# ENVIRONMENT CLEARANCE COMPLIANCE STATUS REPORT OF CEMENT PLANT & POWER PLANT PERIOD: OCTOBER -2022 TO MARCH-2023.



JSW Cement Limited, Salboni (Village- Salboni, P.O. Saiyedpur, Dist- Paschim Medinipur) West Bengal -721147.

HALF YEARLY COMPLIANCE REPORT OF ENVIRONMENT CLEARNACE	
1. NAME OF THE PROJECT:	Cement Grinding Unit 3.6 MTPA and 2 X 18 MW CPP by M/s JSW Cement Ltd. at Village Salboni, Dist. Paschim Medinipur, West Bengal
2. CEARANCE LETTER NO. & DATE:	2015/ENT/T-II-1/002/2017, dated 07.09.2017
3. PERIOD OF COMPLIANCE REPORT:	From October 2022 to March 2023

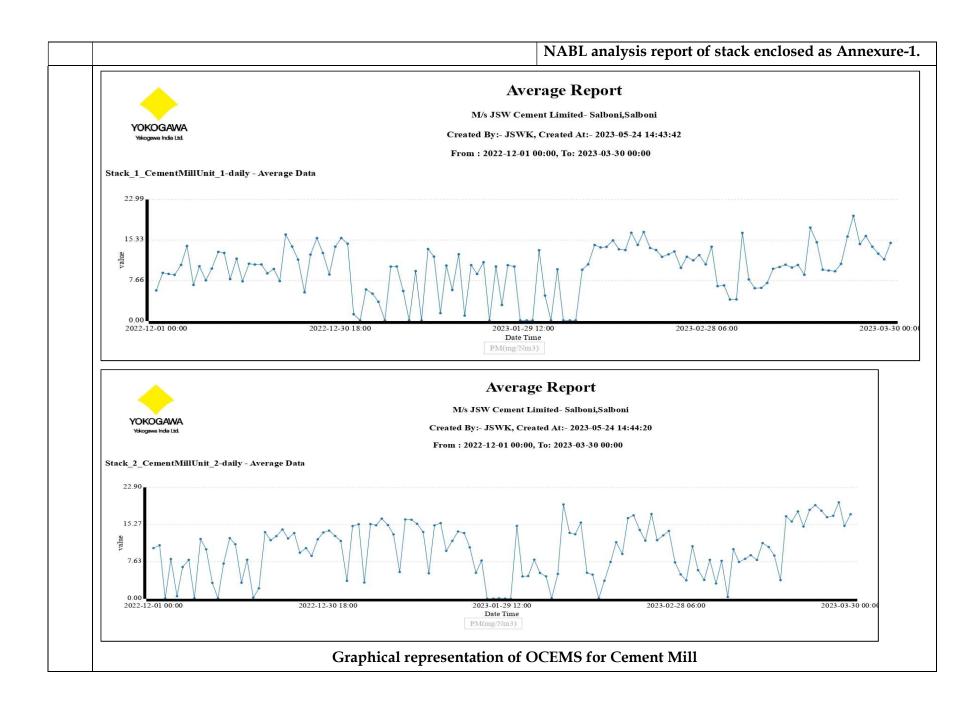
# Compliance report of conditions stipulated in the Environment Clearance

## ENVIRONMENT CLEARANCE NO: 2015/EN/T-II-I/002/2017 Dated: 07.09.2017

**Present Status of the Project:** Expansion of Cement Plant from 2.4 to 3.6 and 1\*18 MW CPP have completed. The manufacture process involves only grinding of cement clinker with fly ash/slag and gypsum. Clinker is being procured from outside.

