



BIHAR CEMENT PLANT

(A Unit of Shree Cement Ltd.)
Jasoia More, BIADA Industrial Growth Centre,
Post/P.S.- Aurangabad (Bihar)-824101, India
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E-mail Id : shreebcgu@shreecementltd.com
CIN:L26943RJ1979PLC001935

SCL/Bihar/ENV/2017-18/154

Date: 30th May 2017
By Speed Post

To,
The Additional Principal Chief Conservator of Forest (APCCF),
Ministry of Environment, Forests & Climate Change,
Regional Office (Ranchi),
Bungalow No. A-2, Shyamali Colony,
Ranchi - 834002

Sub: - Regarding compliance of environment clearance (October, 2016 to March, 2017) of Clinker Grinding Unit at Aurangabad Industrial Growth Center (Industrial Area), Tehsil & District-Aurangabad, Bihar by M/s Bihar Cement Plant, A Unit of Shree Cement Limited.

**Ref: - Environment Clearance letter No. 52, dated: 18th May 2012
Environment Clearance letter No. 74, dated: 16th May 2015**


Dear Sir,

Kindly refer to the above subject matter and referred EC letter, we are submitting here with the point wise compliance report of environment clearance for the period of October' 2016 to March' 2017.

This is for your kind information.

Thanking you.

Yours faithfully,
For BIHAR CEMENT PLANT
(A Unit of Shree Cement Ltd.)


(Gyanendra Mohan Khare)
Unit in charge

Copy to:

1. The Member Secretary, Bihar State Pollution Control Board, Parivesh Bhawan, Patliputra Industrial Area, Patna-800010 (Bihar)
2. ✓ The Member Secretary, State Environment Impact Assessment Authority, 2nd Floor, Beltron Bhawan, Shastri Nagar, Jawhar Lal Nehru Marg, Patna – 800023
3. The Zonal Officer, Central Pollution Control Board, southernd Conclave, Block – 502, 5th & 6th floors, 1582 Rajdanga Main Road, Kolkata - 700107.

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Compliance of “Environment Clearance” of Clinker Grinding Unit at Industrial Growth Centre, Aurangabad, Bihar.

Ref: - **Environment Clearance letter No. 52, dated: 18th May 2012**
Environment Clearance letter No. 74, dated: 16th May 2015

Specific Condition		
Condition No.	EC Condition	Compliance
i	Gaseous emission from various process units should confirm to the load/mass based standard prescribed in the MoEF and SPCB from time to time.	CPCB / MOEF&CC formulated PM emission norms for clinker grinding unit and SO ₂ , NO _x & PM for kiln stack. There is no load based standards formulated for clinker grinding unit, it is formulated only for kiln stack. However reports (Annex-1) are enclosed for your kind reference.
ii	Cement grinding should be carried out in closed cement mill. Provision of dust extraction and pollution control system consisting of highly efficient bag filter and ID fan should be provide for cement mill, clinker silo, fly ash storage silo, cement silo, wagon and gypsum crushing plant adequate stack height. Stack emission shall be monitored at regular interval.	Cement grinding is carried out in closed cement mill. Dust Collectors have been installed at all material transfer points to maintain PM level to <50 mg/Nm ³ Minimum stack height for cement mill stack should be 30 meters. Stack height of Cement mill is 42.5 meter.
iii	The stack emission shall not exceed 50 mg/Nm ³	Bag house for cement mill has been installed to maintain PM level to < 50 mg/Nm ³ . There is no norms of SO ₂ & NO _x for stand-alone grinding units.
iv	Transportation of fly ash to the plant should be brought through tankers and stored in silo without any air pollution at transfer point.	Fly ash is being transported in the closed containers and bulker. It stored in silo and covered hopper only.
v	Regular monitoring of air quality shall be carried out in and around the plant and records shall be maintained.	Ambient air quality for relevant parameters of clinker grading unit as per NAAQS, 2009 has been carried out by NABL certified lab and self for PM ₁₀ , PM _{2.5} , SO ₂ & NO _x . Results are well within the norms. Copy of the results is attached herewith (Annexure-2).
vi	Adequate dust suppression and extraction system should be provided in material storage areas, material loading / unloading areas and transfer point for controlling fugitive emission. Fugitive dust emission from mill and storage	Dust collectors have been installed at all material transfer points. Conveyor belts are covered. Raw material unloading points are covered and provided with dust collectors. A dedicated maintenance team

