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MEGHALAYA CEMENTS LIMITED

CIN- U26942ML2003PLC007125



Ref: MCL/ENV/MSPCB/Compliance-i/2018-19/03

Date:-15 /11/2018

To,

The Member Secretary,
Meghalaya State Pollution Control Board,
'ARDEN' LUMPYNGNGAD,
Meghalaya, Shillong.

Sub: - Submission of half yearly compliance report for the period of April 18 to Sept. 18.

Dear Sir,


We are hereby furnishing the half yearly compliance report (hard copy and soft copy) for the period from April 2018 to Sept. 2018 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 MoEF, North Eastern Regional Office, Shillong, Meghalaya.
- 2) The Member Secretary, State Environment Impact Assessment Authority, Shillong



15/11/18




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Registered Office :
Village: Thangskai, P.O. & P.S. Lumshnong
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HELPLINE NO : 18001233666

Half yearly Compliance Report (for the period April'18 to September'18) 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
SPECIFIC CONDITIONS	
(i) A stack of 100 m height shall be provided with continuous on-line monitoring system in respect of Thermal Power Plant [TPP] The data collected shall be analyzed and submitted regularly to the Meghalaya State Pollution Control Board.	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.
(ii) High efficiency Electrostatic Precipitators [ESPs] of not less than 99.98% efficiency shall be installed in the TPP to limit particulate emission to 50 mg/Nm ³	Complied with. ESP is provided for thermal power plant and it is working effectively.
(iii) Sorbent limestone shall be fed (12% of coal by weight) along with coal in the boiler of the TPP to reduce formation of Sox and thus help neutralize the impact of sulphur in coal.	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.
(iv) Space provision shall be made for Flue Gas De-sulphurisation [FGD] unit of requisite efficiency for removal of SO ₂ when required at a later stage.	Complied with. Provision for flue gas De-sulphurisation has made.



(v)	Dust extraction and suppression system along with water sprinklers shall be provided for controlling fugitive dust during transportation, in coal storage area and other vulnerable area of the TPP.	Complied with. Water sprinkling is being carried out on daily basis in plant premises on the places where fugitive dust particles are present. Provision of water sprinklers system has made at coal storage area and other vulnerable area of 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. 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 every year by our Safety & Vigilance Department. Details of Mock drills and trainings are attached herewith. <i>Annexure-1</i>
(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 is already 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 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 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, Authorities. 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.
(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)	<p>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.</p>	<p>Complied. Monitoring of surface water from River pumped to CPP and 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></p>
(xxi)	<p>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 m³ /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.</p>	<p>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></p>
(xxii)	<p>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.</p>	<p>Complied with. The project proponent has made a manual arrangement for feeding of plastic waste at pre-heater and using the waste as fuel on availability basis.</p>
(xxiii)	<p>The project proponent shall transport raw materials and industrial products through covered means.</p>	<p>Complied with. Raw materials like coal and industrial products like clinker are being transport from one location to other location by properly covered with tarpaulin to avoid any spreading of fugitives.</p>



(xxiv)	<p>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.</p>	<p>Complied with. Development of Green belt had been started in the Year 2009 and 100% of the project area (i.e. 20.44 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. Additional 03 numbers of blocks having total area of 2.79 ha has been planted with local species around the project area. Total plantation including project area and around the project area is 22.835 ha. Annexure - IV</p>
(xxv)	<p>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.</p>	<p>Complied with. The Health Care Centre is functioning under qualified Doctor, Nurses and staffs. The company has also an Ambulance facility to meet up the emergency.</p>
(xxvi)	<p>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.</p>	<p>Complied with. The salaries of Cleaners are being reviewed on the yearly basis. The details are already submitted earlier.</p>
(xxvii)	<p>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.</p>	<p>Complied with. Necessary measures such as bag filter maintenance, Dust suppression is being practiced. The firm is in process for Ambient Air Quality Analysis nearby plant area to verify the air quality.</p>



(xxviii)	<p>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.</p>	<p>Complied with. During the renewal of mines lease, the project proponent practice with to verify the environmental clearance.</p>
(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> <ul style="list-style-type: none"> 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>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 started the work in co-ordination with Environment Department of North Eastern Hill University, Shillong. The NEHU, officials have already appointed a Project fellow for the Project and he is now working at our site on Biodiversity Conservation Plan with focus on conservation of the schedule –I species in the area. The green house has 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 Annexure –V</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 denoniamum (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 started the work in co-ordination with Environment Department of North Eastern Hill University, Shillong. The NEHU, officials have already appointed a Project fellow for the Project and he is now working at our site on Biodiversity Conservation Plan with focus on conservation of the schedule -I species in the area. The green house has 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 Annexure -V</p>
(xxxi)	<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. The company has started the work in co-ordination with Environment Department of North Eastern Hill University, Shillong. The NEHU, officials have already appointed a Project fellow for the Project and he is now working at our site on Biodiversity Conservation Plan with focus on conservation of the schedule -I species in the area. The green house has 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 Annexure -V</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 -VI</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.	Complied with. Implementation done and the expenditure details are enclosed herewith. <i>Annexure -VII</i>
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A. 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.	Complied. Following the stipulation of MSPCB.
(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.	Agreed for compliance. The Project Proponent will implement all 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.
(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.	Agreed for compliance.



(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. 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)	<p>The industry shall undertake the following waste minimization measures:</p> <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. • Dust/particulate matter collected in pollution control equipments shall be reused. 	<p>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.</p>
(vii)	<p>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>	<p>Complied with. 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)	<p>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>	<p>Complied with. 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)	<p>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>	<p>Complied with. Authorization letter No (ADDENDUM). MPCB/ATH-21/2007/ 2018-2019/14; dated 5th July 2018 for 2600 TPD cement manufacturing plant, valid up to 30th November, 2020 and Authorization letter No(ADDENDUM). MPCB/ATH-46/2017/ 2018-2019/; dated 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.	Complied with. Dedicated environmental Management Cell is functioning and Environmental quality functions like Ambient Air Quality Monitoring, Stack Monitoring Emission, Drinking Water Quality and Waste Water quality are being regularly monitored. Chromium testing for CPP blow down water is also being carried out regularly.
(xi)	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.	Complied with. The Sewage Treatment Plant (STP) has been installed and the capacity of the same is 100m ³ /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.
(xii)	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 Company.	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.



(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 company 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 (Protection) Act, 1986, Hazardous Waste (Management & Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and Rules.</p>	<p>Agreed for compliance.</p>
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LPG GAS CYLINDER SAFELY OPERATION

TRAINING REPORT

Date: 11.04.2018

- ❖ **THEME:** LPG Gas cylinder Safety awareness & practical demonstration.
- ❖ **TRAINER'S NAME:** - Shri B. Bhagavan Singh, Mr. Prajjal Rajkumar & Mr. Ganesh Quila
- ❖ **VENUE:** - Topcem Public School
- ❖ **DATE:** - 11.04.2018
- ❖ **TIME:** - 4:00 PM TO 6:00 PM
- ❖ **DURATION:** - 02 Hours
- ❖ **NUMBER OF PARTICIPANTS:** - [36] thirty six persons were attended.

