dissemination of relevant information on environment within the unit and to outside bodies, and regularly interact with Government authorities concerned for protection of environment.



- Maintain appropriate emergency procedures consistent with available technologies to prevent / control environmental incidents.
- Provide appropriate training to all employees.
- Ensure periodic audits to verify compliance with environment management systems.
- Also ensure periodic 3rd party environment audits through certification bodies to check efficacy of the Environment Management Systems.
- Report environmental performance to committee on a monthly basis.

Nitesh Karmakar



SIX MONTHLY COMPLIANCE REPORT FROM OCTOBER – 2018 TO MARCH –
2019 FOR ENVIRONMENT CLEARANCE NO J-11011/540/2017-IA II (I) CONSENT
FOR OPERATION FOR 04 MTPA JSW CEMENT LIMITED

Annexure – VII

All internal roads are paved along with both side tree plantation



SIX MONTHLY COMPLIANCE REPORT FROM OCTOBER – 2018 TO MARCH – 2019 FOR ENVIRONMENT CLEARANCE NO J-11011/540/2017-IA II (I) CONSENT FOR OPERATION FOR 04 MTPA JSW CEMENT LIMITED

Annexure - VIII

Funds earmarked towards capital cost and recurring cost/annum for environment pollution control measures

CAPITAL COST INVESTMENT ON POLLUTION CONTROL MEASURES UP TO 31st March 2019			
Sl. No	Description	Qty	Total in Crores
Air Pollution control measures In RP mill area			
a	Bag House RP mill area	4	7.87
b	Bag Filter (KHD)	2	1.54
c	Bag Filter (Riteco)	1	0.52
d	Beumer	1	0.05
e	Silo extraction & packing plant	1	1.20
f	On line Stack dust monitor system	2	0.09
Total Cost			11.27
Air Pollution control measures In VRM area			
a	VRM Bag house cost	1	3.86
b	Packing plant bag filters CEMPPBF024	4	0.46
c	Reject building bag filter	2	0.18
d	Feed group Bag filter	5	1.37
e	Bag filter transfer point	2	0.11
f	On line Stack dust monitor system	1	0.10
Total Cost			6.09
Expenditure on belt covering, material storage sheds (Fugitive emission control measures)			
a	CSP Sheds (Tones)	265	1.75
b	Gypsum Sheds (Tones)	550	3.63
c	Belt Conveyor shed (Tones)	620	4.09
Total Cost			9.47
STP (Sewage Treatment Plant) 60 KLD			0.21
Rain water harvesting			0.05
Paving /concreting of Internal roads (Fugitive emission control measures)			4.10
Environment monitoring equipment's			0.06
Green belt development			0.45
Total Cost			4.86
Grand Total Cost on Environment			31.69

RECCURING COST INVESTMENT ON POLLUTION CONTROL MEASURES FROM OCTOBER 2018 TO MARCH 2019		
Sl. No	Description	Amount in Lakhs
1	Afforestation	39.6
2	Environment Monitoring	3
General Environment Management		
3	Bag Filter Maintainance	23.48
4	Bag House Power Consumption	69.08
5	STP Operation & Maintainance (Commissioned in Nov-18)	1.5
6	Environmental Awarness	1
7	Water Tanker for Sprinkling	1.71
Total		27.69
Grand Total		70.29





Sanjeevkumar Verma <sanjeevkumar.verma@jsw.in>

Submission of Environmental Statement (Form-V) for the financial year 2017-18 of JSW Cement Limited, Vijaynagar

2 messages

Sanjeevkumar Verma <sanjeevkumar.verma@jsw.in>

Mon, Sep 17, 2018 at 1:48 PM

To: memsecy@kspcb.gov.in, bellary@kspcb.gov.in, ssuresh.cpcb@nic.in, rosz.bng-mef@nic.in

Cc: Ravi Chandra Chikatimalla <ravichandra.chikatimalla@jsw.in>, arvinkumar sharma <arvinkumar.sharma@jsw.in>, Rajkumar Dhempe <rajkumar.dhempe@jsw.in>, Veera Babu G <veerababu.g@jsw.in>, ravi gaurk <ravi.gaurk@jsw.in>

Dear Sir,

Please find attached Environmental Statement (Form-V) of JSW Cement Limited, Vijaynagar for the financial year 2017-18 for your information and record please. Hard copy already dispatched to your office through courier.

With Best Regards,

Sanjeevkumar Verma | Syst Manager - (Environment) | Vijaynagar Works | JSW Cement Ltd.

P.O. Vijaynagar | Dist. Bellary | Karnataka-583275 | India

Cellphone: +91 8884443017

Email: sanjeevkumar.verma@jsw.in

**JSW Cement Environment Statement - 2017-18 , Vijaynagar_1 (2).pdf**
2450K

Ravi Chandra Chikatimalla <ravichandra.chikatimalla@jsw.in>

Mon, Sep 17, 2018 at 1:58 PM

To: Sanjeevkumar Verma <sanjeevkumar.verma@jsw.in>

Dear Sanjeev,

Thanks for the information.

Warm Regards,

Ch Ravi Chandra | Sr Manager - Projects - Environment | JSW Cement Ltd.

3rd Floor, JSW Centre, Bandra Kurla Complex, Bandra (E), MUMBAI – 400 051 | Maharashtra | India

Tel. +91 22 4286 3131 (Direct) | Mobile : +91 7738045918 | Email: ravichandra.chikatimalla@jsw.in

www.jsw.in

[Quoted text hidden]



JSW Cement Ltd
Plot: Vidyanagar, Village: Hanagal, Tal. Bellary - 583175, Karnataka, India.
Phone : 08395-241001
Fax : 08395-241003
Website : www.jsw.in

CIN : L72695K1112006PLC160879

JSWCL/VDNR/KSPCB/

Date: 15.09.2018

To
The Member Secretary
Karnataka State Pollution Control Board
5th Floor, #49, Parisara Bhavan
Church Street, Bengaluru-560001

Subject: Submission of Environmental Statement (Form-V) for the financial Year ending 31st March 2018.

Ref: Combined Consent order no: AWH-300671, Dt.02.11.2016, Valid up to 30.06.2021 & AWH-302207,02.03.2017 Valid up to 30.06.2021

Dear Sir,

Reference to above subject, please find enclosed herewith Environmental Statement (Form-V) of JSW Cement Limited, Vidyanagar, Bellary- District for the financial year 2017-2018.

