

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITYPranisampad Bhavan, Block 'LB'-2, 5th Floor, Sector – III,
Salt Lake, Kolkata – 700 106

Telefax No. 033 2335 5246

Website : www.environmentwb.gov.in

No. 2015 / EN/ T-II-1/002/2017

Date : 07 / 09 /2017

To
M/s. JSW Cement Ltd.
JSW Centre, MMRDA Ground
Bandra Kurla Complex, Bandra (East)
Mumbai – 400 051

Subject : Environmental Clearance for the proposed expansion of Cement Grinding Unit from 2.4 to 3.6 MTPA and 2x18 MW CPP at Vill – Salboni, Dist – Paschim Medinipur, West Bengal by M/s. JSW Cement Limited

Sir,

This has a reference to your application submitted on 08/03/2017 and subsequent communications for Environmental Clearance for the proposed expansion of Cement Grinding Unit from 2.4 to 3.6 MTPA and 2x18 MW CPP at Vill – Salboni, Dist – Paschim Medinipur, West Bengal.

The proposal has been examined and processed in accordance with EIA Notification, 2006. It is noted that the proposed proposal is for expansion of Cement Grinding Unit from 2.4 to 3.6 MTPA and 2x18 MW CPP at existing unit premises at Vill – Salboni, Dist – Paschim Medinipur, West Bengal. It is noted that clinker will not be manufactured at the site. The manufacturing process will involve only grinding of Cement Clinker with Fly ash/Slag and Gypsum.

It is noted that the salient features of the project, for which Environmental clearance has been considered are as follows :

- Location of the Site – Salboni, Dist – Paschim Medinipur, West Bengal
- Latitude & Longitude – 22°34'32.97"N & 87°18'38.70"E
- Land Area – Proposed expansion will be installed within existing land area of 133.2 acres.
- Greenbelt – 44.0 acres.
- Raw Materials – Clinker, Fly Ash, Slag, Gypsum, Coal and Pet Coke.
- Production Capacity – Existing Capacity – 2.4 MTPA & Proposed capacity after expansion – 3.6 MTPA (OPC, PPC, PSC & GGBS) & 2X18 MW CPP
- Details of existing and proposed emission sources with Air Pollution Control Devices:

Sl. No.	Process Equipment/ Machinery	Existing (2.4 MTPA Cement)		Proposed (3.6 MTPA cement & 2x18 MW CPP)	
		Capacity	APCD	Capacity	APCD
1	Grinding Unit (Roller Press)	4 x 90 TPH	Bag Filter	2 x 90 TPH	Bag Filter
2	Cement & GGBS Storage	3 x 5000 T	Bag Filter	3 x 3000 T & 2 x 1000 T	Bag Filter
3	Blending Unit	450 TPH	Bag Filter	300 TPH	Bag Filter
4	Clinker Storage Silo	1 x 25000 T	Bag Filter	1 x 20000 T	Bag Filter
5	Slag Stacker	2000 TPH	Bag Filter	-	-
6	Packer	3 x 240 TPH	Bag Filter	-	-
7	Hot Air Generator	2 x 4 MCal/Hr	Bag Filter	1 x 1.75 MCal/Hr	Bag Filter

8	Coal Mill for HAG	1 x 20 TPH	Bag Filter	-	-
9	Wagon Tippler	2000 TPH	Bag Filter	-	-
10	Fly Ash Storage Silo (for Cement Plant)	-	-	1 x 1000	Bag Filter
11	Fly Ash Storage Silo (for CPP)	-	-	1 x 500 T	Bag Filter
12	Boiler	-	-	2 X 90 TPH	ESP and Flue Gas De-Sulphurization (FGD)
13	Coal Crusher (for CPP)	-	-	1 x 60 TPH	Bag Filter
14	Coal Coke Stockpile (for CPP)	-	-	2 x 10000 T	Water Sprinkler
15	Coal Stacker (for CPP)	-	-	200 TPH	Bag Filter