## **Specific Conditions:**

SI. No.	CONDITIONS	COMPLIANCE
i.	The gaseous emissions from various units should conform to the load/mass based standards prescribed by the Ministry of Environment & Forests and the State Pollution Control Board from time to time. At no time the emission level should go beyond the prescribed standards.	The gaseous/particulate emission from various units conform to the load/mass standards prescribed by the Ministry of Environment & Forests and the State Pollution Control Board. Bag filters installed with the equipment are designed to meet the prescribed standards and the maintenance of the same is done on the regular basis.  Monthly Stack Emission Monitoring is carried out by NABL Accredited Laboratory to monitor the PM and gaseous values, and the OCEMS is also installed in every stack to get the real time data and the real time data are also transferred to the CPCB Server. OCEMS report is given below.



ii. Cement grinding shall be carried out in closed cement mill. Provision of dust extraction and pollution control systems along with minimum stack height of 50 M from G.L. should be made for control of emission. Highly efficient Cyclone Separators, Pulse Jet Bag Filters & ID fans should be provided for Raw Material Handling Section, Ball Mill, Silo, Packing Section. Stack emission shall be monitored at regular intervals and records maintained. The stack emission should not exceed 30 mg/Nm3. For CPP boiler ESP of adequate design and capacity and along with minimum stack height of 30 m from G.L. should be provided. The stack emission should not exceed 30 mg/nm³.

Cement/ slag grinding is done in closed circuit Roller Press mills. High efficiency Bag Houses installed to control the dust emission. Every Stack's height is greater than the 50 m height from G.L. High efficiency Bag Houses has been provided with Roller Press mills (Photograph - I). Pulse Jet Bag Filters installed at material transfer points in Raw Material, Grinding, packing sections to keep emission level below the prescribe/standard level.

High Efficiency ESP has been installed after the boiler to control the emission from the Captive power plant (Photograph - II).

Stack emission are being monitored regularly by us & also by a NABL Accredited laboratory on a monthly basis. Reports for the same is **enclosed as Annexure-I**.

OCEMS also installed in the Cement Mill, Ball Mill and CPP stack to monitor the real time data of pollutants and same data are transferred to the CPCB server.



High Efficiency Bag Houses attached to grinding circuit(Photograph - I)



High Efficiency ESP installed after the boiler(Photograph - II)

iii.	Regular monitoring of the ambient air quality shall be carried out in and around the plant and records maintained. The ambient air quality standards as per GSR 826 € dated 16.11.2009 to be maintained. 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 NO2-are anticipated in consultation with the SPCB. Data on AAQ and Stack Emission shall be regularly submitted to the SEIAA and the SPCB once in six months.	The Ambient Air Quality monitoring is carried out in and around the plant on regular basis and records of the same are maintained. Good housekeeping and regular water sprinkling is done on regular basis to maintain the ambient air quality below the limits prescribed in the GSR 826(E) published on dated November 16, 2009.  Total six numbers of ambient air quality monitoring stations are established in the plant based on the major wind direction.
		Reports of AAQ and Stack Emission are submitted to the SEIAA and the SPCB in a timely manner.  Ambient air quality and stack monitoring is also carried out the by the third party on the monthly basis. Reports of the AAQ monitoring by NABL Accredited laboratory enclosed as Annexure-II.
iv.	The unit shall install CAAQMS for the project.	CAAQMS is installed in the plant premises to monitor the real time data of the ambient air quality (Photograph – III)



**Continuous Ambient Air Monitoring Station (Photograph - III)** 

Finished cement should be collected in silo and packaging should be done through pneumatically controlled system. Suction system should be installed at packaging section to minimize fugitive emission.

Cement is collected in silo and packaging is done through pneumatically controlled system. Suction systems are installed at packing plant to control the fugitive emission. Photographs of the Silos and packers are given below (Photograph IV & V).

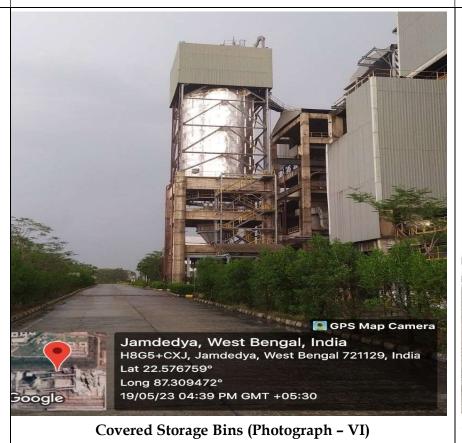




Photograph of automatic Roto-Packer with proper suction system (Photograph - V)

vi. All vibrating screens, storage bins will be adequately covered. Covered storage yards shall be provided for raw materials. Closed unloading of raw materials and closed conveyor belt for transportation with bag filter at transfer points should be provided. Suction head should be provided at all transfer points.