Thanking You

Yours Faithfully


Rajkumar Dhempe
Plant Head

Encl: a/a
3 a/a

CC:

1. Environmental Officer, KSPCB, Regional Officer, Ward No.25, 4th Main, Near Dr.Vishnuvardhan Park, Kuvempunagara, Bellaery-583104.
2. The Director, Regional Officer MoEF&CC (SZ),Kendriya Sadana,4th Floor, E&F wing, 17th Main Road, Koramangala, Bengaluru.-560034
3. Shri S.Suresh (Scientist E & Incharge), Central Pollution Control Board, 1st & 2nd floor, Nisarga Bhavan A-Block, Thimmaiah Main road 7th D Cross, Shivanagar ,Opp. Pushpanjali Theater, Bangalore, Karnataka



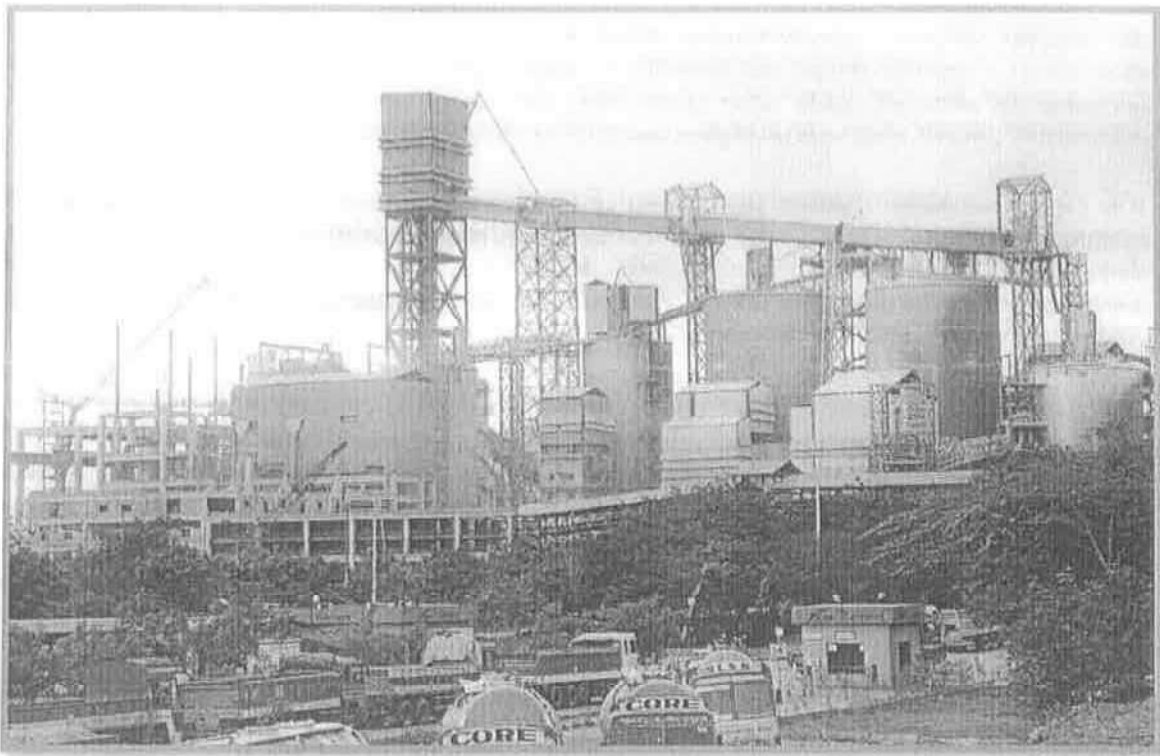
Part of O.P. Jindal Group

Regd. Office: JSW Center,
Bandra Kurla Complex
Bandra (East), Mumbai 400051
Phone: 022-42461000
Fax : 022-26502001

JSW Cement
(FORM-V)

ENVIRONMENTAL STATEMENT REPORT

YEAR 2017-2018



JSW CEMENT LIMITED
P.O Vidyanagar, Toranagallu
Dist. Bellary - 583275

Introduction

India, one of the fastest growing economies in the world, is witnessing an unprecedented growth in infrastructure. JSW Cement believes that this growth needs to be sustainable and is consciously contributing to creating a self-reliant India by manufacturing the building blocks of the Indian development story with its world-class cement.

JSW entered the cement market in 2009 with a vision to ensure a sustainable future for the country by producing eco-friendly cement, using industrial by-products such as slag. Its plants at Vijayanagar in Karnataka, Nandyal in Andhra Pradesh, Dolvi in Maharashtra and Saiboni in West Bengal utilize best quality slag to produce green cement. This has helped in reducing the carbon footprint of the Group. Not only does this ensure optimal utilisation of resources but also saves the ecological risk of industrial by-product dumping. Though, JSW Cement is a relatively late entrant into the industry but with a capacity to produce over 11.6 MTPA tons per year, it is fast becoming a force to reckon with.

Not only does JSW Cement manufacture one of the most eco-friendly cements in India, but it also engineers its products for superior strength and durability. Its flagship plant in Nandyal uses world-class technology (including the advanced Combi Finish Mode Roller Press Circuit and automated loading system) to manufacture cement. It has won prestigious award for its energy-saving processes.

JSW Cement produces: Portland Slag Cement (PSC), Ordinary Portland Cement (OPC), and Ground Granulated Blast Furnace Slag (GGBS). With key markets in Telangana, Andhra Pradesh, Karnataka, Tamil Nadu, Kerala, Maharashtra, Orissa, Goa, Bihar, Jharkhand and West Bengal JSW Cement has been delivering high-quality product to several prestigious and large infrastructural projects in the southern, western and eastern regions of the country.

JSW Cement's first plant was set up at Vijaynagar, District Bellary in Karnataka with a capacity of 0.60 million tonnes per annum in 2008 and enhanced cement plant 3.60 MTPA in the year 2017. The plant uses the latest German Technology supplied by M/s KHD Humbolt Wedag. JSW Cement is a slag based blended cement, manufactured by using granulated blast furnace slag from the Group's steel plants, saving valuable natural resources. This is a giant step by the company towards providing cement that is strong, durable and at the same time eco-friendly.

The slag cement not only preserves the natural resources but also helps in improving the Durability of the Concrete Structures. Use of Slag Cement to produce Concrete can significantly improve durability of the concrete in several ways and consequently extend the life of concrete structures. During the life of the structure, the compressive strength of Slag Cement significantly increases well beyond the 28 days specified strength more than the concrete made from OPC or PPC. Slag Cement has higher resistance to sulphate and chloride attack and also controls the expansion due to Alkali- Silica Reaction hence it is recommended for marine structures.

