

Date: 20.05.2023

The Inspector General Of Forest (Central)
Ministry of Environment, Forest & Climate Change,
Integrated Regional Office, Guwahati
Forth Floor, Housefed, Rukminigoan, GS Road
Guwahati.

Sub. : <u>Six Monthly Compliance Report of EC stipulations on Star Cement Limited (Formerly Cement Manufacturing Company Limited.)</u>, <u>Guwahati Grinding Unit at Village: Chamata Pathar, Kamrup District, Assam due for the period of October, 2022 to March, 2023.</u>

Ref.: Environment Clearance Issued to Cement Manufacturing Company Limited'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 of the stipulated environmental conditions of environment clearance along with results of monitored data for the period of October, 2022 to March, 2023.

Thanking you,

Yours truly,

For Star Cement Limited

Authorized Signatory

Encl.

As Above

Copy to

 Director, Ministry of Environment, Forest and Climate Change, Government of India Indira Paryavaran Bhawan, Jorbhag, New Delhi – 110003

Additional Director & Zonal Officer

Additional Director & Zonal Officer,
 Central Pollution Control Board,
 North Eastern Zonal Office, Shillong - 793014

3. Member Secretary

Pollution Control Board, Assam

- 4. Addl. Chief Environment Engineer, Regional Office
- Assam State Pollution Control Board, Assam
- 5. SEIAA ,Ministry of Environment ,Forest and Climate Change Bamunimaidam, Guwahati -781021, Assam

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Receipt N. 26 200 Regional Office, Guwahati-1 Poliution Control Board, Assam Guwahati-21

STAR CEMENT LIMITED

(Guwahati Grinding Unit)

Gopinath Bordoloi Road, Village - Chamata Pathar, PO Sonarpur, District - Kamrup (Mrtro), Pin - 782 402, Assam, Ph No. +91 8011002579, e-mail:ggu@starceggent co.in

Regd. Office & Works: Lumshong, Dist - East Jaintia Hills; Meghalaya - 793 210, Ph: 03855-278215/16/18, Fax: 03655-278217, e-mail: umshnong@starcement.co.in

Corporate Office: Century House, P 15/1 Taratala Road, CPT Colony, 2nd Floor, Kolkata - 700 088 e-mail: kolkata@starcement.co.in



SL No.	Conditions	Compliance Status (Up to 31 st March, 2023)
A.	SPECIFIC CONDITIONS	
	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 Plant for the year 2022-27 was renewed vide ref. No. WB/GUW/T-1418/Pt-I/15-16/419/2844 dated: 31.03.2022.
		& 'Consent to Operate' for Railway Siding for the year 2022-27 was renewed vide ref. No. WB/GUW/T-4260/21-22/75/346 dated: 24.05.2022.
		Copy of Consent to Operate for Plant is enclosed as Annexure–I. & Copy of Consent to Operate for Railway Siding is enclosed as Annexure–I A.
	The stack emissions from various sources including cement mill and captive power plant (CPP) shall not exceed 50 mg/Nm³ 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/Nm³. 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 installed bag house to control Particulate Matter and opacity Meter for online monitoring for particulate Matter (PM) in the stack of Cement mill and Coal mill; PM is maintained within 30 mg/Nm³. The online data of stack monitoring is being uploaded to CPCB web portal through suitable modem. Data of Ambient air quality, fugitive emissions and stack emissions and ambient noise level monitoring are being submitted to the MoEF, Regional Office at Shillong, ASPCB & CPCB regularly. Interlocking facility has been provided to all the Bag House and pulse jet bag filters. The online data of stack monitoring is being uploaded to CPCB web portal and in process for ASPCB through suitable modem. The URL is http://glens.glensserver.com/
		Stack monitoring data and Ambient air are attached as Annexure–II A & II B respectively.