All vibrating screens, storage bins, and the raw material storage facilities are kept under proper covered storage system. All conveyor belts used for raw material transportation are also covered, and at all raw material transfer points, suction hoods are provided which are further attached with the bag filters. Photographs of the covered storage bins, RM yard & closed conveyor belt, and transfer points are given below(Photograph - VI & X).



Ashna Shuli, West Bengal, India
H8G4+VFJ, Ashna Shuli, West Bengal 721129, India
Lat 22.575754°
Long 87.307275°
19/05/23 04:01 PM GMT +05:30

Covered RM Yard for Gypsum (Photograph – VII)



Covered RM Yard for Coal (Photograph - VIII)



Covered belt conveyors (Photograph - IX)

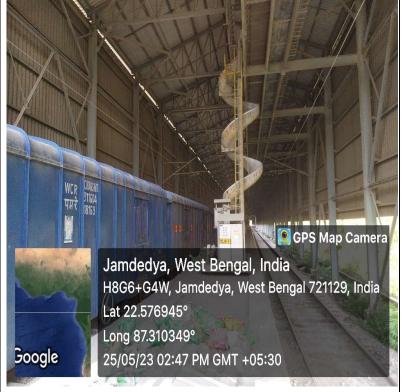


Covered transfer points connected with APCD (Photograph - X)

vii. Adequate dust suppression and extraction system should be provided in material storage areas, material unloading and transfer points for controlling fugitive emission. Fugitive dust emissions from ball mill and storage area shall be collected in bag filters and recycled back to the bag loading areas and other high dust potential areas.

Dust suppression and extraction systems in material storage, loading and unloading and also at the transfer points have been provided for controlling fugitive emissions. Dust collected in bag filters is automatically recycled into the system through closed unloading system (Photograph of Wagon Tippler & loaders - XI & XII). Analysis report of fugitive emissions from NABL accredited lab are enclosed as Annexure-III.





Covered Wagon Loading Area (Photograph-XII)

viii.	Water required for proposed expansion shall be met from ground water supply as proposed. Groundwater shall be abstracted as per permission of the competent authority as per The West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.	Permission for Groundwater abstraction from 6 nos. of bore wells has been obtained from SWID.  Withdrawal permissions from SWID are enclosed as Annexure-IV.
ix.	Process effluent discharge is not permitted. No liquid effluent shall be generated by adoption of dry grinding process.	Cement Grinding Unit- The plant is based on dry grinding process technology and as such there no discharge of process effluent.  Two STPs of 200 KLD & 60 KLD STP have been installed to treat the domestic waste water generated from the offices and canteen Areas and the treated water is used for greenbelt/Plantation.  Zero liquid discharge condition is maintained in the plant.  Neutralization pit is used to treat the RO reject water in Captive Power Plant, and the treated water is used for dust
		suppression.  Photographs( XIII & XIV)of STPs are given below.



