

CEMENT MANUFACTURING COMPANY LTD.
(GUWAHATI GRINDING UNIT)

Date: 19.10.2015

✓ The Joint Director (S)
Ministry of Environment & Forests,
North Eastern Regional Office,
Shillong-793003
Meghalaya.

Sub. : Six monthly compliance report on EC stipulations on Cement Manufacturing Co. Ltd.'s (CMCL's) Guwahati Grinding Unit at Chamata Pathar, Kamrup District, Assam due in December, 2015.

Ref. : Environment clearance issued to Cement Manufacturing Co. Ltd.'s Guwahati Cement Grinding unit by MoEF vide letter no. F.No. J-11011/733/2008-IA II (I) dated 2nd January, 2009.

Dear Sir,

With reference to the above mentioned subject, we are submitting herewith the Six Monthly Compliance Report on the stipulated environmental conditions of environment clearance along with Environmental Quality Monitoring report for the period of **April, 2015 to September, 2015.**

Thanking you,

Yours truly,

For Cement Manufacturing Co. Ltd.

Authorized Signatory

Encl. : As Above

- Copy to :
1. Director, Ministry of Environment, Forest and Climate Change, Government of India
Indira Paryavaran Bhawan, Jorbhag, New Delhi – 110 003
 2. Additional Director & Zonal Officer, Central Pollution Control Board,
North Eastern Zonal Office, Shillong - 793014
 3. Member Secretary
Assam State Pollution Control Board, Guwahati - 793014



Guwahati Grinding Unit : Sonapur, Gopinath Bordoli Road, Vill. : Chamata Pathar, Dist : Kamrup (Metro) Pin - 782 402, Assam
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SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE

(APRIL, 2015 TO SEPTEMBER, 2015)
OF
CEMENT MANUFACTURING COMPANY LTD.
(GUWAHATI GRINDING UNIT)



SUBMITTED TO

MINISTRY OF ENVIRONMENT AND FORESTS



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SL No.	Conditions	Compliance Status (Up to 30th Sept, 2015)
A. SPECIFIC CONDITIONS		
i	Necessary other statutory clearances from other concerned Departments including 'No Objection Certificate' (NOC) from the Assam State Pollution Control Board (ASPCB) shall be obtained prior to commencement of construction and /or operation.	'No Objection Certificate' (NOC) from the Assam State Pollution Control Board (ASPCB) received vide Ref No: WB/GUW/T-1418/09-10/52/248 Dt: 03.07.2009. Further 'consent to Operate' for the year 2015-16 was renewed vide ref. No. WB/GUW/T-1418/09-10/277/1291 Dt: 07.03.2015. Copy of Consent to Operate is enclosed as Annexure-I.
ii	The stack emissions from various sources including cement mill and captive power plant (CPP) shall not exceed 50 mg/Nm ³ by installing bag filters. The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the ASPCB. At no time, particulate emissions from the grinding unit shall exceed 50mg/Nm ³ . Continuous on-line monitors for particulate emissions shall be installed in stacks. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.	We have already installed Opacity Meter for online monitoring for particulate emission (PM) in the stack; SPM is maintained within 50 mg/Nm ³ . Data of Ambient air quality, fugitive emissions and stack emissions are being submitted to the MoEF, Regional Office at Shillong, APCB & CPCB regularly. Interlocking facility has been provided to the Bag House and to all pulse jet bag filters. Ambient Air Quality Monitoring station Photographs are enclosed as Annexure-II. Stack and Ambient monitoring data are attached as Annexure-III.
iii	Cement grinding shall be carried out in closed clinker and will have a highly efficient bag filters. Electrostatic precipitator (ESP) to AFBC boiler of CPP and bag filters to coal mill shall be provided to restrict the particulate matter below 50 mg/Nm ³ .	High efficient pulse jet bag filters are already installed to control the particulate matter below 50mg/Nm ³ . Power plant has not been established till date and power supply is met from Assam State Electricity Board.