- viii. Total Water Requirement – 600 KLD (Bore Wells)
- ix. Solid waste – All dust generated will be recycled and reused in the process. Fly ash generated from CPP to be utilized in manufacturing of PPC.
- x. Wastewater – No process effluent will be generated. Waste water generated from CPP to be treated in suitable ETP and reused within project premises; no process effluent to be discharged outside the project premises and Zero Discharge Principle to be strictly followed. Domestic sewage will be treated in septic tank and soak pit.
- xi. Rainwater Harvesting – Rain water storage tank of dimension 100mX100mX4m to be constructed and harvested rainwater to be utilized in-house to minimize withdrawal of groundwater.
- xii. Total Power requirement – 27 MW, WBSIEDCL.

State Level Environment Impact Assessment Authority (SEIAA), examined the proposal and also perused recommendations of the State Level Expert Appraisal Committee (SEAC). After due consideration of the project proposal, and after considering the recommendations of the State Level Expert Appraisal Committee (SEAC), the State Level Environment Impact Assessment Authority accords Environmental Clearance to the project as per provisions of the EIA notification no. S.O. 1533 (E) dt. 14th September, 2006 of Ministry of Environment & Forests, GOI, subject to strict compliance of terms and conditions as mentioned below.

A. SPECIFIC CONDITIONS:

- i. The gaseous emissions from various process 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.
- 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 50m from G.L. should be provided for control of emission from Slag Mill and Hot Gas Generator. Highly efficient Cyclone separators, Pulse Jet Bag Filters & ID Fan should be provided for Raw Material Handling Section, Ball Mill, Silo and Packing Section. Stack emissions 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 30m from G.L. should be provided. The stack emission should not exceed 30 mg/Nm³.
- iii. Regular monitoring of the ambient air quality shall be carried out in and around the plant and records shall be maintained. All care to be taken to maintain the ambient air quality standards as per GSR 826 (E) dated 16.11.2009. 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, PM_{2.5}, SO₂ and NO₂ are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to the SEIAA and the SPCB once in six months.
- iv. The unit shall install Continuous Automatic Ambient Air Quality Monitoring Station (CAAAQMS) for the project.
 - v. 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.
 - 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.
 - 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 areas shall be collected in bag filters and recycled back to the process. Water sprinkling arrangement shall be made in the raw material stock yards and other high dust potential areas.
 - 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.
 - ix. Process effluent discharge is not permitted. No liquid effluent shall be generated by adoption of dry grinding process.
 - x. Clinker manufacturing / heating is not permitted under this environmental clearance. Clinker and fly ash shall be stored in the closed silos and gypsum and slag in covered shed.
 - xi. All the bag filter dust, raw meal dust, coal dust, clinker dust 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 / reprocessors only. Hazardous waste generated to be disposed of as per provisions of Hazardous Wastes (Management and Transboundary Movement) Rules, 2016.
 - 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.
 - xiii. Green belt shall be developed within the plant premises. At least 33% of the area should be kept for green belt development. At least 12500 (as stated in previous environmental clearance vide no. 89/EN/T-II-1/037/2015 dated 14.01.2016) 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.
 - 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 (nighttime).
 - xv. Asphaltting/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 PM_{2.5} such as haul road, loading and unloading points, transfer points and other vulnerable areas. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
 - 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.
 - 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 per the Factories Act.

- xviii. Adequate measures to be adopted to ensure industrial safety. Proper fire detection & protection systems to be provided to control fire and explosion hazards.
- xix. All the recommendations mentioned in the Corporate Responsibility for Environmental Protection (CREP) guidelines for Cement Plants shall be followed and complied.
- xx. The implementation and monitoring of Environmental Management Plan should be carried out, as proposed.
- xxi. At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial and physical break-up shall be prepared and submitted. Implementation of such program shall be ensured accordingly in a time bound manner.