	areas shall be collected in bag filters and recycled back to the process.	has been provided to maintain the dust collectors. All roads are cemented and regular sweeping is being done by vacuum sweeping m/c.
vii	Regular water sprinkling should be done on the roads inside the plant and other high potential areas to control the fugitive dust emission.	Sprinklers have installed at main gate, unloading area and cement mill area. Tankers are also being used for spray of water on roads to control the fugitive dust.
viii	Suction head should be provided at all transfer dust emission.	Bag dust collectors have been provided at all material transfer points.
ix	Groundwater shall not be abstracted without prior permission of CGWA	NOC for 350 KLD ground water has been granted by CGWA.
x	Process effluent discharge is not permitted. No waste water will be generated from process. Cooling water will be recycled in the process if any.	No industrial waste water generation from cement grinding unit. However RO/Softener reject water is reused in cement mill spray.
xi	Clinker manufacturing is not permitted under this EC	Only clinker grinding unit has been installed.
xii	Solid waste viz. dust generation shall be properly recycled and utilized in the process itself.	No solid waste is generated from clinker grinding unit.
xiii	The unit must develop a separate water body with at least a minimum storage capacity of 25000 M ³ to harvest rain water. Recharging of ground water is not permitted.	Developed a pond of 25000 M ³ in plant area. As per the specific condition No. 9 of EC, CGWA permission is required for use of ground water. To get the CGWA permission, ground water recharging is must, hence recharging structures are being developed to meet the CGWA compliances. SEIAA has been requested vide company letter dated 28/5/2012 to remove the condition of "Recharging of ground water is not permitted".
xiv	33% green belt shall be developed within and around the plant premises. Selection of appropriate species for plantation and may be consultation with Env. & Forest Dept.	Green belt development plan was proposed in phased manner and total target of 33% would be achieved within 5 years. So far plantation has been developed in 27% area. 9000 saplings have been planted inside the plant boundary. Rest would be developed till monsoon, 2017.
xv	Ambient Noise level should not exceed the permissible limit. The ambient noise level should conform to the standards prescribes under EPA Rules, 1989 viz 75 dB (A) (day time) and 70 dB (A) (Night) and its subsequent amendments.	Noise level is being monitored at the plant boundary as well as inside the plant premises. Results are well within the norms. Copy of the results is attached herewith (Annexure-3).

xvi	Generator (1.25 MW) must be housed in acoustic enclosure and should meet the CPCB norms	2x500 KVA latest noise less DG sets are kept in open. They have inbuilt acoustic enclosure. These are operated only during the grid power failure for plant lighting purpose. As per the CPCB norms, stack height is being maintained.
xvii	All internal roads should be concreted / pitched. Proper lighting and proper pathway inside the factory premises should be constructed to ensure safe vehicle moments. Provision of separate pathway for entry and exit of vehicle should be considered. Vehicles should confirm to pollution under control (PUC) norms. Proper housekeeping shall be maintained within the premises. Solar lighting should be used as far as practicable	All movement area and roads are cemented and are swept on regularly basis by vacuum sweeping m/c to maintain good housekeeping. Vehicles are checked to confirm the PUC certificate. PUC certificate of few vehicles are enclosed (Annexure - 4) here with for your kind reference.
xviii	Health and safety of workers should be ensured. Worker should be provided with adequate PPE and sanitation facilities.	Personnel protective equipment have been provide to all. Proper sanitation facilities have been developed at site.
xix	Adequate measures to be adopted to ensure industrial safety.	Safe practices are being followed as per the industrial safety norms.
xx	The implementation and monitoring of Environmental Management Plan should be carried out, as proposed.	A covered shed for storage of gypsum, coal, pet coke and slag has been constructed.
General Condition		
i	The project proponent shall be comply with all the environmental protection measures and safeguards recommended. Further, the unit must undertake social-economic development programmes, educational programmes and health care etc.	Environment Protection Measures mentioned have been implemented. A covered shed for storage of gypsum, coal, pet coke and slag has been constructed. Social welfare activities in the nearby area is going on. Details break up of CSR activities (Annexure - 5) is enclosed herewith for your kind reference.
ii	All the condition, liabilities and legal provisions contained in the E.C. 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 entry.	Complying with all EC conditions.
iii	All the laborers to be engaged for construction work should be screened for health and adequately treated before issue of work permits	Complying with
iv	The project proponent should make financial provision in the total budget of the project for implementation of environmental safeguard.	Agreed for availability of sufficient budget for implementation of EMP.