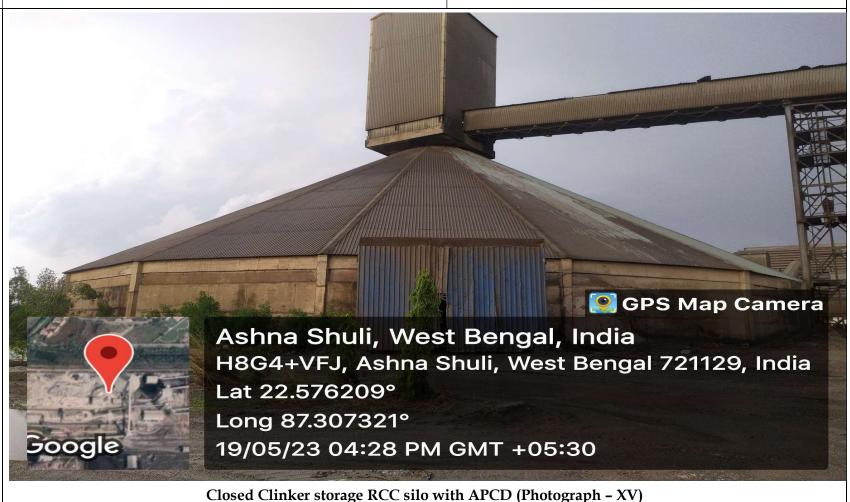
STP 200 KLD(Photograph - XIII)



STP 60 KLD(Photograph - XIV)

x. Clinker manufacturing/heating is not permitted under this Environment Clearance. Clinker and Fly Ash shall be stored in the closed silos and Gypsum in covered shed.

Clinker is not manufactured at our plant. Purchased Clinker is stored in closed RCC silo whereas the Fly Ash, as and when received/ generated in CPP, is stored in a steel silo. Gypsum is stored under covered shed. Photographs(XV, XVI & XVII) of the same are given below.





All the bag filter dust, raw material dust, coal dust, clinker dust | Dust generated from air pollution control devices/bag xi. and cement dust from pollution control devices should be recycled and reused in the process used for cement manufacturing. Spent oil and batteries should be sold to authorized recyclers/repressors only. Hazardous waste generated to be disposed of as per provisions of Hazardous Wastes (Management and Transboundary Movement) Rules, 2016.

filters, raw material dust reused in the cement manufacturing process. Fly Ash generated from CPP is used in the cement manufacturing process.

Spent oil is sold to the authorized vendors. Waste batteries are sold to the authorized vendors. Hazardous waste generated is disposed as per the guidelines of Hazardous Wastes (Management and Transboundary Movement) Rules, 2016.

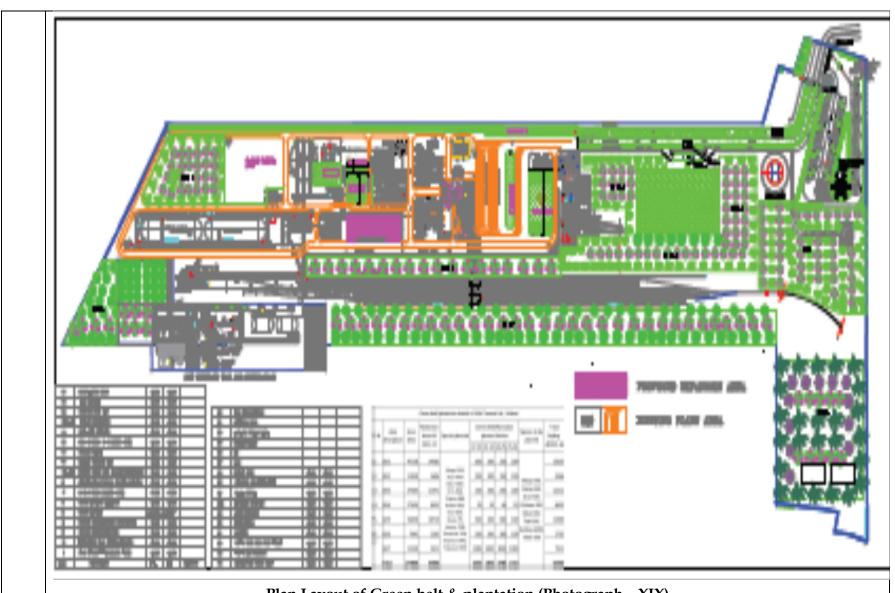
The photographs-XVIII of Hazardous Waste storage area is given below.