B. GENERAL CONDITIONS:

- i. The environmental clearance accorded shall be valid for a period of 7 years for the proposed expansion project.
- ii. Prior Consent-to-Establish (NOC) for the proposed expansion project must be obtained from WBPCB before commencement of construction. All other statutory clearances should be obtained by project proponent from the competent authorities.
- iii. The project proponent shall comply with all the environmental protection measures and safeguards recommended in the EIA/EMP. Further, the unit must undertake socio-economic development activities in the surrounding villages like community development programs, educational programs, drinking water supply, sanitation program for local school and health care etc.
- 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 entity.
- 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.
- 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.
- 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.
- 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 proponents 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 all the documents should also be forwarded to the State Level Environment Impact Assessment Authority, West Bengal.
- 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 Environmental (Protection) Act. 1986, to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner.
- x. The Project Proponent should inform the public that the project has been accorded environmental clearance by the SEIAA, West 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://environmentwb.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.

- xi. 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. The criteria pollutant levels namely; PM10, PM2.5, SO2, 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.
- 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.
- 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 and Other Wastes (Management and Transboundary Movement) Rules, 2016, the Public Liability Insurance Act, 1991, the Environment Impact Assessment Notification 2006 and their amendments.
- xiv. The contact details of the proponent and the name of the consultant are given below –

Name of the Contact person with Designation	Mr. Anil Kumar Pillai, Director & CEO
Address	M/s. JSW Cement Limited JSW Centre, MMRDA Ground Bandra Kurla Complex, Bandra (East) Mumbai – 400 051
Email	ceo.cement@jsw.in
Telephone Number, Fax Number	Phone no. +91 224286 1000, +91 224286 3000
Name of the Consultant	M/s. Development Consultants Pvt. Ltd.



(Sandipan Mukherjee, IFS)
Chief Environment Officer &
Member Secretary, SEIAA

No. 2015 /EN/T-II-1/002/2017/1(4)

Date : 07 / 09 /2017

Copy forwarded to :-

1. Secretary, SEAC & M.S. WBPCB
2. Officer-in-Charge, Regional Office (Eastern Zone), Ministry of Environment & Forests, Government of India, A-3, Chandrashekharapur, Bhubaneswar – 751 023, Orissa.
3. Chief Inspector of Factories, Factories Directorate, 1, K.S. Roy Road, Kolkata – 700 001.
4. Guard file / Record file.

Sd/-
Chief Environment Officer &
Member Secretary, SEIAA

LIST OF TREES PROPOSED FOR PLANTATION

(as mentioned in Environmental Clearance vide no.89/EN/T-II-1/037/2015 dated 14.01.2016)

Sl. No.	BOTANICAL NAME	COMMON NAME	QUANTITY
1.	<i>Anthocephalus cadamba</i>	Kadam	500
2.	<i>Peltophorum pterocarpum</i>	Radhachura	500
3.	<i>Polyalthia longifolia</i>	Debdaru	2000
4.	<i>Madhuca longifolia</i>	Mahua	750
5.	<i>Schleichera olosa</i>	Kusum	350
6.	<i>Alstonia scholaris</i>	Chhatim	2000
7.	<i>Mimusops elengi</i>	Bakul	2000
8.	<i>Terminalia arjuna</i>	Arjun	500
9.	<i>Delonix regia</i>	Gulmohor	250
10.	<i>Bombax ceiba</i>	Simul	500
11.	<i>Acacia auriculiformis</i>	Akashmoni	1000
12.	<i>Ficus benghalensis</i>	Banyan	25
13.	<i>Dalbergia sissoo</i>	Sisoo	1000
14.	<i>Ficus benjamina</i>	Fig Tree	250
15.	<i>Tectona grandis</i>	Teak	250
16.	<i>Ficus religiosa</i>	Ashathwa	125
17.	<i>Cassia fistula</i>	Amaltas	500
		Total	12500

