



MEGHALAYA CEMENTS LIMITED

CIN- U26942ML2003PLC007125



Ref: MCL/ENV/MoEF&CC/Compliance-II/2022-23/06

Date: 08/06/2022

To,

The Addl. Director General (Central),
Ministry of Environment Forest & Climate Change,
North Eastern Regional Office, Shillong,
Meghalaya.

Sub: - Submission of half yearly compliance report for 2600 TPD cements plant for the period of October'2021 to March'2022.

Dear Sir,

We are hereby furnishing the half yearly compliance report (hard copy and soft copy) for the period from **October'2021 to March'2022** on Environmental Stipulation for Expansion of Cement Plant (from 900 TPD to 2600 TPD) along with 10MW Captive Power Plant at Village- Thangskai, East Jaintia Hills District, Meghalaya, vide your Environment Clearance letter no SEIAA/PROJECT-2/2007/18 dated: 25th March'2009.

This is for your kind information and perusal. You are requested to kindly acknowledge the receipt of the same.

Thanking You,

Yours Faithfully,

For MEGHALAYA CEMENTS LIMITED


R.K.Pareek
(President)

Encl: As stated above

Copy to:

- 1) The Member Secretary, Meghalaya State Pollution Control Board, Shillong.
- 2) The Member Secretary, State Environment Impact Assessment Authority, Shillong.



Sales & Marketing Office :
Mega Plaza, 4th Floor, Christian Basti
G.S. Road, Guwahati - 781 005
Tel : 0361 2345421/22223, Fax : 0361 2345419
E-mail : guwahati@topcem.in
Web : www.topcem.in

Kolkata :
BE-77, Salt Lake City
Sector-1, Kolkata - 700 064
Tel. : 033 2334 0666 / 0004
Fax : 033 2334 0605
E-mail : kolkata@topcem.in

Registered Office :
Village: Thangskai, P.O. & P.S. Lumshong
District : East Jaintia Hills, Meghalaya, PIN: 793210
Tel. : +91 89742 17765 / 79850 58469 / 98625 06889
E-mail : meghalaya@topcem.in

ISO 9001:2015 & 14001:2015
30001:2011 Certified Company

HELPLINE NO : 18001233666



Half yearly Compliance Report (for the period October'2021 to March'2022) on Environmental Stipulations for Expansion of Cement Plant (from 900 TPD-2600 TPD), along with 10 MW Captive Power Plant at Thangskai, East Jaintia Hills District by M/s Meghalaya Cements Ltd. – Environmental Clearance Letter No. SEIAA/PROJECT-2/2007/18; Dated 25th March 2009.

Sl. No. as per letter dated 25.03.2009 of State Environment Impact Assessment Authority	Compliance Status
A. SPECIFIC CONDITIONS	
(i)	<p>Complied with. A stack of required height is provided and opacity meter for continuous online monitoring (CEMS) is provided. The data transmission of online data to MsPCB and CPCB are being done through the system.</p>
(ii)	<p>Complied with. ESP is provided for thermal power plant and it is working effectively.</p>
(iii)	<p>Complied with. Provision has been made for lime feeding in boiler through over bed feeding system to reduce the formation of Sox. Project proponent is using limestone for above purpose, as per requirement of the process.</p>
(iv)	<p>Complied with. The Project proponent has using CIL Auction & Linkage CIL coal in Captive power plant in which sulphur content is very low. The Company has maintaining SO₂ in flue gas within the prescribed range. Also provision for lime feeding in boiler through over bed feeding system has been made to reduce the formation of SO₂.</p>
(v)	<p>Complied with. Water sprinkling is being carried out on daily basis in plant premises on the places where fugitive dust particles are present and also on internal roads. Provision of water sprinklers system has made at coal storage area and other vulnerable area of</p>



		TPP.
(vi)	Water requirement for the Thermal Power Plant shall be met from the existing water source. No ground water shall be extracted for the power plant at any stage.	Complied with. Water requirement for the Thermal Power Plant is meeting from rain water during rainy season and from existing source during non rainy season. No extraction of ground water for Thermal Power plant is being done.
(vii)	Closed Cycle Cooling system with induced draft cooling towers shall be provided in the Thermal Power Plant.	Complied with. Closed cycle cooling system has been adopted and recirculation of cooling water is being practiced.
(viii)	Fire protection system shall be made in coal stock yard and other vulnerable areas of the TPP. Fire protection equipment and machinery should be tested periodically and shall always be kept in operational mode. Mock drills shall be conducted regularly.	Complied with. Regular safety training is being provided. Fire protection system along with fire extinguisher of various types is already installed within the entire premises as well as other vulnerable areas of TPP. The fire protection equipments and machineries are being tested periodically and kept in operation mode. Mock drills are being conducted on regular basis by our Safety & Vigilance Department. Details of Mock drills and trainings are attached herewith. <i>(Annexure-1)</i>
(viii) (a)	The PP is prohibited to use high sulphur local coal in its thermal power plant.	Complied with. PP is not using high sulphur local coal in its thermal power plant.
(ix)	The treated effluents shall be re-circulated and reused within the plant area. There shall be no waste water discharge outside the plant boundary.	Complied with. The treated water is being utilized for greenbelt development around the plant and colony. Also a surface water sump is made for recycle/Treatment.
(x)	Rain water harvesting shall be practiced. A detailed scheme for rain water harvesting to recharge the ground water aquifer shall be prepared in consultation with Central Ground Water Authority/State Ground Water Board within six months of receipt of Environmental Clearance.	Complied with. The PP has upgraded the existing system. Scheme for rain water recharging pit has been made, the lay out copy is submitted earlier. The rain water collection and reuse also being practiced to fulfill the requirement of cooling water as well as drinking purpose during monsoon period.



(xi)	Permission for drawl of water of the required quantity from the streams in favor of the Cement – Thermal Power Plant complex shall be secured from the competent Authority within 6 (six) months of receipt of Environmental Clearance.	Complied with. Permission for drawing of water has been obtained from Executive Engineer (Irrigation), Jaintia, Hills Dist; vide letter no.AID (J) 223/2007-2008, Dated Jowai 24/03/08 was enclosed earlier.
(xii)	Noise level in the Thermal Power Plant premises shall be limited to 75 dB and regular maintenance of equipment should be undertaken. For personnel working in high noise areas, personal protection devices like earplugs /ear muffs, etc. should be provided. Workers engaged in noisy areas such as turbine area, air compressors, etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss apart from exercising option of shifting to non noisy/less noisy areas when necessary.	Complied with. Noise level in TTP premises is under limit. Necessary PPEs to employee are being provided. We have fully automated system for operation of turbine, so the exposure of employee to the high noise is minimum. The PP has provided an acoustic covered screw air compressor to maintain the noise level within the acceptable limit. The regular routine testing is been carried out as per the manufacturers' manuals and, by using the necessary PPE's. (Half yearly report is enclosed). <i>(Annexure-ii)</i>
(xiii)	Acoustic hoods shall be provided in respect of all equipment that has potential to contribute towards noise pollution and additionally technical improvement measure detailed in Para 4.3.2 of the EIA/EMP report of the project proponent shall be adopted in the TPP towards noise attenuation.	Complied with. The project proponent has provided acoustic hoods in the Thermal Power Plant.
(xiv)	Dry ash collection system shall be provided in the Thermal Power Plant. 100% ash utilization shall be ensured from the very first day of commissioning of the Thermal Power Plant.	Complied with. Fly ash generated in Captive Power Plant is completely collects in silo through ESP and it is being loaded into tankers for feeding to cement mill hoppers pneumatically. Hence 100% consumption of the ash generated is achieved in our cement plant.
(xv)	The stack emission from various sources shall not exceed 50 mg/Nm ³	Complied with. (Six month's report is enclosed) as an <i>(Annexure-ii)</i>



(xvi)	The project proponent shall get the optimum functioning of the environmental protection equipment certified by a technical institution of repute.	Complied with. Performance assessment has been conducted as per as the norms by the NCCBM, New Delhi. The test results are submitted earlier. Further the project proponent is continuously maintaining the pollution control devices to maintain the efficiency.
(xvii)	Bag House/Filters shall be provided to control the fugitive emission during loading and unloading of raw materials/intermediate and finished products.	Complied with. Nuisance bag filters has been provided to control fugitive emission at Raw Mill, Coal Mill, Kiln and Cement mill. Water sprinkler has also installed at transportation area, Coal storage area and other vulnerable area of the plant.
(xviii)	The project proponent shall store all the raw materials except limestone in covered sheds to control fugitive emission. The coal storage facility should have water sprinkling facility in order to arrest fire hazard, if any.	Complied with. Proper water sprinkling on the places of fugitive dust generation is implemented and controlled.
(xviii) (a)	The storage of the coal dump shall be housed by permanent sheds open on all sides and stacked on impervious floor, preferably cemented to prevent Acid Mine Drain (AMD).	Agreed for compliance. Construction of permanent shed for storage of coal with cemented flooring has been completed for storage of coal and to prevent Acid Mine Drain (Acid Mine Drain).Also Company has planned to make an additional new permanent storage shed with impervious cemented floor for coal & work will be completed by end of year 2022.
(xviii) (b)	The project proponent shall construct garland drains along with Acid Mine Drains Neutralization tanks, in consultation with and approved by the state pollution control board.	Agreed for compliance. Garland drain is provided along the shed and shed is covered from all side to avoid any contamination of surface water due to storage of coal.
(xviii) (c)	No direct discharge of AMD into any drains/natural drains shall be allowed; proper treatment of AMD shall be done by the Project Proponent in the Neutralization Tank before releasing the water to the drain/natural drain, which shall be duly approved by the Meghalaya State Pollution Control Board.	Agreed for compliance. Garland drain is provided along the shed and shed is covered from all side to avoid any contamination of surface water due to storage of coal. No direct discharge of AMD will be assured by the PP.





(xix)	The ambient air quality monitoring stations shall be set up as per statutory requirement in consultation with the Meghalaya State Pollution Control Board (MsPCB) and additional stations shall be installed, in the downwind direction as well as where maximum ground level concentrations are anticipated.	Complied with. Ambient Air Quality monitors – Installed as required having one point at crusher area where maximum concentration is anticipated. (Six month's report is enclosed) <i>(Annexure-ii)</i>
(xx)	Quarterly reports on emission levels, surface and ground water quality shall be submitted to Meghalaya State Pollution Control Board, Chromium (VI) level in nearby surface water bodies flowing in the eastern site of the Plant, and ground water shall be monitored and reported to the MSPCB. Water in the Common Effluent Pit of the TPP shall be monitored monthly for Chromium (VI) toxicity and ensured that its level dose not rise beyond 0.05 mg/t.	Complied. Surface water from water harvesting pit near primary crusher is being tested and reports are being submitted to MsPCB, Chromium (VI) level testing from the effluent is also been tested on monthly basis and reports are attached herewith. <i>(Annexure-iii)</i>
(xxi)	Total water requirement shall not exceed 2000 cum/day [inclusive of the water requirement of the TPP]. The project proponent shall install sewage treatment plant of minimum 120 m ³ /day capacity employing suitable and appropriate technology to treat domestic sewage and treated sewage shall be utilized for green belt development. No waste water shall be discharged outside the premises and zero discharge shall be ensured. No surface runoff from the factory premises shall either reach/contaminate Um-lunar River or any other stream flowing near the industrial location.	Complied. Total water requirement will not exceed 2000cum/day including TPP. The PP has install the STP to treat and reuse the residential waste water and ETP to treat and reuse the waste water generated from HEMM workshop to ensure zero discharge.STP treated water is being used for greenbelt development and sprinkling purpose. ETP treated water is reuse for vehicle washing. <i>(Annexure-ii)</i>
(xxii)	The project proponent shall make all out effort to use high calorific value hazardous waste in the kiln towards which necessary provision shall be made.	Complied with. The project proponent has made a mechanical arrangement for feeding of plastic waste in Tertiary Air Duct (TAD) at pre- heater and using the waste as alternative fuel on availability basis. NOC for utilization of high calorific waste has been obtained from MsPCB.