	The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the SEIAA along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose	
v	No further expansion or modification in the plant should be carried out without prior approval of the SEIAA.	Agreed to take prior approval for further any change in the scope of from the concerned authority.
vi	The Bihar pollution Control Board, who would be given full cooperation, facilities and documents/data by the project proponent during their inspection. A six monthly compliance report and monitoring data along with statistical interpretation shall be submitted to the BSPCB and Regional Office of MoEF regularly. A complete set of all the documents should also be forwarded to the SEIAA. The report also put on the website of the company and also regularly uploaded.	Full co-operation is being extended to the officials of the SPCB & MOEF&CC during inspection. Six monthly compliance reports & monitoring data along with statistical interpretation (Annexure – 6) is being submitted to State Environment Impact Assessment Authority, Regional Office of MoEF & CC, Central Pollution Control Board and State Pollution Control Board. It's also posted on the website of the Company.
vii	In case of any changes in the scope of project, the project would require a fresh appraisal by SEIAA.	Agreed to comply with.
viii	SEIAA reserves the right to add additional safeguard measure subsequently, if found necessary, and to take action including revoking of the environment clearance under the EPA 1986 to ensure effective implementation of the suggested safeguard measure in a time bound and satisfactory manner.	Agreed to comply with.
ix	The project proponent should inform the public that the project has been accorded environmental clearance by SEIAA and copies of EC letter are available with SEIAA Secretariat and also be seen at website. This should be advertised within seven days.	Informed the public by giving advertisement in two newspapers namely Dainik Jagran and Parbhat Khabar dated 24/5/2012. Copy of the same has been submitted.
x	Prior consent to establish (NOC) for the proposed project must be obtained from BSPCB	Obtained
xi	The EC accorded shall be valid for a period of 5 year. The above stipulations would be enforced along with those under the Water act, Air act, HWMH rules, the Public Liability Insurance Act, the EIA notification and their amendments.	Complying with. Public Liability Insurance Act, 1991 is applicable to provide immediate relief to the person affected by accident involving hazardous substance. In the clinker grinding unit no hazardous substance is handled, hence it is not applicable.

Annexure – 6

Statistical interpretation of Ambient air quality, Stack emission and Noise level Monitoring Report

Table:1

Ambient Air Quality ($\mu\text{g}/\text{m}^3$) - October'2016 - March' 2017												
Location / Month	Plant boundary towards Hostel				Plant boundary towards Main Gate				Plant boundary towards Water Harvesting Pond			
	PM ₁₀	PM _{2.5}	SO ₂	NO _x	PM ₁₀	PM _{2.5}	SO ₂	NO _x	PM ₁₀	PM _{2.5}	SO ₂	NO _x
Oct-16	57	35	6	16	58	37	8	15	58	33	6	14
Nov-16	55	36	7	17	56	35	6	18	55	32	5	12
Dec-16	55	38	6	21	57	37	6	21	56	34	5	17
Jan-17	52	37	7	24	59	38	7	22	58	36	4	16
Feb-17	54	37	5	20	58	38	7	20	56	35	5	12
Mar-17	57	39	5	23	55	34	6	24	58	37	5	17
Minimum	52	35	5	16	55	34	6	15	55	32	4	12
Maximum	57	39	7	24	59	38	8	24	58	37	6	17
Average	55	37	6	20	57	37	7	20	57	35	5	15

Table:2

Stack Emission Level (mg/Nm³) - October'2016 - March' 2017		
Location / Month	Pollution Control Measures	PM (mg/Nm ³)
Oct-16	Cement Mill Bag House	21
Nov-16	Cement Mill Bag House	24
Dec-16	Cement Mill Bag House	28
Jan-17	Cement Mill Bag House	23
Feb-17	Cement Mill Bag House	24
Mar-17	Cement Mill Bag House	26
Minimum		21
Maximum		28
Average		24

Table:3

Noise Level at plant boundary as well as inside the plant (Leq-dB(A)) - October'2016 - March' 2017						
Location / Month	Plant boundary towards Main Gate	Plant boundary towards Reclaimer area	Plant boundary towards Water Harvesting Pond	Near Unloading Area	Near Cement Mill Area	Near Compressor House
Oct-16	66.7	64.5	54.2	72.2	79.1	77.9
Nov-16	69.1	66.9	59.8	73.1	76.7	77.2
Dec-16	66.7	68.6	58.2	72.7	78.5	77.7
Jan-17	65.2	67.1	56.4	72.6	77.4	78.1
Feb-17	68.3	66.5	57.2	73.1	73.5	76.5
Mar-17	66.7	62.4	54.9	75.4	77.8	75.8
Minimum	65.2	62.4	54.2	72.2	77.8	75.8
Maximum	69.1	68.6	59.8	75.4	79.1	77.9
Average	67.1	66.0	56.8	73.8	78.5	76.9