On 11th April 2018 we have conducted "LPG CYLINDER" cylinder safety Training at Topcem Public School at time 4:00 PM to 6:00 PM, total 36 persons were participated they are Topcem residential colony people.

During Training it was discussed & practically shown to participants for safe use as per following:

WHILE RECEIVING LPG CYLINDER:

- 1) Check that the cylinder has the company seal & safety cap intact.
- 2) If you are not sure about safe use of LPG, ask the delivery person for demonstration.

BEFORE USE:

- 1) Check the Cylinder valve to ensure that the rubber 'O' ring is present inside.
- 2) Use only soap solution to check gas leaks; never use lighted match-sticks for checking leaks.

AFTER USE:

- 1) Turn "off" the regulator knob and then the stove knob before retiring to bed.
- 2) Always keep the regulator knob in "off" position when the cylinder is not in use.
- 3) Empty cylinders must be stored in a cool and well ventilated place with the safety cap put on.

WHILE IN USE:

- 1) Never leave vessels unattended on burners in operation – the contents may overflow, extinguishing the flame and causing gas leakage
- 2) Don't keep electrical appliances like refrigerators inside the kitchen; power fluctuations in them can act as a source of fire in case of leakage.

SERVICING:

- 1) Always keep rubber tube uncovered and visible
- 2) Check rubber tube regularly for cracks; change rubber tube at least once in two years.

INCASE OF LEAK:

- 1) Call your distributor or emergency service cell for help.
- 2) LPG being heavier than air tends to settle at the ground level on leakage. If LPG leakage is noticed, use all available ventilation to disperse the gas.



SAFETY INSTRUCTIONS TO USE LPG

- i) Always keep the cylinder upright position.
- ii) Keep the Gas stove minimum 6 inches above the cylinder on a suitable surface also always cook while standing.
- iii) Don't place the gas stove where there is strong wind flow.
- iv) Don't use any inflammable items in the Kitchen other than the gas cylinder.
- v) Always light the match stick before turning on the gas stove.
- vi) Avoid other work while cooking and always be present near the stove. Always use a cotton apron while cooking.
- vii) Always use tongs to hold hot vessel used to cook and avoid using cloth.
- viii) Always keep the regulator switch off while sleeping and going out.
- ix) If you smell LPG in air, avoid switching on electric switches, lighter and matches. Open windows doors immediately.

STEP TO FOLLOW IN CASE YOU SMELL GAS IN THE AIR

- i) In case of any gas leakage put on the safety cap, leave it in the open place, contact the distributor immediately or call help line no- 1906.
- ii) Always replace the safety hose every 5 years & avoid trying to repair the gas stove on your own.

During fire of LPG cylinder in emergency how to fight with fire & what precautions to be taken during that situation those were discussed as well as explained about extinguishing media.

Generally LPG fire is coming under C class Fire: Fire involving flammable Gases. To extinguish the fire we should close down the supply of gas by closing the valve and simultaneously for cooling CO₂, DCP & ABC type Extinguisher can be used.

Finally we shown a demo on Fire how to use Fire Extinguisher for extinguish of fire also if fire caught at regulator outlet of LPG cylinder then easily can extinguish by wet cloth through cut of oxygen. So safely each and every one operated the extinguishers also extinguished through used wet cloth and understood fire fighting process. Finally we have seen most of families done the practice very well for enhance of awareness & practice periodic training can be conducted.


SAFETY OFFICER


DGM [SAFETY]



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/MR/G10

Rev No.:00

Date: 01.03.2016

Training Details : LPG Cylinder Safety Awareness.

Agency : In house

Date : From: 11/04/18 To: 11/04/18

Time : From: 04.00 PM To: Onwards

Name of Trainers : DGM (S&V) & Officer.

Attendance Record:

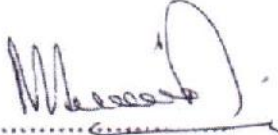
Sl. No.	Employee Name	Department	Designation	Signature
1	Sufia Begum Borthong	-	-	Sufia Begum
2	Sukanta Chandra	-	-	Sukanta
3	Namita Sen	-	-	Namita
4	Sing Chandra	-	-	Sing
5	Uditia Devi	-	-	Uditia
6	Saroj Devi	-	-	Saroj Devi
7	Sangita Devi	-	-	Sangita Devi
8	Karen Khompa	-	-	Karen Khompa
9	M. Kalavati Rao	-	-	M. Kalavati
10	Shabnam Devi	-	-	Shabnam Devi



11	Rakesh Karmakar	-	-	Rak
12	Lalima Bhattacharya	-	-	Lalima
13	Sanjay Bhattacharya	-	-	Sanjay
14	Talukder Tanai	-	-	Tanai
15	Abhishek Choudhary	Abhishek Choudhary	-	Abhishek
16	Rakesh Sinha	-	-	R Sinha
17	Roma Roy	-	-	Roma Roy
18	Ashu Rathi	-	-	Ashu
19	Pompi Nath.	-	-	Pompi Nath
20	Niva Boruah	-	-	Niva Boruah
21	Anjali Karmakar	-	-	Anjali Karmakar
22	Lakshmi Begum	-	-	Lakshmi Begum
23	Anita Tanna	-	-	Anita Tanna
24	Gita Barumata	-	-	Gita Barumata
25	Gurpreet Singh	-	-	Gurpreet
26	Yoni Saha	-	-	Yoni Saha
27	Ravi Dey	-	-	Ravi Dey
28	Rajesh Lal Kachari	-	-	R. Kachari
29	Rima Barumata	-	-	Rima Barumata
30	Bidya Devi Dand	-	-	B. Dand
31		-	-	Bidyalali
32	Anita Malakar	-	-	Anita
33	Gurpreet Singh	-	-	Gurpreet Singh



34	Gulnaz Begum.	-	-	Gulnaz
35	Roji Smith			Rajy Singh Rajy Singh
36	Mayer Devi			Mayer Devi
37	Zenat Hussain			Zenat Hussain
38				
39				
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 HOD



FIRE FIGHTING TRAINING REPORT

Date: 20/06/2018

THEME: Fire fighting training conducted with the MCL Fire responders/securities, Bombay security along with other employees of depts. Topics based on studied of Emergency preparedness or activation sirens code of practice distinguish the type of fire & extinguishers process etc.

- ❖ **TRAINER'S NAME:** - B. Bhagavan Singh - DGM-Safety
- ❖ **VENUE:** - Community Hall.
- ❖ **DATE:** - 19/06/2018
- ❖ **TIME:** - 3:00 PM TO 6:00 PM
- ❖ **DURATION:** - 3:00 HOURS.
- ❖ **NUMBER OF PARTICIPANTS:** - [33] Thirty three participants was attended.

