



MEGHALAYA CEMENTS LIMITED

CIN- U26942ML2003PLC007125



Ref: MCL/ENV/MoEF&CC/Compliance-II/2025-26/12

Date-23/06/2025

To,

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

Sub: - Submission of half yearly compliance report for limestone mines for an area of 31.05 Ha for the period of **October'2024 to March'2025**.

Dear Sir,


We are hereby furnishing the half yearly compliance report (hard copy and soft copy) for the period from **October'2024 to March'2025** on Environmental Stipulations for limestone mining for an area of 31.05 Ha, at South Khliehji at Village- Thangskai, East Jaintia Hills District, Meghalaya, vide your Environment Clearance letter no SEIAA/ (PR-19/2012) PT/PR-05/2015/444 dated: 9th Jan 2017.

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

Thanking You,

Yours Faithfully,

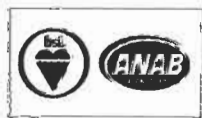
For **MEGHALAYA CEMENTS LIMITED**


(Authorized Signatory)

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.



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Half yearly Compliance Report (for the period October'2024 to March'2025) on Environmental Stipulations for limestone mining for an area of 31.05 Ha, at South Khliehjeri, Thangskai Village, Khliehriat, East Jaintia Hills by M/s – Meghalaya Cements Ltd., (MCL) – Environmental Clearance Letter No. SEIAA/ (PR-19/2012) PT/PR-05/2015/444; Dated 9th Jan 2017.

Sl. No. as per letter dated 09.01.2017 of State Environment Impact Assessment Authority.	Compliance Status
A. SPECIFIC CONDITIONS	
(i) The Project proponent (PP) shall obtain the requisite Wildlife Clearance from the National Board for Wildlife before operationlising the project.	Complied With The project area does not fall within the area of Eco Sensitive zone and the Project Proponent (PP) has obtained the requisite Wildlife Clearance from Divisional Forest Officer (Wildlife), Jaintia Hills, Wildlife Division, Jowai, (through office of APCC govt. of Meghalaya, Letter No. FWC/G/278/pt/928, Dated 6 th June 2018). Copy of the Wildlife Clearance is attached as an (Annexure-I)
(ii) Mining activities shall be restricted to the 31.05Ha. Which is identified as the 'non – forest area'and shall not be extended to any other area.	Agreed to Comply. Mining activities is restricted to the 31.05Ha,which is identified as the 'non – forest area'and will not be extended to any other area at any condition. The bounded co-ordinates for the 31.05 Ha South Khliehjeri Limestone Mining are as below: - Latitude: - N 25,11,50.0 to N 25,12,21.8 Longitude: - E 92,23,20.8 to 92,23,44.1
(iii) The revised mining plan is valid for 5 years only. After its expiry, The PP shall submit another mining plan,duly approved by the authorized agency.	Agreed to Comply. Review of Mining Plan with Progressive Mine Closure Plan has been submitted under Rule 17(2) of MCR, 2016 to the authorized agency (Indian Bureau of Mines) for South Khliehjeri Limestone Mine (Area-31.05 Ha) vide letter no IBM/GHY/MEG/EJNH/MP-81, dated 07/09/2021. The Lease period of Mines is 10/01/2017 to 09/01/2067 and Period of Proposal is 2021-22 to 2025-26.After its expiry, the revises mining Plan will be submitted to the Indian Bureau of Mines.
(iv) The PP shall obtain Consent to Operate (CTO) from the State Pollution Control Board, Meghalaya, within 2 (two) months from the date of issue of the EC and copy of the same shall be forwarded to the SEIAA, Meghalaya and the MoEF&CC, Regional Office, Shillong. The PP shall effectively implement all the conditions stipulated therein in the CTO.	Complied with. The PP hasobtained Consent to Operate(CTO) from the State Pollution Control Board, Meghalaya, vide CTO No.-ONLINE RCTO(R-1) EJHD 2021/2024-2025/57, Dated Shillong the 26 th June'2023& it is valid upto 28 th February 2025under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974, as amended and under Section 21 of the Air (Prevention & Control of Pollution) Ac, 1981, as amended (to be referred as Water Act & Air Act respectively). The Consent to Operate granted in favour of the Project vide TO Order no. MPCB/CON-191-2016/2016-2017/15, dated



		24.02.2018 for operating a 31.05 Ha Limestone Mines and subsequent renewal located at Thangskai, East Jaintia Hills District. The PP has effectively maintaining the General and Specific conditions and submitted to MsPCB. Consent to Operate is valid for 1 (one) year i.e. 28.02.2025, Further, PP has applied for renewal of Consent to Operate to MePCB. Application details is attached as an annexure-II .
(v)	The Project Proponent should ensure that the mining activities shall not disturb the caves existing nearby the mining lease area.	Complied with. We have conducted Scientific study and designing of controlled blasting pattern for carrying out safe and scientific blasting operation to combat environmental pollution such as Air, Noise and Land within permissible limit by Central Institute of Mining and Fuel Research (CIMFR) Jharkhand. As per report no ground vibration in term of peak particle velocity measured by using seismographs beyond a distance of 500 meters from the mine lease boundary of South Khliehjar limestone mines. And we are following controlled blasting as per guidelines provided by CIMFR. Detailed report for the Scientific study has been submitted to IRO-Shillong vide letter no. MCL/Env/MoEF&CC/2022-23/39, dated 11 th Jan 2023.
(vi)	The PP shall ensure that a Biodiversity Conservation Plan with focus on conservation of the schedule –I species in the area, is prepared in consultation with the Forests and Environment Department, Meghalaya. The PP shall ensure adequate budgetary provisions and indicate a timeline for the implementation of the plan. The plan shall be submitted to the SEIAA and the NE regional office of the MoEF& CC, Shillong within a period of 1 year from the date of issue of EC.	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: Orchidaceae, Cattelya Orchidaceae, Cymbidium Orchidaceae, Nepenthes Khasiana and Begonia rubrovenia has been initiated. Also, Company has approached to Forest and Environment Department for better conservation of Biodiversity. Project report on Biodiversity Inventorization and Conservation through Assisted Regeneration of RET Species has submitted to IRO-Shillong vide letter no.- MCL/ENV/MoEF&CC/ Compliance LS-I/2022-23/33, dated 2nd Dec 2022.



(vii)	The Action Plan as spelt out in the EIA Report and on the issues raised during the Public Hearing dated 17/12/2014 shall be implemented by the PP with adequate budgetary provisions. The PP shall complete all the tasks within 1 (one) year and submit a Report to the SEIAA, Meghalaya, and the NE Regional Office, MoEF&CC.	Agreed to Comply. The PP has undertaken and completed all the tasks related to the EIA Report and issues raised during the Public Hearing dated 17/12/2014 accordingly and submitted the detailed report with action plan and compliance status and its implementation to the SEIAA, Meghalaya, and the NE Regional Office, MoEF&CC. Detailed budgetary report against the individual action taken is attached here as Annex – III & III-a.
(viii)	Proponent shall be appoints an Occupational Health Specialist for the medical examination of the workers engaged in the project. Occupational Health check-ups shall be undertaken once in six months for workers and necessary remedial / preventive measures shall be taken. The Recommendations of National Institute for ensuring a good occupational environment for mine workers shall be implemented. The prevention measures for burns, material, and provision of anti-snake venom including all other paramedical safeguards may be ensured before initiating the mining activities.	Complied with. Proponent has appointed Competent Occupational Health Specialist including Medical Officer, Dentist, Nurse, Compounder, Lab Technician & Dresser for the medical examination of the workers engaged in the project. Occupational Health check-ups schedule is being followed as per the guideline and necessary remedial/ preventive measures are taken. The Recommendations of National Institute for ensuring a good occupational environment for mine workers are implemented. The following equipments has setup in Occupational Health for examination of workers: - ECG Machine, Audiometry, Spirometry (PFT), Cardiac Monitor, Oxygen Cylinder, Suction Machine, Nebulizer machine, Semi auto Analyzer, Micro Scope, Incubator, Centrifuge machine, Haemometer, Accucheck machine, Blood cell counter, Homocyto Meter etc. Company has 02 (Two) Ambulance in which one is Advanced life support with Cardiac monitor & Defibrillator and another one is only with Oxygen support. The prevention measures for burns, material, and provision of anti-snake venom including all other paramedical safeguards are already implemented to the workers for mining activities. List of Occupational Health check-ups of mines employees working in the South Khliehjari Limestone Mine (31.05 Ha) and details of Occupational health center including Medical staff, Equipments and testing facilities attached as an (Annexure-IV & V)
(ix)	The mining operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the Ministry of Environment, Forest and Climate Change and Central Ground Water Authority shall be obtained, for which a detailed hydro-geological study shall be carried out; The Report on six monthly basis on changes in Groundwater level and quality shall be submitted to the SEIAA, Meghalaya and the	Agreed to Comply. We have done detailed Hydro geological survey by a CGWS approved third party & as per the report no ground water found in our mining lease area. The utilization of ground water has not been done by the Project Proponent for any activities. As per the Hydro geological survey recommendation Company has established a monitoring well (Borewell & Piezometer) to interface drawn about the depth of ground water level in the mining lease hold



	Regional Office of the Ministry.	area. Detailed Hydro geological Survey report has submitted to IRO-Shillong vide letter no.- MCL/ENV/MoEF&CC/Compliance LS-I/2022-23/33, dated 2nd Dec 2022. No ground water level observed during the period of October-2024 to March-2025. Whenever the Ground water level will be observed, Company will submit the Groundwater level and quality report to IRO-Shillong on six monthly basis.
(x)	The Pollution due to transportation shall be effectively controlled. Vehicles with Meghalaya Pollution Control Board pollution clearance certificate only shall be allowed to ply. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded.	Complied with. Pollution due to transportation is being effectively controlled by proper maintenance of haul roads. Installation work for Permanent water sprinklers on Mines haul road has been done and working effectively. PUC certified vehicles are being used for transportation & other activities in mining by the PP. The mineral transportation is carried out through covered trucks only and the overloaded vehicles are not allowed for minerals transportation. Photographs of Permanent water sprinklers and PUC certificates for the vehicle using in mines is attached as an Annexure- VI&VII.
(xi)	The PP shall put in place proper rainwater harvesting measures at the site and shall also undertake conservation measures to augment groundwater resources in the area in consultation with the Central Ground water Board.	Preparation & implementation of Rainwater Harvesting Scheme has been done and plan has submitted to Central Ground Water Board, Guwahati vide Letter No. - MCL/ENV/CGWB/Comm./2022-23/31, dated: 07.11.2022. Further, CGWB-Guwahati has issued Report and give their recommendation. MCL has taken action on it and made appropriate no. of Rain water harvesting tanks and submitted Action Taken Report to Regional Director, CGWB vide letter no. MCL/ENV/CGWB/Comm./2024-24/12, Dated- 08.06.2024. Inspection done for verification of Action Taken Report. Action taken report is attached as an Annexure- VIII.
(xii)	The Project Proponent shall adopt Best mining Practices for the giving mining conditions. In the mining area adequate number of check dams, retaining walls / structures, garland drains and settling ponds should be provided to arrest the wash-off with rain water in catchment area.	Complied with. Best mining practices are being adopted by the Project Proponent for the giving mining conditions. Systematic opencast mechanized mining method being implemented to win the limestone minerals which have involved deep hole drilling and blasting, excavator and blasting by slurry explosive. Loading and hauling from the mine face being done mechanically by excavators and tipper combination. The method involves the removal of huge quantities of overburden, dumping, and backfilling of the excavated area. In the mining area adequate number



		of check dams, retaining walls / structures, garland drains and settling ponds are provided to arrest the wash-off with rain water in catchment area.																																																							
(xiii)	Use of effective sprinkler system to suppress fugitive dust on hauls roads and other transport roads shall be ensured, and cleaning of transport vehicles shall not be done outside the project area. Main haulage roads and other roads should be regularly wetted using water tankers fitted with sprinklers. Crusher and material transfer points should invariable be provided with Bag filters and or dry fogging system. Belt-conveyors should be fully covered to avoid air borne dust.	Being compiled with Mitigation measures to control fugitive dust emission are being done through permanent sprinklers & Mobile Water Tankers filled with sprinklers on hauls roads and other transport road. Main haulage roads and other roads always keep wetted to suppress fugitive dust. Photographs of Permanent Water Sprinklers are attached as an Annexure-VI . Adequate Bag filters and dry fogging system provided at Crushing & material transfer points. Belt conveyors are fully covered with proper shed to avoid air borne dust.																																																							
(xiv)	The project Proponent shall ensure that no natural water course and / or water resources shall be obstructed due to any mining operations. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of water scarcity in the area, the Project Proponent shall not use local water for the project and also shall assist in arranging water to the villagers for their use.	Agreed to comply. The project Proponent ensures that no natural water course and / or water resources will be obstructed due to any mining operations. In case of water scarcity in the area, the Project Proponent will not use local water for the project also will arrange water to the villagers for their use.																																																							
(xv)	The PP shall ensure that the lights and sounds at night at the project site do not disturb the villages and the also animals. The PP shall must ensure that the biological clock of the village(r)s is not disturbed; by orienting the floodlights / masks away from the villagers and keeping the noise levels well within the prescribed limits for day light / night hours.	Being compiled with The PP is operating the mine in daylight hours only and maintaining the noise levels within the prescribed limits for day light / night hours. Monitoring report of the Noise Level is as mentioned below: - <table><tr><th rowspan="2">Months</th><th colspan="3">Day Hrs</th><th colspan="3">Night hrs</th></tr><tr><th>Min</th><th>Max</th><th>Avg</th><th>Min</th><th>Max</th><th>Avg</th></tr><tr><td>Oct-2024</td><td>64.5</td><td>68.6</td><td>66.3</td><td>59.5</td><td>64.6</td><td>62.27</td></tr><tr><td>Nov-2024</td><td>63.7</td><td>67.8</td><td>65.8</td><td>58.7</td><td>63.8</td><td>61.47</td></tr><tr><td>Dec-2024</td><td>62.5</td><td>66.7</td><td>65.0</td><td>56.9</td><td>62.6</td><td>60.07</td></tr><tr><td>Jan-2025</td><td>61.9</td><td>64.7</td><td>63.3</td><td>52.4</td><td>55.23</td><td>57.5</td></tr><tr><td>Feb-2025</td><td>58.5</td><td>64.6</td><td>61.9</td><td>51.2</td><td>57.9</td><td>55.23</td></tr><tr><td>Mar-2025</td><td>58.7</td><td>64.8</td><td>61.9</td><td>53.4</td><td>57.9</td><td>55.97</td></tr></table>	Months	Day Hrs			Night hrs			Min	Max	Avg	Min	Max	Avg	Oct-2024	64.5	68.6	66.3	59.5	64.6	62.27	Nov-2024	63.7	67.8	65.8	58.7	63.8	61.47	Dec-2024	62.5	66.7	65.0	56.9	62.6	60.07	Jan-2025	61.9	64.7	63.3	52.4	55.23	57.5	Feb-2025	58.5	64.6	61.9	51.2	57.9	55.23	Mar-2025	58.7	64.8	61.9	53.4	57.9	55.97
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(xvi)	The PP shall not transport the minerals by road through the village, without their consent. A 'bypass' road shall preferable be constructed for the purpose of transportation of the minerals so that the impact of sounds, dust and accidents could be mitigated. The PP shall bear the cost towards the	Agreed to comply. The entire Mineral is being transported by our own haul road without using any public/village road. A 'bypass' road has been constructed for transportation of material & mineral to avoid the impact of sounds, dust and mitigation of accidents.																																																							




	widening and strengthening of existing public road network in case the same is proposed to be used for the project.	The PP are not using existing public road network for the project activates.
(xvii)	Necessary permission as per Acts & Rules shall be obtained from the Competent Authorities for Storage and use of explosives and detonators. The instructions and Rules specified therein shall be strictly adhering to.	Complied with. Necessary permission as per Acts & Rules has already been obtained from the Competent Authorities“Petroleum&Explosives Safety Organization PESO”, (Ministry of Commerce & Industries) for Storage and use of explosives and detonators. License for possess for use of Amonium Nitrate from a store house attached to explosive manufacturing unit (ANFO) situated at Survey no.: Umpeh area at East Jaintia Hills district, Meghalaya. Renewal of License no.: A/EC/MG/P3/5(A271) granted in form-3 of Ammonium Nitrate Rules,2012 on Dated 23.03.2022 and valid upto 31.03.2027. The instructions and Rules specified therein are being strictlyadhering to by the PP.The copy of License for the same attaches as Annexure-IX .
(xviii)	As per the Companies Act, 2013 and the CSR Rules, 2% of average net profit of last three years shall be made available by the PP for the socio-economic development of the neighborhood habitats. This shall be properly planned by the PP with the help of expert institutes and implemented through registered Agency as per the CSR Rules. Compliance report shall be submitted to the SEIAA, Meghalaya, the NE Regional Office of the MoEF& CC, and Shillong on a six-monthly basis.	Agreed to comply. 2% of average net profit of last three years is being made available by the PP for the socio-economic development of the neighborhood habitats. Compliance report being submitted to the SEIAA, Meghalaya, the NE Regional Office of the MoEF& CC, and Shillong on a six-monthly basis. Meghalaya Cements Limited has already engaged socio economic development of the neighborhood habitant. Detailed expenditure of CSR activities attaches as Annexure-X
(xix)	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment, Forest and Climate Change 5 years in advance of final mine closure for approval, with a copy to Mining & Geology Department, Meghalaya and the SEIAA, Meghalaya.	Agreed to comply. Final Mine Closure Plan with Corpus Fund as approved by IBM shall be submitted to MoEF&CC 5 years in advance of final mine closure for approval.