FORM-V

See Rule-14

**Environmental Statement Report for the financial year ending the
March 31, 2018****PART- A**

i	Name and address of the owner /Occupier of Industry operation or process	Nilesh Narwekar Director & CEO JSW Cement Limited Toranagallu Dist.Bellary Karnataka-583275
I a	Authorized person for the occupier	Mr. Rajkumar Dhempe Plant Head JSW Cement Limited Toranagallu Dist.Bellary Karnataka-583275
ii.	Industry Category Primary (STC CODE) Secondary (STC CODE)	Red /Large (Cement manufacturing unit) Primary STC Category
iii.	Production Capacity (Units)	3.60 MTPA Ground Granulated Blast Furnace slag (GGBS) Ordinary Portland Cement (OPC) Portland Slag cement (PSC)
iv.	Year of establishment	December 2008
v.	Date of last environmental statement submitted	27.09.2017 Vide our letter No: JSWCL/VDNR/KSPCB/, Dated 27.09.2017

PART - B

Water and Raw material consumption

A. Water

(i) Water consumption m³/day

Process	:	Nil	
Cooling & Spraying m ³ /day	:	155.00	(Average during 2017-18)
Domestic m ³ /day	:	28.03	(Average during 2017-18)

(ii) Consumption per unit of production:

Name of product	Process water* consumption per unit of product-output (KL/MT)	
	During the previous financial year (2016-2017)	During the current financial year (2017-2018)
1.GGBS	0.018	0.044
2.Cement (PSC)	0.020	0.039

***process cooling water**

B. Raw material consumption

Name of the raw material	Name of product	Consumption of raw material per unit product output (MT of Cement)	
		During the previous financial year (2015-16)	During the current financial year (2016-2017)
Clinker	PSC	0.41	0.33
Gypsum		0.04	0.04
GGBS		0.55	0.63
GBS	GGBS	1.070	1.070

1. PSC Grinding	: 10468 MT/Year+
a. Clinker consumption	: 5436.94 MT/Year
b. Gypsum consumption	: 515.05 MT/Year
c. Slag Consumption	: 4576.79 MT/Year

2. PSC Blending : 707169 MT/Year
 a. OPC Consumption : 275817.8 MT/Year
 b. GGBS Consumption : 431352.0 MT/Year
 3. Total GGBS Production : 1400959 MT/Year
 4. Slag consumption for GGBS production : 1506371.83 MT/ Year

PART -C

**Pollutant discharge to environment/unit of output
 (Parameter as specified in the consent issued)**

S.N	Pollutants	Quantity of pollutants discharged (Mass/day) (tone/day)	Concentrations of pollutants in discharged (mass/volume) (mg/Nm ³)	Percentage of variation from prescribed standard with reason
a	Water	No waste water is generated from process. Water is used for cooling purpose and it is recycled. Domestic waste water is treated septic tanks and soak pits.		
b	Air			
	Stack emission			
1	VRM Bag House Stack	0.066	21.85	< 27.1 %
2	RP 1&2 Bag House stack	0.089	22.24	<25.8 %
3	RP 3&4 Bag House stack	0.082	23.51	<21.6 %

PART-D

HAZARDOUS WASTES

(As specified under Hazardous wastes/management & handling rule, 1989)

Hazardous waste	Total Quantity (Kg)	
	During the previous financial year 2016-2017	During the current financial year 2017-2018
(a) From process	Used oil / waste grease	Used oil / waste grease
	Nil	Nil
(b) From pollution control facility	Nil	Nil

PART-E

SOLID WASTE

S.N	Solid Waste	Total Quantity (Kg.)	
		During the previous financial year (2016-17)	During the current financial year (2017-18)
a	From Process	No solid waste is generated from Cement & GGBS manufacturing process	No solid waste is generated from Cement & GGBS manufacturing process
b	From Pollution control facility	All the collected material is automatically recycled in process	All the collected material is automatically recycled in process
c	(i) Quantity recycled or reused	100%	100%
	(ii) sold	Nil	Nil
	(iii) Disposed	Nil	Nil

PART -F

Please specify the characterizations (in terms of composition quantity and Quantum) of hazardous as well as solid waste and indicates disposal practice adopted for both these categories of wastes.

Hazardous waste, used oil: Nil

Solid waste: Nil

PART -G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production

Following measures have been adopted for abatement of pollution, and conservation of natural resource: -

- 1. UTILIZATION OF SLAG:** We are using blast furnace slag for the manufacturing of GGBS / PSC cement which is waste material of steel plant. The slag is consumed for making the PSC & GGBS almost **1506371.83 MT** for the year of 2017-18.
- 2. CONSERVATION OF MINERAL GYPSUM:** Utilization of chemical gypsum. We have used fertilizer industry by-product which is waste in nature and its chemical properties are as good as gypsum. The chemical gypsum is used for cement manufacturing process almost **9432.22 MT** of Chemical gypsum has been consumed in cement manufacturing process during the year of 2017-2018.
- 3. WATER CONSERVATION:**
Company is adopting best possible approaches to conserve water, which can be witnessed as:
 - i Dry Cement manufacturing process.
 - ii. The process water is used for machinery cooling and it is recycled to Maintain Zero Waste Water Discharge.
 - iii Rain water harvesting is being done in plant area for ground water Recharge.
- 4. AIR POLLUTION CONTROL MEASURES:**

Following measures have been taken to control of air pollution

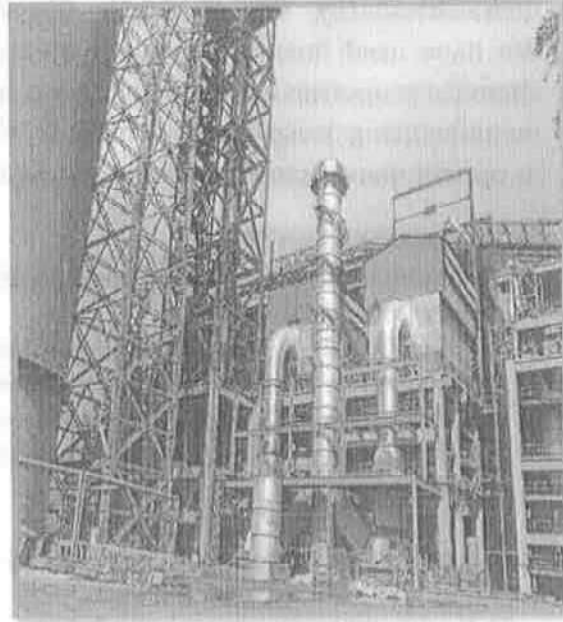
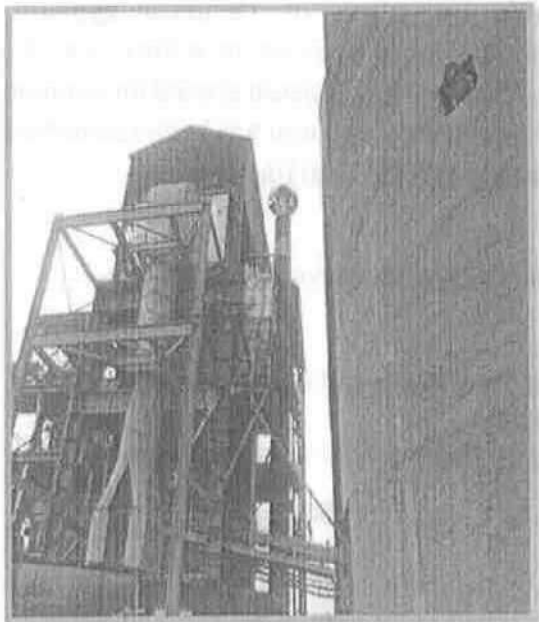
- A. Bag House, Bag filters installed in the plant for the control of air pollution. These are capable of controlling dust emissions <30 mg/Nm³.