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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 30 mg/Nm ³ .	High efficient Polytetrafluoroethylene (PTFE) membrane jet bag filters are installed to control the particulate matter below 30 mg/Nm³. Power plant has not been established till date and power supply is from Assam State Electricity Board.
iv	Ambient air quality monitoring stations (AAQMS) shall be set up as per statutory requirement in	Ambient air quality monitoring stations (AAQMS) were already established in consultation with Assam State
	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 and ambient noise level monitoring shall be submitted to the Ministry's Regional Office at Shillong half-yearly and Central Pollution Control Board (CPCB) and ASPCB monthly and half-yearly. The instruments used for ambient air quality monitoring shall be calibrated time to time.	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 & CC/CPCB/SPCB. The AAQ monitoring reports are enclosed for reference in Annexure—II as II A - Stack Monitoring Report II B - AAQ monitoring Report II C- Ambient Noise Level Monitoring Report II D- Fugitive Emission Analysis Report II E - Water Analysis Report Requisite copies of the monthly and half-yearly monitoring reports for ambient air quality, stack & fugitive emissions and noise level monitoring are being submitted to MoEF & CC 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 latest calibration
		certificates are enclosed as Annexure-II F
•	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	The company is 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 adequate height are maintained as per CPCB guidelines for proper dispersion of particulate matter.
	filters and recycled back to the process. Storage of	The generated dust being collected from all sources and

filters and recycled back to the process. Storage of recycled back to process.

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	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.	The raw materials viz. Clinker, fly ash and gypsum are stored in covered sheds. Finished products are stored in silos. Water tankers are deployed for water sprinkling at all the raw material stock yard and cement loading areas. Photographs are attached as Annexure-III A. Road sweeper Machine is used for cleaning dust at all loading and unloading areas in the plant. Photographs are attached as Annexure-III B.
vi	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).	 operations. The plant is designed on 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 being treated in sewage treatment plant (STP).
vii	'Permission' for the drawl of 1,758 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.	Water drawl permission from CGWA for grinding unit has already obtained vide letter No.21-4(21)/NER/CGWA/2009-50 dated 29.06.2009. NOC Renewal Letter received from CGWA Ref No-CGWA/NOC/IND/REN/2/2022/7353 dated 01.12.2022 valid up to 26.02.2025 Details are enclosed as Annexure–VIII.
viii	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	10 MW captive power plant was not established in

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	authorized recyclers/re-processors.	
ix	The fly ash utilization shall be as per the provisions	No Ely Ash has been sensed by the Control of the Co
17	stipulated in the Fly Ash Notification of September,	No Fly Ash has been generated as the Captive power
d d	1999 and as amended in August, 2003.	plant was not established in the plant.
	2005 and as amenaed my August, 2005.	
X	As proposed, green belt shall be developed in 6 ha	The green belt has been developed in phased manner.
	(33%) out of total 18 ha. Area to mitigate the	At present 1,24,851 trees have been covered in 33%
	impact of fugitive emissions in and around the	of plant area.
	expansion project as per the CPCB guidelines in	Local species are selected in consultation with DFO and
	Consultation with the local DFO.	plantation is being maintained.
12		Details of green belt development are enclosed as
jie •	All and a second	Annexure-IV.
xi	All the recommendations mentioned in the	All the CREP recommendations are being followed. The
	Corporate Responsibility of Environmental	details are provided in Annexure–V.
xii	Protection (CREP) shall be strictly followed.	
XII	Permission from the State Forest Department	Based on the site inspection report by Divisional Forest
	regarding the impact of the proposed plant on the	Office, Kamrup East Division, Guwahati indicating that
	East Africola RF(9 km), West Africola RF (9 km) and Marakdola RF (7 km) located within 10 km radius	"there will not be any impact of the grinding unit on East
	of the proposed project site.	Africola, West Africola and Marakdola Reserve Forests'
į.	of the proposed project site.	Letter no. FGT.58/Misc/Govt. Permit/07 dated. 28.04.09 from the Chief Conservator of Forests (T), Guwahati
		addressed to the Commissioner & Secretary,
		Environment & Forest Department, Government of
-	re No of Sa	Assam, along with report from Divisional Forest Officer,
	1 (a) 1 (a) 1 (b) 1 (b) 1 (c)	Kamrup East Division has been submitted for issue of
	2 100	NOC.
	ring or a stability of the state of the stat	21
xiii	Rainwater harvesting measures shall be adopted.	Rain water harvesting measures have been undertaken.
	The company must also harvest the rainwater	Total 13 no's of Rain water recharge pits were
	from the roof tops and storm water drains to	constructed in the plant premises.
	recharge the ground water and use the same	Photographs are attached as Annexure-VI.
	water for the various activities of the project to	
viv	conserve fresh water.	71
xiv	The company shall provide housing for	The necessary infrastructures were already provided
3	construction labor within the site with all necessary infrastructure and facilities such as fuel	during construction of the project.
1	for cooking, mobile toilets, mobile STP, safe	
1	drinking water, medical health care, creche etc.	
1	The housing may be in the form of temporary	
	structures to be removed after the completion of	
		1