(xxiii)	The project proponent shall transport raw materials and industrial products through covered means.	Complied with. Raw materials like coal and industrial products like clinker are being transported from one location to other location by properly covered with tarpaulin to avoid any spreading of fugitives.
(xxiv)	Thirty three percent of the core project area i.e. 20.143 Ha of land shall be developed as green belt by the project proponent as per the guidelines of Central Pollution Control Board to mitigate the effect of fugitive emission, incurring the expenditure as stated by the project proponent. The program ought to be completed within 5 years from the date of issue of prior Environmental Clearance. Suitable species in respect of the same for the stated area shall be approved by the project proponent from the DFO (Territorial) of Jaintia Hills District.	Complied with. Development of Green belt had been started in the Year 2009 and 100% of the project area (i.e. 20.22 Ha) plantation has been completed. Suitable local species are being planted as per the suggestions given by the Sr. Engineer, (CPCB) & DFO (Territorial); East Jaintia hills Dist, Jowai. The details are enclosed herewith for your kind reference. Total plantation including project area and around the project area is 19.9253ha. (Annexure-iv)
(xxv)	The project proponent shall provide a Health Care Center with all emergency medicines and ambulance along with regularly serving doctors complete with emergency unit that would function round the clock. Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained in compliance of provisions contained on Chapter III and V of the Factories Act, 1948.	Complied with. The Health Care Centre is functioning under qualified Doctor, Nurses and staffs. With all emergency medicine and ambulance to meet up the emergency.
(xxvi)	The salaries of the Cleaners shall be raised by 30% from the present Rs.2500/- p.m. as assured by the project proponent at p.0.15 of the EIA/EMP report in response to concern raised during the Public Hearing.	Complied with. The salaries of Cleaners are being reviewed on the yearly basis. The details are already submitted earlier. (Annexure-v)
(xxvii)	Measures shall be taken to prevent impact of particulate emission/fugitive emission, if any, from the proposed plant on the surrounding private forest areas depicted in their land use study.	Complied with. Necessary measures such as bag filter maintenance, Dust suppression is being practiced. Ambient Air Quality Analysis nearby plant area is being done



		on regular basis. (<i>Annexure - vi</i>)
(xxviii)	The project proponent shall take all such measures as are necessary in the matter of utilization of limestone towards ensuring that no unscientific extraction of limestone is encouraged in the process.	Complied with. The Project proponent ensures that no unscientific extraction of limestone is encouraged in the process.
(xxix)	<p>Meghalaya has been recognized as a cradle for several endemic species and an important constituent of the biodiversity hotspots spread over North East India. Therefore, as a measure of protection of rich biodiversity of the region, the project proponent shall cover an area of not less than 2 ha where would be located green house, mist chamber etc. (within the green belt area already stipulated above), locate conservation plots in respect of at least two of the following species of endangered and endemic plants reported to have been occurring within the region:</p> <p>i) <i>Pteracanthus griffithianus</i>, Acanthaceae ii) <i>Nepenthes khasiana</i>, Nepenthaceae iii) <i>Argostemma khasianum</i>, Rubiaceae iv) <i>Fimbristylis nigrobrunnea</i>, Cyperaceae v) <i>Trivalvaria kanjilali</i>, Annonaceae vi) <i>Begonia rubrovenia</i>, Begoniaceae vii) <i>Ceologyne ovalis</i>, Orchidaceae</p> <p>A scheme /conceptual plan of raising such threatened species shall be prepared in consultation with a reputed institution such as Botanical Survey of India complete with cost and activity schedule within one year from date of issue of prior Environmental Clearance.</p>	<p>Complied with. The company has already doing work on Biodiversity Conservation of Schedule-I species in co-ordination with Environment Department of North Eastern Hill University (NEHU), Shillong since 05 (five) years. The NEHU, officials have already appointed a Project fellow for the Project and they are working at our site on Biodiversity Conservation Plan with focus on conservation of the schedule – I species in the area. The green house already developed and conservation of three flora species namely: <i>Fimbristylis nigrobrunnea</i>, Cyperaceae, <i>Begonia rubrovenia</i>, Begoniaceae and <i>Ceologyne ovalis</i>, Orchidaceae has been initiated. Report is already submitted vide letter no.MCL/Env/MOEF&CC/2021-22/05; Dt:19.05.2021 Also Company has approached to Forest and Environment Department for better conservation of Biodiversity.</p>  <p><i>Ceologyne ovalis</i>, Orchidaceae</p>  <p><i>Begonia rubrovenia</i>, Begoniaceae</p>



(xxx)	<p>The project proponent shall sponsor research and development for conservation of threatened category of species occurring locally such Hedychium dekianum, [Zingiberaceae], Cymbidium eburneum (Orchidaceae), or Dendrobium denonianum (Orchidaceae) which would be carried out by an appropriate research or academic institution located in Meghalaya within a year of issue of prior Environmental Clearance. The research project shall be instituted at an expenditure of a minimum of Rs.5 lakh per year spread over at least 3 years.</p>	<p>Complied with. The company has already doing work on Biodiversity Conservation of Schedule-I species in co-ordination with Environment Department of North Eastern Hill University (NEHU), Shillong since 05 (five) years. The NEHU, officials have already appointed a Project fellow for the Project and they are working at our site on Biodiversity Conservation Plan with focus on conservation of the schedule – I species in the area. The green house already developed and conservation of three flora species namely: Fimbristylis nigrobrunnea, Cyperaceae, Begonia rubrovenia, Begoniaceae and Ceologyne ovalis, Orchidaceae has been initiated. Report is already submitted vide letter no.MCL/Env/MOEF&CC/2021-22/05; Dt:19.05.2021 Also Company has approached to Forest and Environment Department for better conservation of Biodiversity.</p>
(xxxii)	<p>A Conservation Plan for conservation of wild fauna in consultation with a reputed institution such as Wildlife Institute of India, Dehradun shall be prepared and implemented. Such conservation plan drawn in respect of wild life shall be completed within a maximum of 1 year from the date of issue of prior Environmental Clearance and implemented thereafter by the project proponent.</p>	<p>Complied with. Questionnaire survey to account for the existing fauna in the project area and its surrounding has been completed and the list of fauna has provided by NEHU. Further, camera traps have been installed near the project area and final report on existing fauna in the project area prepared by NEHU on the basis of data acquired by camera traps. Plantation of fruit plan bearing species in the project area has done as per Central Pollution Control Board guideline, so as to encourage the increase visitation and roosting of avian species. Report is already submitted vide letter no. MCL/Env/MOEF&CC/2021-22/05; Dt:19.05.2021</p>
(xxxii)	<p>A sum of Rs.2109.52 lakh shall be spent towards capital expenditure as stated by the project proponent towards environment protection and a further sum of Rs.501.60 lakh as recurring cost annually shall be spent by the project proponent towards environmental protection.</p>	<p>Complied with. An expenditure detail is enclosed herewith. (Annexure - vii)</p>



(xxxiii)	A sum of Rs.50 lakh shall be utilized annually by the project proponent till the project subsists towards socio-economic/eco-development activities in the area part of which shall be spent towards distribution of free medicines, malaria eradication program etc. in the nearby villages. A portion of the sum (5%) shall be set apart annually towards creation of employees' welfare fund. Details of expenditure incurred under this Para shall form part of the compliance report to be submitted to the SEIAA/SEAC. Further, a comprehensive long term eco-development plan shall be prepared by the project proponent within six months of receipt of prior Environment Clearance.	<p>Complied with. Implementation done towards socio-economic/eco-development activities and the expenditure details are enclosed here with <i>(Annexure- viii)</i></p> <p>Further, a comprehensive long term eco-development plan shall be prepared by the project proponent with the help of NEHU Shillong. Report is already submitted vide letter no. MCL/Env/MOEF&CC/2021-22/05; Dt:19.05.2021</p>
----------	--	---

B. GENERAL CONDITIONS

In respect of the Cement Plant – Thermal Power Plant project the following general conditions shall be adhered to by the project proponent:

(i)	The project proponent shall strictly adhere to the stipulations of the MSPCB/State Government or any other statutory body as framed/modified from time to time.	<p>Complied.</p> <p>Following the stipulation of MSPCB.</p>
(i)-a	The Project Proponent shall not violate applicable provisions of any Acts, Rules Orders of the Government and judicial orders issued by the Hon'ble Supreme Court/High Courts/NGT, applicable to the project.	<p>Agreed for compliance.</p> <p>The Project Proponent is not violating applicable provisions of any Acts, Rules Orders of the Government and judicial orders issued by the Hon'ble Supreme Court/High Courts/NGT, applicable to the project.</p>
(ii)	At no point of time, either the clinker production or cement production of either PPC or OPC type shall exceed the limit of 2600 tons per day.	<p>Agreed for compliance.</p> <p>As per EC Amendment (Ref. Letter No. - ML/SEIAA/PROJECT-2/2007/937; Dated, Shillong, 24th November 2021) we can produce Annual production of 8, 58,000 MTPA and 330 day working for both Cement and Clinker.</p>



(iii)	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment & Forests or their nominated authority as the case may be. In case of deviation or alteration in the project proposal from those submitted to the Committee for clearance, a fresh reference shall be made to the SEAC through SEIAA to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Agreed for compliance. No further expansion or modification will be carried out without prior clearance.
(iv)	The gaseous emissions (SO ₂ , NO _x) and particulate matter levels from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no point of time, the emissions shall exceed the prescribed limits. Interlocking system of equipment shall be chosen such that in the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Complied. 1. Project Proponent confirms that the gaseous emissions (Sox, NOx & PM) level confirmed to standard prescribed by the concerned authorities from time to time. At no point of time the emission will exceed the prescribed limit. 2. ABB make SCADA based Interlocking is in system to control SO ₂ , NO _x levels in case of failure and working effectively
(v)	The project authorities should adhere to the provisions stipulated in the fly ash notification of September, 1999 as amended in August, 2003 with regard to fly ash utilization.	Complied with. Fly ash generation in our Captive Thermal Power Plant is completely collected by the ESP to its hoppers and it is being loaded into tankers for feeding to cement mill hoppers pneumatically. Hence 100% consumption of the ash generated is achieved by our cement plant.
(vi)	The industry shall undertake the following waste minimization measures: <ul style="list-style-type: none"> • Reuse of by-products from the process as raw materials or as raw material substitutes in other process. • Use of closed pneumatic system for transport of fine material. • All venting systems shall be connected with dust or particulate arresting equipments. 	Complied with. The Project Proponent is not generating any kind of bi-product of process. Closed pneumatic system is installed for transport of the fine material in the manufacturing process. All venting systems are connected with dust or particulate arresting equipments such as Bag Filters.