- B. All the conveyors and transfer points are covered with hood
- C. Bag filters have been installed at all the transfer points to control fugitive emission
- D. Most of the internal approach roads are paved
- E. Water sprinkling is done in unpaved areas
- F. Clinker is stored in covered stockpile whereas cement and GGBS are stored in closed silos

Photographs of Bag filters & List of Bag filters with their details given below:



Bag filters provided at raw material transfer point with covered beld conveyer



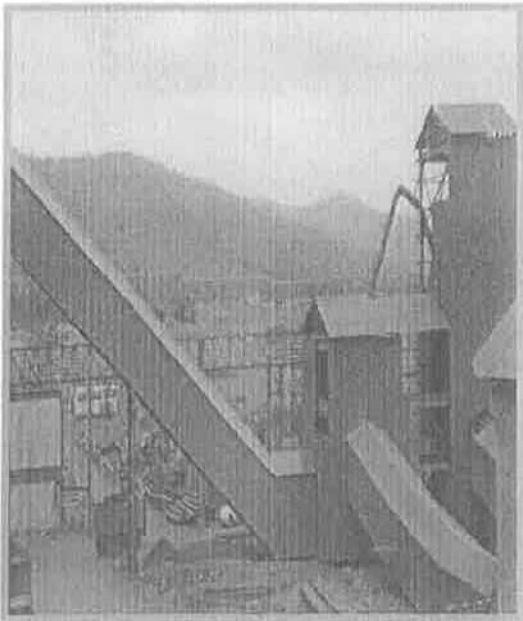
Bag House provided in VRM & RP1&2 mill for the control of air pollution



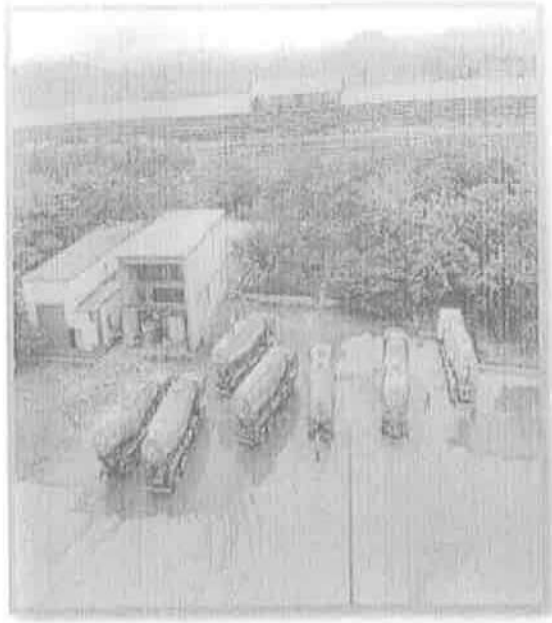
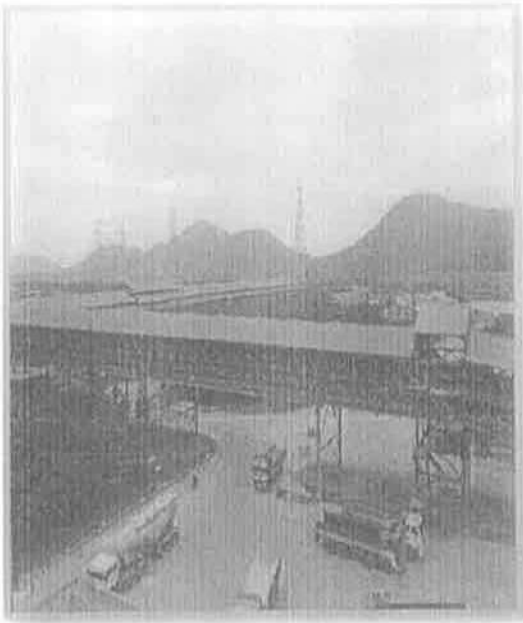
Covered clinker stock pile for storage of clinker with bag filter



Silo provided for storage of product along with bag filter



Covered belt conveyers provide for the control of fugitive dust emission



Covered began loading and concreted floor packing plant area



JSW CEMENT LIMITED,VIJAYNAGAR

Pollution control equipment Bag filters installed at VRM area

S.N	Location	Bag filter capacity (in m ³ /hr)	Fan Capacity (in m ³ /hr)	Qty	No of Bags	Inlet Dust Load	Out let Dust Emission	Type of Bags	MAKE
1	Dump hopper	13700	15000	1	110	15Gms/m ³	25mg/Nm ³	POLYESTER NON WOVEN PE 550 PE SILICON TERATMENT	RECO
2	Grourng hopper	12000	13500	1	110	15Gms/m ³	25mg/Nm ³		RECO
3	Transfer tower	15000	16500	1	110	15Gms/m ³	25mg/Nm ³		RECO
4	Feed hopper - 1	15000	16500	2	132	15Gms/m ³	25mg/Nm ³		RECO
5	Feed hopper -2	18000	20000	1	156	15Gms/m ³	25mg/Nm ³		RECO
6	Reject building	15000	16500	1	110	15Gms/m ³	25mg/Nm ³		RECO
7	Bag house	375000	400000	1	2772	290Gm/Am ³	25mg/Nm ³		THERMAX
8	Airslide 138,139,140 & BE 150	12000	13500	1	110	15Gms/m ³	25mg/Nm ³		RECO
9	Silo-1 inside	5000	13500	1	36	15Gms/m ³	25mg/Nm ³		ENEXCO
10	Silo-1 Top	12000	13500	1	110	15Gms/m ³	25mg/Nm ³		RECO
11	Silo-2 inside	5000	13500	1	36	15Gms/m ³	25mg/Nm ³		ENEXCO
12	Silo-2 Top	12000	13500	1	110	15Gms/m ³	25mg/Nm ³		RECO
13	Bulkloading GGBS side (STATIONARY PACKER)	12000	13500	1	110	15Gms/m ³	25mg/Nm ³		RECO
14	Bulkloading PSC side (STATIONARY PACKER)	12000	13500	1	110	15Gms/m ³	25mg/Nm ³		RECO
15	Roto packer top	25000	29000	1	192	<10Gms	25mg/Nm ³		INTENSIV FILTER
16	Roto packer	7500	8650	1	56	<10Gms	25mg/Nm ³		INTENSIV FILTER
17	Silo-3 inside	4000	4600	1	30	<10Gms	25mg/Nm ³		INTENSIV FILTER
18	Silo-3 Top	7500	8650	1	56	<10Gms	25mg/Nm ³		INTENSIV FILTER
19	Paddle mixer building elevator - 1 (TOP)	5000	5750	1	36	<10Gms	25mg/Nm ³		INTENSIV FILTER
20	Paddle mixer building elevator - 2 (TOP)	5000	5750	1	36	<10Gms	25mg/Nm ³		INTENSIV FILTER
21	Paddle mixer building elevator - 1 (BOTTOM)	5000	5750	1	36	<10Gms	25mg/Nm ³		INTENSIV FILTER
22	Paddle mixer building elevator - 2 (BOTTOM)	5000	5750	1	36	<10Gms	25mg/Nm ³		INTENSIV FILTER
23	Paddle mixer building solid flow feeder - 1	7500	8650	1	56	<10Gms	25mg/Nm ³		INTENSIV FILTER
24	Paddle mixer airslide discharge to silo-3 BE fan	5000	5750	1	36	<10Gms	25mg/Nm ³		INTENSIV FILTER
25	Silo-3 BIN Discharge air slide to roto packer BE	4000	4600	1	30	<10Gms	25mg/Nm ³		INTENSIV FILTER