On 19th June, 2018 from 3:00 PM to 6:00 PM at community hall 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 thought the classification of fire & using of different extinguishers. Training was conducted in phase-1 including campus area along with MCL securities or fire responders with BSS securities total 33 persons were participated in the training. Our motto is about educate all & knowing about using procedures of fire extinguishers during any fire emergency.


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

- 1) Starvation: In this method we discussed & show how to remove unburnt materials from surroundings of fire occurrence area & to control the fire.
- 2) Blanketing: In this method we discussed & show how to cut oxygen from the fire by using of extinguishers & wet blanket to stop the fire by blanket 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 to use on what type of Fire.
 - Classification of Fire and according to it explanation & types of fire
 - Communication procedure during emergency




 Page 1 of 1

- During Fire what can do or do 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.

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]



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/MR/G10

Rev No.:00

Date: 01.03.2016

Training Details : Fire Fighting

Agency : In house

Date : From: 19/06/2018 To: 19/06/2018

Time : From: 03:00 PM To: Onwards.

Name of Trainers : Mr. B. Bhagwan Singh (DGM - S & V)


Attendance Record:

Sl. No.	Employee Name	Department	Designation	Signature
1	Sri Tarun Dutta	BSS	Security	T. Dutta
2	Tajendra Choudhary	N.R.A	"	T. Choudhary
3	Tusheswar Nath	HRSH	"	T. Nath
4	Sogesh Choudhary	BSS	"	S. Choudhary
5	Lilip K. Das.	BSS	"	L. Das
6	Jalendra D. D.	P.C	"	J. D.
7	Lipika Kalita	B.S.B.	"	L. Kalita
8	Subrata Nath	B.S.S.	"	S. Nath
9	Chand Singh Jena	B.S.S.	"	C. Jena
10	Sun Das	B.S.S.	"	S. Das



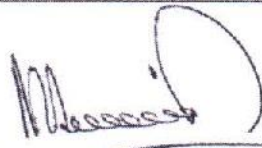
11	K. Balanda Singha	B. S. S.		Sr.
12	11 Seta/lostan Jainny	B. S. S.		Seta/lostan
13	Kailash Bahadur	B. S. S.		Kailash
14	Jitench Nath	HR & A	Security	Shakti
15	Prayakumar Singh			Pray
16	Bhabar Nath			Bha
17	Montu Borah			Montu
18	Pamod Das	B. S. S.		Pamod
19	Joshu Roy			Joshu Roy
20	Minku Nath			Minku
21	Ribu Bora	B. S. S.		Ribu
22	Chyay Koo	B. S. S.		Chyay
23	Shakendra Singh Yadav	H. E. N. M.	Harbinger	Shakendra
24	Katol	HE N. M.	Harbinger	Katol
25	Sankar Kumar Singh	HR & A Dispensing	Lab. Technician	Sankar
26	Chitra Ake	HR & A	Staff	Chitra
27	Rahul Panginy	Vigilance	Porter	Rahul
28	Chandul Kumar Yadav	Mines.	OTPTER	Chandul
29	Anil Yadav	"	"	Anil
30	Prasanta Das	Safety		Prasanta
31	Idanish Patra	Geology		Idanish




HOD

31	Haich Lake	Geology	Surveyor/Asst.	Haich
32	Rajesh Karm.	V's B.I.	Sup.	R
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 HOD

LPG GAS CYLINDER SAFELY OPERATION TRAINING REPORT

Date: 31.07.2018

- ❖ **THEME:** LPG Gas cylinder Safety awareness & practical demonstration.
- ❖ **TRAINER'S NAME:** - Shri B. Bhagavan Singh & Mr. Prajjal Rajkumar
- ❖ **VENUE:** - Community Hall
- ❖ **DATE:** - 31.07.2018
- ❖ **TIME:** - 4:00 PM TO 6:00 PM
- ❖ **DURATION:** - 02 Hours
- ❖ **NUMBER OF PARTICIPANTS:** - [19] persons were attended.

On 31st Jul'2018 we have conducted "LPG CYLINDER" cylinder safe operation Training at Topcem Public School at time 4:00 PM up to 6:00 PM, total 19 persons were participated they are from residential colony people [Guest House, A-Block, B-Block, C-Block, D-Block and administrative campus.

During Training it was discussed & practically shown to participants for safe use as per following:

WHILE RECEIVING LPG CYLINDER:

- 1) Check that the cylinder has the company seal & safety cap intact.
- 2) If you are not sure about safe use of LPG, ask the delivery person for demonstration.

BEFORE USE:

- 1) Check the Cylinder valve to ensure that the rubber 'O' ring is present inside.
- 2) Use only soap solution to check gas leaks; never use lighted match-sticks for checking leaks.

AFTER USE:

- 1) Turn "off" the regulator knob and then the stove knob before retiring to bed.
- 2) Always keep the regulator knob in "off" position when the cylinder is not in use.
- 3) Empty cylinders must be stored in a cool and well ventilated place with the safety cap put on.

WHILE IN USE:

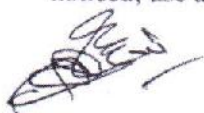
- 1) Never leave vessels unattended on burners in operation – the contents may overflow, extinguishing the flame and causing gas leakage
- 2) Don't keep electrical appliances like refrigerators inside the kitchen; power fluctuations in them can act as a source of fire in case of leakage.

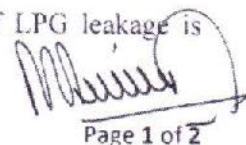
SERVICING:

- 1) Always keep rubber tube uncovered and visible
- 2) Check rubber tube regularly for cracks; change rubber tube at least once in two years.

INCASE OF LEAK:

- 1) Call your distributor or emergency service cell for help.
- 2) LPG being behavior than air tends to settle at the ground level on leakage. If LPG leakage is noticed, use all available ventilation to disperse the gas.





SAFETY INSTRUCTIONS TO USE LPG

- i) Always keep the cylinder upright position.
- ii) Keep the Gas stove minimum 6 inches above the cylinder on a suitable surface also always cook while standing.
- iii) Don't place the gas stove where there is strong wind flow.
- iv) Don't use any inflammable items in the Kitchen other than the gas cylinder.
- v) Always light the match stick before turning on the gas stove.
- vi) Avoid other work while cooking and always be present near the stove. Always use a cotton apron while cooking.
- vii) Always use tongs to hold hot vessel used to cook and avoid using cloth.
- viii) Always keep the regulator switch off while sleeping and going out.
- ix) If you smell LPG in air, avoid switching on electric switches, lighter and matches. Open windows doors immediately.

STEP TO FOLLOW IN CASE YOU SMELL GAS IN THE AIR

- i) In case of any gas leakage put on the safety cap, leave it in the open place, contact the distributor immediately or call help line no- 1906.
- ii) Always replace the safety hose every 5 years & avoid trying to repair the gas stove on your own.

During fire of LPG cylinder in emergency how to fight with fire & what precautions to be taken during that situation those were discussed as well as explained about extinguishing media.