B. GENERAL CONDITIONS

(i)	No change in mining technology and scope of working shall be made without prior approval of the SEIAA, Meghalaya. No deviation shall be made in the calendar plan including excavation,	Agreed to comply. Mining is being done as per mining plan approved by Indian Bureau of Mines. There will be no change in technology and scope of work without prior
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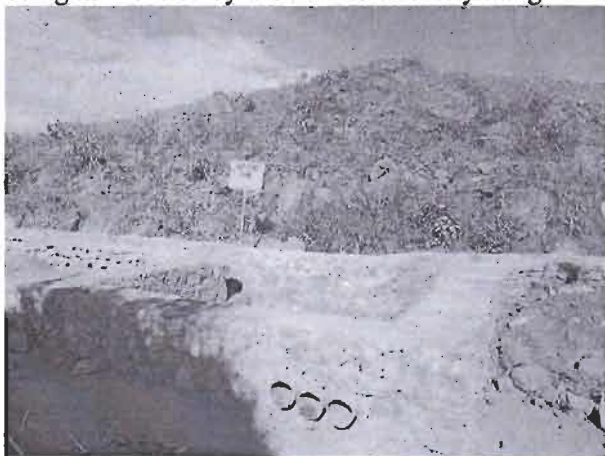


	quantum of mineral and waste.	approval of MoEF& CC. The PP has followed the calendar plan including excavation, quantum of mineral and waste as per approved mining plan vide letter no IBM/GHY/MEG/EJNH/MP-81, dated 07/09/2021. The Lease period of Mines is 10/01/2017 to 09/01/2067 and Period of Proposal is 2021-22 to 2025-26.
(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 to comply. The Project Proponent is implementing 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)	Mining shall be carried out as per the provisions outlined in mining plan approved by Indian Bureau of mines (IBM) as well as by abiding to the guidelines of Directorate General Mines Safety (DGMS).	Agreed to comply. Mining is carried out as per the provisions outlined in mining plan approved by Indian Bureau of mines (IBM) vide letter no IBM/GHY/MEG/EJNH/MP-81, dated 07/09/2021 as well as by abiding to the guidelines of Directorate General Mines Safety (DGMS).
(iii)	Sufficient number of Gullies / drainage channels shall be provided for better management of water. Regular Monitoring of pH shall be included in the monitoring plan and report shall be submitted to the NE Regional Office, MoEF& CC, Shillong and Meghalaya State Pollution Control Board (MSPCB) on six monthly basis.	Sufficient numbers of Gullies / drainage channels are provided for better management of water. Regular Monitoring of pH is being done and reports are submitted to the NE Regional Office, MoEF& CC, Shillong and Meghalaya State Pollution Control Board (MSPCB) on six monthly basis.  Testing Report is attached as an Annexure-XI .
(iv)	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haul road, loading and unloading point and transfer points. Fugitive dust emissions from all the sources shall be controlled regularly. It shall be ensured that the Ambient air parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	Complied with. Effective safeguard measures such as regular water sprinkling being done through Permanent water sprinklers & Mobile water tankers on the critical areas such as haul road, loading and unloading point and transfer points. Regular monitoring of PM10 and PM2.5 are being done in critical areas. To control the Fugitive dust emissions from all the sources, PP is taking effective safeguard measures



	Monitoring of Ambient Air Quality to be carried and record should be maintained.	<p>such as regular water sprinkling, development of green belts and fogging at unloading point and transfer points.</p> <p>Details of PM10, PM2.5 & Fugitive dust emissions are mentioned below: -</p> <table border="1"> <thead> <tr> <th>Pollutants</th><th>Location</th><th>Avg. of Last 06 months</th></tr> </thead> <tbody> <tr> <td rowspan="3">Particulate Matters PM10 ($\mu\text{g}/\text{m}^3$)</td><td>A1. North -East (Near Soil Dump)</td><td>71.40</td></tr> <tr> <td>A2. North - West (Near Haul Road)</td><td>75.80</td></tr> <tr> <td>A3. Southern side (Near Lease Boundary)</td><td>67.43</td></tr> <tr> <td rowspan="3">Particulate Matters PM2.5 ($\mu\text{g}/\text{m}^3$)</td><td>A1. North -East (Near Soil Dump)</td><td>40.20</td></tr> <tr> <td>A2. North - West (Near Haul Road)</td><td>42.35</td></tr> <tr> <td>A3. Southern side (Near Lease Boundary)</td><td>36.43</td></tr> <tr> <td rowspan="4">Fugitive dust emissions ($\mu\text{g}/\text{m}^3$)</td><td>A1. Drilling</td><td>1215.66</td></tr> <tr> <td>A2. Blasting</td><td>1899.66</td></tr> <tr> <td>A3. Loading</td><td>3006.66</td></tr> <tr> <td>A4. Unloading</td><td>1102.83</td></tr> </tbody> </table> <p>Report for the same attached as Annexure-XII</p>	Pollutants	Location	Avg. of Last 06 months	Particulate Matters PM10 ($\mu\text{g}/\text{m}^3$)	A1. North -East (Near Soil Dump)	71.40	A2. North - West (Near Haul Road)	75.80	A3. Southern side (Near Lease Boundary)	67.43	Particulate Matters PM2.5 ($\mu\text{g}/\text{m}^3$)	A1. North -East (Near Soil Dump)	40.20	A2. North - West (Near Haul Road)	42.35	A3. Southern side (Near Lease Boundary)	36.43	Fugitive dust emissions ($\mu\text{g}/\text{m}^3$)	A1. Drilling	1215.66	A2. Blasting	1899.66	A3. Loading	3006.66	A4. Unloading	1102.83
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(v)	The limestone shall be preferably transported by covered conveyor belts to the cement plants which shall be set up by the PP. The vehicles carrying the mineral shall not be overloaded. Vehicular emissions shall be kept under control and regular monitored.	<p>Being complied with</p> <p>The Limestone mines are located nearby and within a peripheral distance of 1.5 km to 2.0 km from the Cement Plant and Crusher. Hence, the cost to establish the Belt conveyor system of Limestone Transportation to crusher is more and not economical viable. Hence, the PP has been adopted the road transport deploying Shovel-Dumper combination of loading covered with enclosure to ensure minimum emission of dust while carrying of Limestone from Mines to Crusher. It is also monitored effectively to ensure that the Limestone carrying vehicles are not overloaded and vehicular emissions are under control. All the HEMM (Heavy Earth Moving Machinery) are being serviced as per periodical as well as routine maintenance. The results are remained well within the prescribed limit. Smoke density emission testing analyzed by Pollution Testing Station, Ladthalaboh, Jowai, Meghalaya for each HEMM and has been included in the compliance report as an Annexure-VII</p>																										
(vi)	The top soil, if any, shall temporarily be stored at earmarked site (s) only and shall be used for land reclamation and plantation at the earliest. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site	<p>Complied with.</p> <p>Top soil is being stored at earmarked site as per the mining plan approved by the Indian Bureau of Mines and is utilizing in greenbelt development.</p> <p>The soil and over burden (OB) generated during the</p>																										



	<p>(s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. During closure of the time the over circumstances the PP shall bring top soil from other areas to fill the pit. In the partially filled pit, the maintenance of terraces should be strictly followed to allow soil to stabilize on the terraces. It is preferable that the orchard is raised by the PP on the reclaimed. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Status shall be reflected in the six-monthly compliance reports.</p>	<p>mining operation is being stacked at designated dump site as per the approved mining plan. The height, width and angle of repose of dumps are maintaining as per the condition stipulated in the environmental clearance. OB dumps will be vegetated with native species to prevent erosion and surface run off. Geo textiles will be used by the PP for stabilization of the dump in critical areas. During closure of the time the over circumstances the PP will bring top soil from other areas to fill the pit. In the partially filled pit, the maintenance of terraces will be strictly followed to allow soil to stabilize on the terraces. Monitoring and management of rehabilitated areas will be maintained by the PP until the vegetation becomes self-sustaining.</p>
(vii)	<p>Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off or water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted and maintained properly. The sump capacity shall be designated keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site, and it shall allow adequate retention period for proper settling of silt material.</p>	<p>Complied with. Catch drain and siltation ponds has been constructed around the mine working, mineral and OB dumps to prevent the run-off water and flow of sediments directly into the river. Water collected in mine pits is being used for dust suppression and green belt development. Maintenance of drains is being done as and when required. Sedimentation tank are constructed to ensure that proper retention period for settling of silt. The Sump capacity is being maintained by the PP within safety margin.</p> 
(viii)	<p>Plantation shall be raised in a 7.5 m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting native species, following the CPCB guidelines for green belt plantation and in consultation with the DFO (Social Forestry). Greenbelt shall be developed all along the mine lease in a phased manner and shall be completed within first five years.</p>	<p>Being complied with. Project Proponent has also been carrying out plantation by maintaining a green belt of 7.5m safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc by planting native species, following the CPCB guidelines. Greenbelt is being developed all along the mine lease in a phased manner. Detailed report is attached herewith which is earlier submitted to The</p>



		Indian Bureau of Mines. <table><tr><th>Duration</th><th>No. of trees planted</th><th>Area covered (in Ha.)</th><th>No. of trees survived</th><th>Survival rate</th></tr><tr><td>Oct-Dec 2024</td><td>400</td><td>0.0</td><td>352</td><td>88.0%</td></tr><tr><td>Jan-Mar 2025</td><td>50</td><td>0.03</td><td>32</td><td>64.0%</td></tr><tr><td>Total</td><td>450</td><td>0.3</td><td>384</td><td>85.33%</td></tr></table> Detailed report attached as an Annexure-XIII	Duration	No. of trees planted	Area covered (in Ha.)	No. of trees survived	Survival rate	Oct-Dec 2024	400	0.0	352	88.0%	Jan-Mar 2025	50	0.03	32	64.0%	Total	450	0.3	384	85.33%
Duration	No. of trees planted	Area covered (in Ha.)	No. of trees survived	Survival rate																		
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Jan-Mar 2025	50	0.03	32	64.0%																		
Total	450	0.3	384	85.33%																		
(ix)	Regular monitoring of water quality, both upstream and downstream of water bodies shall be carried out; records / data shall be maintained and submitted to the NE Regional Office, MoEF&CC, Shillong and MSPCB.	Complied with. Monitoring of water quality both upstream and downstream are being maintained and records are submitted to the NE Regional Office, MoEF&CC, Shillong and MSPCB. Detailed report attached as an Annexure-XI																				
(x)	Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by stabling a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year pre- monsoon(April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to the Regional Office, MoEF&CC, Shillong, and MSPCB.	Agreed to Comply. We have done detailed Hydro geological survey by a CGWS approved third party & as per the report no ground water found in our mining lease area. The utilization of ground water has not been done by the Project Proponent for any activities. As per the Hydro geological survey recommendation Company has established a monitoring well (Borewell & Piezometer) to interface drawn about the depth of ground water level in the mining lease hold area. Detailed Hydro geological Survey report has submitted to IRO-Shillong vide letter no.- MCL/ENV/MoEF&CC/Compliance LS-I/2022-23/33, dated 2nd Dec 2022. No ground water level observed during the period of October-2024 to March-2025. Whenever the Ground water level will be observed, Company will submit the Groundwater level and quality report to IRO-Shillong on six monthly basis.																				
(xi)	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered flora and fauna in the project area.	Agreed to comply. The PP has taken all precautionary measures during mining operation for conservation and protection of endangered flora and fauna in the project area.																				
(xii)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc.	No Contract labours are employed in the mines. However, Provision has been made for the housing of company employees involved in mining activities within the site with all necessary infrastructure and facilities such as fuel for cooking, toilets, STP, safe drinking water, medical health care, creche etc.																				
(xiii)	Critical parameters such as PM _{2.5} , No _x , So _x , in the ambient air within the impact zone, peak particle	Noted for compliance. Critical parameters such as PM _{2.5} , No _x , So _x , in the																				



