



Ref. No. JSWCL/Sal/EC-Exp/Comp/2018-19

Date: -22.05.2019

To

Additional PCCF(c)

Ministry of Environment, Forest and Climate Change

Regional Office (Eastern Zone), A/3

Chandrasekharpur,

Bhubaneswar- 751023, Odisha

**Sub: - Submission of Six Monthly Compliance Report against Stipulated Conditions of EC Letter**

Ref: - Environmental Clearance Letter issued by SEIAA, West Bengal vide Letter No. -2015/EN/T-II-1/002/2017 dated 07.09.2017.

Sir,

With reference to above subject, hereby we are submitting the Six Monthly Compliance report for the Period of October 2018-March 2019 against Stipulated Conditions of EC Letter for our Proposed Expansion of Cement Grinding Unit from 2.4 MTPA to 3.6 MTPA and 2X18 MW CPP at Vill-Salboni, Dist- PaschimMedinipur, West Bengal.

This is for your kind reference and necessary record keeping purpose.

Thanks and Regards,

For JSW Cement Limited

M Sivaramakrishna

Plant Head



CC to:-

- i. Chief Environmental Officer and Member Secretary, SEIAA, West Bengal.
- ii. The Member Secretary, West Bengal Pollution Control Board.
- iii. Regional Office, West Bengal Pollution Control Board, Haldia.

**JSW CEMENT LIMITED**

**HALF YEARLY COMPLIANCE REPORT OF ENVIRONMENT  
CLEARNACE**

OCTOBER 2018- MARCH 2019

**PROPOSED EXPANSION OF CEMENT GRINDING UNIT FROM 2.4 TO 3.6 MTPA  
AND 2 X 18 MW CAPTIVE POWER PLANT.**

**(EC- 2015/ENT/T-II-1/002/2017, dated 07.09.2017)**

**27.04.2019**



**AT- SALBONI, DIST- WEST MEDINIPUR, WEST BENGAL**

### HALF YEARLY COMPLIANCE REPORT OF ENVIRONMENT CLEARNACE

- |   |  |
|---|--|
| <b>1. PROJECT CODE:</b>                   | <b>NA</b>  |
| <b>2. NAME OF THE PROJECT:</b>            | <b>Expansion of Cement Grinding Unit from 2.4 to 3.6 MTPA and 2 X 18 MW CPP by M/s JSW Cement Ltd. at Village Salboni, Dist. PaschimMedinipur, West Bengal</b> |
| <b>3. CEARANCE LETTER NO. &amp; DATE:</b> | 2015/ENT/T-II-1/002/2017, dated 07.09.2017   |
| <b>4. PERIOD OF COMPLIANCE REPORT:</b>    | From October '18 to March '19 (3 <sup>rd</sup> Compliance Report after commencement of Land)   |

**Status of the project: Expansion of Cement Plant is not started. Construction of 1 X 18 MW CPP is under progress.**

Sl.No.	SPECIFIC 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.	Stacks for proposed 1.2 MTPA Cement mill (Expansion from 2.4 MTPA to 3.6 MTPA) and 2 X 18 MW CPP will be designed in such a way that the gaseous emissions will be well within the prescribed limits. Monthly Stack Emission Monitoring is being carried out. CEMS is installed for 2.4 MTPA Cement unit stack and shall be installed at all mentioned stacks to send the continuous emission data to CPCB/WBPCB server. Appropriate mitigation measures shall be taken to keep the emission level below prescribed standard for all time.
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/Nm <sup>3</sup> . For CPP boiler ESP of adequate design and	Cement/ slag grinding shall be done in closed circuit Roller Press mills. High efficiency Bag Houses shall be provided for dust emission control. Stacks with 50 M height shall be provided. High efficiency cyclone separators shall be provided with Roller Press mill. Pulse Jet bag Filters shall be installed at material transfer points in Raw Material, Grinding, Packing sections. High efficiency ESP shall be installed after Boiler for CPP. Stack emission shall be monitored at intervals prescribed by the WBPCB and shall be maintained <30 mg/Nm <sup>3</sup> .

	capacity and along with minimum stack height of 30 m from g.L. should be provided. The stack emission should not exceed 30 mg/nm <sup>3</sup> .	Construction of CPP photograph is attached as <b>Annexure-I</b>
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.	Regular monitoring of the ambient air quality started for six locations in and around the plant by 3 <sup>rd</sup> party govt. Recognized lab and records are maintained. Ambient Air Quality is well within the prescribed limit as per CPCB NAAQS 2009.
iv.	The unit shall install CAAQMS for the project.	One Continuous Ambient Air Quality Monitoring Station has been installed in North direction of the plant approximately at an Ariel distance 200 m.
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.	Currently for existing cement plant Cement are collected in silo and packaging are done through pneumatically controlled system. Suction system are installed at packing plant. Same technology shall be followed for the expansion also.
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.	For the existing plant closed conveyor belt are used for transportation of raw materials. Bag filters are provided at all transfer points with suction heads. All storage bins are fully covered. Same shall be done for conveyor belts, transfer points, vibrating screens and storage bins.
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 in existing plant and same will be utilized for expansion and in case of necessity it shall be increased. CPCB guideline on control of fugitive emission shall be implemented.
viii.	Water required for proposed expansion shall be met from ground water supply as proposed. Groundwater shall be	Permission for Groundwater abstraction from 6 nos. Of bore wells have been obtained from the State Water Investigation Deptt., vide permit No.