	<ul style="list-style-type: none"> Dust/particulate matter collected in pollution control equipments shall be reused. 	
(vii)	Fugitive emissions in the work zone environment, product and raw materials storage area shall be regularly monitored. The emissions shall conform to the limits imposed by the State Pollution Control Boards/Central pollution Control Board.	<p>Complied with.</p> <p>Monitoring of fugitive emission is already been under taken and the tests were conducted in-house with our team and also by the third party. The Project Proponent is submitting monthly report to MsPCB which is generated by the third party as well as our laboratory team.</p>
(viii)	Dust/particulate matter collected in pollution control equipments shall be reused. Spares would be maintained in respect of all pollution control equipment. Maintenance and optimum functioning of the pollution control equipment shall be ensured by the project proponent.	<p>Complied with.</p> <p>The Project proponent has provided different types of Environmental Protection Equipments for collection of dust/particulate matter and to reuse the same in our process. The required spares parts are also maintaining for optimum functioning of the said equipments.</p>
(ix)	The project proponent shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, as amended from time to time. Authorization from the MSPCB shall be obtained for collection, treatment, storage and disposal of hazardous wastes.	<p>Complied with.</p> <p>Authorization letter No (ADDENDUM). MPCB/ATH-27/2007/2021-2022/20; dated 11th FEB 2022.</p> <p>Authorization letter No (ADDENDUM). MPCB/ATH-27/2007/2021-2022/19; dated 11th FEB 2022 for 2600 TPD cement manufacturing plant, valid up to 30th November, 2025.</p> <p>Authorization letter No (ADDENDUM). MPCB/ATH-46/2017/2018-2019/2; dated 15th July 2018.</p> <p>MPCB/ATH-46/2017/2018-2019/4A; dated 5th July 2018 for 10 MW CPP, valid up to 31st August, 2022 obtained from MSPCB.</p>
(x)	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Environmental Quality Monitoring functions. A state of the art Chromium testing kit shall be maintained in the laboratory.	<p>Complied with.</p> <p>Dedicated environmental Management Cell is functioning and Environmental quality functions like Ambient Air Quality Monitoring, Stack Monitoring Emission, and Drinking Water Quality and Waste Water quality are being regularly monitored. Chromium testing for CPP blow down water is also being carried out regularly.</p>



(xi)	<p>All pollution control equipment in STP of the type specified by the project proponent shall be duly installed and manned full time by trained personnel appointed for the purpose.</p>	<p>Complied with. The Sewage Treatment Plant (STP) has been installed and the capacity of the same is 100m³/Day, and the treated water being utilized for suppresses the fugitive dust of our internal roads. The Effluent Treatment Plant (ETP) has been installed near Vehicle Work Shop and the treated water is being recycled for the same purpose. The capacity of the ETP is 25 kL/Day. The Neutralization Pit has been also installed at CPP. Rejected water generates through De-mineralization of water is being neutralized in the neutralizing pit and then used for green belt development. Drainage system and STP, ETP and NPT map are submitted earlier.</p>
(xii)	<p>A six monthly compliance status report shall be submitted to SEIAA/SEAC and Regional Office, Ministry of Environment & Forests, Govt. of India, Shillong apart from posting the same on the website of the Project proponent.</p>	<p>Complied with. Half yearly compliance reports along with monitoring data are being submitted to concerned officials on the regular basis and posting the same data on the website also.</p>
(xiii)	<p>Implementation of the project vis-à-vis environmental action plans shall be monitored by the Regional Office, Ministry of Environment & Forests duly assisted by the SPCB.</p> <p>The Regulatory Authority may revoke or suspend the clearance on the recommendation of the SEAC, if implementation of any of the above conditions is not satisfactory.</p> <p>The Regulatory Authority may on the recommendation of SEAC reserve the right to stipulate additional conditions, if found necessary. The Project proponent in a time bound manner shall implement these conditions too.</p> <p>The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment</p>	<p>Agreed for compliance.</p>



	(Protection) Act, 1986, Hazardous Waste (Management & Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and Rules.	
--	---	--

C. ADDITIONAL CONDITIONS

(i)	<p>The project proponent to create a good and successful plantation in the green belt area of approximately 18 hectares by using indigenous plant species like <i>Michelia Chanmpacca</i>, <i>Castanopsis sp</i>, <i>Schima wallichii</i>, <i>Mesua ferrea</i>, <i>Artocarpus hetero-phylla</i> preceded by establishing well stocked nurseries of above species in the different plots. The project proponent must accord importance & seriousness to undertake the plantation on mission mode. The plantation so create act as a model for all the industrial units located within the district.</p>	<p>Complied with The PP has created good plantation & green belt by using indigenous plant species like <i>Michelia Chanmpacca</i>, <i>Castanopsis sp</i>, <i>Schima wallichii</i>, <i>Mesua ferrea</i>, <i>Artocarpus hetero-phylla</i> preceded by establishing well stocked nurseries of above species in the different plots. The PP has developing plantation like a model. The company has followed "Akira Miyawaki" method for Plantation in project area. Development of Green belt had been started in the Year 2009 and total 19.9253 Ha area of plantation done in or around the project. Suitable local species are being planting as per the suggestions given by the Sr. Engineer, (CPCB) & DFO (Territorial); East Jaintia hills Dist, Jowai.</p>
-----	--	--



FIRE FIGHTING TRAINING REPORT

Date: 22/02/2022

Location: V.T.C [Vocational Training Centre]

Introduction: The Fire Fighting Training is designed to equip workers with the knowledge and necessary skills to manage and extinguish a fire, using a variety of techniques covered in the course. Upon completion of this course participants were able to extinguish fires with the use of a fire extinguisher, evacuate an installation on fire apply the theory of the fire triangle in preventing fires at worksites

THEME: Fire fighting training conducted for all Responder team and security staff. Topic based on studies of Emergency preparedness or activation, sirens code of practice distinguish the type of fire & fire extinguishers using process and how to fight with i.e. fire fighting procedure etc.

TRAINER's NAME and

1. B. Bhagavan Singh – DGM-Safety
2. Prajjal Rajkumar – Safety officer
3. Ganesh Quila- Asst. Fire officer

Program details

- 1) VENUE: - V.T.C [Vocational Training Centre]
- 2) DATE:- 22/02/2022
- 3) TIME: - 4:00 PM TO 6:30 PM
- 4) DURATION: - 2.5 Hours
- 5) NUMBER OF PARTICIPANTS: - [23] Twenty three participants were attended.

On 22nd Feb'2022 from 4 PM to 6:30 PM at VTC we have conducted "FIRE FIGHTING TRAINING" along with studied emergency preparedness function and accident indicator siren alarming procedure" i.e accident indicator siren alarming procedure also taught the classification of fire & using of different extinguishers as well as techniques and principle of Fire suppression. Total 23 persons were participated in the training. Our Motto is about to educate all and strengthening in this ground for emergency activation & knowing about using procedures of fire extinguishers during any fire emergency.

Objectives of this training:

The purpose of this firefighting training is to give participants skills, knowledge and expertise that will enable them to identify the conditions capable of causing fire, know how to use a fire extinguisher, respond appropriately to fire emergencies and follow the fire evacuation plan, adequately implement fire emergency procedures.

General principles of fire safety:

Combustion, fire and Oxidation, the fire triangle



Methods of Fire Extinction: Following methods are used for extinguishing the fire according to fire Triangle.

- 1) **Starvation:** In this method we discussed & shown how to remove un-burnt materials from surrounding of fire occurrence area & to control the fire.
- 2) **Blanketing:** In this method we discussed & shown how to cut oxygen from the fire by using of extinguishers & wet blanket to stop the fire by blanketing process:
 - Foam, ABC, DCP extinguishers are used for blanketing.
- 3) **Cooling:** In this method we bring down temperature of fire below auto ignition temperature of fuel & fire extinguishers.
 - Foam, Water, CO2 extinguishers are used for cooling.

Classification of Fire: Fire is five [5] types.

- **A class Fire:** Fire involving combustible materials of Organic nature.
 - **B class Fire:** Fire involving Flammable liquids.
 - **C class Fire:** Fire involving flammable Gases.
 - **D class fire:** Fire involving combustible metals.
 - **E class Fire:** Fire involving on Electrical appliances.
- At the time of any fire emergency how to fight with fire & what precaution to be taken during that situation.
 - Which type of Fire extinguishers can be use on what type of Fire.
 - Classification of Fire and according to it explanation & types of fire.
 - Communication procedure during emergency.
 - During Fire what can do or not.
 - Explanation of locations where Fire can catch at our factory premises & in vehicles.
 - Introduction and function of Fire fighting tanker along with Fire equipments.
 - During fire accident siren alarming procedure.
 - Operating procedure of fire extinguishers & Fire fighting tanker if necessary.
 - Practical Demonstration.


Basic evacuation procedures :

- Role of fire wardens in evacuation
- Employee's role in evacuation
- The Company's role in evacuation
- How to behave before evacuating premises
- Organization of an alert and evacuation.
- Mustering at the Assembly point.

Finally we have conducted practical demo program on fire by use of fire fighting equipments like Fire extinguishers, Fire fighting tanker & given the training to all participants, observed each and every one can operate the extinguishers and understood fire fighting process. Finally we have seen most of the persons learnt well & satisfactory as practice training will be continued for further progress.


SAFETY OFFICER




DGM [SAFETY]

O/C

Annex-1

Meghalaya Cements Ltd.

Vill: Thangskai, P.O. Lumshnong, East Jaintia Hills, Meghalaya-793210

Attendance Sheet for IMS/EnMS/External Agency Training

Doc.No: MCL/IMS&EnMS/HR& A/TAF/019

Rev No.:01

Date: 01.04.2016

Training Details : Fire Fighting Training

Agency : In-house.

Date : 22.02.2022

Time : 04:00 pm to 05:30 pm

Name of Trainers : DGM & Officers. (Supply & Vigilance Deptt.)

Attendance Record:

Sl. No.	Emp Code	Employee Name	Department	Designation	Signature
1		Tapan Choudhury	HR	Security	[Signature]
2		Nirmal Choudhury	HR	"	[Signature]
3		Bozelle Mody	HR	"	[Signature]
4		Anil Lakha	HR	"	[Signature]
5		Mantu Bora	"	"	[Signature]
6		Satyajit Saha	BSS	"	[Signature]
7		Indrjeet Medhora	"	"	[Signature]
8		Ketan Das	"	"	[Signature]
9		Amp Bora	HR	"	[Signature]
10		Rajat K. Tams	BSS	"	[Signature]
11		Salim Marchant	BSS	"	[Signature]



12					
13		Sayon Mualchani	BSS	Security	Good
14		Sukhman Dima	"	"	Good
15		Komal Das	"	"	Good
16		Kabitra Blyan	"	"	Good
17		Dishant Das	"	"	Good
18					
19		B. Manu Singh			
20		Pooja Das			
21		Subin Das			Good
22					
23		Subin Das			
24					
25					
26					
27					
28					
29					
30					



 HOD



FIRE MOCKDRILL & EMERGENCY PROGRAMME

DATE: 25/02/2022

THEME: MOCKDRILL ON FIRE

CONDUCTED BY : MEGHALAYA FIRE & EMERGENCY SERVICE SHILLONG
 VENUE : Vehicle Workshop

DATE : 25/02/2022
 TIME : 2:37 PM -3:30 PM
 NUMBER OF ATTENDED PERSONS : Seventy (48) persons.
 NAME OF INFORMER : Shift Engineer of HEMM
 ALARM RAISED BY : CCR security person (after got the information)
 FIRE CAUGHT : At around 2:33 PM
 FIRE -FIGHTING & RESCUE TEAM REACHED: At around 2:37 PM
 TOTAL LIVING PERSONS : In Fire caught place 04 Persons.
 PERSONS EVACUATED TO : Safe zone within 6 minutes.
 LAST PERSON EVACUATED : At around 2:43 PM
 FALLING THREE PROCESS : Head counting started during evacuation Simultaneously.
 TOTAL RESCUER : 04 Persons
 DECLARATION : After getting everyone in counting
 Extinguished the fire & the area was declared safe
 and total 04 persons were safely evacuated,

On 25th Feb'2022 at around 2:37 PM to 3:30 PM at Vehicle workshop " Fire Mock Drill" was conducted total 48 Persons were involved from Mines & HEMM workshop.

Main Motto of the awareness program was in case of any fire emergency employee how to fight and extinguish the fire also how to activate & control the situation as well as how evacuate the victims from fire area, also elaborated the drill process and practically shown the Drill to involved persons along with rescue procedures of casualties. We shown to participants about rescue procedure, if found senseless due to fire accidents then immediately how to rescue the injured persons (casualties).

Finally a briefing was done informing about the Emergency Mock Drill scenario and the objective of the drill; we addressed the workers about Fire Emergency. Safety Officer told the staff and workers about Emergency Response Procedure and Hazards associated with their works.

Mock Drill- Suddenly Alarm was raised by CCR security person after got the information from HEMM workshop. According to siren & information by shift engineer Fire fighting team along with Fire fighting tanker rushed to spot within 4 minutes, workers were evacuated from Fire caught area to Cold zone i.e safe zone at assembling point, one person at around 2:43 PM he evacuated from there he was last men as per information of our responders team Fire caught at Hyva in HSD tank. During rescue simultaneously head counting also continued at safe zone by helping of 'Falling Three' procedures and finally observed total casualties were removed from fire caught area. After



safely evacuation of workers immediately Fire extinguishing process had started, due to major fire it was extinguished by Fire Fighting Tanker, Extinguishing Media is AFFF because it was oil Fire.

Medical team also in ready position during emergency for help and further first-aid of casualties, First aid boxes and its contents are available at site. After extinguished and controlled, Safety officer observed & investigated the area and taken the report of property lost & damage as well as after mitigation Safety officer had declared that it is now safe.

Following observations were noted during conduct of Fire Emergency mock drill.

