

**Half Yearly Compliance Report  
2024  
01 Jun(01 Oct - 31 Mar)**

**Acknowledgment**

<b>Proposal Name</b>	JSW Cement Ltd		
<b>Name of Entity / Corporate Office</b>	Mr.Manoj Kumar Rustagi		
<b>Village(s)</b>	N/A		
<b>District</b>	NANDYAL		
<b>Proposal No.</b>	IA/AP/IND/267226/2020	<b>Category</b>	Industrial Projects - 1
<b>Plot / Survey / Khasra No.</b>	N/A	<b>Sub-District</b>	N/A
<b>State</b>	ANDHRA PRADESH	<b>Entity's PAN</b>	NA
<b>MoEF File No.</b>	F.No. J-11011/889/2007-IA-II-(I)	<b>Entity name as per PAN</b>	NA

**Compliance Reporting Details**

**Reporting Year** 2024  
**Remarks (if any)**  
**Reporting Period** 01 Jun(01 Oct - 31 Mar)

**Details of Production and Project Area**

**Name of Entity / Corporate Office** Mr.Manoj Kumar Rustagi

	<b>Project Area as per EC Granted</b>	<b>Annual Project Area in Possession</b>
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	0	0
<b>Total</b>	<b>0</b>	<b>0</b>

**Production Capacity**

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Clinker	Million Tons per Annum (MTPA)	30/09/2027	3.4	2.24	3.4
2	Cement	Million Tons per Annum (MTPA)	30/09/2027	6.0	2.16	6.0

## Conditions

### Specific Conditions

Sr.No.	Condition Type	Condition Details
1	Statutory compliance	The PP shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

**PPs Submission:** Complied  
Submitting the all the documents within the time.

Date:  
31/05/2024

### General Conditions

Sr.No.	Condition Type	Condition Details
1	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R. No. 612 (E) dated 25th S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

**PPs Submission:** Complied  
Installed three continuous emission monitoring stations at an 120 degree angle at plant and connected to APPCB and CPCB web sites.

Date:  
31/05/2024

2	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
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**PPs Submission:** Complied  
Fugitive emissions are monitored in all dust prone areas once in a month through M/s. Lawn Enviro Associates (P) Ltd . Monitoring report are attached

Date:  
31/05/2024

3	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.
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**PPs Submission:** Complied  
3 nos of CAAQMS are already installed at the periphery of the plant. In addition, 4 nos of AAQ stations for manual monitoring have also been provided at the plant periphery.

Date:  
31/05/2024

4	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly
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		monitoring report.
<p><b>PPs Submission:</b> Complied Regularly submitting the CEMS and Air Quality monitoring reports to the Regional Office of MoEF&amp;CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.</p>		<p>Date: 31/05/2024</p>
5	AIR QUALITY MONITORING AND PRESERVATION	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
<p><b>PPs Submission:</b> Complied Air Pollution Control (APC) system and closed conveyer systems are provided for all the dust generating points including fugitive dust from all vulnerable sources, to minimize the prescribed stack emission and fugitive emission standards.</p>		<p>Date: 31/05/2024</p>
6	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
<p><b>PPs Submission:</b> Complied Leakage detection and mechanized bag cleaning facilities are provided for all the bag filters.</p>		<p>Date: 31/05/2024</p>
7	AIR QUALITY MONITORING AND PRESERVATION	Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
<p><b>PPs Submission:</b> Complied All the pollution control systems are designed keeping in view of CREP guidelines.</p>		<p>Date: 31/05/2024</p>
8	AIR QUALITY MONITORING AND PRESERVATION	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
<p><b>PPs Submission:</b> Complied Truck mounted mobile vacuum cleaner are available in the plant to clean the plant roads, shop floors etc. on regular basis. In addition, manually operated dust cleaning systems are also deployed in packing plant area.</p>		<p>Date: 31/05/2024</p>
9	MISCELLANEOUS	The PP shall put all the environment related expenditure, expenditure related to Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the left over funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.
<p><b>PPs Submission:</b> Complied Noted and agreed.</p>		<p>Date: 31/05/2024</p>
10	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) as amended from time to time; S.O. 3305 (E)

		dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
<b>PPs Submission:</b> Complied We are not not having any ETP and Online effluent monitoring system is not applicable for cement plants.		Date: 31/05/2024
11	MISCELLANEOUS	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
<b>PPs Submission:</b> Complied We will not go for Expansion without EC.		Date: 31/05/2024
12	MISCELLANEOUS	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
<b>PPs Submission:</b> Complied Noted and agreed.		Date: 31/05/2024
13	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall regularly monitor ground water quality at least twice a year (preand post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
<b>PPs Submission:</b> Complied We are regularly monitoring the ground water levels through two numbers of piezometers through NABL accredited labs .		Date: 31/05/2024
14	WATER QUALITY MONITORING AND PRESERVATION	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
<b>PPs Submission:</b> Complied Two STPs each of 50 m3/day have been installed to treat domestic wastewater.		Date: 31/05/2024
15	WATER QUALITY MONITORING AND PRESERVATION	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
<b>PPs Submission:</b> Complied Provided garland drains for the lime stone waste dump yards.		Date: 31/05/2024
16	MISCELLANEOUS	The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