Generally LPG fire is coming under C class Fire: Fire involving flammable Gases. To extinguish the fire we should close down the supply of gas by closing the valve and simultaneously for cooling CO₂, DCP & ABC type Extinguisher can be used.

Finally we shown a demo on Fire how to use Fire Extinguisher for extinguish of fire also if fire caught at regulator outlet of LPG cylinder then easily can extinguish by wet cloth through cut of oxygen. So safely each and every one operated the extinguishers also extinguished through used wet cloth and understood fire fighting process. Finally we have seen most of families done the practice very well for enhance of awareness & practice periodic training can be conducted.


SAFETY OFFICER


DGM [SAFETY]



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/MR/G10

Rev No.:00

Date: 01-03-2016

Training Details

Agency

Duration

(a) Date/s

(b) Time

Names of Trainers

Mr. B. Bhagavan Singh 2. Mr. P. Rajkumar 3. Mr. B. N Rao

Attendance Record:

Sl.	Employee Name	Department	Designation	Signature
01.	Aparna Sinha	Production		Asinla
02.	Ruma Sodhi	Admin		RS
03.	Nelke Choudhary	Energy		Nelke
04.	Nandita Basu	Instrument		
05.	Lipika Malakar	Safety vigilance	computer operator	LA
06.	Bh. Sudha Rani	Mechanical		Bh. Sudha
07.	Manathi Perasad	Account		
08.	Rita Nath	Production		Rat
09.	Sumita	C.P.P		Sumita
10.	Sarwati Devi	Mines		S. Devi
11.	Khushboo Singh	Account		Kh. Singh
12.	Ramjama Singh	Store		R
13.	Meha Deva			MS
14.	Avishka Singh	Store		AS



[Signature]
HOD

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/MR/G10

Rev No.:00

Date: 01-03-2016

Training Details : LPR cylinder Safety using awareness
 Agency : Safety Dept.
 Duration : 2 Hrs.
 (a) Date/s From: 30/07/2018 To:
 (b) Time From: 4:00 Pm To: 6:00 Pm.
 Names of Trainers :
 1. Mr. B. Bhagavan Singh 2. Mr. P. Rajkumar. Mr. B. N. Rao

Attendance Record:

Sl.	Employee Name	Department	Designation	Signature
15	Musai Kumar	(C/P)	Sin Engineer	Musai Kumar
16	N. Lakshmi Devi	Mines	Manager.	N. Lakshmi Devi
17	Mr. P. Prasad Singh	Mechanical	Manager	P. Prasad Singh
18	Mr. D. R. Das	Civil	Staff	D. R. Das
19	T. P. Singh	Imp.	ILL.	T. P. Singh



[Signature]
 HOD

FIRE FIGHTING TRAINING REPORT

Date: 31.08.2018

- ❖ **THEME:** Taught Fire Fighting procedure, Classification of fire, Types of fire extinguisher & its operation and various rescue process as well as studied emergency preparedness & response plan.
- ❖ **TRAINER'S NAME:** - Shri B. Bhagavan Singh, Mr. Prajjal Rajkumar & Mr. Ganesh Quila
- ❖ **VENUE:** - Community Hall
- ❖ **DATE:** - 31.08.2018
- ❖ **TIME:** - 3: PM TO 6:00 PM
- ❖ **DURATION:** - 3 HOURS
- ❖ **NUMBER OF PARTICIPANTS:** - 37 persons were attended.

On 31st Aug'2018 we have conducted "FIRE FIGHTING TRAINING" at Community Hall at time 3:00 PM, total 37 persons were participated from each shift of various department workers, staff, security staff & Engineers. At the time of any Fire emergency how to fight with fire & what precautions to be taken during at situation those were discussed as well as explained 'EMERGENCY PREPAREDNESS' code of practice i.e. Siren alarming system, how to activate or rush to assembling point after hearing the siren. Taught about operation of available Fire Extinguishers and sand bucket.

Classification of Fire: Fire is five (5) types.

A class Fire: Fire involving combustible materials of Organic nature.

- Example: wood, paper, rubber plastic etc.
- For extinguishing fire involving this class we can use Water, Foam, ABC, DCP, CO₂ type Fire Extinguisher.

B class Fire: Fire involving Flammable liquids.

- Example: diesel, petrol, kerosene, etc.
- For extinguishing fire involving this class we can use Foam, ABC, DCP, CO₂ type Fire Extinguisher.

C class Fire: Fire involving flammable Gases.

- Example: LPG etc.
- To extinguish the fire we should close down the supply of gas by closing the valve and simultaneously for cooling CO₂, DCP & ABC type Extinguisher can be used.

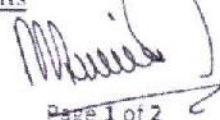
D class Fire: Fire involving combustible metals.

- Example: magnesium, aluminum, zinc etc.
- For extinguishing fire involving this class we can use ABC & DCP type Fire Extinguisher.

E class Fire: Fire involving on Electrical appliances.

- Example: Computer, motor, switch etc.
- For extinguishing fire involving this class we can use CO₂, ABC & DCP type Fire Extinguisher.
- ✓ For Electric Fires switch of the power supply before attempting to extinguish the fires. & it is Dangerous if use water or Foam type fire extinguishers on live Electrical Equipments





During Fire duties:

- ❖ Which type of Fire extinguishers can to use on what type of Fire.
 - ❖ Classification of Fire and according to it explanation of types of fire.
 - ❖ Explanation of Emergency preparedness as per the reference of MCL Emergency preparedness.
 - ❖ Firstly know where we kept our Fire extinguishers that explanation as per reference of extinguishers report.
 - ❖ Communication procedure during emergency.
 - ❖ During Fire what can do or do not.
 - ❖ Operating procedure of Fire extinguishers.
- ❖ Rescue process – Demonstrate rescue process to all participants & one by one they practiced rescue process. Following rescues are shown & demonstrate.
- One casualty – one rescuer (Pick on back, Reverse pick on back, man crown, man catch, down stair).
 - One casualty two rescuers (Two Hand Seat & Four Hand Seat).
 - Stretcher Rescue.

Finally we shown a demo on Fire how to use Fire Extinguisher for extinguish of fire safely each and every one operated the extinguishers and understood fire fighting process. Finally we have seen all school staff got knowledge well & for practice periodic training can be conducted.


SAFETY OFFICER


DGM [SAFETY]



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/DEPT/TAF/019

Rev No.:01

Date: 01.04.2018

Training Details : Fire Fighting Extinguisher

Agency : In house

Date : From: 31/08/2018 To: 31/08/2018

Time : From: 03:00 PM To: 05:00 PM Onwards.