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iv	<p>Ambient air quality monitoring stations (AAQMS) shall be set up as per statutory requirement in consultation with the ASPCB. Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA or by the State authorities. Monitoring of ambient air quality and shall be carried out regularly in consultation with ASPCB and must not exceed the standards stipulated under EPA or by the State Authorities. Monitoring reports for ambient air, stack and fugitive emissions shall be submitted to the Ministry's Regional Office at Shillong, Central Pollution Control Board (CPCB) and ASPCB half-yearly. The instruments used for ambient air quality monitoring shall be calibrated time to time.</p>	<p>Ambient air quality monitoring stations (AAQMS) were already established in consultation with Assam State Pollution Control Board (ASPCB). Ambient Noise levels were recorded at various locations in the plant premises. Ambient air quality and ambient noise levels are found within standards stipulated under EPA/MoEF/CPCB/SPCB. The AAQMS are shown as Annexure-II. The AAQ monitoring reports are enclosed for reference as Annexure-III. Required no of copies of the half-yearly monitoring reports for ambient air quality, stack & fugitive emissions are being submitted to MoEF Regional Office at Shillong, Central Pollution Control Board (CPCB) and Assam State Pollution Control Board (ASPCB). The instruments used for ambient air quality are being calibrated time to time and the calibrated certificates of latest for Fine Dust Samplers are available at the plant for ready reference.</p>
v	<p>The company shall install adequate dust collection and extraction system to control fugitive dust emissions at loading /unloading points and all the transfer points. Adequate pollution control system shall be provided to raw mill, cement mill and rotary kiln along with stacks of adequate height as per CPCB guidelines to control fugitive emissions. Fugitive dust emissions from all the sources including storage areas shall be collected in bag filters and recycled back to the process. Storage of raw material shall be in closed roof sheds. Water sprinkling arrangement shall be made in the raw material stock yard and cement bag loading areas.</p>	<p>The company is already using water tankers for water sprinkling at loading/unloading points and all transfer points to control fugitive emissions. Adequate Air pollution control equipment such as pulse jet bag filters are attached to stacks of cement mill and packing plants. Stacks of 30 m height are maintained as per CPCB guidelines for proper dispersion of particulate matter. The generated dust being collected from all sources and recycled back to process. The raw materials viz. clinker and gypsum are stored in covered sheds. Fly ash and product are stored in silos. Slag is stored in covered shed. Water tankers are deployed for water sprinkling at all the raw material stock yard and cement bag loading areas.</p> <p style="text-align: right;">Photographs are attached as Annexure-IV.</p>