	<p>velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per MoEF's notification in 2009. Further, quality of discharged water shall also be monitored (TDS, DO, pH and Total suspended Solids-TSS). The data shall be uploaded on the website of the company and also prominently displayed at the project site. The circular No-J20012/1/2006-IA-II (M) dated 27.05.2009 issued by the MoEF&CC, which is available on the website of the Ministry www.envfor.nic.in shall also be referred to in this regard for its compliance.</p>	<p>ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer is being monitored periodically as per MoEF's notification in 2009. Further, quality of ETP discharged water is being also be monitored (TDS, DO, pH and Total suspended Solids-TSS).</p> <table><tr><th>Parameters</th><th>Obtained value January-25</th></tr><tr><td>pH</td><td>6.78</td></tr><tr><td>TSS</td><td>19</td></tr><tr><td>BOD</td><td>21</td></tr><tr><td>COD</td><td>68</td></tr><tr><td>Temperature</td><td>25.2</td></tr><tr><td>Oil & Grease</td><td><4.0</td></tr><tr><td>Total Residual Chlorine</td><td><0.01</td></tr><tr><td>Ammonical Nitrogen</td><td>17</td></tr><tr><td>Free Ammonia</td><td><0.01</td></tr><tr><td>Total Kjeldahl Nitrogen</td><td>32</td></tr></table> <p>The monitoring data is being uploaded on the company website https://topcem.in/ and displaying at the main gate of the project. Detailed reports are attached as Annexure- XII&XIV.</p>	Parameters	Obtained value January-25	pH	6.78	TSS	19	BOD	21	COD	68	Temperature	25.2	Oil & Grease	<4.0	Total Residual Chlorine	<0.01	Ammonical Nitrogen	17	Free Ammonia	<0.01	Total Kjeldahl Nitrogen	32
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(xiv)	<p>Industrial waste water (workshop and waste water from the mine) shall be properly collected, treated so as to conform to the standard prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of effluents.</p>	<p>Agreed to comply. Effluent Treatment Plant (ETP) with 25 KLD Capacity has already been installed at HEMM workshop. Workshop waste water is being reuse in vehicle washing and green belt development after treatment and oil sludge are being properly collected and utilize as alternative fuel in Kiln. The Testing report of Workshop waste water after treatment mentioned below: -</p> <table><tr><th>Parameters</th><th>Obtained value January-25</th></tr><tr><td>pH</td><td>6.78</td></tr><tr><td>TSS</td><td>19</td></tr><tr><td>BOD</td><td>21</td></tr><tr><td>COD</td><td>68</td></tr><tr><td>Temperature</td><td>25.2</td></tr><tr><td>Oil & Grease</td><td><4.0</td></tr><tr><td>Total Residual Chlorine</td><td><0.01</td></tr><tr><td>Ammonical Nitrogen</td><td>17</td></tr><tr><td>Free Ammonia</td><td><0.01</td></tr><tr><td>Total Kjeldahl Nitrogen</td><td>32</td></tr></table> <p>Detailed testing report is attached as Annexure- XIV.</p>	Parameters	Obtained value January-25	pH	6.78	TSS	19	BOD	21	COD	68	Temperature	25.2	Oil & Grease	<4.0	Total Residual Chlorine	<0.01	Ammonical Nitrogen	17	Free Ammonia	<0.01	Total Kjeldahl Nitrogen	32
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(xv)	<p>Personnel working in dusty areas should wear protective respiratory devices and they should also</p>	<p>Complied with. PPEs (like Nose Mask, Safety Goggles and other</p>																						



	be provided with adequate training and information on safety and health aspects.	protective equipments)are being provided to all workers. Safety and health training and Awareness are given to the workers regularly by Safety Officers.																								
(xvi)	A separate environmental management cell with suitable qualified personnel shall be set-up. The PP shall put in place an administrative mechanism to deal with environmental issues, to ensure compliance to the EC conditions and to implement the EMP, biodiversity action plan, etc. The PP shall inform the details along with the name of such responsible officials, to the SEIAA, MSPCB and the Regional Office of the MoEF& CC, Shillong. In case of any change in respect of the officials responsible, the same shall be intimated by the PP.	<p>Complied with.</p> <p>A separate environmental management cell with suitable qualified personnel is already set up and they are reporting directly to the Head of the Plant. The environmental Cell is prepared with the guidance of Indian Bureau of Mines (IBM) and the cell is looking after all the deal with environmental issues, to ensure compliance to the EC conditions and to implement the EMP, biodiversity action plan, CTO conditions of MSPCB and sustainable development of mining activitiesetc.and also responsible for the said works. The details of the environmental management cell and name of such responsible officials are attached as an Annexure-XV.</p>																								
(xvii)	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purposes. Year wise expenditure shall be reported to the SEIAA, Meghalaya and the Regional Office, MoEF&CC, Shillong.	<p>Agreed to comply.</p> <p>The funds earmarked for environment protection measure are kept in the separate account.</p> <table border="1"> <thead> <tr> <th>SL. No.</th><th>Head</th><th>Total Expenditure (in lakh)</th></tr> </thead> <tbody> <tr> <td>1</td><td>Plantation</td><td>6.45</td></tr> <tr> <td>2</td><td>Dust suppression</td><td>7.12</td></tr> <tr> <td>3</td><td>Preparation of Retaining wall, Checkdam, Siltation Tanks and Garland drains</td><td>5.27</td></tr> <tr> <td>4</td><td>PPE supply to mine workers</td><td>0.68</td></tr> <tr> <td>5</td><td>Water Treatment & Maintenance of Effluent Treatment Plant</td><td>0.50</td></tr> <tr> <td>6</td><td>Dump Compaction</td><td>2.8</td></tr> <tr> <td colspan="2">Total</td><td>22.82</td></tr> </tbody> </table> <p>Detail of expenditure is being reported to SEIAA, Meghalaya and Regional Office, MoEF& CC, Shillong on Six monthly bases.Detailed expenditures for the period of Oct-2024 to Mar-2025are attached as an Annexure-XVI.</p>	SL. No.	Head	Total Expenditure (in lakh)	1	Plantation	6.45	2	Dust suppression	7.12	3	Preparation of Retaining wall, Checkdam, Siltation Tanks and Garland drains	5.27	4	PPE supply to mine workers	0.68	5	Water Treatment & Maintenance of Effluent Treatment Plant	0.50	6	Dump Compaction	2.8	Total		22.82
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(xviii)	Environment Statement for each financial year ending 31st March in Form – V as mandated shall be submitted to MPSCB with copy of the same to SEIAA, Meghalaya and Regional Office, MoEF&CC,Shillong	Environment Statement for each financial year ending 31st March in Form – V as mandated is being submitted to MPSCB with copy of the same to SEIAA, Meghalaya and Regional Office, MoEF&CC, Shillong. Environment Statement in																								



		Form-V for FY: 2024-25 was submitted to MsPCB vide letter no. MCL/Env/MsPCB/2025-2026/08, dated 05/05/2025. Copy of the Form-V is attached as an Annexure-XVII
(xix)	The Project Proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Regional Office, MoEF&CC, Shillong, Central Pollution Control and State Pollution Control Board. The certified copy of the same shall be forwarded to the SEIAA and SEAC, Meghalaya.	Agreed to Comply. Six monthly reports on the status of the implementation of the stipulated environmental safeguards are being submitted to the Regional Office, MoEF&CC, Shillong, Central Pollution Control and State Pollution Control Board. Also submitting the certified copy of the same to the SEIAA and SEAC, Meghalaya.
(xx)	A copy of clearance letter shall be marked to concerned local bodies / NGOs, if any, from whom suggestion / representation has been received while processing the proposal.	Complied With.
(xxi)	The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance. A copy of the clearance letter shall be made available on the website of the PP.	Complied With. PP has advertised in two local newspapers i.e The Shillong times and Mawphor on dated 30 th May 2018 and 26 th May 2018 respectively widely circulated regarding the accorded of environmental clearance. A copy of the clearance letter available on the Company website https://topcem.in Newspaper advertisement are attached as an Annexure-XVIII
(xxii)	Official from the Regional Office of MoEF& CC, Shillong, MSPCB or any authorized officials, who would be monitoring the implementation of the conditions mentioned herein, shall be given full cooperation, facilities and documents / data by the PP during their inspection.	Agreed for compliance. Full co-operation is given to the official from Regional Office of the MoEF& CC, Shillong, MSPCB by furnishing the documents / data / information / monitoring reports during their inspection.
(xxiii)	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 PP do 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.
(xxi)	The SEIAA reserves the right to add or delete any conditions or safeguarding measures found necessary, and to take action including revoking the clearance granted, if conditions stipulated are not implemented by the PP or in case of submission of false document / wrong declaration.	Noted. Agreed to compile with.
(xxv)	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green tribunal Act, 2010.	Noted.



Annexure - I

Received.
16/8/18

GOVERNMENT OF MEGHALAYA
OFFICE OF THE DIVISIONAL FOREST OFFICER JAINTIA HILLS WILDLIFE
DIVISION JOWAI.

NO.MWL/JH/228/Cemt.Factory/2017-18/ 307

Dated Jowai, the 14th June, 2018.

From: - The Divisional Forest Officer,
Jaintia Hills Wildlife Division,
Jowai.

To,  18/6/18
The Meghalaya Cement Limited.

Sub :- Issue of Wildlife Clearance Certificate regarding South Khliehji lime Stone
Mine 31.05 ha at Thangskai, east Jaintia Hills, Meghalaya of
Meghalaya Cement Limited

Sir,

With reference to the subject cited above, as per your letter No Ref
MCL/Comm/DFO (Wildlife)/2018/14 Dt.30/04/2018, please find enclosed herewith the letter from the
Additional principal Chief Conservator of Forests, Wildlife & Chief Wildlife Warden, Meghalaya, Shillong
Dt. 06/06/2018 for information and necessary action

Enclosed: - as above.

Yours faithfully,


Divisional Forest Officer,
Jaintia Hills Wildlife Division, Jowai.



**GOVERNMENT OF MEGHALAYA
OFFICE OF THE ADDITIONAL PRINCIPAL CHIEF CONSERVATOR
OF FORESTS, WILDLIFE & CHIEF WILDLIFE WARDEN,
MEGHALAYA, SHILLONG**

No.FWC/G/278/Pt/928

Dated Shillong, the 6 June, 2018.

To :

✓ The Divisional Forest Officer,
Jaintia Hills WL Division,
Jowai.

am
18/6/18

Sub :-


Issue of wildlife Clearance certificate regarding South
Khliehri Lime Stone Mine 31.05 ha at thangkai, East
Jaintia Hills, Meghalaya of Meghalaya cement limited.

Ref:

No. MWL/JH/228/Cemt.Factory/2016-17/20
Dt, 18.04.2018.

With reference to your letter cited above, I am to inform
you that ~~since~~ the project in question does not fall within a Protected Area
or Eco- Sensitive Zone, the approval of Standing Committee of National
Board for wildlife is not required.

This is for your information and Necessary action.



Additional Principal Chief Conservator of Forests,
Wildlife & Chief Wildlife Warden
Meghalaya, Shillong.

RECEIPTRegd No. 168Date 8.6.18


Rcpt. From _____



Annexure-II



Meghalaya
State Pollution Control Board
mspcb



Online Consent Management & Monitoring System
Ministry of Environment, Forest and Climate Change
Government of India

Home

Consent Management

Laboratory Management

Waste Management

CESS Management

Knowledge Base

Logout

Apply For Consent

Industry Profile


Change Password

Fee Calculator

Delete InProgress Applications

Send us your feedback and suggestions

click here for any kind complaints or query




Welcome Meghalaya Cements Limited 31.05 Ha Limestone Mines

Date : 27-5-2025

In-progress Application

Completed Application

Application No	Application Date	Application For	Application Name	Type	Certificate For	Status
461499	18-02-2025 11:15	both	Meghalaya Cements Limited 31.05 Ha Limestone Mines	CTO	renew	In-progress
294518	16-03-2024 03:56	both	Meghalaya Cements Limited 31.05 Ha Limestone Mines	CTO	renew	In-progress



Details of Action Plan for the issues raised during the Public Hearing by the stakeholders of the Elaka Narpuh for 31.05 ha Limestone mines area (as per EIA) and agree to comply.

Annexure-III

Sl.No.	Issues	Action Plan	Status / Compliance
1.	During the Public Hearing concern was raised by the stakeholders that as per the environmental conditions granted to Meghalaya Cements Limited for 31.05 ha. limestone mines that the company should allocate about 40 lakh as a capital cost & 25 lakh as annual recurring cost will be kept for the various CSR activities like Health facilities (Ambulance), Education (Development School), Welfare of youth and community development.	M/s Meghalaya Cements Limited will allocate about 40 lakh as a capital cost & 25 lakh as annual recurring cost will be kept for the various CSR activities like Health facilities (Ambulance), Education (development School), welfare of youth and community development.	The detail CSR activities for financial year 2018-2019 have attached. (Annexure -IV-a) Attached herewith as CSR detail - (Annexure -IV)
2.	Local residents have demand from the company to provide the cement at cheap rate.	The company will provide cement at cheap price to local residents.	The detail of cement distribution has attached. (Annexure -IV-a)
3.	The local residents has raised the concern and requested the officials of M/s Meghalaya Cements Limited to take appropriate mitigative measures to avoid pollution to the neighboring village due to mining activities.	M/s Meghalaya Cements Limited has taken appropriate mitigative measures to avoid pollution to the neighboring village due to mining activities.	The detail of action plan has attached (Annexure -IV -a)
4.	The local residents has raised the concern and demanded that M/s Meghalaya Cements Limited should generate 60% employment for local people also the Meghalaya Cements Limited should not emit any air pollution from its plant and should not discharge any waste into rivers bodies.	M/s Meghalaya Cements Limited will provide 60% employment to local people also will not emit any air pollution from plant and should not discharge any waste into rivers bodies.	Detailed employment record for mines has attached. The employment given in the mines is controlled by the department mining of our company and the list of employee working under the mining department is already submitted. Detail action plan to mitigate air and water pollution has attached. (Annexure -IV-a)



ACTION PLAN FOR MITIGATION OF ENVIRONMENTAL POLLUTION

Annexure-III – (a)

Sl.No.	Environmental Impact	Action Plan	Status / Compliance	Cost	
				Capital cost	Recurring Cost
1.	Water pollution due to surface run-off from mines area.	a) M/s Meghalaya Cements Limited will construct check dam to avoid water contamination of local water body due to carry over sedimentation from mines area due mining activities.	The company have constructed check dam of length about 160 m at the upstream to control the runoff water to the mines and another two check dams is constructed below the waste dam and soil dam having length of about 580 m and 530 m (the last one is in progress) at the downstream.	Check dam construction -- Rs 2.1 Lacs	Cleaning – once in a year – Rs 0.25
		b) M/s Meghalaya Cements Limited will construct garland drain on both side of the haul road and around the soil dump and OB dump to avoid mixing of sediments from mines area to surface run –off.	To avoid mixing of sediments from mines area to surface run –off the company have constructed garland drain of about 1125 m long on both side of the haul roads and dumping yards.	Garland Drain construction -- Rs 2.8 lacs	Cleaning – once in a year – Rs 0.25 Lacs
2.(a)	Air pollution due to generation of fugitive dust.	a) M/s Meghalaya Cements Limited will take necessary measures to avoid generation of fugitive dust due to movement of vehicles by providing water sprinkler on haul road for dust suppression.	Water sprinkling is being carried out regularly at the loading point and unloading points, haul roads regularly to suppress the fugitive dust.	i) Water Tanker – Rs 12.0 Lacs	i) Maintenance Cost- 0.4 Lacs ii) Driver Salary – Rs- 4.08 Lacs ii) Diesel & Lubricants- Rs- 2.0 lacs



Annexure - III

(b)	b) Plantation of native species to minimize the generation of air born dust due to movement of vehicles.	The afforestation is being carried out as per the approved mining plan and EIA and EMP. A total of 2324 nos. saplings of local species have been planted as on September, 2019 with survival rate of about 77.41%.	Area preparation, Sapling cost, Fertilizer and Fencing – Rs 2.75 lacs	Watch & ward – Rs- 3.25 Lacs
(c) & (d)	Air pollution due to dust generation during mining operation.	c) M/s Meghalaya Cements Limited will use wet drilling system to avoid fugitive emission due to drilling process. d) Construction of metallic Haul Road to minimize fugitive dust generation	i) Installation of Wet drilling system to ROC – Rs 0.7 Lacs. ii) Purchase of Real-time Air Sampler – Rs 4.2 Lacs.	
3.	Modification of exhaust system of mining machineries.	M/s Meghalaya Cements Limited will upgrade the exhaust of drilling and excavation machine to mitigate exhaust emission from the machines.	Construction Cost – Rs 7.2 Lacs	Maintenance Cost – Rs 3.5 Lacs.
4.	Vibration due to use of traditional explosives.	M/s Meghalaya Cements Limited will use advance explosive (NONEL) to minimize the vibration generated during the explosion activity.	i) Flue Gas Analyzer Cost- Rs 2.15 Lacs i) Purchase of Minimate to measure ground vibration – Rs 2.47 Lacs/-	i) Spare & maintenance – Rs 0.1 Lacs i) Cost of Nonel – Rs 4.7 Lacs
5.	Maintenance of Soil Dump, OB Dump and Haul road.	Compaction of dumps and Haul roads to maintain the Stability.	i) JCB Compactor – Rs 12.0 Lacs	i) Maintenance Cost- 1.5 /- Lacs ii) Driver Salary – Rs- 2. 2 Lacs ii) Diesel & Lubricants- Rs- 0.8 lacs