	abstracted as per permission of the competent authority as per The West Bengal Ground Water Resources (Management, Control and Regulation) Act, 2005.	P1428445003490000001TSE,P1428445003490000002TSE, P1428445003490000003TSEdated 16.10.2015 and P1428446000040000001TSE, P1428445003490000001TSE and P1428456001940000001TSE dated 03.11.2017.
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. 60 KLD STP installations is in process for treatment and reuse of domestic waste water. CPP- Effluent Treatment Plant of adequate capacity shall be installed for the treatment of effluent generated from the process.
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 shall not be manufactured at this facility. Clinker is stored in closed silo whereas the Fly Ash as and when received/ generated at the proposed CPP shall be stored in closed bin. Gypsum is stored under covered shed.
xi.	All the bag filter dust, raw material 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.	Dust generated from air pollution control devices/bag filters, raw material dust shall be reused in the cement manufacturing process. Fly Ash generated from CPP will be completely reused in the cement manufacturing process. Hazardous waste Authorization from WBPCB is being applied for handling of used oil, lubricants. It will be sold to authorized recyclers/reprocessors only.
xii.	Adequate provisions should be made for harvesting rainwater. The harvested water should be used for plantation, fire fighting, washing and cleaning etc. Recharging of Groundwater is not permitted.	Rainwater harvesting pit, as proposed, shall be constructed with a potential to store 40000 KL of 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.	Greenbelt is being developed and as prescribed, 33% of the area will be covered into greenbelt by planting >12500 number of tree species. We have already planted approx. 19000 tree saplings. We are in progress to develop greenbelt+Landscaping over 60 Acre (45% of the area) with 100000 tree saplings in 5 years i.e. till year 2021 monsoon. The width of the greenbelt at the plant boundary are kept 15 M. No vegetative cover was destroyed/ removed during the establishment and operation phases. Around 35 Acre of Land has been developed as Greenbelt with 18000 nos. Of

		recommended species.
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).	Ambient noise levels shall be maintained well within the prescribed limits (75 dBA (daytime) and 70 dBA (nighttime)) 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.
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 PM <sub>10</sub> and PM <sub>2.5</sub> 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.	100% of Internal concrete/ paved roads completed. Proper lighting and pathway inside the factory premises are being provided. Separate pathways are provided for entry and exit of vehicles. Only PUC certified vehicles are allowed inside the plant. Speed limit for every vehicles are fixed maximum upto 20 KM/Hr. inside the plant premises in order Good housekeeping is maintained within the premises.
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.	Internal concrete/ paved roads are completed. Proper lighting and pathway inside the factory premises are being provided. Separate pathways are provided for entry and exit of vehicles. Only PUC certified vehicles shall be allowed inside the plant. Good housekeeping is 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 the Factories Act.	Health and safety of workers is being ensured by implementing in line with OHSAS standard. Required PPEs and sanitation facilities are provided to workers at site. Occupational Health Surveillance shall be done on regular basis and records shall be maintained as per requirements of the Factories Act.
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 are being taken to ensure industrial safety. Fire detection and protection devices are being installed at appropriate locations.

xix.	All the recommendations mentioned in the Corporate Responsibility for Environmental Protection (CREP) guidelines for Cement Plants shall be followed and complied.	All the applicable recommendations of CREP guidelines for cement plant shall be followed and complied.
xx.	The implementation and monitoring of Environment Management Plan should be carried out, as proposed.	Environment Management Plan, as proposed in the EIA report, is being implemented.
xxi.	At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on local need 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.	Rs. 10.00 Crore earmarked for Enterprize Social Commitment (ESC). We have Yearwise and itemwise budget to be spent in next 5 years is attached as <b>Annexure-II</b> . We are in the process of forming a committee for implementation of CSR programme. We will submit the details of the committee to SEIAA.

S. No.	GENERAL CONDITIONS:	COMPLIANCE
i.	The environment clearance accorded shall be valid for a period of 7 years for the proposed project.	Noted and agreed.
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.	We have obtained consent to Establish from the WBPCB vide letter NOC No. 139508, Memo No. 654-2N-45/2015 (E), dated 15.12.2017. All other statutory clearances have also been obtained from the respective departments. CTE Letter sent with 1 <sup>st</sup> EC Compliance (October,17 to March 18).
iii.	The project proponent shall comply with all the environmental protection measures and safeguards recommended. Further, the unit must undertake socio-economic development activities in the surrounding villages like community development programmes, educational	Noted and we commit to comply with all the environmental safeguards envisaged in the EMP, Environment Clearance and the Consents issued by the board. Socio-economic development activities have been initiated and will be further strengthened in due course.