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vi	<p>Total ground water requirement for the cement plant shall not exceed 1,900 m³ /day. Effluent Treatment Plant (ETP) shall be provided for treatment of liquid effluent. Industrial effluent from CPP shall be treated and utilized for dust suppression, cooling and green belt development. Blow down water shall be treated in neutralizing pit. No liquid effluent shall be discharged from the process outside the premises and all the treated wastewater shall be utilized for green belt development and other plant related activities. 'Zero' effluent discharge shall be maintained. Sewage effluent will be treated in sewage treatment plant (STP).</p>	<ul style="list-style-type: none"> • No additional ground water is required for the grinding unit. The present use of water is <100 m³/day for plant operations. • The plant is designed to Zero effluent discharge concept. This concept is being implemented as there is no industrial effluent generated from the process. • No Captive Power Plant (CPP) was established. • The domestic wastewater generated from the plant is treated in sewage treatment plant (STP). • No wastewater is discharged out side the plant premises. • The treated wastewater is being utilized for green belt development and dust suppression. The STP sludge is used as manure for green belt.
vii	<p>'Permission' for the drawl of 1,900 m³ / day ground water shall be obtained from State Ground Water Board /Central Ground Water Authority (SGWB/CGWA) and a copy submitted to the Ministry's Regional Office at Shillong within 3 months of issue of environmental clearance letter.</p>	<p>As per approved guidelines of CGWA no NOC is required for drawl of less than 100 m³/day of ground water.</p>
viii	<p>Solid waste viz. fly ash from the captive power plant and dust etc. generated shall be properly recycled and reutilized in the cement plant itself. No solid waste shall be discharged from the grinding unit. Bed ash shall be used as bed material and /or disposed off in environment-friendly manner. Treated domestic sludge shall be used as manure for green belt development. Solid waste from sewage treatment plant (STP) shall be utilized as manure for green belt. Used transformer oil/spent oil shall be sold to authorized recyclers/reprocessors.</p>	<p>10 MW captive power plant was not established in Cement Grinding Unit. Power supply is met from Assam State Electricity Board (ASEB). Hence fly ash is not generated in the Guwahati Grinding Unit.</p> <p>All the bag filters dust, clinker dust and cement dust are recycled and reused in the process. STP sludge is used as manure for horticulture/ green belt. The used transformer oil/spent oil sold to authorised recyclers.</p>
ix	<p>The fly ash utilization shall be as per the provisions stipulated in the Fly Ash Notification of September, 1999 and as amended in August, 2003.</p>	<p>No Fly Ash has been generated as the Captive power plant was not established.</p>
x	<p>As proposed, green belt shall be developed in 6 ha(33%) out of total 18 ha. Area to mitigate the impact of fugitive emissions in and around the expansion project as per the CPCB guidelines in consultation with the local DFO.</p>	<p>The green belt has been developed in phased manner. At present 7600 trees are covered in an area of 6.6 ha.</p> <p>Local species are selected in consultation with local DFO and plantation is being</p>



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		carried out. Details are enclosed as Annexure-V
xi	All the recommendations mentioned in the Corporate Responsibility of Environmental Protection (CREP) shall be strictly followed.	All the CREP recommendations are being followed.
xii	Permission from the State Forest Department regarding the impact of the proposed plant on the East Africola RF(9 km), West Africola RF (9 km) and Marakdola RF (7 km) located within 10 km radius of the proposed project site.	Based on the site inspection report by Divisional Forest Office, Kamrup East Division, Guwahati indicating that "there will not be any impact of the grinding unit on East Africola, West Africola and Marakdola Reserve Forests". Letter no. FGT.58/Misc/Govt. Permit/07 dtd. 28.04.09 in this regard from the Chief Conservator of Forests (T), Guwahati addressed to the Commissioner & Secretary, Environment & Forest Department, Government of Assam, along with report from Divisional Forest Officer, Karuk East Division has been submitted for issue of NOC.
xiii	Rainwater harvesting measures shall be adopted. The company must also harvest the rainwater from the roof tops and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.	Rain water harvesting measures have been undertaken. Total 13 no's of Rain water recharge pits were constructed in the plant premises. Photographs are attached as Annexure-VI.
xiv	The company shall provide housing for construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	The necessary infrastructures were provided during construction of the project.
B. GENERAL CONDITION		
i	The project authority must adhere to the stipulations made by Assam State Pollution Control Board and State Government.	The stipulations of ASPCB are complied.
ii	For further expansion or modification of the plant should be carried out without prior approval of this Ministry.	The project authorities will submit proposals for further expansion or modification of the plant to MoEF for prior approval.
iii	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO ₂ and NO _x are	The ambient air quality monitoring stations were established at four locations in the plant where the maximum ground level concentrations of Particulate Matter are