PERIODIC MEDICAL EXAMINATION MEGHALAYA CEMENTS LTD



NAME BADAN KARDONG DATE OF EXAMINATION 07/02/25

DESIGNATION SR SUPERVISOR DEPARTMENT MINE/C

AGE/SEX 51/M BLOOD GROUP O (IVE) BLOOD SUGAR (R) 127 mg/dl EMPLOYEE CODE 2007

IDENTIFICATION MARK White Bald spot on upper forehead Mobile No. 961239297

ANY COMPLAINTS None

PERSONAL HISTORY None

ANY HISTORY OF ALCOHOL / SMOKING / TOBACCO NO

FAMILY HISTORY OF ANY DISEASE None

GENERAL EXAMINATION: HEIGHT 154 cm, WT 62 kg, BP 127/85 mm/Hg, PULSE 77 /min, RESP RATE 16 /min

CHEST MEASUREMENT: FULL INSPIRATION 99 cm, EXPIRATION 90 cm

EYE: Right Left

DISTANT VISION (WITH/WITHOUT GLASSES) 6/6 6/6

NEAR VISION (WITH/WITHOUT GLASSES) N/C N/C

ANY COLOUR BLINDNESS / NIGHT BLINDNESS / SQUINT / EYE DISEASES None

PALLOR / CYANOSIS / CTERUS / CLUBBING / LYMPHADENOPATHY / OEDEMA None

EARS HEARING: RIGHT Good LEFT Good ANY ORGANIC DISEASE None

AUDIOMETRY None

CNS: S1 + S2 + ANY OTHER SOUNDS None EEG (N) Study

CV: RAISED / NOT RAISED VEINS (N) None

RESPIRATORY SYSTEM: BREATH SOUNDS Good Clear TRACHEA Central

ANY CREPITS / RONCHI None SPIROMETRY None

GI SYSTEM: ABDOMEN Soft, well, non tender LIVER/SPLEEN NOT palpable

GENITOURINARY SYSTEM: EXTERNAL GENITILIA (N) HERNIA/HYDROCELE None

CNS: ANY FITS / SEIZURE / PARALYSIS / WEAKNESS None

REFLEXES: PUPILARY (N) KNEE JERK (N) ANKLE JERK (N) BABINSKY SIGN Neg

Gait (N) FREMORS None ROMBERG TEST Neg FINGER NOSE TEST (N)

MENTAL HEALTH Good FITNESS STATUS Fit

REMARKS :-

① Avoid oily fatty foods

Signature of Doctor

Medical Officer
Meghalaya Cements Ltd

DR. LANU AKASH AIMOL
RMC Regd. No. 31851
HABS. SPMC, Bikaner (Raj.)
Name & Regd No

MCL
Meghalaya Cement Ltd

Occupational Health Centre, MCL
Vill-Thangskai, P.O-Lumshnong, Dist-East Jaintia Hills, Meghalaya-793210

2007 - BADAN KARDONG
51 Years / Male / Ht 154 Cms / 62 Kgs / Non-Smoker

FVC TEST
Date: 07-02-2025 (T3)

Pred Egn: CLARITY
Ref By: NONE

Eth: Cam 100
Temp: 0°C

F (Liters/Sec)

V (Liters)

Parameter **Pred** **Pre** **Pre%** **Post** **Post%** **Imp%**

FVC	[L]	2.85	2.68	94		
FEV1	[L]	2.42	2.60	108		
FEV5	[L]		2.26			
FEV3	[L]	2.76				
FEV6	[L]					
PEFR	[L/s]	8.10	8.61	106		
FEF25-75	[L/s]	3.39	5.57	140		
FEF75-85	[L/s]		2.11			
FEF 2-12	[L/s]	6.65	7.55	114		
FEF25%	[L/s]	7.53	9.58	127		
FEF50%	[L/s]	5.47	5.85	107		
FEF75%	[L/s]	2.81	2.48	88		
FEV5/FVC	(%)		84.38			
FEV1/FVC	(%)	84.87	97.07	114		
FEV3/FVC	(%)	97.00				
FEV6/FVC	(%)					
FEV1/FEV6	(%)					
PET	(S)		2.81			
ExpTime	(S)		0.07			
LungAge	(Y)	33.00	30.00	91		
FVC	[L]		1.07			
PIFR	[L/s]		3.24			
FIF25%	[L/s]		9.38			
FIF50%	[L/s]		5.85			
FIF75%	[L/s]		2.25			
FIV 5	[L]		1.48			
FIV1	[L]		2.62			
FIV3	[L]					
FIV5/FIVC	(%)		48.15			
FIV1/FIVC	(%)		92.10			
FIV3/FIVC	(%)					

FVC %Pred

FEV1 %Pred

Pre Medication Report:
Spirometry within Normal range as FVC% >= 80 And
FEV1/FVC% > 70

Pre COPD Severity Report:
COPD Severity within Normal range

Doctor's Comments: LNL

Meghalaya Cement Ltd
THANGSKAI
Vill-Thangskai

DR. LANU AKASH AIMOL
RMC Regd. No. 31557
MBBS, SPMC, Bikaner (Raj.)
Medical Officer
Meghalaya Cement Ltd
Lanu Akash Aimol



OCCUPATIONAL HEALTH CENTER

MEGHALAYA CEMENT LTD. THANGSKAI

X-Ray Report

Name Of Patient

Prasanna Prinsuram

Age/Sex

21/male

Department

HRIS

Date

04/02/23

Trachea :

Central

Lungs Field :

Rt. clear No pneumothorax infiltrates

Cardiac Field :

Cardiac size normal in size

Aortic Knuckle

seen

Diaphragm :

Normal appearance

CP Angle :

Normal

Ribs & Other osseous structure :

no density

Soft Tissue :

Imp. @ study



Signature of Medical Officer
DR. LANU AKHOM
RMC Regd. No. 31001
MBBS, SPMC, Dikar (Rat.)
Medical Officer
Meghalaya Cement Ltd

**OCCUPATIONAL HEALTH CENTRE**

MEGHALAYA CEMENTS Ltd, Vill - Thangskai, PO - Lumshnong,
East Jaintia Hills, Meghalaya, India, 793210



Name: MR. BADAN KARDONG(2007)

Invoice No: 609

Case No: M619

Age/Sex: 52 Years / Male

Registered On: 07-02-2025 05:59 PM

Referrer: DR. LANU AKASH AIMOL

Type/Remark: Healthray Patient

Haematology

TEST	RESULT	UNIT	REFERENCE RANGE
Hemoglobin	13	g/dL	13 - 17



Sankar Singha
Lab Technician OHC MCL



Dr. Lanu Akash Aimol
RMQ OHC MCL

Annexure - IV



OCCUPATIONAL HEALTH CENTRE

MEGHALAYA CEMENTS Ltd., Vill - Thangskai, PO - Lumshnong,
East Jaintia Hills, Meghalaya India. 793210



Name: * MR. BADAN KARDONG(2007)

Invoice No: 609

Case No: M619

Age/Sex: 52 Years / Male

Registered On: 07-02-2025 05:59 PM

Referrer: DR. LANU AKASH AIMOL

Type/Remark: Healthray Patient

Biochemistry

TEST	RESULT	UNIT	REFERENCE RANGE
FASTING BLOOD SUGAR			
Fasting Blood Sugar	93	mg/dl	70 - 100



Sankar Singha
Lab Technician OHC MCL



Dr. Lanu Akash Aimol
RWG OHC MCL



OCCUPATIONAL HEALTH CENTRE

MEGHALAYA CEMENTS Ltd., Vill - Thangskai, PO - Lumsnong,
East Jaintia Hills, Meghalaya, India, 793210



Name: MR. BADAN KARDONG(2007)

Invoice No: 609

Case No: M&19

Age/Sex: 52 Years / Male

Registered On: 07-02-2025 05:59 PM

Referrer: DR. LANU AKASH AIMOL

Type/Remark: Healthy Patient

Haematology

LIVER FUNCTION TEST (LFT)

TEST	RESULT	UNIT	REFERENCE RANGE
TOTAL BILIRUBIN	1.2	mg/dl	0.3 - 1.2
SGOT (AST)	15.2	U/L	15 - 40
SGPT (ALT)	14.0	U/L	10 - 49
S. Alkaline Phosphatase	87.4	U/L	30 - 120
SERUM PROTEIN			
Total Protein	7.97	g/dL	5.7 - 8.2
Albumin	3.02	g/dL	3.2 - 4.8
Globulin	4.95	g/dL	2.5 - 3.4
A/G Ratio	0.61		0.9 - 2

Interpretation :

Note :

1. In an asymptomatic patient, Non-alcoholic fatty liver disease (NAFLD) is the most common cause of increased AST & ALT levels. NAFLD is considered as hepatic manifestation of metabolic syndrome.
2. In most types of liver disease, ALT activity is higher than that of AST; exception may be seen in Alcoholic Hepatitis, Hepatic Cirrhosis, and Liver neoplasia.
3. In a patient with Chronic liver disease, AST: ALT ratio > 1 is highly suggestive of advanced liver fibrosis.



Sankar Singh
Lab Technician OHG MCL



Dr. Lanu Akash Aimol
RMO OHG MCL



OCCUPATIONAL HEALTH CENTRE

MEGHALAYA CEMENTS Ltd, Vill - Thangskai, PO - Lumshuong,
East Jaintia Hills, Meghalaya, India, 793210



Name: MR. BADAN KARDONG(2007)

Invoice No: 609

Case No: M619

Age/Sex: 52 Years / Male

Registered On: 07-02-2025 05:59 PM

Referrer: DR. LANU AKASH AIMOL

Type/Remark: Healthy Patient

Haematology

HbA1c

TEST	RESULT	UNIT	REFERENCE RANGE
Glycosylated Hemoglobin (HbA1c)	4.71	%	4 - 5.6

Interpretation :

HbA1c result is suggestive of non diabetic adults (≥ 18 years) / well controlled Diabetes in a known Diabetic
Interpretation as per American Diabetes Association (ADA) Guidelines

Reference Group	Non-diabetic adult ≥ 18 yrs	At risk (Prediabetes)	Diagnosing Diabetes	Therapeutic goals for glycemic control
HbA1c in %	4.0-5.6	5.7-6.4	≥ 6.5	< 7.0

Interpretation :

	< 5.6 - Normal
HbA1c %	5.7-6.5 - At Risk for Diabetes
	> 6.5 - Diabetes



Sankar Singha
Lab Technician QHC MCL



Dr. Lanu Akash Aimol
RMO QHC MCL



Name: Private

Department: Private

Employee code: 2007

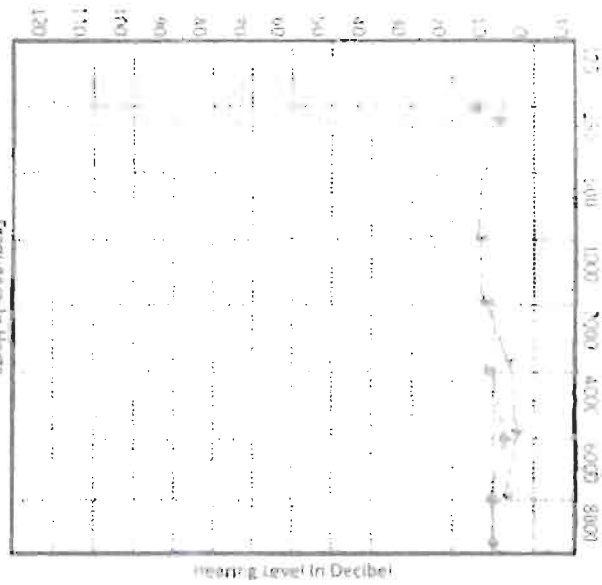


Age: 51

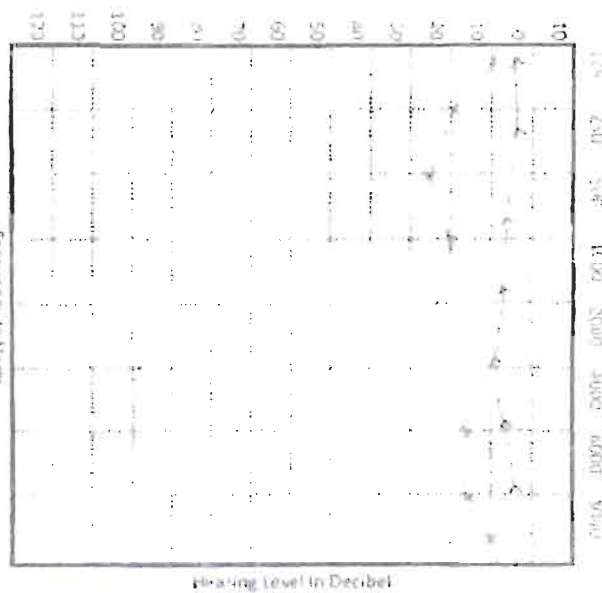
Sex: Male

Date: 4/2/25

RIGHT



LEFT



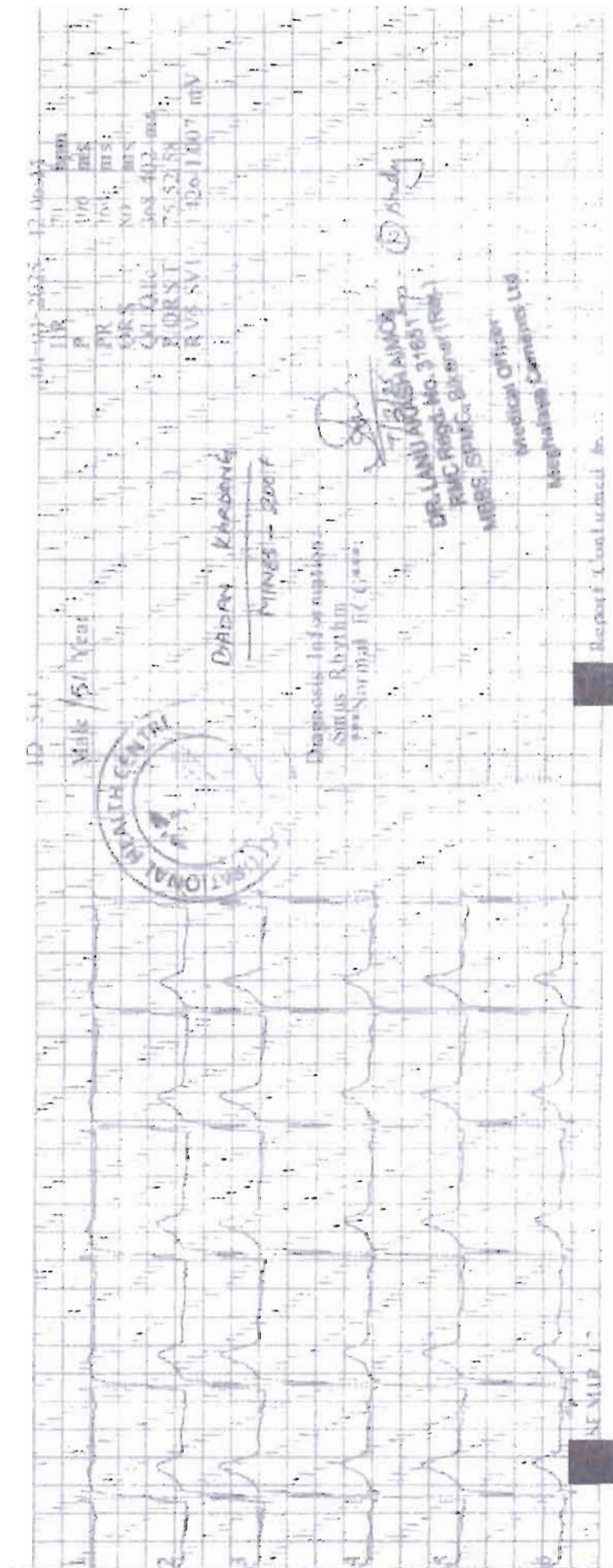
Comments	Defenses/Objections/Findings/Remarks
Past Illness	TB, Rheumatoid Arthritis, Measles, Mumps, N/A
Occupational Exposure	STP, Cement, Silica, Dust, Noise, Vibration
Other Exposure	None