Observers

1. Mr. Amit Kumar – Asst. Manager- Mine
2. Mr. Pankaj Kumar – Engineer

Positive Notes:

- All the workmen and staff reported to the Assembling point without any panic.
- The evacuation was performed successfully well in time.
- Communication was well enough to reach the Fire Point at the right time.
- The fire-Fighting team used the right Extinguisher for the Extinguishing purpose AFFF
- ERT member has done well and evacuate the Work Location on time.
- Emergency Vehicle is available at Site [Ambulance / Fire Tanker & Fire mobile Ban]
- The workforce remains calm, while the mock drill was in progress, and showed keen interest to get knowledge about the emergency.
- Workers were briefed about the emergency response procedure and fire Emergency.
- The evacuation team response was quick.

Deficiencies observed during the exercise:

- Public address system used but miscommunication between team.

GUIDELINES HAVE FOLLOWED FOR EMERGENCY SITUATION:

Particulars	During mock drills following points listed and checked
Emergency Response Plan.	Emergency Response Plan is available.
Communication or public address system.	Communication or public address system were used
First aid kit & aider	First aid boxes and its contents are available at site.
Assembly Place	Designated Assembly place Available at Cooling Tower Site.
Audio alarm system	Audio alarm/Handheld megaphone available.
Evacuation Plan	Minimum action identified and completed before evacuation (People evacuated from the Emergency site to safe place)
Others	Preparedness and alertness - Involvement of people during emergencies.



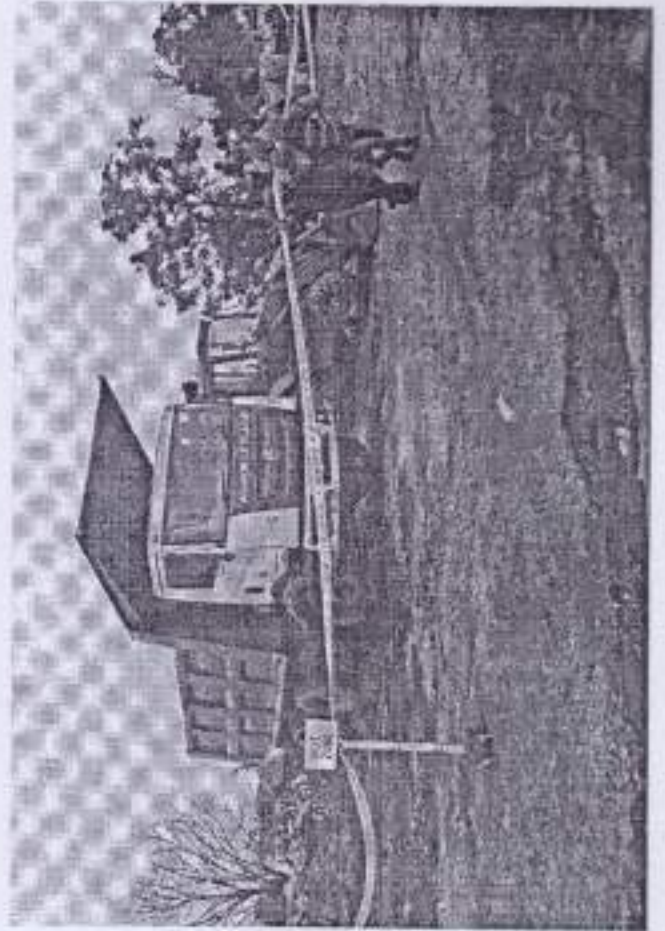
- 1) ATTENDANCE & CHECKING OF DAMAGE PROPERTY & LIVES LOST AND REPORTING. After the drill Safety officer with his team visited the area & estimated the damages.
- 2) COMMUNICATION: Safety office makes the communication to concern as well as informed to unit head about the incident and for further action.

CONCLUSION: Training is important part for help to educate of employees for make potential and competent in this regards the Fire Mock Drill was held to spread knowledge to our employees as well as participants also can understand and gain the knowledge about Fire mock drill, it was observed most of the workers activated while siren rang and every involved persons learned the lesson and became active

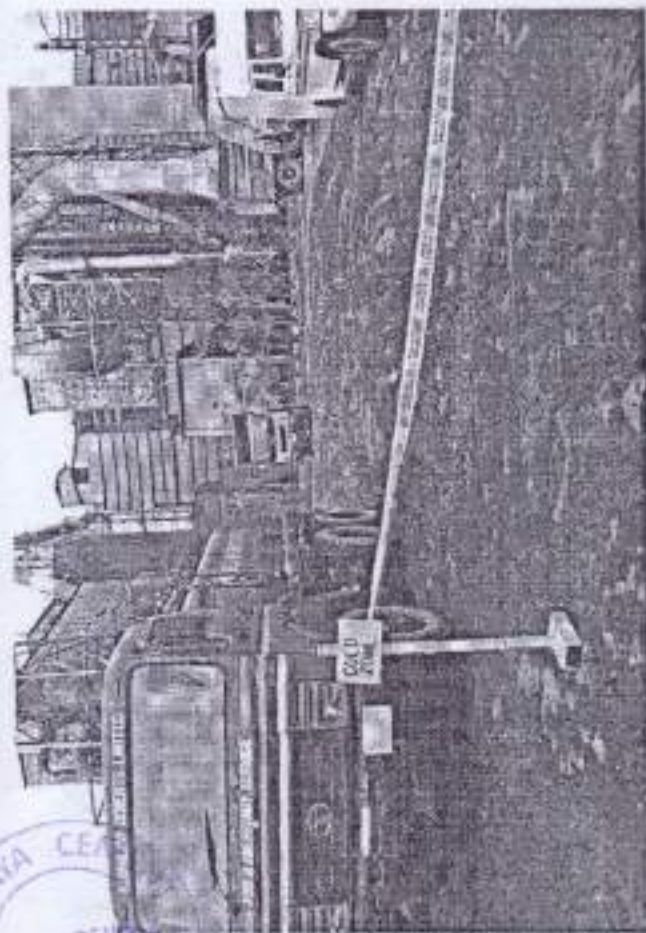
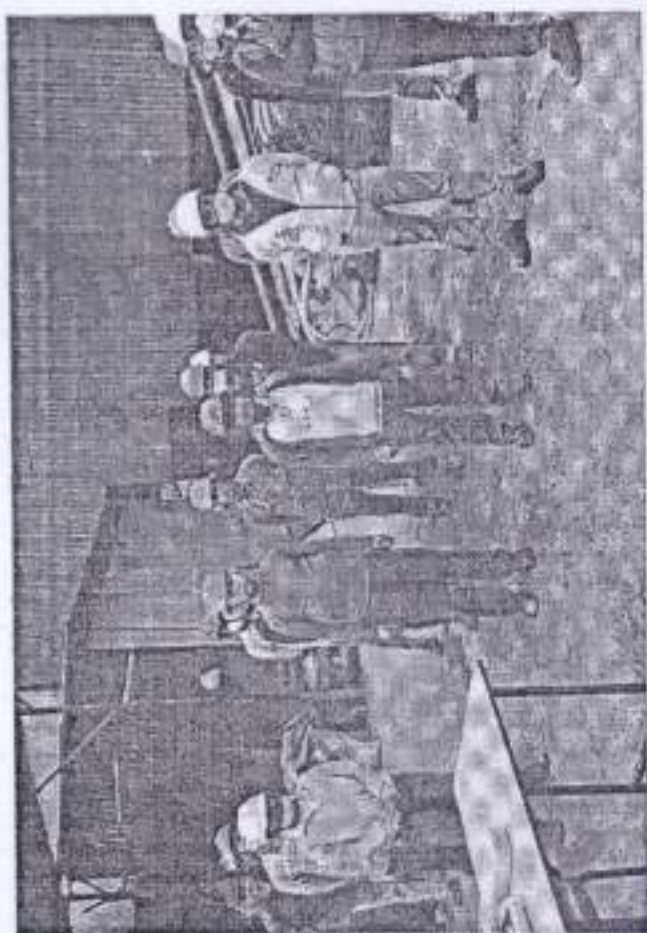
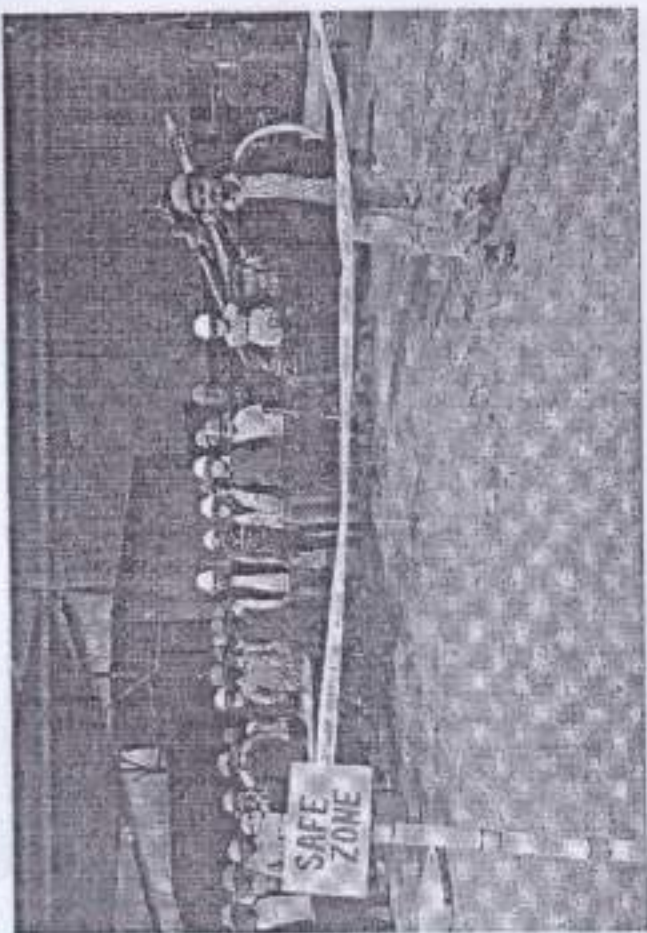