	programmes, drinking water supply, sanitation programme 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 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.	Workers are being supplied with kerosene/ LPG for cooking purpose. Medical examination of workers is done at the time of joining. Good housekeeping and sanitation is maintained 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 alongwith the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.	Rs. 70.98 Crores as capital cost have been allotted towards implementing the Environment Management Plan (EMP). (Pl. refer <b>Annex.III</b> for details). Implementation schedule for all the conditions stipulated in this EC will be submitted after full plant commissioning.
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 alongwith statistical interpretation shall be submitted to the WBPCB regularly. A complete set of documents should also be	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 shall be 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

	forwarded to the State Level Environment Impact Assessment Authority, West Bengal.	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 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 ( <a href="http://environmentweb.gov.in">http://environmentweb.gov.in</a> ). 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.	The information was advertised through publication in Times of India (English) and Anand Bazar Patrika (Bangla) dated 15.12.2017. Copies of the advertisements have been forwarded to R.O. Eastern Region, Bhubaneswar alongwith first compliance report..
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, SO <sub>2</sub> , NO <sub>x</sub> (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.	Noted. Status of EC compliance as well as monitored data will be uploaded on the website and will also be submitted to the WBPCB. Monitoring of critical sectoral parameters of the project shall be done and data displayed near the main gate after full commissioning of the plant.
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: NA Date of final approval of the project: 15.12.2017 Date of land development/ project implementation: January 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.
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**M. Sivaramakrishna**

VP (Operations), Plant Head

JSW Cement Ltd.

Salboni (W.B.)



## Annexure-II

<b>Enterprise Social Commitment (ESC) Budget for Financial Year: 2018-19 to 2022-23</b>			<b>Rs. Lakhs</b>					<b>Total Budget</b>
<b>Category</b>	<b>Sl. No.</b>	<b>Activity</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	
<b>Category 1</b>			<b>100.00</b>	<b>130.00</b>	<b>70.00</b>	<b>60.00</b>	<b>60.00</b>	420.00
<b>Improving Living Conditions</b>	1.1	Promoting Health Care		30.00	20.00	10.00	10.00	70.00
	1.2	Safe Drinking water	100.00	100.00	50.00	50.00	50.00	350.00
<b>Category 2</b>			<b>20.00</b>	<b>30.00</b>	<b>30.00</b>	<b>20.00</b>	<b>20.00</b>	<b>120.00</b>
<b>Promoting Social Development</b>	2.1	Formal educational institution infrastructure & Development	20.00	20.00	20.00	10.00	10.00	80.00
	2.2	Vocational educational institution infrastructure & Development		10.00	10.00	10.00	10.00	40.00
<b>Category 3</b>			<b>10.00</b>	<b>15.00</b>	<b>10.00</b>	<b>10.00</b>	<b>10.00</b>	<b>55.00</b>
<b>Addressing Environmental Issues</b>	3.1	Tree Plantation	5.00	5.00	5.00	5.00	5.00	25.00
	3.2	Promoting use of Renewable energy	5.00	10.00	5.00	5.00	5.00	30.00
<b>Category 4</b>			<b>70.00</b>	<b>70.00</b>	<b>70.00</b>	<b>95.00</b>	<b>95.00</b>	<b>400.00</b>
<b>Rural Development Projects</b>	4.1	Rural Roads and Drainages	20.00	20.00	20.00	20.00	20.00	100.00
	4.2	Infrastructure facilities in Rural area	50.00	50.00	50.00	75.00	75.00	300.00
<b>Overhead</b>			<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>5.00</b>
<b>Project Mangement Cost</b>	5.1	Project Mangement Cost	1.00	1.00	1.00	1.00	1.00	5.00
<b>Total</b>			<b>201.00</b>	<b>246.00</b>	<b>181.00</b>	<b>186.00</b>	<b>186.00</b>	<b>1000.00</b>

**COST OF ENVIRONMENTAL PROTECTION MEASURES**

## ITEMWISE BREAKUP OF CAPITAL INVESTMENT &amp; ESTIMATES FOR ENVIRONMENT MANAGEMENT PLAN

<b>Details of allocation made for environmental management for 1 X 1.2 Cement Plant and 2X 18 MW CPP</b>		
<b>S. No.</b>	<b>Particulars</b>	<b>Capital Investment (Rs.Lakhs)</b>
1	Process Bag Houses(RP Unit)	200
2	Flue Gas Desulphurization Unit	4000
3	ESP for boilers	300
4	Dedusting Bag Filters	240
5	Fly Ash Handling System	900
6	Process Bag House (Coal Mill)	40
7	Process Bag House (Wagon Tippler)	60
8	Covering of Belt Conveyors	756
9	Covered Shed for Gypsum (1500 MT)	94.5
10	Covered Shed for Coal (1500 MT)	94.5
11	Internal Roads	208.65
12	Green Belt development	100
13	Rain Water Harvesting	30
14	Water Sprinklers with pumps, etc.,	15
15	Noise pollution control	50
16	Occupational Health Centre	50
	<b>Total</b>	<b>7098.65</b>