AC	BC
Right	0
Left	0

AC	air conduction
BC	bone conduction
AC	Red Curve
BC	Blue Curve

Remarks: Pl. Hearing Aids Date: 4/2/25

DR. SUNDHAKSHI MANOJ
Public Regd. No. 31061
MBBS, Sp. LCC, BLS, PALS
Medical Officer
Meghalaya Cement Ltd





PERIODIC MEDICAL EXAMINATION MEGHALAYA CEMENTS LTD



NAME: UDAY Kumar Terna DATE OF EXAMINATION: 20/02/20

DESIGNATION: ENGINEER DEPARTMENT: Mines

AGE/SEX: 48/M BLOOD GROUP: O (ve) BLOOD SUGAR (F): 106 mg/dl EMPLOYEE ID: 2578

IDENTIFICATION MARK: Cut mark on right forehead Mobile No: 9485181651

ANY COMPLAINTS: None

PERSONAL HISTORY: None

ANY HISTORY OF ALCOHOL / SMOKING / TOBACCO: None

FAMILY HISTORY OF ANY DISEASE: No

GENERAL EXAMINATION HEIGHT: 172 cm, Wt: 75 kg BP: 130/90 mm/Hg PULSE: 77 /min RESP RATE: 16 /min

CHEST MEASUREMENT FULL INSPIRATION: 105 cm EXPIRATION: 99 cm

EYE: Right Left

DISTANT VISION (WITH/WITHOUT GLASSES): G/G G/G

NEAR VISION (WITH / WITHOUT GLASSES): N/G N/G

ANY COLOUR BLINDNESS/ NIGHT BLINDNESS/SQUINT/EYE DISEASES: None

PALE OR CYANOSIS/ICTERUS/CLUBBING/LYMPHADENOPATHY/LEUKAEMIA: None

EARS - HEARING RIGHT: WNL LEFT: WNL ANY ORGANIC DISEASE: None

AUDIOMETRY: WNL

CVS: S1: + S2: + ANY OTHER SOUNDS: None ECG: (N) Study

IVT: RAISED / NOT RAISED VEINS: (N) None

RESPIRATORY SYSTEM BREATH SOUNDS: Clear TRACHEA: Midline

ANY CREPITS/RONCALUS: None SPIROMETRY: WNL

GI SYSTEM: ABDOMEN: Soft, BCS LIVER/SPLEEN: not palpable

GENITOURINARY SYSTEM: EXTERNAL GENITALIA: (N) HERNIA/HYDROCELE: No

CNS: ANY FITS/SEIZURE/PARALYSIS/WEAKNESS: No

REFLEXES: PUPILLARY: (N) KNEE JERK: (N) ANKLE JERK: (N) BABINSKI SIGN: Neg

GAIT: (N) TREMORS: None ROMBERG TEST: Neg FINGER NOSE TEST: (N)

MENTAL HEALTH: Good FITNESS STATUS: Fit

REMARKS: (1) Avoid sweets, oily, fatty foods

Signature of Doctor

DR. LANU AKASH AIMOL
RMC Regd. No. 31851
MBBS, SPMC, Bikaner (Raj.)
Name & Regd No

Medical Officer
Meghalaya Cements Ltd



MCL
Meghalaya Cement Ltd.

Occupational Health Centre, MCL.
Vill-Thangskai, P.O.-Lumshnong, Dist-East Jaintia Hills, Meghalaya-790210

2578 - UDAY KUMAR JHA
45 Years / Male / Ht 172 Cms / 75 Kgs / Non-Smoker

FVC TEST
Date: 06-02-2025 (T2)

Pred Eqn: CLARITY
Ref By: NONE

Bth.Corr: 100
Temp: 0°C

F(Liters/Sec)

V(Liters)

Parameter	Pred	Pre	Pre%	Post	Post%	Normal
FVC	[L]	3.21	2.85	90	-	-
FEV1	[L]	2.54	2.47	97	-	-
FEV5	[L]	-	2.71	-	-	-
FEV3	[L]	3.11	2.47	79	-	-
FEV6	[L]	-	-	-	-	-
PFR	[L/s]	8.36	8.34	100	-	-
FEF25-75	[L/s]	3.45	3.10	148	-	-
FEF75-85	[L/s]	-	1.37	-	-	-
FEF2-12	[L/s]	6.11	7.14	117	-	-
FEF25%	[L/s]	7.51	9.36	123	-	-
FEF50%	[L/s]	5.27	5.45	103	-	-
FEF75%	[L/s]	2.78	1.74	76	-	-
FEV5/FVC	[%]	-	78.61	-	-	-
FEV1/FVC	[%]	79.13	91.85	116	-	-
FCV3/FVC	[%]	97.00	91.85	95	-	-
FEV6/FVC	[%]	-	-	-	-	-
FEV1/FEV6	[%]	-	-	-	-	-
PET	[S]	-	4.62	-	-	-
ExpTime	[S]	-	0.11	-	-	-
LungAge	[Y]	50.09	52.00	104	-	-
FVC	[L]	-	2.79	-	-	-
PFR	[L/s]	-	3.30	-	-	-
FIF25%	[L/s]	-	9.49	-	-	-
FIF50%	[L/s]	-	5.97	-	-	-
FIF75%	[L/s]	-	2.18	-	-	-
FIV5	[L]	-	0.93	-	-	-
FIV1	[L]	-	2.46	-	-	-
FIV3	[L]	-	-	-	-	-
FIV5/FVC	[%]	-	33.33	-	-	-
FIV1/FVC	[%]	-	88.17	-	-	-
FIV3/FVC	[%]	-	-	-	-	-

- Pre Medication Report:
Spirometry within Normal range as FVC% ≥ 80 And FEV1/FVC% > 70

- Pre COPD Severity Report:
COPD Severity within Normal range

Doctor's Comments: WNL

MEGHALAYA CEMENT LTD
THANGSKAI

DR. LAKSHY KASHIMOL
RMC Regd. No. 31651
MBBS, SPAC, Bikaner (Raj.)
Medical Officer
Meghalaya Cement Ltd

Not For Medical/Legal Purpose



OCCUPATIONAL HEALTH CENTER

MEGHALAYA CEMENT LTD, THIANGSKA

X-Ray Report

Name Of Patient	DR. KUNDA THA
Age/Sex	45/Male
Department	HRDS
Date	07/01/20

Trachea : Maline

Lungs Field : All lung fields clear No opacities effusion

Cardiac Field : Enlarged seen Cardiac size (R)

Aortic Knuckle : Hemothorax Intact.

Diaphragm :

CP Angle : CP angle not obliterated

Ribs & Other osseous structure : Bony structure (R)

Soft Tissue : (R)

Imp - (R) study



Signature of Medical Officer
 DR. LALU SHAIKH
 RMC Regd. No. 0863
 MBBS, SPMC, Bikaner (Raj.)

Medical Officer
 Meghalaya Cement Ltd



OCCUPATIONAL HEALTH CENTRE

MEGHALAYA CEMENTS Ltd., Vill - Thangskai, PO - Lumshnong,
East Jaintia Hills, Meghalaya, India, 793210

Name: MR. UDAY KUMAR JHA(2578)

Invoice No: 602

Case No: M612

Age/Sex: 48 Years / Male

Registered On: 05-02-2025 05:18 PM

Referrer: DR. LANU AKASH AIMOL

Type/Remark: Healthray Patient

Haematology

TEST	RESULT	UNIT	REFERENCE RANGE
Hemoglobin	13.4	g/dL	13 - 17

Sankar Singh
Lab Technician OHC MCLDr. Lanu Akash Aimol
RMO OHC MCL



OCCUPATIONAL HEALTH CENTRE

MEGHALAYA CEMENTS Ltd, Vill - Thangskai, PO - Lumshnong,
East Jaintia Hills, Meghalaya, India, 793210

Name: MR. UDAY KUMAR JHA(2578)

Invoice No: 602

Case No: M612

Age/Sex: 48 Years / Male

Registered On: 06-02-2025 06:18 PM

Referrer: DR. LANU AKASH AIMOL

Type/Remark: Healthray Patient

Biochemistry

TEST	RESULT	UNIT	REFERENCE RANGE
FASTING BLOOD SUGAR			
Fasting Blood Sugar	106.0	mg/dl	70 - 100

Sankar Singha
Lab Technician OHC MCLDr. Lanu Akash Aimol
RMO OHC MCL



OCCUPATIONAL HEALTH CENTRE

MEGHALAYA CEMENTS Ltd., Vill - Thangskai, PO - Lumshnong,
East Jaintia Hills, Meghalaya, India, 793210



Name: MR. UDAY KUMAR JHA(2575)

Invoice No: 602

Case No: M612

Age/Sex: 48 Years / Male

Registered On: 06-02-2025 05:18 PM

Referrer: DR. LANU AKASH AIMOL

Type/Remark: Healthray Patient

Haematology

LIVER FUNCTION TEST (LFT)

TEST	RESULT	UNIT	REFERENCE RANGE
TOTAL BILIRUBIN	H 1.44	mg/dl	0.3 - 1.2
SGOT (AST)	34.4	U/L	15 - 40
SGPT (ALT)	21.1	U/L	10 - 49
S. Alkaline Phosphatase	71.4	U/L	30 - 120
SERUM PROTEIN			
Total Protein	7.15	g/dL	5.7 - 8.2
Albumin	4.12	g/dL	3.2 - 4.8
Globulin	H 3.04	g/dL	2.5 - 3.4
A/G Ratio	1.33		0.9 - 1.1

Interpretation:

Note:

1. In an asymptomatic patient, Non-alcoholic fatty liver disease (NAFLD) is the most common cause of increased AST & ALT levels. NAFLD is considered as hepatic manifestation of metabolic syndrome.
2. In most types of liver disease, ALT activity is higher than that of AST, exception may be seen in Alcoholic Hepatitis, Hepatic Cirrhosis, and Liver neoplasia.
3. In a patient with Chronic liver disease, AST:ALT ratio >1 is highly suggestive of advanced liver fibrosis.



Sankar Singha
Lab Technician OHC MCL



Dr. Lanu Akash Aimol
RMO OHC MCL



OCCUPATIONAL HEALTH CENTRE

MEGHALAYA CEMENTS Ltd., Vill - Thangskai, PO - Lumshnong,
East Jaintia Hills, Meghalaya, India, 793210



Name: MR. UDAY KUMAR JHA(2578)

Invoice No: 602

Case No: M612

Age/Sex: 48 Years / Male

Registered On: 06-02-2025 06:18 PM

Referrer: DR. LANU AKASH AIMOL

Type/Remark: Healthy Patient

Biochemistry

LIPID PROFILE

TEST	RESULT	UNIT	REFERENCE RANGE
TOTAL CHOLESTEROL	162.3	mg/dl	< 200
TRIGLYCERIDE	102.9	mg/dl	<150
HDL Cholesterol	H 64.2	mg/dl	40 - 60
LDL / HDL Ratio	L 1.36		1.5 - 3.5
LDL Cholesterol	87.2	mg/dl	< 100
VLDL	20.58	mg/dl	0 - 30
CHOL / HDL Chol. Ratio	L 2.53		3 - 5
TGL / HDL Ratio	1.60		<3.12



Sankar Singha
Lab Technician OHC MCL



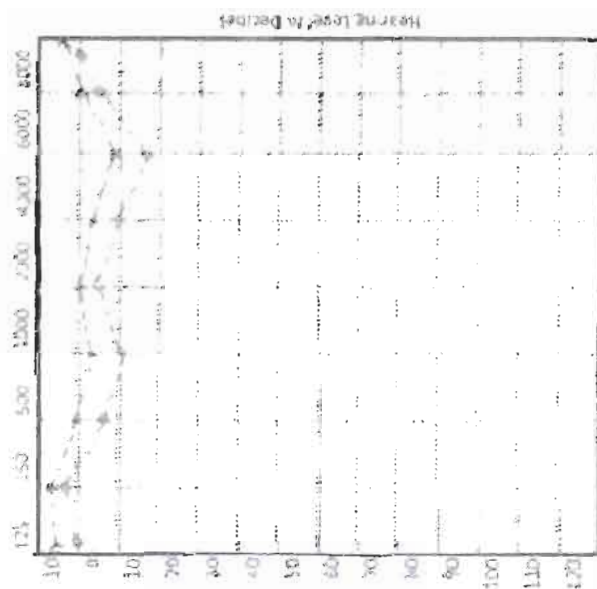
Dr. Lanu Akash Aimol
RMO OHC MCL

OCCUPATIONAL HEALTH CENTER
Unit - Meghalaya Cement Limited
AUDIOGRAM

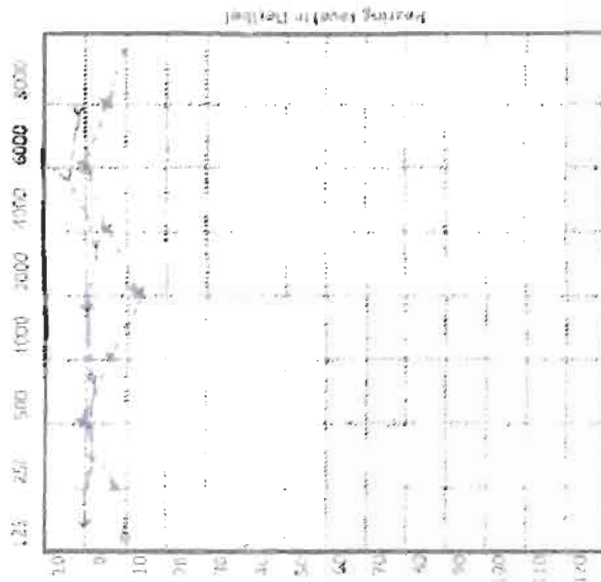


Name: UNNY KUMAR THA Age: 48 Sex: Male
Department: Mines Employee code: 612/25 Date: 6/2/25

RIGHT



LEFT



Frequency in Hz

Frequency in Hz

Complaints	Deafness, Distortion, Tinnitus, etc.
Past illness	Tuberculosis, Diabetes, etc.
Drugs & Drugs	OTC, Antibiotics, etc.
Present disease	None