Safety Officer


DGM Safety





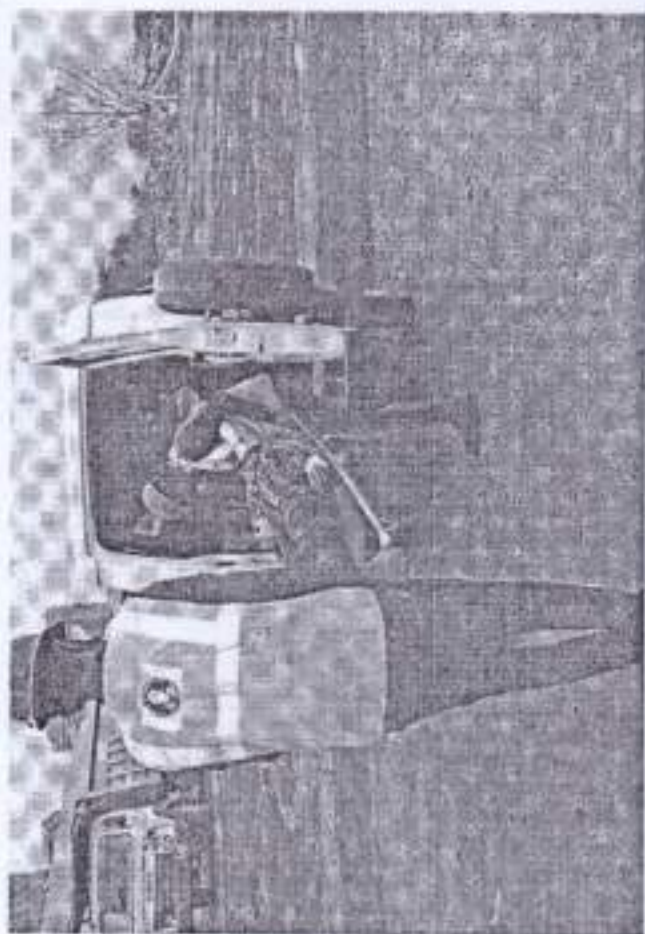
MEGHALAYA CEMENT
THANGSKAI
Dillip
* *



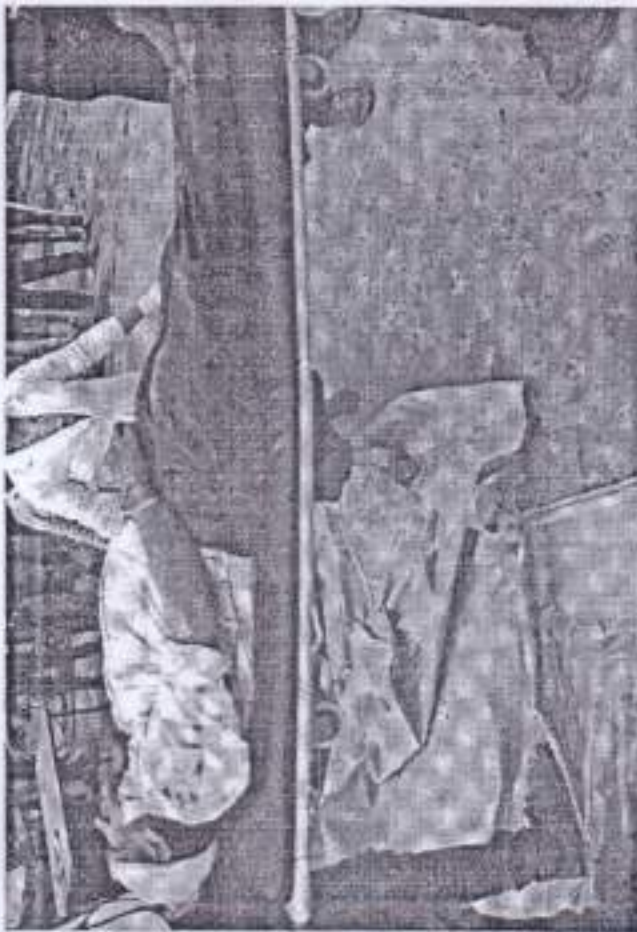
INEGHAYAKA CE
 THANGSI
 Ullin
 ★ ★



MEGHALAYA CEMENT
THANGKAI
Ullak



Stamp with two stars and illegible text.



Uttarakhand Cement Ltd
Dehradun

MEGHALAYA CEMENTS LTD.FIRE MOCKDRILL & EMERGENCY

Date: 26/10/2021

THEME: MOCKDRILL ON FIRE

CONDUCTED BY	: Safety department
VENUE /Location	: South Khliehjari lime stone mine.
DATE	: 25/10/2021
TIME	: 3:30 PM -4:10 PM
NUMBER OF ATTENDED PERSONS	: 27 persons.
NAME OF INFORMER	: Foreman of Mine
ALARM RAISED BY	: CCR security person (after got the information)
FIRE CAUGHT	: At around 3:27 PM
FIRE -FIGHTING & RESCUE TEAM REACHED:	At around 3:30 PM
TOTAL LIVING PERSONS	: In Fire caught place 03 Persons.
PERSONS EVACUATED TO	: Safe zone within 5 minutes.
LAST PERSON EVACUATED	: At around 3:35 PM
FALLING THREE PROCESS	: Head counting started during evacuation Simultaneously.
TOTAL RESCUER	: 03 Persons
DECLARATION	: After getting everyone in counting Extinguished the fire & the area was declared safe and total 03 persons were safely evacuated.

On 25/10/2021 at around 3:30 PM to 3:58 PM at South Khliehjari lime stone mine "Mock Drill was conducted on Fire" total 27 Persons were involved from Mines & Vehicle workshop.

Main Motto of the training programme was in case of any fire emergency how to fight and extinguish the fire and how to handle the situation and evacuate the persons from fire area, as well as practically shown the Drill to involved persons along with rescue systems of casualties. We shown to participants about rescue procedure, if found senseless due to fire accidents then immediately how to rescue the victim (casualties) to Safe zone and to Occupational health centre also shown its procedure.

Mock Drill- Suddenly Alarm was raised by CCR security person after got the information from Mine. According to siren & information by Foreman Fire fighting team along with Fire fighting tanker reached the spot within 3 minutes, workers were evacuated from Hot Zone to Cold zone i.e safe zone at assembling point, one person at around 3:35 PM he evacuated from there he was last men as per information of our 1st responder team Fire caught at Dumper in HSD tank. During rescue simultaneously head counting also continued at safe zone by helping of 'Falling Three' procedures and finally observed total casualties were removed from fire caught area. After safely evacuation of workers immediately Fire extinguishing process had started, due to major fire breakout it was extinguished by Fire Fighting Tanker, Extinguishing Media is AFFF because it was oil Fire.



Medical team also in ready position during emergency for help and further first-aid of casualties, after extinguished and controlled, Safety officer observed & investigated the area and taken the report of property lost & damage as well as after mitigation Safety officer had declared that it is now safe.

- 1) TURN OUT: Employees were taught how to fight with fire at the time of Emergency and given knowledge about evacuation process & First Aid knowledge also imparted them.
- 2) SAFE ZONE ASSEMBLY: Employees were taught about why and how gathered at assembling point also introduced "COLD/SAFE ZONE".
- 3) VICTIMS: Demonstrations for treating victims & shown to everyone. All the victims were treated & transported for Medical Aid to the nearby facility by the employees of MCL and they were aided by the Medical staff.
- 4) ATTENDANCE & CHECKING OF DAMAGE PROPERTY & LIVES LOST AND REPORTING. After the drill Safety officer with his team visited the area & estimated the damages.
- 5) COMMUNICATION: Safety officer makes the communication to concern as well as informed to unit head about the incident and for further action.

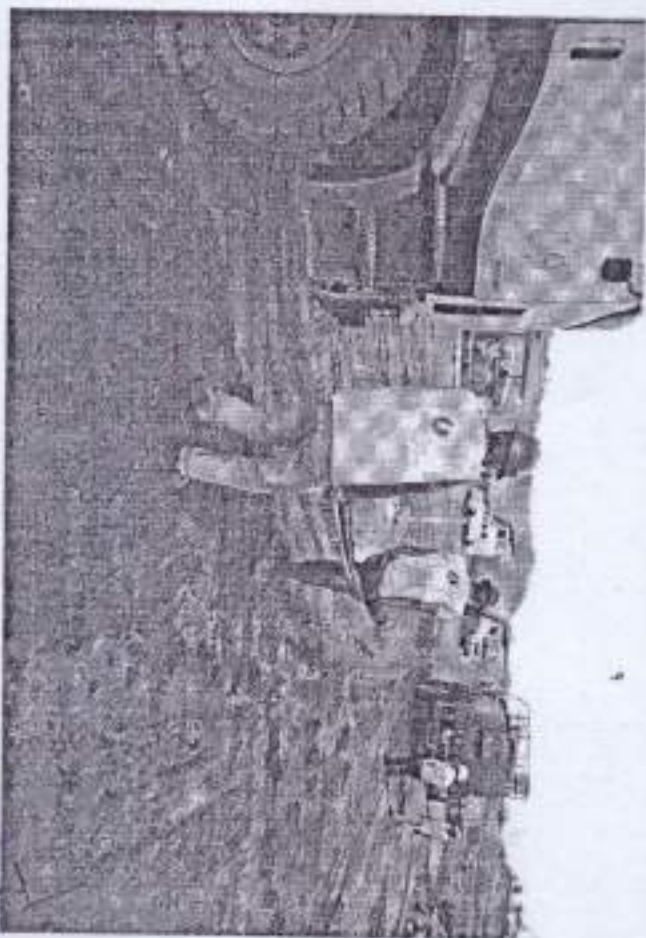
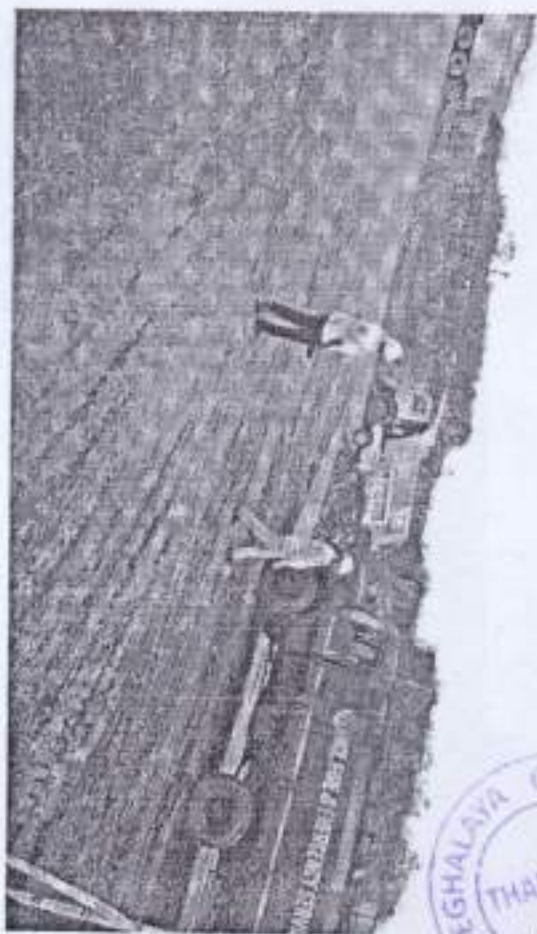
CONCLUSION: Training is important part for help to educate of employees for make potential and competent in this regards the Fire Mock Drill was held to spread knowledge to our employees as well as participants also can understand and gain the knowledge about Fire mock drill, it was observed most of the workers activated while siren rang and every involved persons learned the lesson and became active