<b>PPs Submission:</b> Complied Noted and agreed.		Date: 31/05/2024
17	MISCELLANEOUS	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
<b>PPs Submission:</b> Complied Noted and Aggreded.		Date: 31/05/2024
18	MISCELLANEOUS	Any appeal against this environmental clearance 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.
<b>PPs Submission:</b> Complied Noted and agreed.		Date: 31/05/2024
19	WATER QUALITY MONITORING AND PRESERVATION	Water meters shall be provided at the inlet to all unit processes in the cement plant.
<b>PPs Submission:</b> Complied Water flow meters are provided at the inlet to all processes units.		Date: 31/05/2024
20	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.
<b>PPs Submission:</b> Complied Treated water is properly recycled and reused in other processes such as gardening and dust suppression inside the plant.		Date: 31/05/2024
21	Noise Monitoring & Prevention	Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
<b>PPs Submission:</b> Complied Noise levels are regularly monitored and reported to A.P .Pollution Control Board on monthly basis and six monthly compliance report also.		Date: 31/05/2024
22	Noise Monitoring & Prevention	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
<b>PPs Submission:</b> Complied Ambient noise levels are maintained well within the prescribed limits. The ambient noise levels for the period April 23 to March 24 are as below. # Location Nose levels dBA (avg.) Day time Night time 1 Near New Security gate 66.60 59.70 2 Near MRSS Building 71.20 68.55 3 Near Old Security gate 69.15 65.0 4 Near Colony 54.00 50.00		Date: 31/05/2024
23	ENERGY PRESERVATION MEASURES	Waste heat recovery system shall be provided for kiln and cooler.

<b>PPs Submission:</b> Complied 12.2 MW WHRR installed for Kiln and Cooler		Date: 31/05/2024
24	ENERGY PRESERVATION MEASURES	The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
<b>PPs Submission:</b> Complied Power consumption for Ordinary Portland Cement (OPC) from Oct 23 to March 2024 was 79.14 kWh/t cement and Thermal energy consumption was: 704.15 kcal/Kg of Clinker. We are planning for cooler modification to further reduce the thermal energy consumption.		Date: 31/05/2024
25	ENERGY PRESERVATION MEASURES	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
<b>PPs Submission:</b> Complied Solar power generation systems are provided inside plant buildings like of CCR ,Packing Plant, WTP Buildings, 15 MW Solar power plant and Solar Street lights at internal roads and parking locations.		Date: 31/05/2024
26	ENERGY PRESERVATION MEASURES	Provide the project proponent for LED lights in their offices and residential areas.
<b>PPs Submission:</b> Complied LED lights are provided in all office buildings locations.		Date: 31/05/2024
27	WASTE MANAGEMENT	Used refractories shall be recycled as far as possible.
<b>PPs Submission:</b> Complied Complied. Used refractories are sold to vendors for recycling.		Date: 31/05/2024
28	GREENBELT	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.
<b>PPs Submission:</b> Complied JSWCL plans to further reduce CO2 emission by implementing the following measures: Increasing use of alternate fuels to the extent of >15% Thermal Substitution rate (TSR) Reduction in sp. thermal energy (~25 Kcal/kg clinker) through cooler upgradation, cyclone modification and use of steel slag in Raw meal Reduction of clinker factor (~7%) by increasing production of blended cement Installation of 12.2 MW Waste Heat Recovery Power Plant Enhancing the existing capacity of Solar power plant from 5.5 MW to 15 MW in next 3 years Use of Electrical Vehicles (owned/ leased) – 5 Nos, each of 55 ton capacity for transportation of slag from Vijayanagar, Bellary to Nandyal (approx. 300 km) With the implementation of above measures, we will reduce our net CO2 emission by 12.4 % in next 3 years. Total CO2 savings to be achieved = 193651 t per annum Carbon Sequestration: • Carbon sequestration through plantation • As of now we have planted 86568 nos of plants which can potentially sequester ~31 T of CO2 per annum (considering an average of 0.3 kg CO2 sequestration per year per plant) • We are in discussion with a Hosur based company for mass plantation of Bheema Bamboo species which has very high carbon sequestration potential as compared to other species. • In future, we plan to plant approx. 112500 nos of plants which will further help in Carbon sequestration. • One of the criteria for species selection for greenbelt will be based on the carbon sequestration potential. Technological Carbon Sequestration • Exploring to partner with a London based agency to work on Carbon Capture, Utilization and Storage (CCUS project) • Through GCCA, we are also in discussion with few other companies who are working on CCUS • We have prepared the GHG emissions inventory for whole company as well for each plant. The inventory is third party verified also		Date: 31/05/2024