Location: Thangskai

Mod: MOD

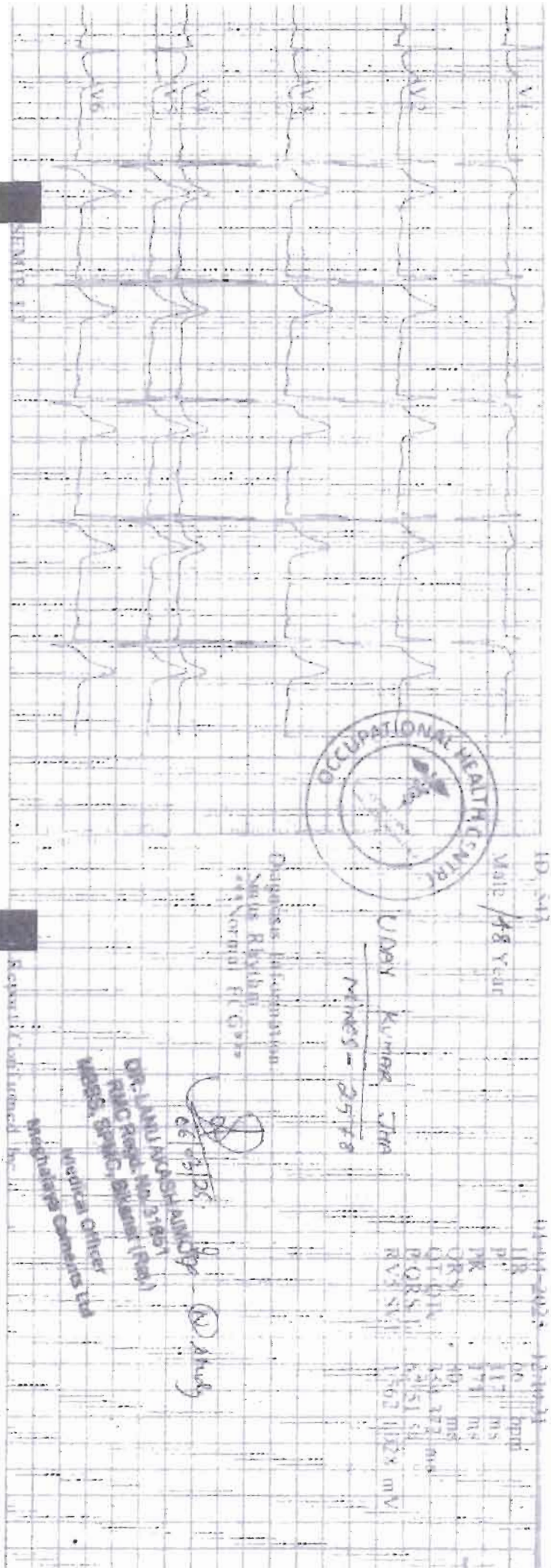
	AT	BC
Right	0	0
Left	0	0

AC: Air Conduction
BC: Bone Conduction
AC: Air Conduction
BC: Bone Conduction

Notes: HL Hearing level
HL Hearing level
HL Hearing level
HL Hearing level

Meghalaya Cement Ltd
Occupational Health Center
Thangskai
Meghalaya
Phone No. 316111
(181)





ID: 247
Male / 48 Year

UDAY KUMAR JIN
NAMES - 2578

Diagnosis Information:
Normal Rhythm
Normal ECG

66/95/95
DR. LAMU AVASH ANANDY
RUC Regd. No. 31851
MBBS, DPM, BLS (PAC)
Medical Officer
Meghalaya Cement Ltd

14-04-2023 12:40:31
HR 75 bpm
PR 171 ms
QRV 171 ms
QT/QTc 387/387 ms
R-RS 151 ms
R-RS 151 ms
R-RS 151 ms





PERIODIC MEDICAL EXAMINATION MEGHALAYA CEMENTS LTD



NAME VIJAY KUMAR THAKUR DATE OF EXAMINATION 13/2/25

DESIGNATION BLASTER DEPARTMENT Plant

AGE/SEX 56/M BLOOD GROUP B(+ve) BLOOD SUGAR (G) 109 Hb (%) 12.8 EMPLOYER ID/IDF 2-8-2

IDENTIFICATION MARK Ant. Mena. left eye (nas) MUMUKSHU 7629234547

ANY COMPLAINTS None

PERSONAL HISTORY None

AME HISTORY OF ALCOHOL / SMOKING / TOBACCO None

FAMILY HISTORY OF ANY DISEASE None

GENERAL EXAMINATION: HEIGHT 168 cm, WT 78.1 kg, BP 140/90 mm/Hg, PULSE 83 /min, RESPIRATE 16 /min

CHEST MEASUREMENT: FULL INSPIRATION 106 cm, EXPIRATION 101 cm

EYE: Right Left

DISTANT VISION (WITH/WITHOUT GLASSES) 6/6 6/6

NEAR VISION (WITH / WITHOUT GLASSES) N/G N/G

ANY COLOUR BLINDNESS/ NIGHT BLINDNESS/SQUINT/EYE DISEASES None

PALEUS / CYANOSIS / ICTERUS / CLUBBING / LYMPHADENOPATHY / CYDEMA None

EARS - HEARING: RIGHT NGL LEFT NGL ANY ORGANIC DISEASE None

ADDITIONAL TRY None

CNS: S1 + S2 + ANY OTHER SOUNDS None L50 (+) study

CVS: RAISED / NOT RAISED VIBES (+) low

RESPIRATORY SYSTEM: BREATH SOUNDS Yes clear TRACHEA Central

ANY CREPITS/ROCHL None SPIROMETRE NGL

GIS SYSTEM, ABDOMEN Soft, nst LIVER/SPLEEN not palpable

GENITOURINARY SYSTEM, EXTERNAL GENITALIA (N) HERNIA/HYDROCELE NO

ENV. ANY TICS/SEIZURE/PARALYSIS/WEAKNESS None

REFLEXES: PUPILLARY N KNEE JERK + ANKLE JERK + BABINSKI SIGN None

CLIN: N TENDONS None RUMBERG TEST None FINGER NOSE TEST (N)

MENTAL HEALTH Good CONSCIOUS STATUS Fid

REMARKS:-

(1) Avoid Sugars, sweets

Signature of Doctor

Medical Officer
Meghalaya Cements Ltd



DR. LANU AKASH AIMOL
RMC Regd. No. 31851
MARS, SPAC, Bikaner (Raj.)

Name & Regd. No.

MCL
Meghalaya Cement Ltd

2582 VIJAY KUMAR THAKUR
56 Years / Male / Ht 168 Cms / 78 Kgs / Non-Smoker

Occupational Health Centre, MCL.
Vill-Thangskai, P.O-Lumshong, Dist-East Jaintia Hills, Meghalaya-793210

FVC TEST
Date: 13-02-2025 (T3)

Pred Eqn : CLARITY
Ref By : NONE

Eth Corf 100 Temp 0°C

Parameter	Unit	Pred	Pre	Pre%	Post	Post%	Imp
FVC	[L]	2.55	2.80	31	-	-	-
FEV1	[L]	2.42	2.61	106	-	-	-
FEV3	[L]	-	2.24	-	-	-	-
FEV6	[L]	-	-	-	-	-	-
PEFR	[L/s]	8.10	8.52	108	-	-	-
FEF25-75	[L/s]	3.99	5.37	142	-	-	-
FEF75-85	[L/s]	-	2.11	-	-	-	-
FEF 2-1.2	[L/s]	6.65	7.55	114	-	-	-
FEF25%	[L/s]	7.13	9.59	127	-	-	-
FEF50%	[L/s]	5.47	5.85	109	-	-	-
FEF75%	[L/s]	2.81	2.49	88	-	-	-
FEV S/FVC	[%]	-	84.38	-	-	-	-
FEV1/FVC	[%]	84.87	97.00	112	-	-	-
FEV3/FVC	[%]	-	97.00	-	-	-	-
FEV6/FVC	[%]	-	-	-	-	-	-
FEV1/FEV5	[%]	-	-	-	-	-	-
PET	[s]	-	2.85	-	-	-	-
ExptTime	[s]	-	0.06	-	-	-	-
LungAge	[Y]	31.00	30.00	92	-	-	-
FVC	[L]	-	3.07	-	-	-	-
PIFR	[L/s]	-	1.24	-	-	-	-
PIF25%	[L/s]	-	9.38	-	-	-	-
PIF50%	[L/s]	-	5.86	-	-	-	-
PIF75%	[L/s]	-	2.25	-	-	-	-
FI V5	[L]	-	1.48	-	-	-	-
FI V1	[L]	-	2.62	-	-	-	-
FI V3	[L]	-	-	-	-	-	-
FI V5/FVC	[%]	-	48.17	-	-	-	-
FI V1/FVC	[%]	-	92.12	-	-	-	-
FI V3/FVC	[%]	-	-	-	-	-	-

FVC %Pred

FEV1 %Pred

Pre Medication Report
Spirometry within Normal range as FVC% >= 80 And FEV1/FVC% > 70

Pre COPD Severity Report:
COPD Severity within Normal range

Doctor's Comments LNL

13/2/25
DR. ANU KASHI AIMOL
RMC Regd. No. 31851
MBBS, SPMC, Bikaner (Raj.)
Medical Officer
Meghalaya Cement Ltd
Dr. Akash Aimol



OCCUPATIONAL HEALTH CENTER

MEGHALAYA CEMENT LTD, THANGSKAI

X-Ray Report

Name Of Patient

VINAY KUMAR THANGSKAI

Age/Sex

20/male

Department

MINES

Date

04/02/20

Trachea

Mediastine

Lungs Field :

Clear fields.

Cardiac Field :

No cardiomegaly, effusion, mass seen

Aortic Knuckle :

Heardumpage - Compensatory increase in size

Diaphragm :

CP Angle :

Ribs & Other osseous structure :

No deformity

Soft Tissue :

By (N) study



Signature of Medical Officer
 DR. LANJAN SHAIKOL
 RMC Regd. No. 51551
 MBBS, SPMC, Bikaner (Raj.)
 Medical Officer
 Meghalaya Cement Ltd

Annexure - IV



OCCUPATIONAL HEALTH CENTRE

MEGHALAYA CEMENTS Ltd., Vill - Thangskai, PO - Lumshnong,
East Jaintia Hills, Meghalaya, India, 793210



Name: MR. VIJAY KUMAR THAKUR(2582)

Invoice No: 628

Case No: M638

Age/Sex: 56 Years / Male

Registered On: 13-02-2025 05:40 PM

Referrer: DR. LANU AKASH AIMOL

Type/Remark: Healthray Patient

Haematology

TEST	RESULT	UNIT	REFERENCE RANGE
Hemoglobin	14.0	g/dL	13 - 17



Sanjay Singh
Lab Technician OHC MCL



Dr. Lanu Akash Aimol
MD OHC MCL



OCCUPATIONAL HEALTH CENTRE

MEGHALAYA CEMENTS Ltd., Vill - Thangskai, PO - Lumshnong,
East Jaintia Hills, Meghalaya, India, 793210



Name: MR. VIJAY KUMAR THAKUR(2582)

Invoice No: 628

Case No: M638

Age/Sex: 56 Years / Male

Registered On: 13-02-2023 05:40 PM

Referrer: DR. LANU AKASH AIMOL

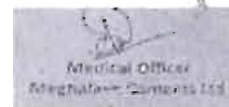
Type/Remark: Healthray Patient

Biochemistry

TEST	RESULT	UNIT	REFERENCE RANGE
FASTING BLOOD SUGAR			
Fasting Blood Sugar	109.0	mg/dl	70 - 100



Sankar Singha
Lab Technician QHC MCL



Dr. Lanu Akash Aimol
RMO QHC MCL



OCCUPATIONAL HEALTH CENTRE

MEGHALAYA CEMENTS Ltd., Vill - Thangskai, PO - Lumshding,
East Jaintia Hills, Meghalaya, India, 793210



Name: MR. VIJAY KUMAR THAKUR(2582)

Invoice No: 629

Case No: M638

Age/Sex: 56 Years / Male

Registered On: 13-02-2025 05:40 PM

Referrer: DR. LANU AKASH AIMOL

Type/Remark: Healthray Patient™

Haematology

LIVER FUNCTION TEST (LFT)

TEST	RESULT	UNIT	REFERENCE RANGE
TOTAL BILIRUBIN	0.83	mg/dl	0.3 - 1.2
SGOT (AST)	17.6	U/L	15 - 40
SGPT (ALT)	16.3	U/L	10 - 49
S. Alkaline Phosphatase	11 120.5	U/L	30 - 120
SERUM PROTEIN			
Total Protein	8.02	g/dL	5.7 - 8.2
Albumin	4.02	g/dL	3.2 - 4.8
Globulin	11 4.00	g/dL	2.5 - 3.4
A/G Ratio	1.00		0.9 - 2

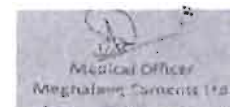
Interpretation:

Note:

1. In an asymptomatic patient, Non-alcoholic fatty liver disease (NAFLD) is the most common cause of increased AST & ALT levels. NAFLD is considered as hepatic manifestation of metabolic syndrome.
2. In most types of liver disease, ALT activity is higher than that of AST, exception may be seen in Alcoholic Hepatitis, Hepatic Cirrhosis, and Liver neoplasia.
3. In a patient with Chronic liver disease, AST:ALT ratio >1 is highly suggestive of advanced liver fibrosis.



Sankar Singha
Lab Technician OHC MCL



Dr. Lanu Akash Aimol
RMO OHC MCL



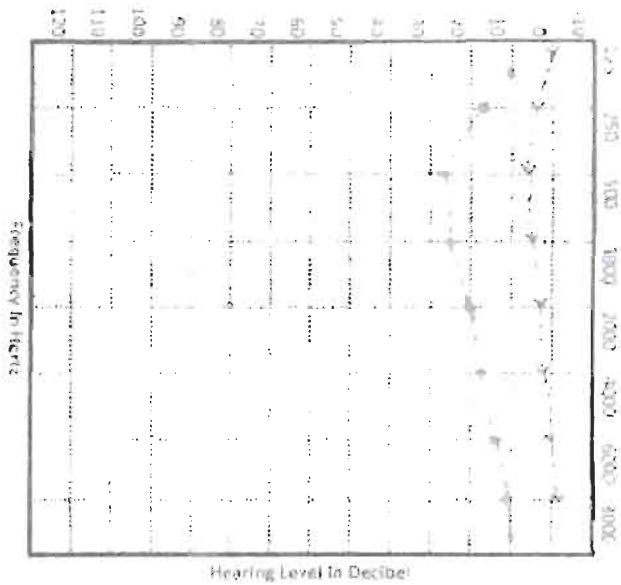
OCCUPATIONAL HEALTH CENTRE
Unit - Meghalaya Cement Limited

AUDIOGRAM

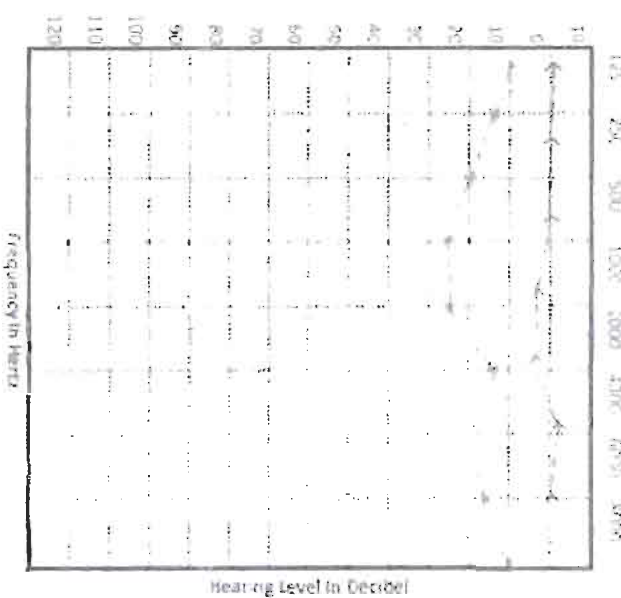
Name: Vijay Kumar Thakur Sex: Male

Department: Mines Employee code: 2582 Date: 13/2/25

RIGHT



LEFT



Complaints	Diagnosis (Ototoxicity/Noise/uv/Neuropathy)
Pain/Itching	Re/Exposure/Noise/Neuropathy/Neuropathy
Other Complaints	SP/Genotoxicity/Salt/Water/Air/Malaria
Notes/Findings	Source: /Duration: /Notes: use P/2/2/2/2/2

Remarks: Bk Hearing Sensitivity N/A

AC	BC
Right	25
Left	25

AC: A condition
BC: Bone Conduction
AC: Red Colour
BC: Blue Colour



DR. MANU ABRAHAM
RMC, Regd. No. 31651
MBBS, SpMC, Otolaryngologist (Regd.)
Medical Officer
Meghalaya Cement Ltd.