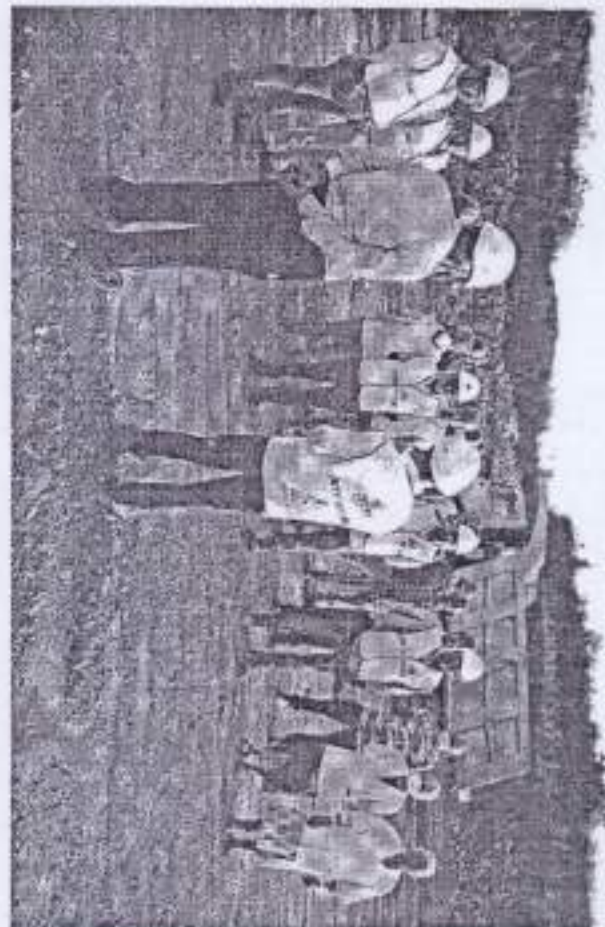


Safety Officer

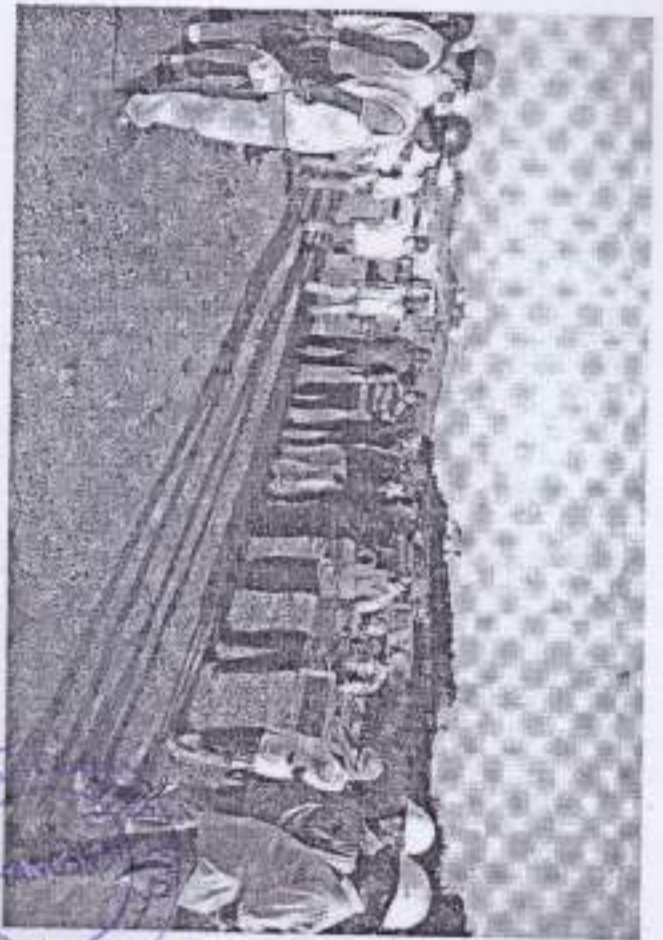
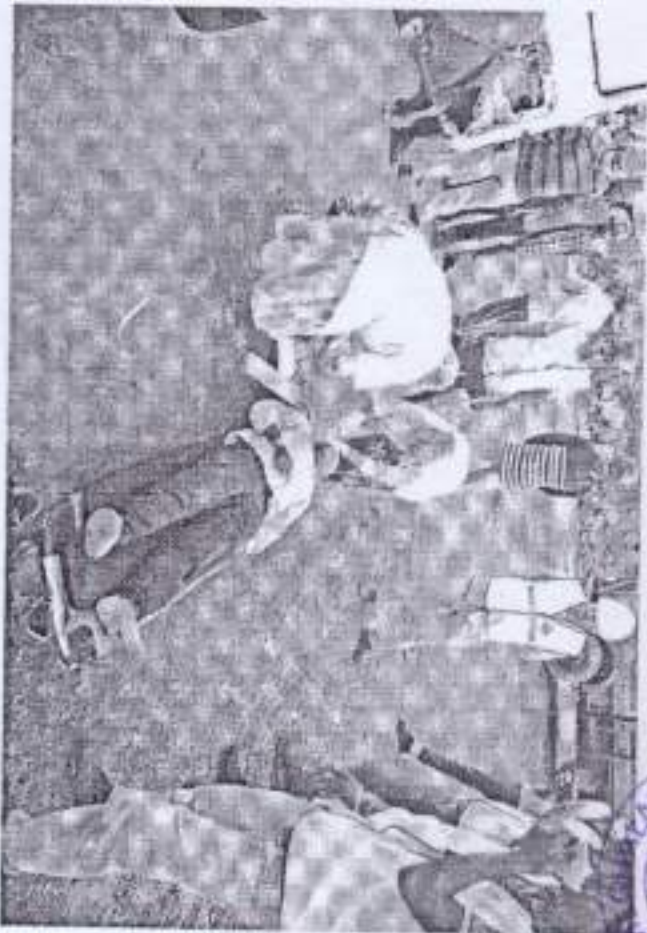
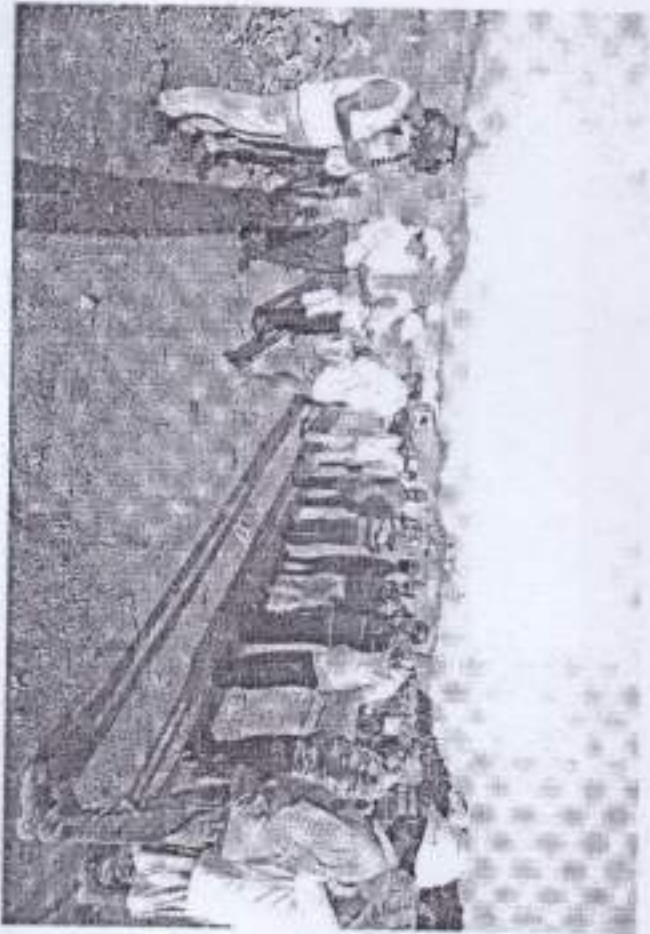
DGM Safety



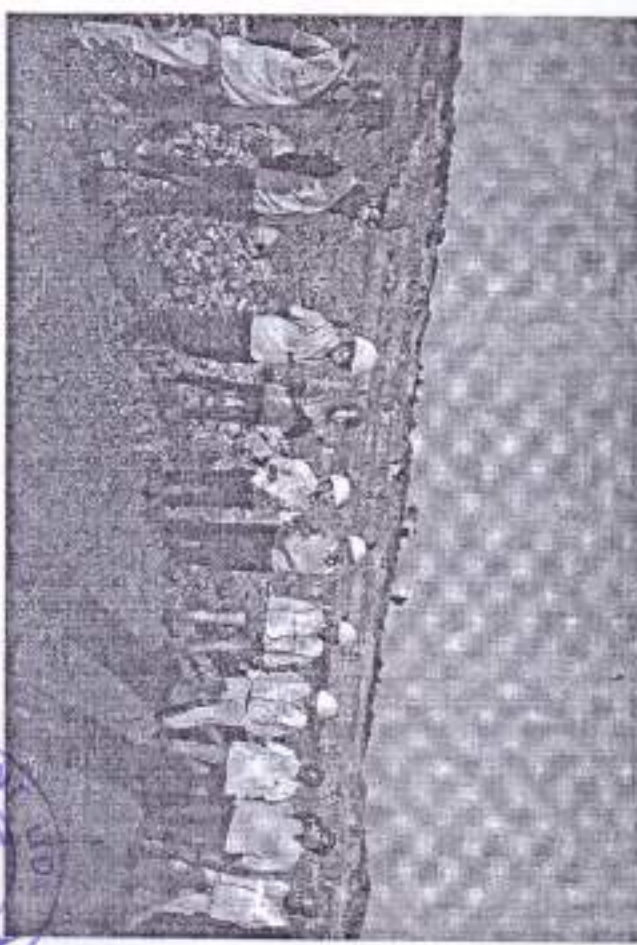
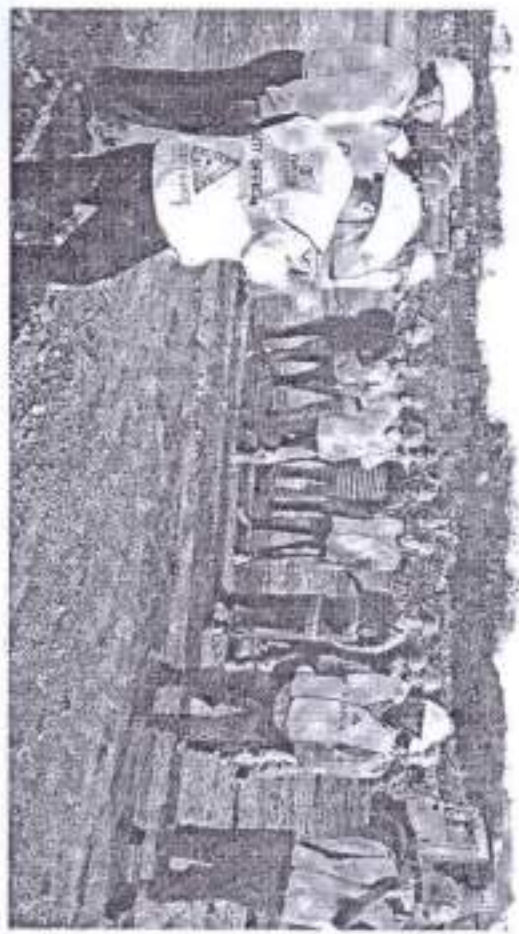




WISCHALAKKI CEMENT LTD.
MANGALURU
KARNATAKA
INDIA



Uttarakhand
THANKS
KAYA



MEGHAYANA CEMENT
THANGSKAN
011/11/2011

MEGHALAYA CEMENTS LIMITED

Six Monthly Reports: Stack Emission Report, 2021-2022

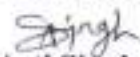
Chimney	Suspended Particulate Matter (PM):mg/Nm ³								
	Oct' 2021	Nov' 2021	Dec' 2021	Jan' 2022	Feb' 2022	Mar' 2022	Avg.	Concentration not to exceed, in mg/Nm ³	
Pr. Crusher	12.69	29.35	12.31	14.67	15.82	14.01	16.48	30	
Sec. Crusher	15.84	23.22	15.30	16.95	20.53	12.12	17.33	30	
Coal mill 1	18.35	21.59	12.70	26.40	23.73	14.23	19.50	30	
Coal mill 2	16.38	10.67	10.46	13.86	17.32	19.62	14.72	30	
RABH 1	PM	21.59	21.49	20.33	21.46	16.29	18.22	19.90	30
	SO ₂	489.32	413.57	446.18	411.04	417.05	389.64	427.80	1000 (Based on pyritic sulphur presence in limestone)
	NO _x	258.14	221.08	213.76	209.86	185.37	234.71	220.49	600
RABH 2	PM	23.69	24.13	13.16	16.81	19.77	21.64	19.87	30
	SO ₂	596.28	459.27	421.59	421.87	466.32	361.58	454.49	1000 (Based on pyritic sulphur presence in limestone)
	NO _x	243.75	217.64	205.74	201.67	185.56	219.43	212.30	600
ESP 1	22.68	21.65	23.86	21.03	26.85	24.77	23.47	30	
ESP 2	24.54	28.91	27.09	26.87	27.81	25.82	26.84	30	
Cement Mill No-1	14.36	16.29	26.24	15.43	22.88	25.22	20.07	30	
Cement Mill No-2	16.09	18.41	26.55	27.65	19.02	27.15	22.48	30	
Packing House-1	22.72	20.58	20.88	16.15	11.27	21.34	18.82	30	
Packing House-2	19.86	17.41	18.67	17.13	17.72	27.04	19.64	30	
Prepared by  Arti Singh	Checked & Verified by  Ujjwal Anurag								

MEGHALAYA CEMENTS LIMITED

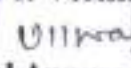
Six Monthly Report: Ambient Air Quality Report, 2021-2022

Location		Ambient Air Quality (AAQ): $\mu\text{g}/\text{m}^3$							MoEF notification G.S,R 826(E), dated 16.11.2009, Concentration not to exceed,
		Oct' 2021	Nov' 2021	Dec' 2021	Jan' 2022	Feb' 2022	Mar' 2022	Avg.	
Near CCR Building	PM ₁₀	54.72	63.47	53.81	52.41	51.69	53.28	54.90	100
	PM _{2.5}	36.45	29.45	23.89	26.38	29.72	27.41	28.88	60
	SO ₂	12.92	10.22	11.62	11.57	18.03	16.47	13.47	80
	NO _x	09.28	07.09	07.57	8.61	10.17	07.27	08.33	80
Guest House	PM ₁₀	49.36	51.36	48.26	51.34	61.85	58.62	53.47	100
	PM _{2.5}	31.46	26.44	21.64	23.56	26.49	24.90	25.75	60
	SO ₂	06.68	09.28	11.94	8.94	18.21	19.64	12.45	80
	NO _x	04.82	06.74	08.69	6.47	12.25	14.81	08.96	80
Crusher	PM ₁₀	51.48	62.59	56.47	55.69	47.63	44.37	53.04	100
	PM _{2.5}	33.24	30.68	24.08	27.15	32.37	31.04	29.76	60
	SO ₂	13.01	14.62	12.08	10.27	11.72	11.72	12.24	80
	NO _x	07.24	06.81	05.33	6.09	10.06	07.39	07.15	80
DG House (Downwind direction)	PM ₁₀	63.15	69.28	61.39	46.97	52.32	46.79	56.65	100
	PM _{2.5}	39.10	37.09	31.57	24.73	23.99	20.86	29.56	60
	SO ₂	11.56	13.04	14.21	12.89	15.27	17.08	14.01	80
	NO _x	06.18	08.31	06.82	7.64	11.33	10.94	08.54	80