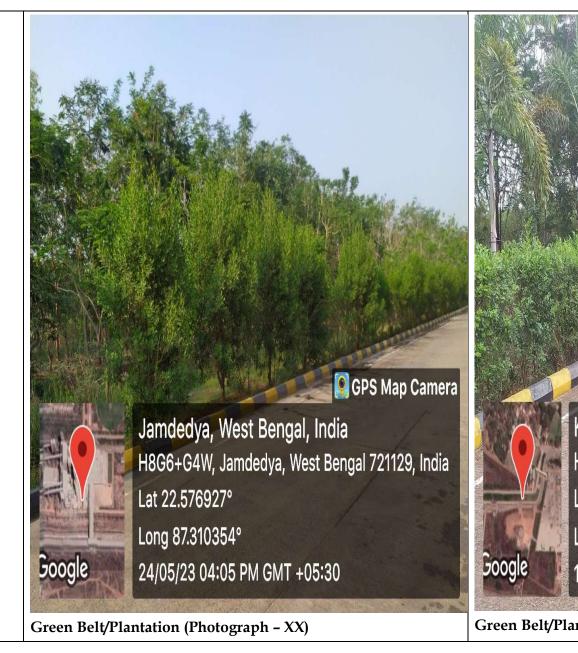
Hazardous waste storage facility inside the plant (Photograph - XVIII)

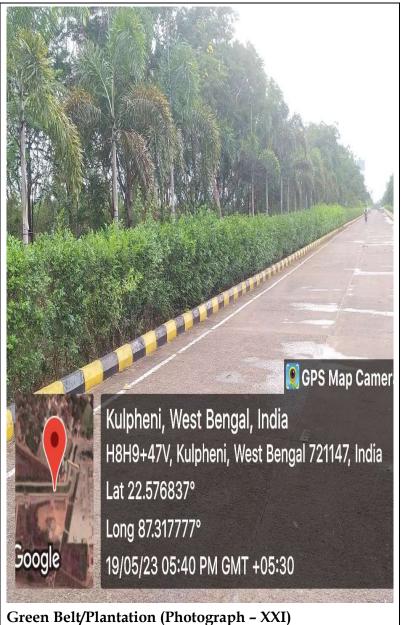
xii.	Adequate provisions should be made for harvesting rainwater. The harvested water should be used for plantation, firefighting, washing and cleaning etc. Recharging of Groundwater is not permitted.	Rainwater harvesting pit, as proposed, shall be constructed to collect the rainwater. In addition, rainwater will also be harvested from roof top, storm drains etc. The harvested rainwater will be utilized to the maximum extent to conserve fresh water.
xiii.	Greenbelt shall be developed within the plant premises. At least 33% of the area should be kept for greenbelt development. At least 12500 (as stated in previous environmental clearance vide no. 89/EN/T-II-I/037/2015 dated 14.1.2016) to be planted and maintained in the greenbelt area of 44 acres. There should not be any removal/destruction of vegetative cover both at the establishment as well as the operational stage, without the sanction of appropriate authority.	More than 33% of total plant area has been developed into Greenbelt area.  No vegetative cover was destroyed/ removed during the establishment and operation phases.  44 Acres of Land inside the plant premises has been developed as Greenbelt with recommended species (Photographs attached below). As per condition given for plantation in Environment Clearance vide no. 89/EN/T-II-I/037/2015 dated 14.01.2016, we have planted 42825 nos. of plants against target given of 12500 (Photographs XIX, XX & XXI).

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Plan Layout of Green belt & plantation (Photograph - XIX)