Occupational Health Center Details

MCL OHC Staff Details			
Sl.No.	Name of Staff	Course	Designation
1	Dr. LanuAkashAimol	MBBS	Medical Officer
2	Dr. FedelisLungdin	BDS	Dental Officer
3	Sabir Hussain	GNM	Male Nurse
4	Shilpi Nath	ANM	Female Nurse
5	Wanpali	ANM	Female Nurse
6	TariniBezburah	RMP	Compounder
7	Shankar Kumar Singha	MLT	Lab Technician
8	JyotishmanKashyap	Certificate Course	X-ray Technician
9	DeimonmiSuiam	10th	Dresser
10	GenevolinLamare	10th	Office Assistant
Hospital Equipment & Services			
Sl. No.	Hospital Equipments	Quantity	Remarks
1	ECG Machine	1	
2	Audiometry Machine	1	
3	Spirometry Machine	1	
4	Nebulizer machine	2	
5	Suction Machine	2	
6	AUTOMATIC EXTERNAL DEFIBRILLATOR	1	
7	Multipara monitor	2	
7	Multipara monitor-2	2	
8	Manual BP Machine -2	2	
9	Digital BP machine-2	2	
10	Minor OT light-2	2	
11	Hospital Bed (Fowler, Semi fowler, Plain)	10	
12	Bedside curtain screen	3	
13	Auto-clave Machine	2	
14	Digital otoscope	1	
15	Instrument Boiler	1	
16	Needle Cutter	1	
17	Foldable Stretcher	5	
18	Wheel Chair	3	
19	Steel Stretcher Trolley	1	
20	B-Type Oxygen Cylinder	6	
21	D-Type Oxygen Cylinder	5	
22	C-PAP	1	
Dental Equipment's			
1	Dental Chair	1	
2	UV STERILIZER	1	
3	Dental air compressor	1	
4	Dental Scalars Set	1	



5	Dental Glass Bead Sterilizer	1	
X-Ray Equipment's			
1	X-RAY machine	1	
2	Radiography CR system	1	
3	Xray Lead Barrier	1	
4	Lead thyroid collar	1	
5	Lead Vest	1	
Ambulance Service @ 24x7			
1	BLS Ambulance	1	
2	Mini Ambulance	1	
Lab Equipment details			
Sl. No.	Name of Equipments	Quantity	Remarks
1	Microscope	2	
2	Centrifuge Machine	2	
3	Semi Auto Analyzer	1	
4	Fully Automatic Hematology Analyzer	1	
5	Fully Automatic Immunofluorescence Quantitative Analyzer	1	
6	Fully Automatic Electrolyte Analyzer	1	
7	Haemo Meter	2	
8	Blood Glucose Meter	2	
9	Micropipette 100-1000 Micro Litre	1	
10	Micropipette 5-50 Micro Litre	1	
11	Incubator	1	
12	Blood cell Counter	1	
13	Haemocyto Meter	1	
14	Test Tube Rack	3	
15	ESR Stand	1	
Lab Testing Facility			
Sl. No.	Lab Testing Facility		
1	Blood Glucose:- Fasting, Random &PP		
2	COMPLETE BLOOD COUNT (CBC)		
3	ESR		
4	KIDNEY FUNCTION TEST (KFT)		
5	LIVER FUNCTION TEST (LFT)		
6	LIPID PROFILE		
7	SERUM ELECTROLYTES		
8	THYROID PROFILE		
9	HbA1C		
10	C-Reactive Protein Latex Test		
11	R.F. (Latex Test)		
12	VDRL		
13	HBsAg (Hepatitis-B)		
14	HCV (Hepatitis-C)		



15	A.B.O. Grouping
16	Rh Type
17	Malaria Test
18	Widal Test
19	Dengue Kit
20	Serum Uric Acid
21	HCG
22	ECG
23	SPIROMETRY (PFT)
24	AUDIOMETRY
25	Trop-T
26	ASO
27	CKMB
28	CARDIAC TROP I
29	PROCALCITONIN
30	MICROALBUMIN
31	SERUM TOTAL CALCIUM
32	Urine Routine Examination
33	Stool Routine Examination
Hospital Emergency Services	
1	24 X 7 Doctor Availability
2	24 X 7 BLS Ambulance Service
3	24 X 7 Mini Ambulance Service







POLLUTION TESTING STATION**LADTHALABOH, JAINTIA HILLS**

Name of Licence Holder:-
M/s JASPER I S LONG
 Ladthalaboh, Jaintia Hills
 Jowai - 793150

LICENCE NO. Com/Trans/74/2004/5
 DATE OF ISSUE:- 21st March, 2005



156

Book No.

Sl.No.

7793

Date... 18/03/25

SMOKE EMISSION TEST REPORT
(DIESEL DRIVEN VEHICLES)

The Vehicle No. M/L 11 8104 is tested for emission level and reading
 is as under.

Type of Vehicle other than agriculture tractors		Notified Standard of maximum smoke density			Actual Reading	
		Light absorption co-efficient	Hartidye Units	Bosch Unit	Light absorption co-efficient	Hartidye Units
1.	Full load at 60 to 70% of maximum engine rated rmp declared by the manufacture.	3.25	75	5.2		
2.	Free acceleration	2.45	65	5.2		27.1%

Certified that the vehicle meets the emission standard fixed under Rule 115(2) of the Central Motor Vehicles Rules 1989. This Certificate is valid upto 17/09/25

Jasper. I. Slong
 Govt. Approved

Pollution Testing Station

Ladthalaboh, Jowai, Meghalaya

Com/Trans/PTS(JIS)/44/2005/140, Dated : 17.10.2019



POLLUTION TESTING STATION

LADTHALABOH, JAINTIA HILLS

Name of Licence Holder:-
M/s JASPER I S LONG
Ladthalaboh, Jaintia Hills
Jowai - 793150

LICENCE NO.Com/Trans/74/2004/5
DATE OF ISSUE:- 21st March, 2005

Book No. 156

Sl.No. 7796

Date... 18/03/25

SMOKE EMISSION TEST REPORT (DIESEL DRIVEN VEHICLES)

The Vehicle No. ML 11 8127 is tested for emission level and reading is as under

Type of Vehicle other than agriculture tractors		Notified Standard of maximum smoke density			Actual Reading	
		Light absorption co-efficient	Hartidye Units	Bosch Unit	Light absorption co-efficient	Hartidye Units
1.	Full load at 60 to 70% of maximum engine rated rmp declared by the manufacture.	3.25	75	5.2		
2.	Free acceleration	2.45	65	5.2		

Certified that the vehicle meets the emission standard fixed under Rule 115(2) of the Central Motor Vehicles Rules 1989. This Certificate is valid upto 17/09/25

Com/Trans/PTS(JIS)/44/2005/140, Dated : 17.10.2019

Jasper I. Slong
Govt. Approved
Pollution Testing Station
Ladthalaboh, Jaintia Hills



POLLUTION TESTING STATION**LADTHALABOH, JAINTIA HILLS**

Name of Licence Holder:-
M/s JASPER I SLONG
Ladthalaboh, Jaintia Hills
Jowai - 793150

LICENCE NO.Com/Trans/74/2004/5
DATE OF ISSUE:- 21st March, 2005



Book No. 156

Sl.No. 7797

Date... 18/03/25

SMOKE EMISSION TEST REPORT
(DIESEL DRIVEN VEHICLES)

The Vehicle No. ML 11 8180 is tested for emission level and reading is as under

Type of Vehicle other than agriculture tractors	Notified Standard of maximum smoke density			Actual Reading	
	Light absorption co-efficient	Hartidye Units	Bosch Unit	Light absorption co-efficient	Hartidye Units
1. Full load at 60 to 70% of maximum engine rated rmp declared by the manufacture.	3.25	75	5.2		31.8%
2. Free acceleration	2.45	65	5.2		

Certified that the vehicle meets the emission standard fixed under Rule 115(2) of the Central Motor Vehicles Rules 1989. This Certificate is valid upto 17/09/25

Com/Trans/PTS(JIS)/44/2005/140, Dated : 17.10.2019

Jasper. I. Slong
 Govt. Approved
 Pollution Testing Station
 Ladthalaboh, Jaintia Hills



POLLUTION TESTING STATION**LADTHALABOH, JAINTIA HILLS**

Name of Licence Holder:-
M/s JASPER I SLONG
 Ladthalaboh, Jaintia Hills
 Jowai - 793150

LICENCE NO.Com/Trans/74/2004/5
 DATE OF ISSUE:- 21st March, 2005

Book No. **156**

Sl.No. **7798**

Date **18/03/25**

SMOKE EMISSION TEST REPORT
(DIESEL DRIVEN VEHICLES)

The Vehicle No. **ML 11 7232** is tested for emission level and reading is as under

Type of Vehicle other than agriculture tractors		Notified Standard of maximum smoke density			Actual Reading	
		Light absorption co-efficient	Hartdye Units	Bosch Unit	Light absorption co-efficient	Hartdye Units
1.	Full load at 60 to 70% of maximum engine rated rmp declared by the manufacture.	3.25	75	5.2		
2.	Free acceleration	2.45	65	5.2		

Certified that the vehicle meets the emission standard fixed under Rule 115(2) of the Central Motor Vehicles Rules 1989. This Certificate is valid upto **17/10/25**

Jasper. I. Slong
 Govt. Approved
 Pollution Testing Station
 Ladthalaboh, Jowai, Meghalaya
 Seal of the Testing Station

Com/Trans/PTS(JIS)/44/2005/140, Dated : 17.10.2019



Annexure-VII

POLLUTION TESTING STATION

LADTHALABOH, JAINTIA HILLS

Name of Licence Holder:-
M/s JASPER I S LONG
Ladthalaboh, Jaintia Hills
Jowai - 793150

LICENCE NO.Com/Trans/74/2004/5
DATE OF ISSUE:- 21st March, 2005

Book No. 156

Sl.No. 7799

Date... 18/03/25

SMOKE EMISSION TEST REPORT (DIESEL DRIVEN VEHICLES)

The Vehicle No. ML 11 8103 is tested for emission level and reading
is as under

Type of Vehicle other than agriculture tractors		Notified Standard of maximum smoke density			Actual Reading	
		Light absorption co-efficient	Hartdye Units	Bosch Unit	Light absorption co-efficient	Hartdye Units
1.	Full load at 60 to 70% of maximum engine rated rmp declared by the manufacture.	3.25	75	5.2		28.9%
2.	Free acceleration	2.45	65	5.2		

Certified that the vehicle meets the emission standard fixed under Rule 115(2) of the Central Motor Vehicles Rules 1989. This Certificate is valid upto 17/09/25

Jasper I. Slong
Govt. Approved
Pollution Testing Station
Ladthalaboh, Jaintia Hills

Com/Trans/PTS(JIS)/44/2005/140, Dated : 17.10.2019





MEGHALAYA CEMENTS LIMITED

CIN- U26942ML2003PLC007125



Ref.: -MCL/ENV/CGWB/Comm./2024-25/12

Date: 08.06.2024

To,

Thangskai Regional Director

Central Ground Water Board,
4P7C+7RQ, NH-37, OPP-ISBT,
Betkuchi, Gaurchuk,
Guwahati, Assam.

Sub: - Submission of Action Taken Report on Rainwater harvesting measures implemented by Meghalaya Cements Limited at Village -Thangskai.

Ref: - Report issued by Central Ground Water Board, Regional Office- Guwahati in December, 2023.

Dear Sir,

With reference to subject cited above, we are hereby submitting the Action Taken Report on Rainwater harvesting measures as per recommendation given by you through mail on 13th December-2023 (report enclosed). Further we wish to inform you that we have constructed appropriate numbers of storage tank to catch & use of the roof top rain water and established the Piezometer to monitor the ground water level & quality in our 2600TPD Cement Plant & 31.05 Ha Limestone Mines to comply the EC Stipulation.

Detail layout of Storage tanks along with roof area, roof materials, volume of rain water and number of recharge structures are attached herewith for your kind consideration.

On view of the above we request you to kindly provide us closure report on Rainwater harvesting measures implemented by the company.

Thanking You Sir,

Yours Faithfully,

For Meghalaya Cements Limited

Authorized Signatory

Encl: as above.



ISO 9001:2015 & 14001:2015
50001:2011 Certified Company

Sales & Marketing Office:
Mega Plaza, 4th Floor, Christian Basti
G.S. Road, Guwahati - 781 005
Tel.: 0361 2345421/22/23, Fax: 0361 2345419
E-mail: guwahati@topcem.in
web: www.topcem.in

HELPLINE NO : 18001233666

Kolkata:
BG-77, Salt Lake City
Sector-1, Kolkata - 700 064
Tel.: 033 2334 0668 / 0004
Fax: 033 2334 0505
E-mail: kolkata@topcem.in

Registered Office:
Village: Thangskai, P.O. & P.S. Lumshing
District: East Jaintia Hills, Meghalaya, P.N: 793210
Tel.: +91 89742 17765 / 70850 58469 / 59625 09599
E-mail: meghalaya@topcem.in



Action Taken Report

Meghalaya Cements Limited

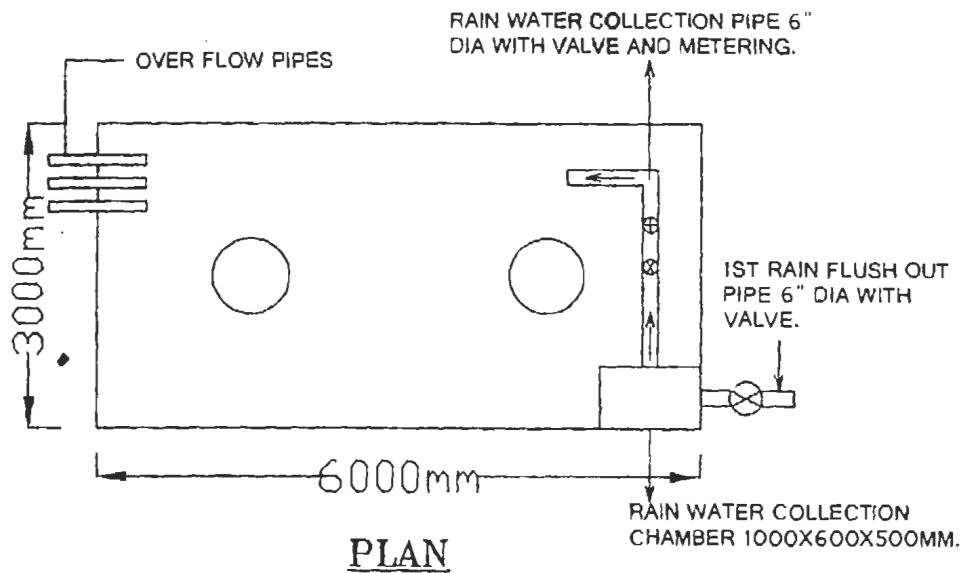
Details of Storage tank along with roof area, roof materials, volume of rain water and number of recharge structures on Rain water Harvesting measures implemented by M/s Meghalaya Cements Limited at Village- Thangskai, Po- Lumshnong, Dist- East Jaintia Hills, Meghalaya to comply the EC stipulation of 2600 TPD Cement Plant & 31.05 Ha Limestone Mines: -

SL. No.	Queries	Reply or Clarification
1	What is the total roof area of the entire site?	Raw Material Shed area- 31557.42 sqmtr & Residential Colony building roof area- 4777.194 sqmtr Total roof area is 36334.614 sqmtr.
2	How many sectors are in the project area and name? (i.e., raw material yard, colony building, etc.)	There are two sectors i.e raw material yard and colony building.
3	What is the roof area in each sector and what is the roof of materials?	Raw Material Shed area- 31557.42 sqmtr Residential Colony building roof area- 4777.194 sqmtr. CGI Sheets are used for Raw Material Shed and RCC for Colony building.
4	What is the volume of rain water in each sector and how many storage tanks you have already built in each sector?	Volume of rain water For Raw Material Shed area = 31557.42 $*6.683*0.80 = 168718.6 \text{ m}^3$ For Residential Colony building = 4777.194 $*6.683*0.80 = 25540.79 \text{ m}^3$ 01 storage tank has made for Raw Material Shed area and 02 storage tanks has made for Colony building. Additional 2 storage tanks constructed newly at WHRS Area.
5	How many storage tanks you planned to construct to capture the entire volume of rain water in how many days?	So far total 05 nos. of Storage tank start functioning to capture the entire volume of rain water.