Name of Trainers : Mr. B. Bhagwan Singh (DGM) & Officers

Attendance Record:

Sl. No.	Employee Name	Department	Designation	Signature
1	Surbhi Pareek	Electrical	ITE	[Signature]
2	Ashwesh Anwar	Production	AE	[Signature]
3	Gyan Ranjan Kumar	Electrical	AE	[Signature]
4	Mithilesh Kumar Misra	Instrument	A.E	[Signature]
5	Abhinav Shukla	Instrument	Engg	[Signature]
6	Hiraj Alam	Production	Patroller	MUSAZ
7	SRK Bhagat	Logistic	Sr. Officer	[Signature]
8	Soman Kishore Das	CPP	Trainee Chemist	[Signature]
9	VIKASH KR. SAH	CPP	Trainee Oper	[Signature]
10	ANINDA SUNDAR DAS	CPP	Engg	[Signature]



11	Jogesh Kalita	cad-B.S.S	Supervisor	Jogesh Kalita
12	Suklabaran Paomari	"	Guard	Suklabaran
13	Nipon Borah	"	"	Joydev Borah
14	Joydev Borah	"	"	Nipon Borah
15	Sumon Kon	"	"	Bnu
16	Ribu Borah	"	"	Ribu
17	Dilip Van Bor	"	"	Dilip
* 18	Pranod Das	"	"	Pranod
19	Utpal Hazarika	"	"	Utpal
20	Sujay Kon	"	"	Sujay
21	Ajay Nongth	"	"	Ajay
22	Pran Karle. Konan	"	"	Pran.
23	Rupam Baraghai	"	"	Rupam
24	Sankharam Sanawaf	"	"	Sankharam
25	Mitran Nath	"	"	Mitran
26	Roman Das	"	"	Roman
27	Delip K. Das			Delip
28	Torun Dutta	"	"	Torun Dutta
29	K. Braga K. Smita	"	"	K. Braga
30	Bhramshwang deimari	"	"	Bhramshwang
31	Bijul Borah	"	"	Bijul



HOD

11	Santanu Mandal	Production	A-E	<i>[Signature]</i>
12	Rajesh Pandey	G.C	Staff	<i>[Signature]</i>
13	Pankaj Basah	Mech.	Supervisor	<i>[Signature]</i>
14	Lakshmi Bez Baruah	Civil	Office boy	<i>[Signature]</i>
15	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
16	<i>[Signature]</i>	HR (Civil)		<i>[Signature]</i>
17	<i>[Signature]</i>	Civil	<i>[Signature]</i>	<i>[Signature]</i>
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MEGHALAYA CEMENTS LIMITED

ANNEX-II

Six Monthly Report: Noise Intensity and Water Consumption, From April'2018 to Sept' 2018

Location		Noise Intensity: dB (A) Leq							
		Apr 2018	May 2018	June 2018	July 2018	Aug 2018	Sep 2018	Avg.	Noise Level not to exceed, in dB (A) Leq
DG House	Day	74	72	72	72	71	74	72.5	75
	Night	69	64	66	67	66	64	66.0	70
Guest House	Day	52	48	46	53	54	52	50.833	75
	Night	48	40	42	42	46	46	44	70
Crusher	Day	72	62	58	72	74	73	68.50	75
	Night	54	48	46	68	68	69	58.83	70

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

Location		Water Consumption(Monthly) : M ³							Water Consumption not exceed
		Apr 2018	May 2018	June 2018	July 2018	Aug 2018	Sep 2018	Avg.	
Domestic		3066	3447	3624	3908	3889	3330	3544.00	1236 m ³ /Day
Industrial		11991	10003	5192	2524	7016	13968	8449.00	

Hence, the water consumption 404.13 m³/Day, for cement plant.

Analyzed by


Arti Singh


Verified by
Sunil Kumar Choudhary

MEGHALAYA CEMENTS LIMITED

Six Monthly Report (CPP): Water Consumption Report, 2018-19

Location: CPP	<u>Water Consumption(Monthly) :M³</u>							
	Apr 2018	May 2018	June 2018	July 2018	Aug 2018	Sep 2018	Avg.	Water Consumption not exceed
	28661.00	27207.00	18760.00	23795.00	26680.00	28044.00	26795.00	2000 m ³ /Day

Hence, the water consumption is 893.17 m³/day.

Analyzed by


Arti Singh

Verified by

Sunil Kumar Choudhary



MEGHALAYA CEMENTS LIMITED

Six Monthly Reports: Stack Emission Report, 2018-2019

Chimney		Suspended Particulate Matter (PM):mg/Nm ³							Concentration not to exceed, in mg/Nm ³
		Apr 2018	May 2018	June 2018	July 2018	Aug 2018	Sep 2018	Avg.	
Pr. Crusher		24.23	26.13	21.60	22.50	20.69	18.20	22.225	30
Sec. Crusher		25.18	28.09	19.70	24.36	26.92	20.80	24.175	30
Coal mill 1		28.07	29.09	27.40	29.579	28.69	29.70	28.755	30
Coal mill 2		28.04	29.01	29.10	28.01	29.19	29.50	28.808	30
RABH 1	PM	15.00	19.60	19.80	21.20	18.70	14.90	18.20	30
	SO ₂	729.50	845.0	779.10	856.80	873.50	931.70	835.933	1000 (Based on pyritic sulphur presence in limestone)
	NO _x	392.60	266.2	265.10	316.20	446.00	386.80	345.483	600
RABH 2	PM	16.90	18.2	16.90	19.60	15.90	17.90	17.566	30
	SO ₂	758.26	899.1	866.50	813.06	895.80	815.50	841.37	1000 (Based on pyritic sulphur presence in limestone)
	NO _x	381.58	271.0	281.70	303.76	433.60	358.0	338.273	600
ESP 1		29.70	28.4	27.40	25.80	26.40	27.40	27.516	30
ESP 2		29.30	28.8	28.60	26.30	27.10	26.30	27.733	30
Cement Mill No-1		23.09	25.62	26.10	21.39	25.38	22.40	23.997	30
Cement Mill No-2		21.75	28.12	22.80	24.54	27.53	18.80	23.923	30
Packing House-1		17.51	17.64	25.80	18.75	22.58	21.00	20.563	30
Packing House-2		22.22	24.71	23.70	22.91	27.56	19.48	23.43	30