xiv.	The overall noise levels in and around the plant area shall be kept well within the standards 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 (night-time).	Ambient noise levels are maintained well within the prescribed limits (75 dBA (daytime) and 70 dBA (night-time) by maintaining the overall workplace noise level within the permissible limits by adopting various noise control measures such as acoustic hoods, silencers, enclosures etc. on the noise generating equipment.  The ambient noise levels conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime)
		and 70 dBA (night-time).  Noise monitoring is done by the NABL Accredited laboratory on regular basis, Report of the noise monitoring are enclosed as Annexure-V.
XV.	Asphalting/concreting of roads and water spray all around the stockyard and loading/unloading areas in the cement plant shall be carried out to control fugitive emissions. Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haul road, loading and unloading pints, transfer points and other vulnerable areas. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central	All internal roads are bituminous/ concrete roads. Mechanized road sweeping machine and water spray on the roads is carried out on regular basis by the movable water tanker and fixed water sprinkling system to control the fugitive emission. Good housekeeping is maintained within the premises.  Photographs (XXII & XIII) of the road sweeping machine & water sprinkled road is given below.
		Regular water sprinkling is carried out at haul road, loading and unloading points, transfer points and at other vulnerable areas to control the air pollution.
		Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board.
		Air quality monitoring is done on regularly basis by an NABL Accredited laboratory. Report of the air quality analysis is enclosed as Annexure-II.



Road Sweeping Machine (Photograph - XXII)



Plant inside Concrete road(Photograph - XXIII)

xvi. Proper lighting and proper pathway inside the factory premises should be constructed to ensure safe vehicular movement. Provision of separate pathway for entry and exit of vehicles should be considered. Vehicles should conform to Pollution under Control (PUC) norms. Proper housekeeping shall be maintained within the premises.

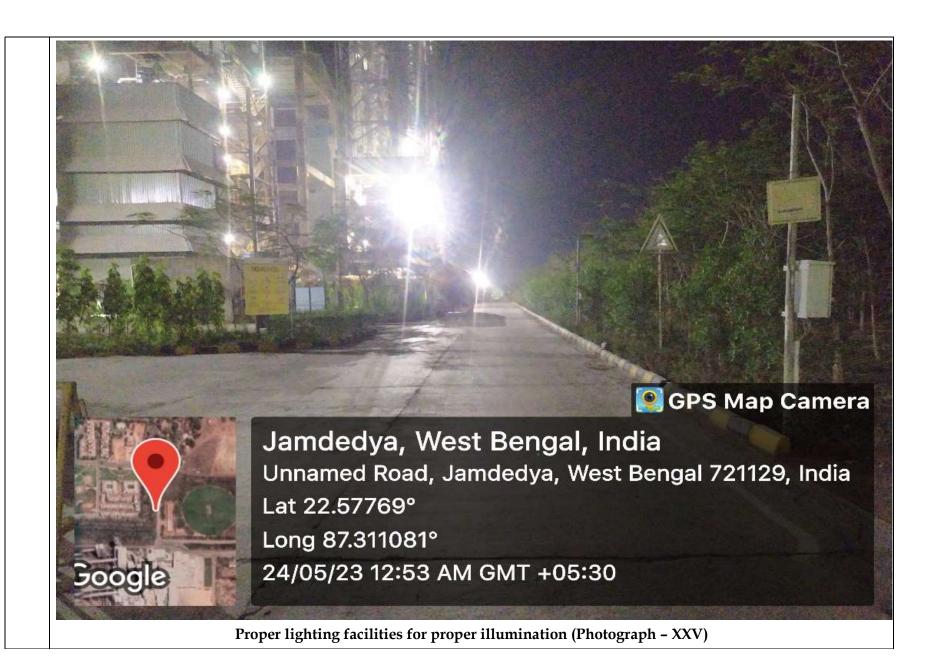
Proper lighting and pathway inside the factory premises are provided for safe vehicular movement. All internal roads are concrete & bituminous road.

Separate pathways are provided for entry and exit of vehicles. Only PUC certified vehicles are allowed inside the plant. Good housekeeping is maintained within the premises.

Photographs(XXIV & XXV)related to the separate pathways & lighting on the roads are given below.



Separate path way for incoming & outgoing vehicle (Photograph - XXIV)



xvii	Health and safety of workers should be ensured. Workers should		
	be provided with adequate personnel protective equipment and		
	sanitation facilities. Occupational Health Surveillance of the		
	workers shall be done on a regular basis and records maintained		
	as the Factories Act.		

Health and safety of workers is ensured in line with OHSAS standard. Required PPEs and sanitation facilities are provided to workers at site.

Occupational Health Surveillance is done on regular basis and records are maintained as per requirements of the Factories Act.