JSW CEMENT LIMITED, VIJAYNAGAR

POLLUTION CONTROL EQUIPMENTS BAG FILTER INSTALLED AT ROLLER PRESS MILL AREA

Sr. No	Bag filter Location	HEIGHT (m)	Eqpt no	Bag filter capacity (Am ³ / hr)	Fan capacity m ³ /hr	Nos of bags (nos)	Inlet dust load gm/Am ³	outlet dust emission (mg/Nm ³)	Make
1	HOPPER BUILDING	18.15	531BF1	10,000	11,500	80	50	25	THERMAX
2	HOPPER BUILDING	12.00	531BF2	8,000	9,200	64	50	25	THERMAX
3	RP BUILDING	31.00	531BF3	12,000	13,800	96	50	25	THERMAX
4	RP BUILDING	31.00	531BF4	18,000	20,700	140	50	25	THERMAX
5	HOPPER BUILDING	18.15	533BF1	10,000	11,500	80	50	25	THERMAX
6	HOPPER BUILDING	12.00	533BF2	8,000	9,200	64	50	25	THERMAX
7	RP BUILDING	37.00	551BF1	25,000	28,750	196	50	25	THERMAX
8	RP BUILDING	18.15	551BF2	8,000	9,200	64	50	25	THERMAX
9	RP BUILDING	37.00	552BF1	25,000	28,750	196	50	25	THERMAX
10	RP BUILDING	37.00	553BF1	25,000	28,750	196	50	25	THERMAX
11	HOPPER BUILDING	12.00	553BF2	8,000	9,200	64	50	25	THERMAX
12	RP BUILDING	37.00	554BF1	25,000	28,750	196	50	25	THERMAX
13	RP BUILDING	18.50	591BF1	5,000	5,750	80	50	25	THERMAX
14	RP BUILDING	10.00	591BF2	10,000	11,500	80	50	25	THERMAX
15	RP BUILDING	18.50	593BF1	5,000	5,750	40	50	25	THERMAX
16	RP BUILDING	10.00	593BF2	10,000	11,500	80	50	25	THERMAX
17	At Discharge of Clinker extraction belt conveyor	25.20	481BF01	7,000	8,100	46	50	25	THERMAX
18	At Deep Pan conv 481DP01 discharge	9.00	481BF02	10,250	11,500	80	50	25	THERMAX
19	ABOVE CLINKER HOPPER	41.20	481BF03	19,500	23,400	146	50	25	THERMAX
20	At Belt 151BC07 discharge	9.00	481BF04	8,700	10,000	46	50	25	THERMAX

JSW CEMENT LIMITED, VIJAYNAGAR

POLLUTION CONTROL EQUIPMENTS BAG FILTER INSTALLED AT ROLLER PRESS MILL AREA

Sr. No	Bag filter Location	HEIGHT (m)	Eqpt. no	Bag filter capacity (Am ³ /hr)	Fan capacity m ³ /hr)	Nos of bags (nos)	Inlet dust load gm/Am ³	outlet dust emission (mg/Nm ³)	Make
1	HOPPER BUILDING	18.15	531BF1	10,000	11,500	80	50	25	THERMAX
2	HOPPER BUILDING	12.00	531BF2	8,000	9,200	64	50	25	THERMAX
3	RP BUILDING	31.00	531BF3	12,000	13,800	96	50	25	THERMAX
4	RP BUILDING	31.00	531BF4	18,000	20,700	140	50	25	THERMAX
5	HOPPER BUILDING	18.15	533BF1	10,000	11,500	80	50	25	THERMAX
6	HOPPER BUILDING	12.00	533BF2	8,000	9,200	64	50	25	THERMAX
7	RP BUILDING	37.00	551BF1	25,000	28,750	196	50	25	THERMAX
8	RP BUILDING	18.15	551BF2	8,000	9,200	64	50	25	THERMAX
9	RP BUILDING	37.00	552BF1	25,000	28,750	196	50	25	THERMAX
10	RP BUILDING	37.00	553BF1	25,000	28,750	196	50	25	THERMAX
11	HOPPER BUILDING	12.00	553BF2	8,000	9,200	64	50	25	THERMAX
12	RP BUILDING	37.00	554BF1	25,000	28,750	196	50	25	THERMAX
13	RP BUILDING	18.50	591BF1	5,000	5,750	80	50	25	THERMAX
14	RP BUILDING	10.00	591BF2	10,000	11,500	80	50	25	THERMAX
15	RP BUILDING	18.50	593BF1	5,000	5,750	40	50	25	THERMAX
16	RP BUILDING	10.00	593BF2	10,000	11,500	80	50	25	THERMAX
17	At Discharge of Clinker extraction belt conveyor	25.20	481BF01	7,000	8,100	46	50	25	THERMAX
18	At Deep Pan conv 481DP01 discharge	9.00	481BF02	10,250	11,500	80	50	25	THERMAX
19	ABOVE CLINKER HOPPER	41.20	481BF03	19,500	23,400	146	50	25	THERMAX
20	At Belt 151BC07 discharge	9.00	481BF04	8,700	10,000	46	50	25	THERMAX