29	GREENBELT	Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.
<b>PPs Submission:</b> Complied Decarbonization program consisting of carbon emissions, carbon budgeting, carbon offsetting and carbon sequestration strategies is detailed in the above point under Greenbelt. The above program also details a 3-year action plan with strategies to reduce our carbon intensity by approx. 12%.		Date: 31/05/2024
30	MISCELLANEOUS	i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
<b>PPs Submission:</b> Complied Copies of the EC have been submitted to the Heads of local bodies of Panchayats on 30.09.2022, Municipal Commissioner On 06.10.2022, MRO 04.10.2022, Zila Parishad on 04.10.2022, Environmental engineer on 04.10.2022.		Date: 31/05/2024
31	MISCELLANEOUS	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
<b>PPs Submission:</b> Complied Environmental Clearance orders are published in the Sakshi Paper Telugu and English Newspapers The Hans India on 29.9.2022. Copies of the newspaper advertisements.		Date: 31/05/2024
32	MISCELLANEOUS	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
<b>PPs Submission:</b> Complied Noted and agreed to comply within the stipulated time frame.		Date: 31/05/2024
33	MISCELLANEOUS	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
<b>PPs Submission:</b> Complied Criteria pollutants namely PM10, PM 2.5, SOx, NOx are monitored at the prescribed intervals and the data displayed at the main factory gate for public disclosure. The monitored data are also uploaded on company website along with 6 monthly compliance reports.		Date: 31/05/2024
34	MISCELLANEOUS	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate

		Change at environment clearance portal.
<b>PPs Submission:</b> Complied uploaded 6 monthly compliance report on MoEF&CC website.		Date: 31/05/2024
35	MISCELLANEOUS	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
<b>PPs Submission:</b> Complied Environment Statement of each financial year is regularly submitted to SPCB before 30th Sept every year and the same is also uploaded on the Company's website. Environmental statement (Form-V) for the year 2022-23 was submitted to SPCB and RO, MoEF&CC on 29.09.2023		Date: 31/05/2024
36	MISCELLANEOUS	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
37	MISCELLANEOUS	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
<b>PPs Submission:</b> Complied Noted and agreed.		Date: 31/05/2024
38	MISCELLANEOUS	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
<b>PPs Submission:</b> Complied Noted and agreed.		Date: 31/05/2024
39	AIR QUALITY MONITORING AND PRESERVATION	Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
40	AIR QUALITY MONITORING AND PRESERVATION	Provide wind shelter fence and chemical spraying on the raw material stock piles; and xi. Provide Low NOX burners as primary measures and SCR /NSCR technologies as secondary measure to control NOX emissions.
<b>PPs Submission:</b> Complied Except limestone stockpile, all the raw material are stored in covered shed. Regular water sprinkling is also done around the raw material storage areas. Wind shelter fence and chemical spraying on raw material will be ensured in due course. For NOx control, we have provided low NOx burners as well as Low NOX Calciner and the NOx values are always maintained below the permissible limits. In view of the above, SNCR is presently not required.		Date: 31/05/2024
41	AIR QUALITY	Have separate truck parking area and monitor vehicular emissions



	MONITORING AND PRESERVATION	at regular interval.
42	AIR QUALITY MONITORING AND PRESERVATION	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport

<p><b>PPs Submission:</b> Complied</p> <p>Separate truck parking area provided for all the incoming and loaded trucks Provided closed conveyers and bag filters at all transfer points to avoid the spillage dust to the environment. In addition, the company has constructed a 30 km long concrete road from plant to Nandyal for transportation of material, thus minimizing the impact of dust pollution on the surroundings.</p>	Date: 31/05/2024
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43	AIR QUALITY MONITORING AND PRESERVATION	Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.
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**Visit Remarks**

<b>Last Site Visit Report Date:</b>	N/A
<b>Additional Remarks:</b>	