MEGHALAYA CEMENTS LIMITED

Six Monthly Report (CPP): PM & AAQ Report, 2018-19

Location: CPP		<u>Suspended Particulate Matter (PM):mg/Nm³</u>							
		Apr 2018	May 2018	June 2018	July 2018	Aug 2018	Sep 2018	Avg.	Concentration not to exceed, in mg/Nm ³
Chimney	PM	32.40	37.4	35.30	24.70	32.0	31.50	32.216	50
	SO ₂	565.60	548.3	476.90	532.80	571.20	504.30	533.183	600
	NO _x	274.55	270.5	262.60	275.60	282.0	272.50	272.958	300
<u>Ambient Air Quality (AAQ):µg/m³</u>									MoEF notification G.S.R 826(E), dated 16.11.2009, Concentration not to exceed,
S↔E	PM ₁₀	72.54	69.77	68.66	61.08	47.84	60.44	63.388	100
	PM _{2.5}	40.58	40.17	41.16	43.92	30.56	42.02	39.735	60
	SO ₂	16.72	12.88	11.80	12.40	10.40	11.66	12.64	80
	NO _x	22.40	23.48	26.44	28.62	19.78	21.40	23.687	80
S↔W	PM ₁₀	67.81	64.62	62.47	60.86	47.91	54.38	59.675	100
	PM _{2.5}	39.27	39.78	40.62	43.65	29.28	41.76	39.06	60
	SO ₂	12.88	18.10	10.40	14.40	11.90	16.40	14.01	80
	NO _x	23.64	28.80	22.64	28.66	21.88	29.60	25.87	80
N↔E	PM ₁₀	63.11	79.32	77.38	64.61	52.40	58.55	65.89	100
	PM _{2.5}	39.12	45.27	44.26	39.26	26.20	41.78	39.31	60
	SO ₂	10.90	17.76	9.80	11.40	12.72	14.86	12.90	80
	NO _x	21.48	26.70	21.72	20.48	21.40	24.66	22.74	80
Analyzed by		<div>  Arti Singh </div> <div>  Sunil Kumar Choudhary </div>							

MEGHALAYA CEMENTS LIMITED

Six Monthly Report: Ambient Air Quality Report, 2018-2019

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,
		Apr 2018	May 2018	June 2018	July 2018	Aug 2018	Sep 2018	Avg.	
DG House	PM ₁₀	79.40	70.95	31.80	13.10	21.52	19.37	39.357	100
	PM _{2.5}	48.20	44.30	19.70	12.96	17.26	16.57	26.498	60
	SO ₂	20.59	22.84	18.24	17.84	20.94	22.48	20.488	80
	NO _x	15.86	13.68	11.94	10.58	12.91	14.21	13.197	80
Guest House	PM ₁₀	66.20	64.72	23.70	10.56	22.69	20.54	34.735	100
	PM _{2.5}	28.40	26.90	18.20	9.72	19.52	18.67	20.235	60
	SO ₂	19.49	21.44	17.44	16.94	20.54	21.58	19.572	80
	NO _x	14.54	13.48	10.44	11.52	11.71	13.41	12.517	80
Crusher	PM ₁₀	88.20	84.53	44.70	12.23	23.39	21.48	45.755	100
	PM _{2.5}	52.60	49.25	21.40	11.05	18.65	17.56	28.418	60
	SO ₂	22.42	21.76	20.24	22.64	21.46	24.48	22.167	80
	NO _x	16.76	14.48	13.64	12.28	13.61	12.31	13.847	80

NOTE: - ND = Note detected due to less concentration.

Analyzed by



Arti Singh


Sunil Kumar Choudhary

MEGHALAYA CEMENTS LIMITED

Location		Meteorological Data (Monthly Avg.)					
		Apr 2018	May 2018	June 2018	July 2018	Aug 2018	Sep 2018
Temperature	Min	12.57	6.46	7.68	9.94	10.63	6.59
	Max	28.38	30.21	32.21	33.36	33.06	31.15
	Avg.	21.69	19.21	18.97	19.35	21.17	19.91
Humidity	Min	24.90	41.89	43.10	45.96	50.34	49.73
	Max	91.13	91.15	91.18	91.18	91.18	91.19
	Avg.	69.26	81.87	88.65	89.70	88.56	88.98
Rain Fall	MTD	310	875.31	1761.99	1149.16	574.15	709.648
	YTD	310.00	1134.00	2819.50	4554.00	5129.00	5825

Analyzed by



Arti Singh


Sunil Kumar Choudhary



MEGHALAYA CEMENTS LIMITED
CAPTIVE POWER PLANT - 10 MW
WATER ANALYSIS REPORT

ANNEX - III

Date: 10.04.2018

SL NO	PARAMETER	UNIT	D/F WATER		FEED WATER		C/D		SAT STEAM		S/H STEAM		CONDENSER		RAW WATER	COOLING WATER		
			NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	MEAS URED	NORM	MEASURED (Shift A)	MEAS URED (Shift B)
1	pH		8.5 - 8.8		8.5 - 9.2		9.8 - 10.2	10.08	8.8 - 9.2		8.8 - 9.2		8.8 - 9.2					
2	Conductivity	µS/cm	5		10		200	92	5		5		5					
3	TDS	ppm	3		5		100	102	3		3		3					
4	Total hardness	ppm						104										
5	Ca Hardness	ppm						11										
6	Mg Hardness	ppm						11										
7	P. Alkalinity	ppm						7										
8	M. Alkalinity	ppm						12										
9	Silica	ppm	<0.02		<0.02		<5	1.20	<0.02		<0.02		<0.02					
10	Phosphate	ppm					<10	4.92										
11	Iron	ppm																
12	Hydrazine	ppm			<1													
13	Chloride	ppm																
14	FEC	ppm																
15	Turbidity	NTU																
16	Cr ⁶⁺							0.017										

[Signature]



ANNEX-III



MEGHALAYA CEMENTS LIMITED
CAPTIVE POWER PLANT - 16 MW
WATER ANALYSIS REPORT

Date: 14.05.2018

SL NO	PARAMETER	UNIT	DM WATER		FEED WATER		CSD		SAT. STEAM		S.H. STEAM		CONDENSER		RAW WATER		COOLING WATER		
			NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED (Shift A)	MEAS URED (Shift B)
1	pH		8.5 - 8.8		8.8 - 9.2		9.8-10.2	10.15	8.8-9.2		8.8-9.2		8.8-9.2						
2	Conductivity	µS/cm	5		10		200	28	5		5		5						
3	TDS	ppm	3		5		100	168	3		3		3						
4	Total hardness	ppm						1011											
5	Ca Hardness	ppm						11											
6	Mg Hardness	ppm						11											
7	P- Alkalinity	ppm						7											
8	M- Alkalinity	ppm						12											
9	Silica	ppm	<0.02		<0.02		<0.1	1.17	<0.02		<0.02		<0.02						
10	Phosphate	ppm					<10	466											
11	Iron	ppm																	
12	Hydrazine	ppm			<0.1														
13	Chloride	ppm																	
14	FRC	ppm																	
15	Turbidity	NTU																	
16	Cr ⁶⁺							0.020											

Signature



ANNEX - III



MEGHALAYA CEMENTS LIMITED

CAPTIVE POWER PLANT - 10 MW

WATER ANALYSIS REPORT

Date: 08.06.2018

SL NO	PARAMETER	UNIT	DM WATER		FEED WATER		CBU		SAT. STEAM		SH STEAM		CONDENSER		RAW WATER	COOLING WATER		
			NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	MEAS URED	NORM	MEAS URED (SHR A)	MEAS URED (SHR B)
1	pH		8.5 - 8.8		8.5 - 9.2		8.8 - 10.2	10.64	8.5 - 9.2		8.8 - 9.2		8.8 - 9.2					
2	Conductivity	µS/cm	5		10		200	32	5		5		5					
3	TDS	ppm	3		5		100	192	3		3		3					
4	Total hardness	ppm						122										
5	Ca Hardness	ppm						11										
6	Mg Hardness	ppm						11										
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					
10	Phosphate	ppm					<10	5.18										
11	Iron	ppm																
12	Hydrazine	ppm			<0.1													
13	Chloride	ppm																
14	FRC	ppm																
15	Turbidity	NTU																
16	Cr ⁶⁺							0.016										