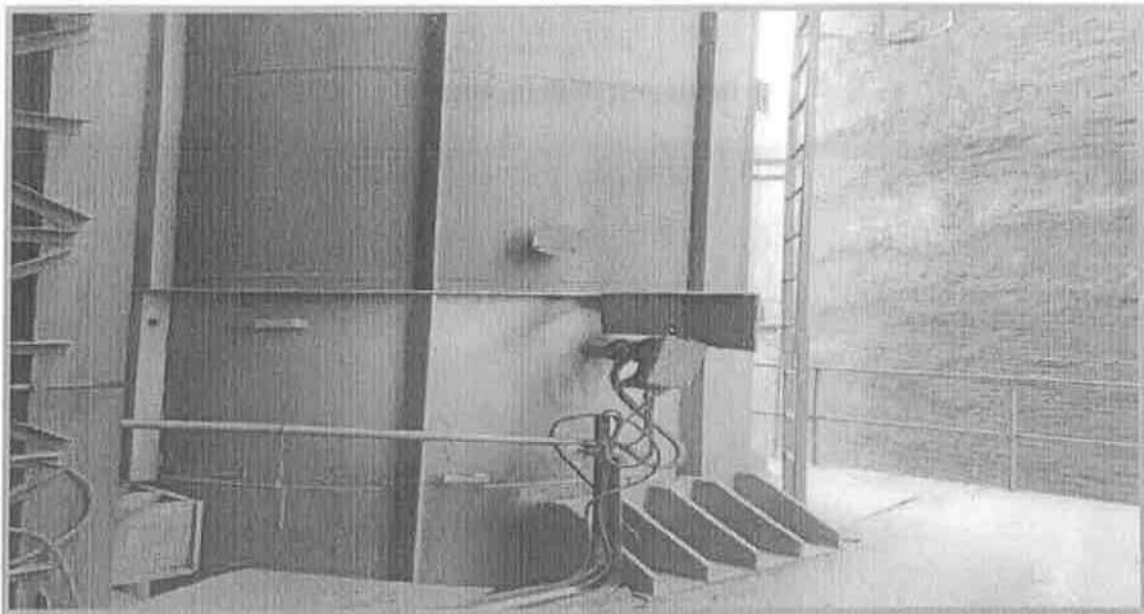
21	At Truck Tippler station	8.00	471BF01	28,000	32,700	198	50	25	THERMAX
22	At Clinker Silo top	11.00	471BF02	6,000	6,900	64	50	25	THERMAX
23	ABOVE COAL BIN (HAG)	20.25	561BF01	3,000	3,450	30	50	25	THERMAX
24	ABOVE COAL BIN (HAG)	20.25	562BF01	3,000	3,450	30	50	25	THERMAX
25	GGBS ELEVATOR	35.00	610BF01	5,000	5,750	42	60	25	IFI
26	AS VENT (GGBS SILO FEED)	66.14	610BF02	4,000	4,600	60	60	25	IFI
27	AS VENT WITH RAL(GGBS SILO FEED)	57.81	610BF03	6,000	6,900	49	60	25	IFI
28	GGBS ELEVATOR	84.55	610BF04	5,000	5,750	42	60	25	IFI
29	AS VENT (GGBS SILO FEED)	66.14	610BF05	4,000	4,600	60	60	25	IFI
30	AS VENT WITH RAL(GGBS SILO FEED)	57.81	610BF06	6,000	6,900	49	60	25	IFI
31	GGBS TOP (SILO)	36.85	610BF07	5,000	5,750	126	60	25	IFI
32	GGBS SILO CONE BIN	20.00	611BF01	5,000	5,750	77	60	25	IFI
33	GGBS ELEVATOR(EXTRACTION)	10.00	611BF02	6,000	6,900	49	60	25	IFI
34	GGBS SILO BULK LOADING	10.00	611BF03	12,000	13,800	98	60	25	IFI
35	PSC SILO TOP	39.00	612BF01	6,000	6,900	49	60	25	IFI
36	PSC SILO CONE	15.90	612BF02	6,000	6,900	49	60	25	IFI
37	PSC SILO CONE ELEVATOR	49.50	612BF03	6,000	6,900	49	60	25	IFI
38	ABOVE BULK LOADING	17.675	612BF04	10,000	11,500	80	60	25	IFI
39	INLET AT 621BE01	8.70	621BF01	6,000	6,900	49	60	25	IFI
40	ABOVE PACKER 1	19.47	621BF02	15,000	17,250	120	60	25	IFI
41	ABOVE PACKER 1	19.47	621BF03	35,000	40,250	220	60	25	IFI
42	INLET AT 622BE01	8.70	622BF01	6,000	6,900	49	60	25	IFI
43	ABOVE PACKER 2	19.47	622BF02	15,000	17,250	120	60	25	IFI
44	ABOVE PACKER 2	19.47	622BF03	35,000	40,250	220	60	25	IFI
45	INLET AT 623BE01	8.70	623BF01	6,000	6,900	49	60	25	IFI
46	ABOVE PACKER 3	19.47	623BF02	15,000	17,250	120	60	25	IFI
47	ABOVE PACKER 3	19.47	623BF03	35,000	40,250	220	60	25	IFI
48	BAG HOUSE-I	55.00	581BH1	2,97,000	3,41,550	1,800	550	10	HIMENVIRO
49	BAG HOUSE-II	55.00	582BH1	2,97,000	3,41,550	1,800	550	10	HIMENVIRO
50	BAG HOUSE-III	55.00	583BH1	2,97,000	3,41,550	1,800	550	10	HIMENVIRO
51	BAG HOUSE-IV	55.00	584BH1	2,97,000	3,41,550	1,800	550	10	HIMENVIRO

Schedule maintenance and monitoring of pollution control device: All the pollution control devices have been maintained as per scheduled maintenance by dedicated environment management team and monitoring of all these are done regularly as per KSPCB Norms

Regular Stack emission & AAQM monitoring is being done to check the emission levels. The results show that the emissions like PM-10, PM-2.5, SO₂, and NO₂ are well within limits



Emission data displayed at factory main gate



CEMS Installed at VRM Bag house stack

5. GREEN BELT DEVELOPMENT:

Plantation is being developed in following manner:

S. No.	Form of Plantation	Description
i	Shelter Belt plantation	All around the cement plant, tree plantation is being done, Preference is being given to fast growing species including locally dominant species such as Neem, Pongamia, Alstronia etc
ii	Avenue plantation	Both side of internal roads
iii	Block plantation	Vacant land around facilities being developed

So far we have planted 22500.nos of saplings (Trees & Shrubs) covering an area of 32 acres up to March 2018 in all plant premises

Greenbelt development will serve following purposes:

- (i) Increase in fresh Oxygen supply
- (ii) Acting as carbon sink thereby combating global warming through reduction in CO₂ emissions.
- (iii) Improving microclimate, contributing to cooling effect and improve green cover in the Surrounding areas improving QOL (Quality of Life) with Increase in lung space and promoting healthy lifestyle
- (iv) Noise pollution control
- (v) Aesthetics
- (vi) optimum use of unused land

Green belt development



Green belt development inside the plant area



Green belt development inside JSW Cement Limited, Vijaynagar

6. SOLID WASTE MANAGEMENT

Following strategy is being implemented to handle solid waste of all kinds.

- a. Practicing principle of 2Rs i.e. Reduces & Reuse
- b. All the waste is segregated on the basis on degradability/recyclability, than Accordingly they are disposed. Bio degradable waste from Canteen & toilets composted and the Manure is used for horticulture Purpose.
- c. All the hazarded waste is disposed through the authorized recyclers.

7. GOOD HOUSE KEEPING

Following measures have been taken for good housekeeping at plant

- a. Regular roads sweeping is being carried out
- b. All the roads of plant have been concreted as well as flowers and plantation has been done side by the roads for the beautification
- c. Development of plantation and greenery.