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i	The project authority must adhere to the stipulations made by Assam State Pollution Control Board and State Government.	The stipulations of Assam State Pollution Control Board (ASPCB) and State Government are being complied.
ii	For further expansion or modification of the plant should be carried out without prior approval of this Ministry.	Prior approvals will be obtained from MOEF & CC if any, further expansion or modification of the plant.
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, SO2 and NOx are anticipated in consultation with the ASPCB. Data on ambient air quality and stack emissions and Ambient Noise level monitoring should be regularly submitted to this Ministry including its Regional Office at Shillong once in six months.	The ambient air quality monitoring stations were established in consultation with the ASPCB at four location in the plant where the maximum ground level concentration of particulate matter are anticipated. The gaseous emissions of SO ₂ and NO _x will not be generated from the stacks of the grinding unit. However, in ambient air PM ₁₀ , PM _{2.5} along with SO ₂ & NO _x are being monitored regularly in order to maintain Ambient Air Quality. The six months data of ambient air quality and stack emissions are regularly submitted to MoER Regional office, Shillong. Monthly ambient air quality monitoring reports are enclosed as Annexure–II B .
iv	Industrial wastewater should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. The treated wastewater should be utilized for plantation purpose.	There is no discharge of industrial effluent from the grinding unit. However, domestic wastewater is being treated in sewage treatment plant (STP). The treated wastewater is being utilized for green believelopment and dust suppression. The sludge obtained from STP has been utilized for greenbelievelopment.
V	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).	The Ambient noise levels <75 dB (A) are maintained below Standards prescribed by APCB/CPCB/MoEFCC Monthly monitored Noise levels are enclosed as Annexure-II C.

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vii The company shall undertake eco-development measures including community welfare measures in the project area. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA /EMP. The company is complying with all the environmental protective measures & safeguards as per guidelines of State Pollution Control Board, Central Pollution Control Board & Ministry of Environment, Forest & Climate Change. The company is complying with all the environmental protective measures & safeguards as per guidelines of State Pollution Control Board, Central Pollution Control Board & Ministry of Environment, Forest & Climate Change. The company is complying with all the environmental protective measures & safeguards as per guidelines of State Pollution Control Board & Ministry of Environment, Forest & Climate Change. The company has setup a separate environmental management cell under the control of a Senior Executive with an adequate laboratory facilities to carryout various management & monitoring functions.	Vi	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.	 Mechanical sweeping machine has been deployed in plant area. Daily manual sweeping is also carried out. Dust bins have been provided at various locations. The personal 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 checkup of the workers. Periodic Medical Examination is being done on a regular basis and records are being maintained in the plant. The examination and tests are being carried out, as per norms, have been duly recorded in the Health Register for ready reference. Preventive health checkup details are attached as Annexure-VII.
environmental protection measures and safeguards recommended in the EIA /EMP. ix A separate Environmental Management Cell with full-fledged laboratory facilities to carry out various management and monitoring functions should be protective measures & safeguards as per guidelines of State Pollution Control Board, Central Pollution Control Board & Ministry of Environment, Forest & Climate Change. The company has setup a separate environmental management cell under the control of a Senior Executive with an adequate laboratory facilities to carryout various	vii	measures including community welfare measures in	measures including community development activities in
full-fledged laboratory facilities to carry out various management and monitoring functions should be with an adequate laboratory facilities to carryout various	viii	environmental protection measures and safeguards recommended in the EIA /EMP.	protective measures & safeguards as per guidelines of State Pollution Control Board, Central Pollution Control Board & Ministry of Environment, Forest & Climate Change.
	ix	full-fledged laboratory facilities to carry out various management and monitoring functions should be	management cell under the control of a Senior Executive with an adequate laboratory facilities to carryout various

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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.
χì	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.	The company has been submitting six monthly compliance report and monitored data along with statistical interpretation to MoEF & CC, 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 company has already informed to the Ministry the date of financial closure and final approval of the project on Date: 24.09.2009.
xiii	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 advertised 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.	The company 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 displayed on website at http://starcement.co.in

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