Prepared by


 Arti Singh


Checked & Verified by


 Ujjwal Anurag

MEGHALAYA CEMENTS LIMITED

Six Monthly Reports: Noise Intensity and Water Consumption, From Oct'2021 to Mar'2022

Location		<u>Noise Intensity: dB (A) Leg</u>							Noise Level not to exceed, in dB (A) Leg
		Oct' 2021	Nov' 2021	Dec' 2021	Jan' 2022	Feb' 2022	Mar' 2022	Avg.	
DG House	Day	72	67	72	66	70	68	69.17	75
	Night	58	56	61	58	55	59	57.83	70
Guest House	Day	51	47	56	52	51	55	52.00	75
	Night	41	43	40	44	42	41	41.83	70
Crusher	Day	73	71	74	69	67	71	70.83	75
	Night	48	55	60	56	57	59	55.83	70

NOTE : Day Time (6:00AM to 9:00PM), Night Time (9:00PM to 6:00AM)

Location		<u>Water Consumption(Monthly) : M³</u>							Water Consumpti on not exceed
		Oct' 2021	Nov' 2021	Dec' 2021	Jan' 2022	Feb' 2022	Mar' 2022	Avg. (m ³ /Day)	
Domestic		13,176	12,760	13,623	13,340	11,511	13,486	428.00	1236 m ³ /Day
Industrial		15,229	20,910	19,681	20,896	15,879	18,557	610.73	

Prepared by

Arti Singh
Arti Singh

Checked & Verified by
Ujjwal Anurag
Ujjwal Anurag

MEGHALAYA CEMENTS LIMITED

Six Monthly Report (CPP): PM & AAQ Report, 2021-2022

		<u>Suspended Particulate Matter (PM) & Gaseous Emission:mg/Nm³</u>							
		Oct' 2021	Nov' 2021	Dec' 2021	Jan' 2022	Feb' 2022	Mar' 2022	Avg.	Concentration not to exceed, in mg/Nm ³
Chimney : CPP	PM	24.56	Stopped due to maintenance					24.56	50
	SO ₂	456.37						456.37	600
	NOx	216.48						216.48	300
Location: CPP		<u>Ambient Air Quality (AAQ):µg/m³</u>							MoEF notification G.S.R 826(E), dated 16.11.2009, Concentration not to exceed,
		Oct' 2021	Nov' 2021	Dec' 2021	Jan' 2022	Feb' 2022	Mar' 2022	Avg.	
S→E	PM ₁₀	52.69	42.59	44.86	47.68	42.71	39.51	45.01	100
	PM _{2.5}	22.43	21.47	23.54	21.59	23.85	22.47	22.56	60
	SO ₂	16.24	11.35	19.42	12.89	14.71	13.58	14.70	80
	NOx	13.77	08.18	13.51	10.97	13.59	11.43	11.91	80
S→W	PM ₁₀	44.87	39.07	42.67	39.42	41.77	37.64	40.91	100
	PM _{2.5}	26.35	25.99	28.94	25.91	21.87	18.90	24.66	60
	SO ₂	13.27	18.62	10.14	15.89	11.47	14.32	13.95	80
	NOx	10.89	13.46	08.64	12.91	10.34	11.07	11.22	80
N→E	PM ₁₀	31.67	33.18	36.92	43.86	39.95	41.89	37.91	100
	PM _{2.5}	22.18	29.67	29.21	30.12	26.71	24.07	26.99	60
	SO ₂	11.29	13.42	13.84	12.72	10.43	11.18	12.15	80
	NOx	08.26	10.47	11.09	11.29	09.57	10.01	10.01	80
Prepared by Arti Singh		Checked & Verified by Ujjwal Anurag							

MEGHALAYA CEMENTS LIMITED

Location: CPP	<u>Water Consumption(Monthly) :M³</u>							
	Oct' 2021	Nov' 2021	Dec' 2021	Jan' 2022	Feb' 2022	Mar' 2022	Avg. (m ³ /Day Cons.)	Water Consumpti on not exceed
	494.00	0.00	0.00	0.00	0.00	0.00	0.00	16.06

Prepared by


 Arti Singh

Checked & Verified by


 Ujjwal Anurag

MEGHALAYA CEMENTS LIMITED

Location		Meteorological Data (Monthly Avg.)					
		Oct' 2021	Nov' 2021	Dec' 2021	Jan' 2022	Feb' 2022	Mar' 2022
Temperature	Min	09.84	11.46	08.81	05.51	04.68	11.39
	Max	31.44	25.89	24.64	22.33	22.95	30.37
	Avg.	22.87	18.58	15.20	13.50	13.41	20.38
Humidity	Min	37.27	41.61	35.93	26.49	32.27	24.74
	Max	99.63	94.82	100.37	98.48	99.50	101.98
	Avg.	78.64	75.33	71.62	72.94	67.64	62.19
Rain Fall	MTD	192.15	0.5	25.50	05.50	241	615.50
	YTD	4732	4732.5	4758	4763.50	5004.50	5620



MEGHALAYA CEMENTS LIMITED
WATER ANALYSIS REPORT FOR SURFACE WATER

Date - 21.10.2021



SL NO	PARAMETER	UNIT	DM WATER		FEED WATER		SURFACE WATER		SAT. STEAM		S.H. STEAM		CONDENSER		RAW WATER		COOLING WATER		
			NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM
1	pH	µs/cm	8.5-8.8		8.8-9.2		9.8-10.2	9.97	8.8-9.2	8.8-9.2	8.8-9.2	8.8-9.2	8.8-9.2						
2	Conductivity	ppm	5		10		200	42	5	5	5	5	5						
3	TDS	ppm	3		5		100	34.67	3	3	3	3	3						
4	Total Hardness	ppm					NIL	NIL											
5	Ca Hardness	ppm					NIL	NIL											
6	Mg Hardness	ppm					NIL	NIL											
7	P- Alkalinity	ppm					6												
8	M- Alkalinity	ppm					13												
9	Silica	ppm	<0.02		<0.02		<5	0.21	<0.02	<0.02	<0.02	<0.02	<0.02						
10	Phosphate	ppm						8.31											
11	Iron	ppm																	
12	Hydrazine	ppm					<0.1												
13	Chloride	ppm																	
14	FRC	ppm																	
15	Turbidity	NTU																	
16	Cr ⁶⁺							0.017											



Signature



MEGHALAYA CEMENTS LIMITED
WATER ANALYSIS REPORT FOR SURFACE WATER

Date - 16.11.2021

SL NO	PARAMETER	UNIT	DM WATER		FEED WATER		SURFACE WATER		SAT. STEAM		S.H. STEAM		CONDENSER		RAW WATER		COOLING WATER	
			NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED
1	pH	µs/cm	8.5-8.8		8.8-9.2		9.8-10.2	10.02	8.8-9.2	8.8-9.2	8.8-9.2	8.8-9.2	8.8-9.2					
2	Conductivity	ppm	5		10		200	62	5	5	5	5	5					
3	TDS	ppm	3		5		100	29	3	3	3	3	3					
4	Total Hardness	ppm					NIL	NIL										
5	Ca Hardness	ppm					NIL	NIL										
6	Mg Hardness	ppm					NIL	NIL										
7	P- Alkalinity	ppm					8	8										
8	M- Alkalinity	ppm					11	11										
9	Silica	ppm	<0.02		<0.02		<5	0.38	<0.02	<0.02	<0.02	<0.02	<0.02					
10	Phosphate	ppm					8.60	8.60										
11	Iron	ppm																
12	Hydrazine	ppm			<0.1													
13	Chloride	ppm																
14	FRC	ppm																
15	Turbidity	NTU																
16	Cr ⁶⁺						0.024	0.024										



Signature



MEGHALAYA CEMENTS LIMITED
WATER ANALYSIS REPORT FOR SURFACE WATER

Date - 09.12.2021

Sl. NO	PARAMETER	UNIT	DM WATER		FEED WATER		SURFACE WATER		SAT. STEAM		S.H. STEAM		CONDENSER		RAW WATER		COOLING WATER	
			NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED
1	pH	µs/cm	8.5-8.8		8.8-9.2		9.8-10.2	10.08	8.8-9.2		8.8-9.2		8.8-9.2					
2	Conductivity	ppm	5		10		200	54	5		5		5					
3	TDS	ppm	3		5		100	36.10	3		3		3					
4	Total Hardness	ppm						NIL										
5	Ca Hardness	ppm						NIL										
6	Mg Hardness	ppm						NIL										
7	P- Alkalinity	ppm						7										
8	M- Alkalinity	ppm						12										
9	Silica	ppm	<0.02		<0.02		<5	0.19	<0.02		<0.02		<0.02					
10	Phosphate	ppm						8.09										
11	Iron	ppm																
12	Hydrazine	ppm			<0.1													
13	Chloride	ppm																
14	FRC	ppm																
15	Turbidity	NTU																
16	Cr ⁶⁺							0.019										



[Handwritten signature]



MEGHALAYA CEMENTS LIMITED
WATER ANALYSIS REPORT FOR SURFACE WATER

Date - 19.01.2022

SL NO	PARAMETER	UNIT	DM WATER		FEED WATER		SURFACE WATER		SAT. STEAM		S.H. STEAM		CONDENSER		RAW WATER		COOLING WATER		
			NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM
1	pH	µs/cm	8.5-8.8		8.8-9.2		9.8-10.2	10.14	8.8-9.2	8.8-9.2	8.8-9.2	8.8-9.2	8.8-9.2						
2	Conductivity	ppm	5		10		200	48	5	5	5	5	5						
3	TDS	ppm	3		5		100	26.40	3	3	3	3	3						
4	Total Hardness	ppm					NIL	NIL											
5	Ca Hardness	ppm					NIL	NIL											
6	Mg Hardness	ppm					NIL	NIL											
7	P- Alkalinity	ppm					6.9												
8	M- Alkalinity	ppm					12.1												
9	Silica	ppm	<0.02		<0.02		<5	0.14	<0.02	<0.02	<0.02	<0.02	<0.02						
10	Phosphate	ppm						7.92											
11	Iron	ppm																	
12	Hydrazine	ppm																	
13	Chloride	ppm																	
14	FRC	ppm																	
15	Turbidity	NTU																	
16	Cr ⁶⁺							0.026											



[Handwritten signature]



MEGHALAYA CEMENTS LIMITED
WATER ANALYSIS REPORT FOR SURFACE WATER

Date - 03.02.2022

SL NO	PARAMETER	UNIT	DM WATER		FEED WATER		SURFACE WATER		SAT. STEAM		S.H. STEAM		CONDENSER		RAW WATER		COOLING WATER	
			NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED	NORM	MEASURED
1	pH	µs/cm	8.5-8.8		8.8-9.2		9.8-10.2	10.04	8.8-9.2	8.8-9.2	8.8-9.2	8.8-9.2	8.8-9.2					
2	Conductivity	ppm	5		10		200	43	5	5	5	5	5					
3	TDS	ppm	3		5		100	26.80	3	3	3	3	3					
4	Total Hardness	ppm						NIL										
5	Ca Hardness	ppm						NIL										
6	Mg Hardness	ppm						NIL										
7	P. Alkalinity	ppm						7										
8	M- Alkalinity	ppm						12										
9	Silica	ppm	<0.02		<0.02		<5	0.23	<0.02	<0.02	<0.02	<0.02	<0.02					
10	Phosphate	ppm						7.40										
11	Iron	ppm																
12	Hydrazine	ppm			<0.1													
13	Chloride	ppm																
14	FRC	ppm																
15	Turbidity	NTU																
16	Cr ⁶⁺							0.018										