ANNEX-III



MEGHALAYA CEMENTS LIMITED
CAPTIVE POWER PLANT - 16 MW
WATER ANALYSIS REPORT

Date: 11.07.2018

SL NO	PARAMETER	UNIT	DM WATER		FEED WATER		CBO		SAT STEAM		S.H. STEAM		CONDENSER		RAW WATER	COOLING WATER		
			NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	MEAS URED	NORM	MEASURED (SHM A)	MEAS URED (SHM B)
1	pH		8.5 - 8.8		8.8 - 9.2		9.8-10.2	9.98	8.8-9.2		8.8-9.2		8.8-9.2					
2	Conductivity	µs/cm	5		10		200	22	5		5		5					
3	TDS	ppm	3		5		100	19.2	3		3		3					
4	Total hardness	ppm						111										
5	Ca Hardness	ppm						11										
6	Mg Hardness	ppm						11										
7	P- Alkalinity	ppm						3										
8	M- Alkalinity	ppm						7										
9	Silica	ppm	<0.02		<0.02		<5	0.21	<0.02		<0.02		<0.02					
10	Phosphate	ppm					<10	0.78										
11	Iron	ppm																
12	Hydrazine	ppm			<0.1													
13	Chloride	ppm																
14	FRC	ppm																
15	Turbidity	NTU																
16	Cr ⁺⁶							0.018										





MEGHALAYA CEMENTS LIMITED

CAPTIVE POWER PLANT - 10 MW

WATER ANALYSIS REPORT

ANNEX-III

Date: 09.08.2018

SL NO	PARAMETER	UNIT	DM WATER		FEED WATER		CRD		SAT. STEAM		S.H. STEAM		CONDENSER		RAW WATER	COOLING WATER		
			NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	NORM	MEAS URED	MEAS URED	NORM	MEASURED (Shift A)	MEAS URED (Shift B)
1	pH		8.5 - 8.8		8.8 - 9.2		8.8-10.2	10.0	8.8-9.2		8.8-9.2		8.8-9.2					
2	Conductivity	µS/cm	5		10		200	30	5		5		5					
3	TDS	ppm	3		5		100	18	3		3		3					
4	Total hardness	ppm						10/1										
5	Ca Hardness	ppm						1										
6	Mg Hardness	ppm						1										
7	P- Alkalinity	ppm						1										
8	M- Alkalinity	ppm						1.2										
9	Silica	ppm	<0.02		<0.02		<5	0.28	<0.02		<0.02		<0.02					
10	Phosphate	ppm					<10	5.82										
11	Iron	ppm																
12	Hydrazine	ppm			<0.1													
13	Chloride	ppm																
14	FRC	ppm																
15	Turbidity	NTU																
16	Cr ¹⁵							0.08										

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ANNE X - III



MEGHALAYA CEMENTS LIMITED
CAPTIVE POWER PLANT - 10 MW
WATER ANALYSIS REPORT

Date: 10.09.2018

SL NO	PARAMETER	UNIT	DM WATER		FEED WATER		CBO		SAT. STEAM		S.H. STEAM		CONDENSER		RAW WATER	COOLING WATER		
			NORM	MEAS. URED	NORM	MEAS. URED	NORM	MEAS. URED	NORM	MEAS. URED	NORM	MEAS. URED	NORM	MEAS. URED	MEAS. URED	NORM	MEAS. URED (Shift A)	MEAS. URED (Shift B)
1	pH		8.5 - 8.8		8.5 - 9.2		9.5 - 10.2	10.04	8.5 - 9.2		8.5 - 9.2		8.5 - 9.2					
2	Conductivity	µS/cm	5		10		200	36	5		5		5					
3	TDS	ppm	3		5		100	18	3		3		3					
4	Total hardness	ppm						112										
5	Ca Hardness	ppm						11										
6	Mg Hardness	ppm						11										
7	P- Alkalinity	ppm						7										
8	M- Alkalinity	ppm						12										
9	Silica	ppm	<0.02		<0.02		<5	0.20	<0.02		<0.02		<0.02					
10	Phosphate	ppm					<10	5.96										
11	Iron	ppm																
12	Hydrazine	ppm			<0.1													
13	Chloride	ppm																
14	FRC	ppm																
15	Turbidity	NTU																
16	Cr ⁶⁺							0.017										



YEAR WISE PLANTATION DETAILS **MEGHALAYA CEMENTS LIMITED**

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

Year	Saplings planted (Nos.)	Area covered (Hect.)	Saplings Survive (Nos.)	Survival Rate	Date: - 27-10-2018 Remarks
2009-10	10630	1.063	6909	65.00%	Planted near Office Campus, Residential Blocks, Children Park, Guest House, Temple and Road side.
2010-11	4485	0.4485	3304	73.67%	CPP Campus,
2011-12	1425	0.1425	1271	89.19%	CPP Campus.
2012-13	1725	0.1725	1609	93.28%	CPP Campus, Lawn of residential blocks & Dispensary.
2013-14	1793	0.1293	1365	7612.94%	Planted in the Topcem Public School Campus, Children Park & Approach Road side.
2014-15	7904	0.8	5532	69.99%	CPP Campus, Along Plant Boundary & Crusher Road side.
2015-16	12905	1.7	9290	71.99%	Approach Road side, CPP Campus, Along Plant Boundary & Dispensary Campus.
2016-17	52700	1.79	42149	79.98%	Along Plant Boundary & Behind Scrap Yard near Civil Office by 'Akira Miyawaki' Method.
2017-18	3820	0.545	3094	80.99%	Planted in the Topcem Public School Campus and CPP Campus & Interspaces in plant boundary and road side. Residential colonies,
2018-19	3500	0.3045	2736	78.17%	Planted near crusher side & Interspaces in plant boundary and road side.
Total	97387	7.0953	74523	76.52%	

Note: - 1. We have naturally grown green belt area of 2.45 hectares and 10.5 hectares situated at north eastern and south-eastern part of the plant area and we are maintaining the said area regularly. Therefore, the total area under green belt is **20.045 hectares**.

2. Another Three Blocks such as near main Gate no-1 (0.26 ha), behind Main Gate no-1 (1.33 ha) and inbetween Khliehjeri and South Khliehjeri mines (1.2 ha) = **2.79 Hectares**.

Total Plantation as on 30.03.2018 = 22.835 hectares.



Biodiversity inventorization and conservation through assisted regeneration of RET species in limestone mining area of Meghalaya Cements Ltd.