8. SOCIO-ECONOMIC BENEFIT

- a. Indirect employment through our contractors
- b. Direct employment to local residents
- c. Growth of local market and development of nearby villages through CSR activities

M/s JSW Cement Limited has adopted dry process technology, which is cost effective and environmentally clean technology. The advantage of dry process is also fuel economy and less water consumption. Additionally, the company has undertaken various energy efficiency improvement measures & process optimization which helped to significantly reduce the overall energy consumption to enable us to achieves our ultimate goal of GHG emission reduction and positive contribution towards reversing the effects of Climate

change. The stack emission from the plant controlled by equipment like Bag house and bag filter installed at various material transfer points to clean the process and arrest the fugitive emission. The particulate matter collected in the pollution control equipment is recycled in process and neutralizing the cost of operation of pollution control equipments and hence no cost impact on the production cost.

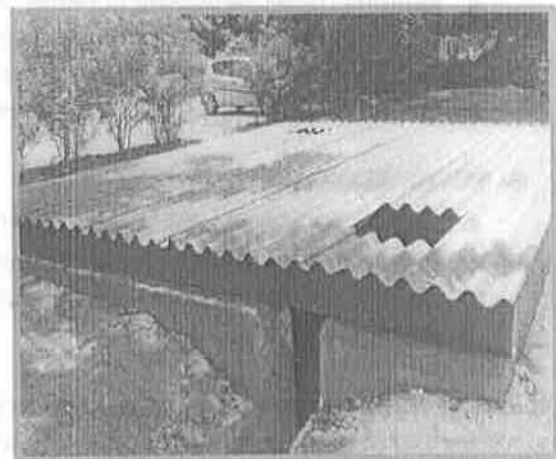
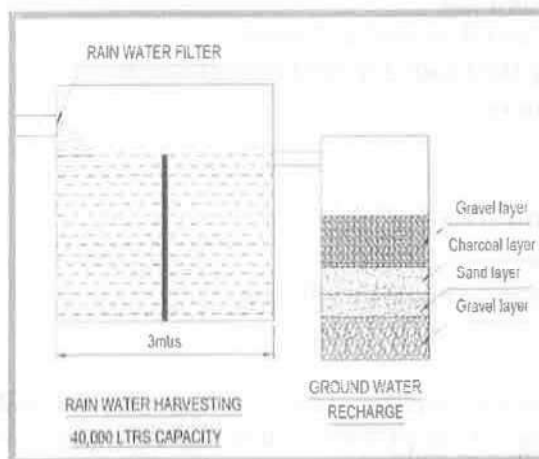
PART -H

Additional Measures /investments proposed for environmental protection including abatement of pollution, prevention of pollution.

1. Installation of Bio-Gas plant to convert domestic waste into useful energy resource



Bio gas plant installed at near canteen



Roof top rain water harvesting implemented for water conservation

2. 500 Nos trees plantation done in 2017-2018
3. Usage of 100% GBF Slag replacing river sand in cement plastering in construction to avoid Usage of river sand

PART -I

Any other particulars for improving the quality of environment

1. Environment Management System improvement

- (i) External certification of Management Systems conforming to ISO 14001:2015 and ISO 50001: 2011 (Energy Management System) by M/s IRQS Mumbai
- (ii) Periodic review of EMS including compliance of environmental laws through periodic Management Review & Internal & external audits.
- (iii) Awareness program through various environment workshop Tree Plantation etc on world environment day.

2. Significant energy saving & other measures implemented

- (i) Replacement of conventional lights with LED to save energy
- (ii) Installation of LED Lamps in street light fitting by replacing with CFL lamps.
- (iii) Top soils conservation during excavation (during project work) and utilized the soil for nursery development and tree plantation.
- (iv) Regular maintenance of vehicles to control of vehicles emission & noise.
- (v) Acoustic enclosures are provided at noise generating area to control of noise pollution
- (vi) Use of personal protective Equipment: All employees are provided with personal protective Equipment's (PPEs), as per the requirement, such as workers working in plant area are provided with dust masks and in noise pollution areas with Ear plugs/Ear muff, safety boots gloves welding goggles, Goggles and safety helmet are also being provided as per the requirement.

JSW Cement Limited , Vijaynagar

Ambient air quality monitoring Report From April 2017-March 2018

Location : Sultanpur Village					
Month	PM ₁₀	PM _{2.5}	SO ₂	NO _x	KSPCB Norms (Annual)
	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
April,2017	81	32	14.8	17.3	PM ₁₀ - 100
May,2017	85	33	16.8	20.4	
June,2017	77	35	14	16	
July,2017	81	23	15	21	PM _{2.5} - 60
August,2017	85	32	16	21	
September,2017	84	26	18	19	
October,2017	86	31	8	11	
November,2017	73	23	18	24	SO ₂ - 80
December,2017	85	23	13	15	
January,2018	86	26	14	15	
February,2018	97	19	15	13	
March,2018	93	27	16	18	NO ₂ - 80
Min.	73.0	19.0	8.0	11.0	
Max.	97.0	35.0	18.0	24.0	
Avg.	84.5	27.4	14.6	17.6	

JSW Cement Limited , Vijaynagar

Ambient air quality monitoring Report From April 2017- March 2018

Location : Torangallu Village					
Month	PM ₁₀	PM _{2.5}	SO ₂	NO _x	KSPCB Norms (Annual)
	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
April,2017	84	31	13.3	16.6	PM ₁₀ - 100
May,2017	91	31	17.6	26.0	
June,2017	81	36	15.0	17.0	
July,2017	81	36	15.0	17.0	PM _{2.5} - 60
August,2017	86	30	17.0	23.0	
September,2017	87	29	15.0	18.0	
October,2017	84	27	11.0	14	
November,2017	82	30	17.0	18	SO ₂ - 80
December,2017	92	25	14.0	9	
January,2018	86	24	15.0	13	
February,2018	97	23	13.0	14	
March,2018	96	28	15.0	16	NO ₂ - 80
Min.	81.0	23.0	11.0	9.0	
Max.	97.0	36.0	17.6	26.0	
Avg.	87.5	29.2	14.8	16.9	

JSW Cement Limited , Vijaynagar

Ambient air quality monitoring Report From April 2017- March 2018

Location : Vidyanagar Colony

Month	PM ₁₀	PM _{2.5}	SO ₂	NO _x	KSPCB Norms (Annual)
	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³
April,2017	48	22	3	7	PM ₁₀ - 100
May,2017	38	18	4	19	
June,2017	49	21	5	18	
July,2017	42	28	8	15	PM _{2.5} - 60
August,2017	34	22	9	14	
September,2017	39	25	18	11	
October,2017	84	44	6	15	SO ₂ - 80
November,2017	52	22	11	21	
December,2017	87	53	13	17	
January,2018	98	55	18	17	NO ₂ - 80
February,2018	88	52	22	19	
March,2018	79	45	25	24	
Min.	34.1	18.2	2.9	6.9	NO ₂ - 80
Max.	98.4	54.8	24.5	24.4	
Avg.	62.1	34.2	12.0	16.3	

JSW CEMENT LIMITED.