In the last financial year periodic heath check-up was carried out for 100% JSW staff & associates workers (Photographs - XXVI & XXVII)

Sl. No.	Type of Employee	Percentage of staff/ Associates undergone periodic health check-
		up.
1	JSW Staffs	100%
2	Associate Employees	100%



Health Check-up of JSW Employee (Photographs - XXVI



Health Check-up of Associates (Photograph - XXVI)

xviii Adequate measures to be adopted to ensure industrial safety.Proper fire detection and protection systems to be provided to control fire and explosion hazards.

Adequate measures have been taken to ensure industrial safety. Proper Fire detection and protection devices are installed at appropriate locations. Fire fighting vehicle is also available round the clock within the premises.

Photographs(XXVIII-XXXIV) of the same given below.



Regular Safety training of Employees/Workers (Photograph-XXVIII)



Regular Tool Box Meeting (Photograph-XXIX)



Fire Fighting System (Photograph-XXX)



Fire Alarm (Photograph-XXXI)



Smoke Detection Sensor (Photograph-XXXII)



Fire Fighting System (Photograph-XXXIII)



	Budget spent on the activities in the reporting period
	enclosed as Annexure-VI.

# **General Conditions**

S. No.	CONDITIONS:	COMPLIANCE
i.	The environment clearance accorded shall be valid for a period of 7 years for the proposed project.	Noted
ii.	Prior Consent-to-Establish (NOC) for the proposed project must be obtained from WBPCB before commencement of construction. All other statutory clearances should be obtained by the project proponent from the competent authorities.	Complied.
iii.	The project proponent shall comply with all the environmental protection measures and safeguards recommended. Further, the unit must undertake socioeconomic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply, sanitation programme for local school and health care etc.	The unit is complying to all the environmental safeguards envisaged in the EIA, EMP, Environment Clearance, Consents issued by the board.  We undertake socio-economic development activities in the surrounding villages, Photographs of the Activities done in the reporting period are given below. Photographs for socio – economic activities are given below:









iv	All the conditions, liabilities and legal provisions contained in the EC shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of management of the project to any other party.	Noted and agreed.
V.	Provision should be made for the supply of kerosene or cooking gas to the labourers during construction phase. All the labourers to be engaged for construction works should be screened for health and adequately treated before issue of work permits. Environmental sanitation should be ensured for the workers.	Complied.  Now the plant is operational.
vi.	The project proponent should make financial provision in the total budget of the project for implementation of the environmental safeguards. The project authorities will	

	provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the SEIAA, West Bengal along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.	Implementation schedule for all the conditions stipulated in this EC is submitted to SEIAA, West Bengal.  The fund allocated for EMP will not be diverted for any other purpose.
vii.	No further expansion or modifications in the plant should be carried out without prior approval of the state level Environment Impact Assessment Authority, West Bengal. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEIAA, West Bengal.	Noted and Agreed.
viii	The West Bengal Pollution Control Board, who would be monitoring the implementation of environmental safeguards, should be given full cooperation, facilities and documents/data by the project proponent during their inspection. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to the WBPCB regularly. A complete set of documents should also be forwarded to the State Level Environment Impact Assessment Authority, West Bengal.	Full co-operation shall be extended to the officials of the SPCB during their inspection. Six monthly compliance reports & the status of the implementation of the stipulated environmental safeguards are regularly submitted to State Environment Impact Assessment Authority, Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board & State Pollution Control Board and also posted on the website of the Company. Copies of six monthly compliance report, monitored data and statistical interpretation of the monitored data will be submitted to SEIAA.
ix.	The State Level Environment Impact Assessment Authority, West Bengal reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Noted and agreed.
x.	The project proponent should inform public that the project has been accorded environment clearance by the SEIAA, West	The information was advertised through publication in The Telegraph Calcutta (English) and Anand Bazar Patrika (Bangla) dated 15 <sup>th</sup>

Bengal and copies of the clearance letter are available with the State Pollution Control Board/ Committee and may also be seen at Website of the SEIAA, West Bengal (http://environmentweb.gov.in). This should 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.