HALF YEARLY REPORT (April 2018-September 2018)

Work Components:

1. Survey and inventorization of project area : An intensive survey of the project area will be conducted to create an inventory of the flora (tree species) and fauna (mammals).
2. Setting up of nursery for propagation of species as per TOR and recommendations of SEIAA.
3. Afforestation / regeneration / gap filling of the project area as allocated by MCL.
4. Planting and conservation of bird and mammal food plant species (grasses wild fruit trees etc.) based on assessment of camera trap data

Formulation of Eco Development Plan and recommendations for medium/ long term upkeep of project area.

Reporting period : **April 2018-September 2018.**

Work component 1 : Work component 1 has been completed as detailed in earlier report.

Work component 2 : The fabrication of nursery has been completed. The soil preparation in the nursery is also in progress.

The selection of species as per the TOR and recommendations of SEIAA was initiated. The Meghalaya Biodiversity Board was approached for permission to collect *Nepenthes khasiana* but the same was denied. Therefore natural populations of other selected species in accordance to the list provided in TOR is being undertaken. One species has been selected and collected samples are being kept in the nursery for further propagation.

Specimens of *Fimbristylis nigrobrunnae* were collected from Dainthlen, Sohra, East Khasi Hills after detailed reference from the herbarium of Botanical Survey of India, Shillong. The species was then transferred to TOPCEM for plantation and rejuvenation and the specimens are being nursed by the concerned Department of Meghalaya Cement limited for acclimatization, before transplanting in the designated area in the project site.



Orchids species were collected from Moopun falls, Mukhaialong, East Jaintia Hills, Meghalaya and Mawsawa, Sohra, Meghalaya. The collected species were then brought to TOPCEM for re-plantation in green house.

Jack fruit seedlings for plantation were also collected from Umsning, Ribhoi, Meghalaya but failed to survive.

***Phyllanthus emblica* seeds extraction.**

Material and methods.

Amla fruits were collected from local market. The seeds are extracted by alternate boiling and drying .

The amla fruits were thoroughly cleaned under tap water to remove dust, it was then boiled for about 15 min for easy removal of fleshy parts.

After removing the fleshy pulp of amla/gooseberry fruits, the seeds were then sun dried for 2-3 days. When the seed coat broke along the ridges, seed coat and seeds were separated out manually. Seeds were then collected and stored for planting.

A Survey was carried out in Nongwet village, Pynursla and Nonthymmai, Tyrna village East Khasi Hills for locating natural populations of two of the listed rare and endangered species i.e *Argostemma khasianum* and *Begonia rubrovenia*. *Begonia rubrovenia* was spotted in both the surveyed sites and specimens have been collected for replantation in the project area (TOPCEM). However, during the current years monsoon, stormy weather damaged the greenhouse. The same is under repair. The species that were being nursed and hardened in the greenhouse have survived, and appropriate nursery operations are being undertaken. *Begonia rubrovenia* is being propagated through stem cutting outside green house. Orchids were also transplanted from green house to a trees outside the green house.

Work Component 3. The following species (Table 1) are recommended for plantation and gap filling in the project area (as reported earlier).

Table.1 Some of the tree species that are proposed for planting in the project area.

Sl.no	Scientific name
1.	<i>Alnus nepalensis</i>
2.	<i>Syzygium cumini</i>
3.	<i>Rhus javanica</i>
4.	<i>Schima wallichii</i>
5.	<i>Syzygium formosum</i>
6.	<i>Grevellia robusta</i>
7.	<i>Daubanga grandiflora</i>
8.	<i>Phyllanthus emblica</i>
9.	<i>Sapium baccatum</i>
10.	<i>Actinodaphne obovata</i>
11.	<i>Lithocarpus fenestratus</i>
12.	<i>Castonopsis tribuloides</i>



200 saplings of indigenous tree species, and fruit species were introduced in the project area. The saplings were collected from the Forest Department Social Forestry, Jowai Range. These saplings were propagated by planting out nursery raised seedlings at a spacing of 1M*1M in 30 cm deep pits. The plantation area has been fenced to ensure that the seedlings/saplings are established without disturbance. Some of the species that were introduced are listed below (Table 2)

Table 2. List of species introduced in the project area for gap filling

Sl.no	Scientific name	Family	Common name
1	<i>Alnus nepalensis</i> D.Don	Betulaceae	Alder
2	<i>Chukrasia tabularis</i> A.Juss	Meliaceae	Indian mahogany
3	<i>Castanopsis tribuloides</i> (Sm.) A.DC.	Fagaceae	
4	<i>Syzygium.sp</i>	Myrtaceae	
5	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn	Combretaceae	Arjun tree
6	<i>Grevillea robusta</i> A.Cunn. ex R.Br.	Proteaceae	Silver oak
7	<i>Exbucklandia populnea</i> (R.Br. ex Griff.) R.W.Br.	Hamamelidaceae	Pipli tree
8	<i>Azadirachta indica</i> A.Juss.	Meliaceae	Neem

Component 4. The questionnaire survey to account for the existing fauna in the project area and its surroundings has been completed as presented in the earlier report

Shillong

11 October, 2018



D. Paul, PI

MEGHALAYA CEMENTS LIMITED

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

The revenue expenditure incurred on an environmental protection equipments / Machineries,
from 01st April' 2018 to 30th Sept'2018.

Sl.No	Type	Heading	Amount in Rs.
1.	Revenue	Bag Filters (Cement mill, Raw mill, Coal mill & Crusher)	6,48,699.00
2.		ESP	22,52,216.05
3.		RABH	4,91,626.73
4.		Raw Material Yard	49,099.49
5.		Sewage Treatment Plant & Neutralization Pit	8,293.27
Gross Total			Rs.3449934.54

For MEGHALA CEMENTS LIMITED


Authorized Signatory





MEGHALAYA CEMENTS LIMITED

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

The Capital expenditure incurred on an environmental protection equipments / Machineries,
from 01st April' 2018 to 30th Sept'2018.

Sl.No	Type	Heading	Amount in Rs.
1.	Capital	SO ₂ Reduction System	5,73,388.00
Gross Total			Rs. 5,73,388.00

For MEGHALA CEMENTS LIMITED


Authorized Signatory





MEGHALAYA CEMENTS LIMITED

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

Expenditure Incurred for Socio-Economic Development under CSR activities
from 01st April' 2018 to 30th Sept'2018.

Sl.No	Heading	Amount in Rs.
1.	Emphasis on Education	132,000.00
2.	Encouraging/Felicitation program for Students.	22,000.00
3.	Polio Immunization Camps, family planning, etc.	421,442.00
4.	Infrastructure development of Hospitals / Schools	233,440.00
5.	Cement Distribution Programme.	2,852,300.00
6.	Plant Distribution programme	281,389.00
7.	Donation to Churches, Road & House Repairing etc.	55,000.00
8.	Drinking water supplying scheme.	182,883.00
9.	Village development funds.	300,000.00
Gross Total		4,480,454.00

For MEGHALA CEMENTS LIMITED


Authorized Signatory