Vijayangara Works
Vidyanagara ,Sandur Taluk
Bellary District. Karnataka

Stack emission monitoring report for the year 2017-18

Manual Stack monitoring Report (Stack monitoring Kit VSS1)

S.N	Name of Stack	Stack emission		Standard KSPCB mg/Nm ³
		mg/Nm ³		
1	VRM Bag House Stack	Minimum	17.4	30.0
		Maximum	26.2	
		Average	21.8	
2	RP 1&2 Bag House Stack	Minimum	13.5	
		Maximum	27.2	
		Average	22.2	
3	RP 1&2 Bag House Stack	Minimum	24.9	
		Maximum	28.4	
		Average	26.9	

JSW Cement Limited
 Vijayangara Works
 Vidyanagara, Sandur Taluk
 Bellary District, Karnataka

Ambient Noise Level report 2017-2018

Location	Day Time			Night Time			KSPCB Noise level Standard	
	Min dB(A)	Max dB(A)	Avg. dB(A)	Min dB(A)	Max dB(A)	Avg. dB(A)	Day Time	Night Time
Main Gate	56.5	67.5	63.52	53.6	65.3	60.67	75 dB(A)	70 dB(A)
Back side gate	55.3	66.3	61.26	51.6	62.6	58.87		
Railway siding	53.4	68.5	62.83	51.1	67.5	59.79		
Slag Yard	57.3	70.8	63.38	55.2	65.2	60.34		
Store	52.0	66.7	62.13	48.1	64.7	59.27		
Mill section	62.3	73.4	69.88	56.7	70.6	66.28		
Packing area	59.5	71.1	64.96	53.8	66.3	61.18		
Near JSSL	53.2	67.6	60.63	50.8	62.4	57.55		

JSW CEMENT LIMITED

Vijayangara Works
Vidyanagara ,Sandur Taluk
Bellary District, Karnataka

METEOROLOGICAL REPORT FOR THE YEAR 2017-2018

Year	Month		Wind Direction	Wind Speed	Temperature	RH
			Deg	m/s	°C	%
2017-2018	April.2017	Minimum	100	1.1	30.3	22.19
		Maximum	253	2.4	33.66	45.57
		Avg	220	1.8	32.17	37.64
	May.2017	Minimum	145	0.9	27.8	30.93
		Maximum	252	4.6	33.26	63.95
		Avg	219	2.6	30.93	48.55
	June .2017	Minimum	191	2.2	25.46	52.39
		Maximum	257	3.3	30.27	72.25
		Avg	228.6	2.8	27.55	63.5
	July.2017	Minimum	214	2.2	24.84	61.42
		Maximum	250	3.7	28.04	77.86
		Avg	234.7	3	26.6	66.92
	August.2017	Minimum	211	1.7	24.67	60.59
		Maximum	253	2.9	28.27	80.42
		Avg	234.7	2.3	26.22	70.84
	September.2017	Minimum	110	1.1	23.26	61.26
		Maximum	267	3.1	28.99	86.69
		Avg	218.3	1.6	26.18	72.51
	October.2017	Minimum	88	1	24.66	50.37
		Maximum	240	1.8	27.38	82.66
		Avg	193.3	1.4	25.79	68.34
	November.2017	Minimum	82	1	22.4	53.91
		Maximum	248	1.9	26.42	78.8
		Avg	153.8	1.3	24.8	63.06
	December.2017	Minimum	85	1	21.97	50.14
		Maximum	208	1.9	25.65	72.75
		Avg	131.5	1.5	23.22	61.07
	January.2018	Minimum	85	1	16.6	81.3
		Maximum	208	2.1	30.9	23.7
		Avg	131.5	1.6	23.75	49.4
	February.2018	Minimum	85	1	16.4	81.3
		Maximum	208	2.7	33.9	23.7
		Avg	131.5	1.82	25.15	49.4
March.2018	Minimum	85	1	21	81.3	
	Maximum	208	2.7	36.5	23.7	
	Avg	131.5	1.82	28.75	49.4	

Annexure - X

Advertised our Environmental Clearance in local new papers (Kanada Prabha, Deccan Herald)

ಸಾರ್ವಜನಿಕ ಪ್ರಕಟಣೆ

ಪರಿಸರ, ಅರಣ್ಯ ಮತ್ತು ಹವಾಮಾನ ಬದಲಾವಣೆ ಸಚಿವಾಲಯವು ತನ್ನ ಉಲ್ಲೇಖ ಸಂಖ್ಯೆ ನಂ. ಎಫ್. ನಂ. ಐಎ-ಜೆ-11011/540/2017-ಐಎ. II(I) ದಿನಾಂಕ 01.02.2018 4.0 ಎಮ್.ಟಿ.ಪಿ.ಎ. ಸ್ಲಾಗ್ ಗ್ರೈಂಡಿಂಗ್ ಮತ್ತು ಮಿಕ್ಸಿಂಗ್ ಘಟಕ (ಗಳು) 6.2 ಎಮ್.ಟಿ.ಪಿ.ಎ.ಗೆ ವರ್ಗಾಯಿಸಲು ಅನುಮೋದಿಸಿದೆ. ಎಮ್/ಎಸ್. ಜೆ.ಎಸ್. ಡಬ್ಲ್ಯೂ. ಸ್ಟೀಲ್ ಲಿಮಿಟೆಡ್. (ಮೂಲ ಕಂಪನಿ) ಜೆ.ಎಸ್. ಡಬ್ಲ್ಯೂ. ಸಿಮೆಂಟ್ ಲಿಮಿಟೆಡ್. (ಹೊಸ ಕಂಪನಿ). ಎನ್ವಿರಾನ್ಮೆಂಟಲ್ ಕ್ಲಿಯರೆನ್ಸ್ ಪ್ರತಿಯನ್ನು ಎಸ್.ಪಿ.ಸಿ.ಬಿ. ಜೊತೆ ಪತ್ರ ಲಭ್ಯವಿರುತ್ತದೆ. ಹಾಗೂ ಪ್ರತಿಯನ್ನು ಪರಿಸರ, ಅರಣ್ಯ ಮತ್ತು ಹವಾಮಾನ ಬದಲಾವಣೆ ಸಚಿವಾಲಯದ ವೆಬ್‌ಸೈಟ್‌ನಲ್ಲೂ ನೋಡಬಹುದು <http://envfor.nic.in>

PUBLIC NOTICE

The Ministry of Environment Forest & Climate change Vide their letter No F.NO.IA- J-11011 /540/2017 -IA-II(I) dt 1.02.2018 have accorded to transfer the Environmental Clearance of 4.0 MTPA Slag Grinding and mixing unit(s) from Environmental Clearance granted to 6.2 MTPA Slag Grinding and Mixing units as a part of Integrated Steel Plant of M/s JSW Steel Limited (parent company) to M/s JSW Cement Limited(new company) (The copy of Environmental clearance letter is available with SPCB and may also be seen at website of the Ministry of Environment Forest & Climate change <http://envfor.nic.in>