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	<p>anticipated in consultation with the ASPCB. Data on ambient air quality and stack emissions should be regularly submitted to this Ministry including its Regional Office at Shillong once in six months.</p>	<p>anticipated in consultation with the ASPCB. The gaseous emissions of SO₂ and NO_x will not be generated from the stacks of the grinding unit. However, PM₁₀, PM_{2.5} along with SO₂ & NO_x are being monitored regularly. The six months data of ambient air quality and stack emissions are regularly submitted to MoEF Regional office, Shillong. Monthly ambient air quality monitoring reports are enclosed as Annexure-III.</p>
iv	<p>Industrial wastewater should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater should be utilized for plantation purpose.</p>	<p>There is no industrial effluent discharge from the process. The domestic waste water of the plant is treated in sewage treatment plant (STP). The treated wastewater is being utilized for green belt development and dust suppression. The sludge is being used as manure.</p>
v	<p>The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) 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 Environmental (Protection) Act, 1986 Rules, 1989 viz. 75dBA (day time) and 70 dBA (night time).</p>	<p>The Ambient noise levels <75 dB(A) are maintained below Standards prescribed by APCB/CPCB/MoEF. Monthly monitored Noise levels are enclosed as Annexure-III.</p>
vi	<p>Proper housekeeping and adequate occupational health programmes must be taken up. All the persons working in the sensitive areas shall wear protective covers. Occupational Health Surveillance programme shall be done on a regular basis and records maintained. The programme must include lung function and sputum analysis tests once in six months.</p>	<ul style="list-style-type: none"> • Mechanical sweeping machine is working in plant area. Daily manual sweeping is also carried out. Dust bins have been provided at various locations. • All the persons working in the dust/noise prone areas have been provided with personal protective equipment (PPE) such as helmets, safety glasses, industrial grade gloves, safety harnesses, gum boots, nose masks and earmuffs. • Occupational Health Surveillance Programme is being conducted for the workers by a qualified doctor along with the medical staff. The medical staff has been appointed for regular health check up of the workers. • Periodic Medical Examination is being done on a regular basis and findings of the examination and tests are carried



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		<p>out, as per norms, have been duly recorded in the Health Register for ready reference.</p> <p>Preventive health check up details are attached as Annexure-VII.</p>
vii	The company shall undertake eco-development measures including community welfare measures in the project area.	CMCL complies with all the eco development measures including community development activities in the project area.
viii	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA /EMP.	CMCL is complying with all the environmental protective measures & safeguards as per guidelines of State Pollution Control Board (SPCB), Central Pollution Control Board (CPCB) & Ministry of Environment & Forests and Climate Change (MoEFCC).
ix	A separate Environmental Management Cell with full fledged laboratory facilities to carry out various management and monitoring functions should be set up under the control of Senior Executive.	CMCL has setup a separate environmental management cell under the control of a Senior Executive with full fledged laboratory facilities to carryout various management & monitoring functions. Equipment has already been installed.
x	As proposed in the EIA /EMP, Rs. 160.00 lakhs and Rs. 10.00 lakhs earmarked towards capital cost and recurring cost / annum for environmental pollution control measures shall be judiciously utilized for the implementation of conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purposes.	Funds have been earmarked for Environmental pollution control. The fund is being used for environmental protection measures only and is not diverted for any other purpose.
xi	The Regional Office of this Ministry at Shillong /Central Pollution Control Board / Assam State Pollution Control Board shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	CMCL is being submitted six monthly compliance report and monitored data along with statistical interpretation to MoEF Regional office at Shillong, Central pollution Control Board and Assam State pollution Control Board.
xii	The project Authorities 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 and the date of commencing the land development work.	The management of CMCL already informed to the Ministry the date of financial closure and final approval of the project on Date: 24.09.2009.



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xiii	<p>The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the Assam State Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This should be advertized within seven days from the date of issue of the clearance letter at least in two local newspapers that the widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office.</p>	<p>The Project Proponent has informed the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the Assam State Pollution Control Board / Committee on Dt: 24.09.2009. The Environmental Clearance information published in two local newspapers one in English and other is in Assamese. The EC copy is displayed on website at www.cmcl.co.in. (Consent To Establish-Pollution Control Board, Assam. No: WB/GUW/T-1418/09/10/52/248), (Central Ground Water Authority. No: 21-4(21)/NER/CGWA/2009. Dt: 29.06.09. (NOC-Office Of The Chief Conservator Of Forests (Territorial), Assam. No. FGT.58/Misc/Govt. Permit/07.Dt:28/04/09.)</p>
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