September 2017. Photograph for the same is given below. (Photograph-XXXV).

## জনসাধারণের জন্য তথ্য

জনসাধারণকে জানানো হচ্ছে যে ভারত সরকারের পরিবেশ, বন এবং জলবায়ু পরিবর্তন মন্ত্রনালয়ের ১৪ই সেপ্টেম্বর, ২০০৬ এর S.O. 1533 (E) জানুয়ারী, পিশ্চমবঙ্গের রাজ্যস্তরীয় পরিবেশগত প্রভাব মূল্যায়ন কর্তৃপক্ষ (SEIA) তাদের তারিখের পত্রসংখ্যা: 2015/EN/T-II -1/002/2017 দ্বারা জে.এস.ডরু (JSW) সিমেন্ট লিমিটেড কে, গ্রাম-শালবনী, জেলা-মেদিনীপুর, পশ্চিমবঙ্গ-এ অবস্থিত 2.4 MTPA ক্ষমতার সিমেন্ট ইউনিটেক 3.6 MTPA ক্ষমতার সিমেন্ট ইউনিটে প্রস্তাবিত সম্প্রসারণ এবং 2 X 18 MW CPP কে পরিবেশগত ছাড়পত্র প্রদান করা হয়েছে।

ছাড়পত্রের অনুলিপি পশ্চিমবঙ্গ দূষণ নিয়ন্ত্রণ বোর্ডে উপলব্ধ আছে এবং এটিকে SEIAA পশ্চিমবঙ্গ (http://environmentwb.gov.in) এবং জে.এস.ডব্রু সিমেন্ট লিমিটেডের ওয়েবসাইট (http://www.jswcement.in) এ দেখা যেতে পারে।

#### PUBLIC INFORMATION

This is to inform the Public that M/s JSW Cement Ltd. has been accorded Environment Clearance by the State Level Environment Impact Assessment Authority (SEIAA) vide letter No. 2015 /EN/T-II-1/ 002/ 2017, dated 07-09-2017 in accordance with S.O. 1533 (E) dt. 14 September, 2006 of the Ministry of Environment, Forest and Climate Change, GOI, for their proposed expansion of Cement Grinding Unit from 2.4 MTPA to 3.6 MTPA and 2 x 18 MW CPP at village Salboni, Distt. PaschimMedinipur, West Bengal.

Copies of the Clearance letter are available with the West Bengal Pollution Control Boardand may also be seen at the Website of the SEIAA, West Bengal (http://www.environmentwb.gov.in) and also at the website of M/s JSW Cement Limited (http://www.jswcement.in).

## News Paper Advertisement (Photograph -XXXV).

xi. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective zonal office of the WBPCB. The criteria pollutant levels namely: SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

Status of EC compliance as well as monitored data is being uploaded on the website and are also submitted to the WBPCB (https://www.jswcement.in/sustainability).

Monitoring of critical sectoral parameters of the project are being done and data being displayed near the main gate of the company Photograph for the same is given below (Photograph -XXXVI).



Display Board on Main Gate for Stack & Ambient real time data (Photograph -XXXVI)

xii. The project authorities should inform the State Pollution Control Board as well as the SEIAA, West Bengal, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work/ project implementation.

Date of financial closure of the project: 15.12.2017

Date of final approval of the project: 15.12.2017

Date of land development/ project implementation: 01-03-2018

xiii.	The above stipulations would be enforced along with those
	under the Water (Prevention and Control of Pollution) Act,
	1974, the Air ((Prevention and Control of Pollution) Act, 1981,
	the Environment (Protection) Act, 1986, the Hazardous Waste
	(Management, Handling and Transboundary Movement)
	Rules, 2009, the Public Liability Insurance Act, 1991, The
	Environment Impact Assessment Notification 2006 and their
	amendments.

Noted and agreed.

For JSW Cement Ltd. Salboni (W.B.)

Sajeesh G.

**Vice President & Plant Head**