[Handwritten Signature]



MEGHALAYA CEMENTS LIMITED
WATER ANALYSIS REPORT FOR SURFACE WATER

Date - 11.03.2022

SL NO	PARAMETER	UNIT	DM WATER		FEED WATER		SURFACE WATER		SAT. STEAM		S.H. STEAM		CONDENSER		RAW WATER		COOLING WATER	
			NORM	MEAS USED	NORM	MEAS USED	NORM	MEAS USED	NORM	MEAS USED	NORM	MEAS USED	NORM	MEAS USED	NORM	MEAS USED	NORM	MEAS USED
1	pH	µs/cm	8.5-8.8		8.8-9.2		9.8-10.2	10.09	8.8-9.2	8.8-9.2	8.8-9.2	8.8-9.2	8.8-9.2					
2	Conductivity	ppm	5		10		200	47	5	5	5	5						
3	TDS	ppm	3		5		100	27.4	3	3	3	3						
4	Total Hardness	ppm						NIL										
5	Ca Hardness	ppm						NIL										
6	Mg Hardness	ppm						NIL										
7	P- Alkalinity	ppm						7										
8	M- Alkalinity	ppm						12										
9	Silica	ppm	<0.02		<0.02		<5	0.13	<0.02	<0.02	<0.02	<0.02						
10	Phosphate	ppm																
11	Iron	ppm																
12	Hydrazine	ppm																
13	Chloride	ppm																
14	FRC	ppm																
15	Turbidity	NTU																
16	Cr ⁶⁺							0.021										



[Handwritten Signature]

YEAR WISE PLANTATION DETAILS
M/s MEGHALAYA CEMENTS LIMITED
 Plant area - 52.949 Ha

Date: - 31-03-2022

Year	Saplins planted (Nos.)	Area covered (Hect.)	Saplins Survive (Nos.)	Survival Rate	Remarks
2009-20	79900	19.1898	61195	76.59%	Planted at different locations such as Northern, Northeastern and eastern side of the project area, CPP campus, Lawn of residential blocks & Topcem Public School Campus, Interspaces in plant boundary, road & internal road side, Children park etc. before the amendment of reduction of existing of plant area from 59.269 Ha to 52.949 Ha vide letter no- SEIAA/PROJECT-2/2007/8/1818 dated Shillong, the 30th September, 2020.
2020-21	3475	0.2185	2955	85.04%	Planted CPP back side and interspaces along plant boundary.
2021-22	10548	0.5170	8697	82.45%	Planted LS Reclaimer back side, CPP back side, Topcem Public School Campus, Mazagine Area, Clay Shed back side, Cricket Ground road side and interspaces along plant boundary.
Total	93923	19.9253	72847	77.56%	


 Ullhalla
 Authorized Signatory

SALARY DETAILS OF CLEANER FOR THE MONTH OF MARCH'2022								
S.N.	NAME	CODE NO.	SEK	D.O.J.	GRADE	DEPT	DESIG	SALARY
1	DISWONLANG BAREH	2260	FEMALE	01.04.2011	WKM	HR&A	CLEANER	15253
2	EDEN LALOD	3323	FEMALE	01.04.2011	WKM	HR&A	CLEANER	14178
3	PRAS BAREH	2261	FEMALE	01.04.2011	WKM	HR&A	CLEANER	17744
4	SABINA SYIH	2262	FEMALE	01.04.2011	WKM	HR&A	CLEANER	13020
5	KHALMISS SUTING	2263	FEMALE	01.04.2011	WKM	HR&A	CLEANER	14963
6	PHINIAL DHAR	2264	FEMALE	01.04.2011	WKM	HR&A	CLEANER	12654
7	IBASHISHA KHARSATI	2267	FEMALE	01.04.2011	WKM	HR&A	CLEANER	14010
8	ESTAR PUSEIN	2268	FEMALE	01.04.2011	WKM	HR&A	CLEANER	13618
9	PHIMAI SUTNGA	2271	FEMALE	01.04.2011	WKM	HR&A	CLEANER	14632
10	HILDIS SYRTI	2272	FEMALE	01.04.2011	WKM	HR&A	CLEANER	10538
11	LILY POHRAN	2273	FEMALE	01.04.2011	WKM	HR&A	CLEANER	10866
12	KYRSOI SYIH	2275	FEMALE	01.04.2011	WKM	HR&A	CLEANER	13894
13	PHYRNAI SYRTI	2276	FEMALE	01.04.2011	WKM	HR&A	CLEANER	10892
14	RIDAMON SUCHEN	2277	FEMALE	01.04.2011	WKM	HR&A	CLEANER	11134
15	METHILDA SYIEMLIH	2315	FEMALE	01.04.2011	WKM	HR&A	CLEANER	10643
16	SPELBHA SUCHIANG	2322	FEMALE	01.04.2011	WKM	HR&A	CLEANER	10969
17	WONDERFUL PALE	2330	FEMALE	01.04.2011	WKM	HR&A	CLEANER	10692
18	RANSI PUSEIN	2343	FEMALE	01.04.2011	WKM	HR&A	CLEANER	10595
19	SAPHA SIANGSHAI	2344	FEMALE	01.04.2011	WKM	HR&A	CLEANER	10692
20	EMLI DHAR	2345	FEMALE	01.04.2011	WKM	HR&A	CLEANER	10643
21	TALITHA RYMBAI	2349	FEMALE	01.04.2011	WKM	HR&A	CLEANER	10595
22	SHANIAH SHYLLA	2352	FEMALE	01.04.2011	WKM	HR&A	CLEANER	10789
23	CHEBARIMA BAREH	2362	FEMALE	02.04.2011	WKM	HR&A	CLEANER	11615
24	MINA KHONGLAH	2269	FEMALE	01.04.2011	WKM	HR&A	CLEANER	12498
25	NILDIS KHLUNG	3288	FEMALE	07.08.2012	WKM	HR&A	CLEANER	10692
26	LUTMON LAMARE	3030	FEMALE	05.08.2012	WKM	HR&A	CLEANER	10669
27	SHIDA SUTNGA	3316	FEMALE	01.07.2013	WKM	HR&A	CLEANER	10595
28	HEL PAJAT	3244	FEMALE	03.08.2013	WKM	HR&A	CLEANER	10692
29	PALDIS SUTING	3247	FEMALE	01.08.2013	WKM	HR&A	CLEANER	10692
30	SABITRY KHONGLAH	3248	FEMALE	05.10.2013	WKM	HR&A	CLEANER	10573
31	KEEPHIM SYMPLI	5436	FEMALE	13.08.2018	WKM	HR&A	CLEANER	10573
32	DARI PUSEIN	5697	FEMALE	15.03.2021	WKM	HR&A	CLEANER	9000
33	BEAUTIFUL PALE	5699	FEMALE	16.03.2021	WKM	HR&A	CLEANER	9000
34	SYNDONG SYRTI	5703	FEMALE	18.03.2021	WKM	HR&A	CLEANER	9000
35	MUNI SUTING	5706	FEMALE	19.03.2021	WKM	HR&A	CLEANER	9000



M/s MEGHALAYA CEMENTS LIMITED
AMBIENT AIR QUALITY SURVEY

MCL/ENV/PB-AAQM/2021-22/03

Location of sampling	Forest Area (Near by plant boundry)
Date duration of sampling	16.12.2021 to 17.12.2021
Time Duration of sampling	48 hours
Weather	Clear
Total Rain Fall, mm (On Date)	0.00 mm
Ambient Temperature (°C) :	Max. - 22.15°C, Min. - 10.79°C
Relative Humidity (%) :	Max. - 85.70%, Min. - 47.51%
Wind direction	→S(200.04°)

Pollutants	Analysis Results			Permissible Limits for Rural Areas (By MSPCB 24 hrs Monitoring)
	Village Name & Air Quality Survey No.			
	A1. Near Wahiajer Village V/07/21-22	A2. Near Shiehrvphi Village V/08/21-22	A3. Near Thangskai Village V/09/21-22	
	48 hrs.	48 hrs	48 hrs	
Particulate Matters PM10 ($\mu\text{g}/\text{m}^3$)	51.37	46.72	41.10	100
Particulate Matters PM2.5 ($\mu\text{g}/\text{m}^3$)	31.94	34.68	27.69	60

Remarks : The Parameters analysed were found to be within the permissible Limits of Ambient Air Quality Standards (National) for Rural Areas as per EPA

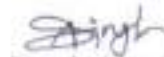
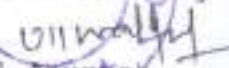
Notification GSR 176, April 1996.

Prepared By

Singh
(Arti Singh)

Checked & Verified By

Ujjwal Anurag
(Ujjwal Anurag)

M/s MEGHALAYA CEMENTS LIMITED				
AMBIENT AIR QUALITY SURVEY				
MCL/ENV/PB-AAQM/2021-22/04				
Location of sampling	Forest Area (Near by plant boundry)			
Date duration of sampling	28.03.2022 to 29.03.2022			
Time Duration of sampling	48 hours			
Weather	Clear			
Total Rain Fall, mm (On Date)	0.00 mm			
Ambient Temperature (°C) :	Max. - 21.23°C, Min. - 15.65°C			
Relative Humidity (%) :	Max. - 94.96%, Min. - 61.89%			
Wind direction	→SW(111.05°)			
Pollutants	Analysis Results			Permissible Limits for Rural Areas (By MSPCB 24 hrs Monitoring)
	Village Name & Air Quality Survey No.			
	A1. Near Wahiajer Village V/10/21-22	A2. Near Shiehrvphi Village V/11/21-22	A3. Near Thangskai Village V/12/21-22	
	48 hrs.	48 hrs	48 hrs	
Particulate Matters PM10 ($\mu\text{g}/\text{m}^3$)	66.38	57.92	51.17	100
Particulate Matters PM2.5 ($\mu\text{g}/\text{m}^3$)	45.67	29.74	33.29	60
Remarks : The Parameters analysed were found to be within the permissible Limits of Ambient Air Quality Standards (National) for Rural Areas as per EPA Notification GSR 176, April 1996.				
Prepared By  (Arti Singh)		Checked & Verified By  (Ujjwal Anurag)		

MEGHALAYA CEMENTS LIMITED

Village -Thangskal, P.O.-Lumshnong, District- East Jaintia Hills,
Meghalaya, PIN - 793210.

The capital expenditure & revenue expenditure incurred on an environmental protection equipments / Machineries.

From 1st October'2021 to 31st March'2022.

Sl.No	Type	Heading	Amount in Rs.
1	Revenue	Plant Bag Filters (Crusher, Raw Mills, Cement mill, Coal mill & Crusher)	1721492.86
2		ESP	3925832.34
3		RABH	3153197.56
4		Sewage Treatment Plant & Neutralization Pit	5519.24
5		SOX-NOX Reduction System	7110.04
6		RO Treatment Plant	15978.22
7		Environment Miscellaneous	528281.59
Gross Total (In Rs.)			9357411.85



MEGHALAYA CEMENTS LIMITED

Village –Thangskai, P.O.-Lumshnong, District- East Jaintia Hills,
Meghalaya, PIN – 793210.

Expenditure Incurred for Socio-Economic Development under CSR activities for 900-2600TPD
Cement Plant Project

From 01st October'2021 to 31st March'2022.

Sl.No	Heading	Amount in Rs.
1.	Emphasis on Education	66,000.00
	Sports Activity	5,000.00
2.	Encouraging/Felicitation program for Students.	5,000.00
3.	Polio Immunization Camps, family planning, etc.	427,896.00
4.	Infrastructure development of Hospitals / Schools	81,557.00
5.	Cement Distribution Programme.	2,705,054.00
6.	Plant Distribution programme	10,233.00
7.	Donation to Churches, Road & House Repairing etc.	23,800.00
	Community Feast	10,000.00
8.	Drinking water supplying scheme.	77,467.00
9.	Village development funds.	237,500.00
10.	Corona Pandemic	10,000.00
	Gross Total	3,659,507.00

For MEGHALA CEMENTS LIMITED

R.K Pareek
(President)