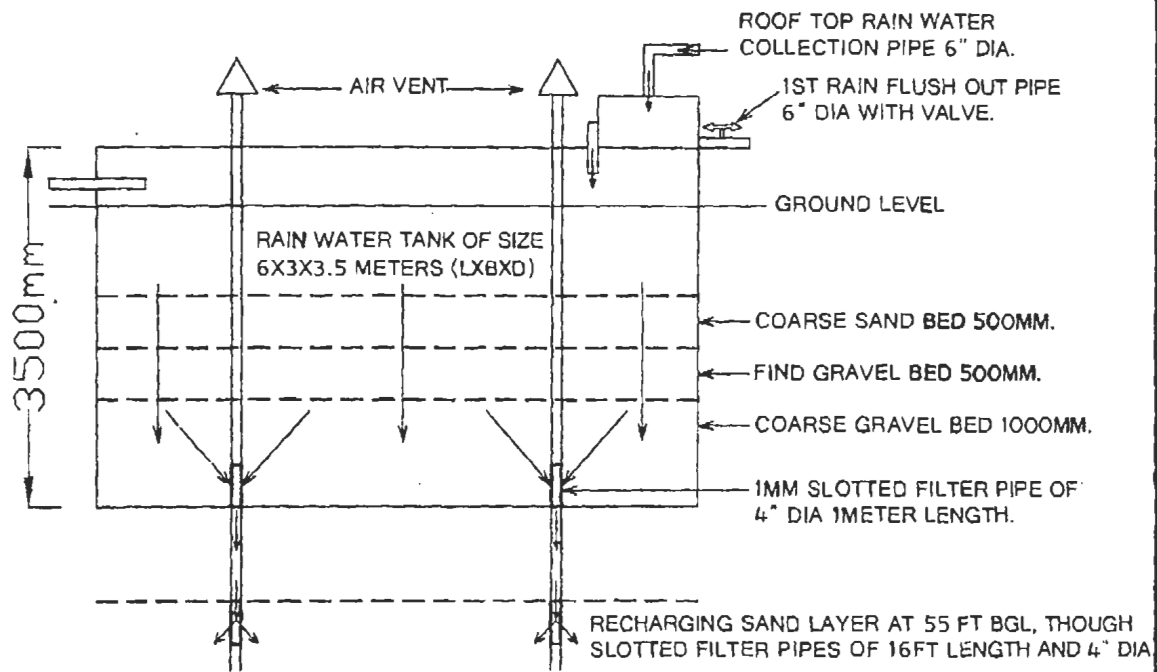


6	How many recharge structures you have constructed to recharge what volume of water?	05 no. of recharge structures with total 1863.49 m ³ capacity have been constructed to recharge the water. All are operational. Collected rain water is being used in process.
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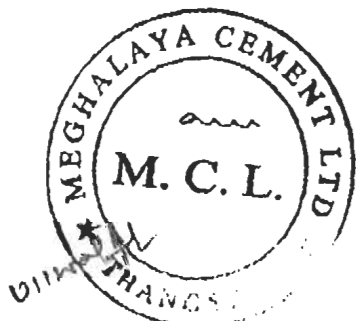




PLAN



ELEVATION



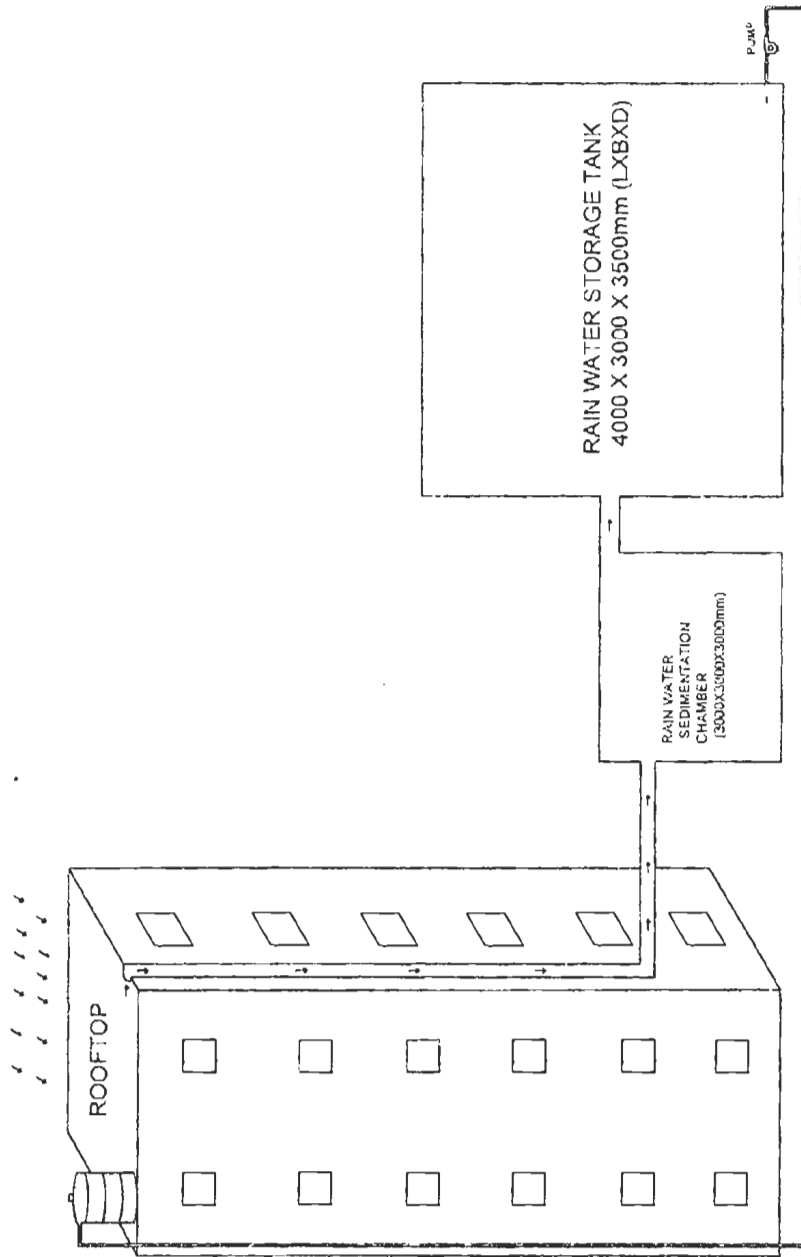
RAIN WATER HARVESTING SYSTEM




MEGHALAYA
CEMENTS LIMITED

SCALE NTS	DRAWN BY K.A.	DATE 06.02.16	CHKD. BY	APPD. BY
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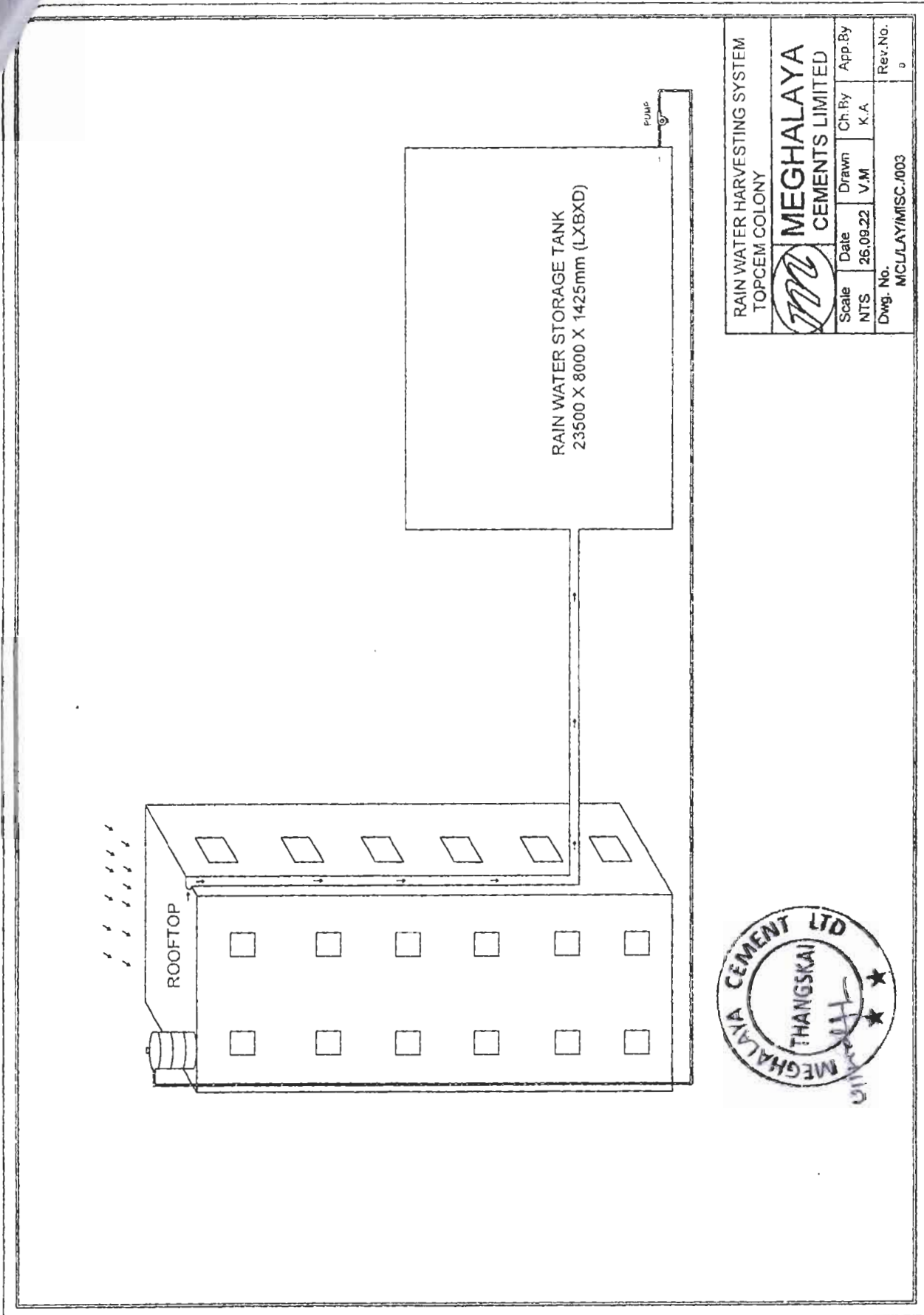
DRG. NO. MCL/LAYOUT/RWHS/001	REV 0
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RAIN WATER HARVESTING SYSTEM-E BLOCK

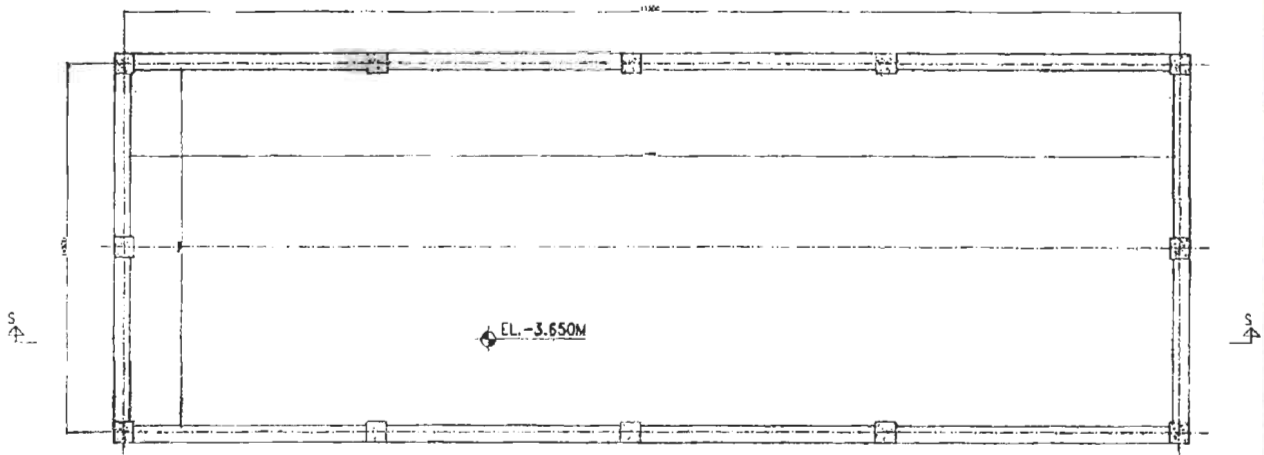
		MEGHALAYA CEMENTS LIMITED	
		Date	Ch. By
Scale	25.09.22	Drawn	App. By
NTS	V.M	K.A	
Dwg. No.	MCL/LAY/MISC/002		
Rev. No.	0		



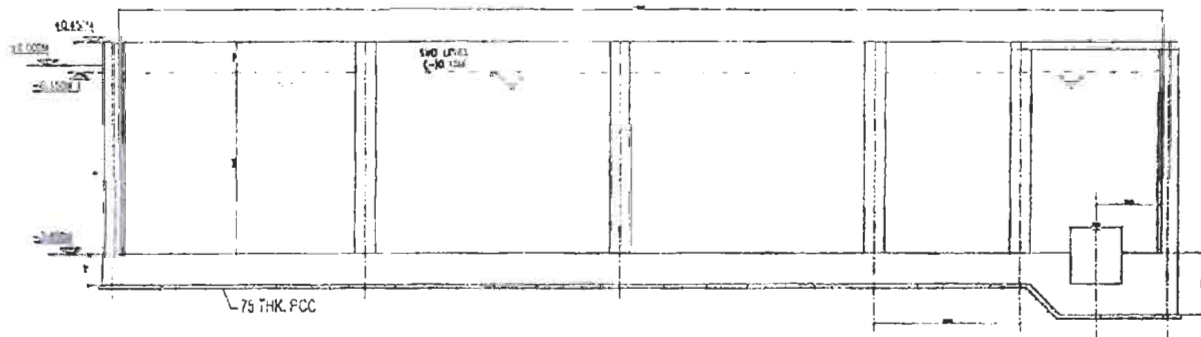


RAIN WATER HARVESTING SYSTEM		TOPCEM COLONY	
		MEGHALAYA CEMENTS LIMITED	
Scale	Date	Drawn	Ch. By
NTS	26.09.22	V.M	K.A
Dwg. No.		Rev. No.	
MCL/LAY/MISC/003		0	





TANK BOTTOM PLAN



Elevation view (S-S)



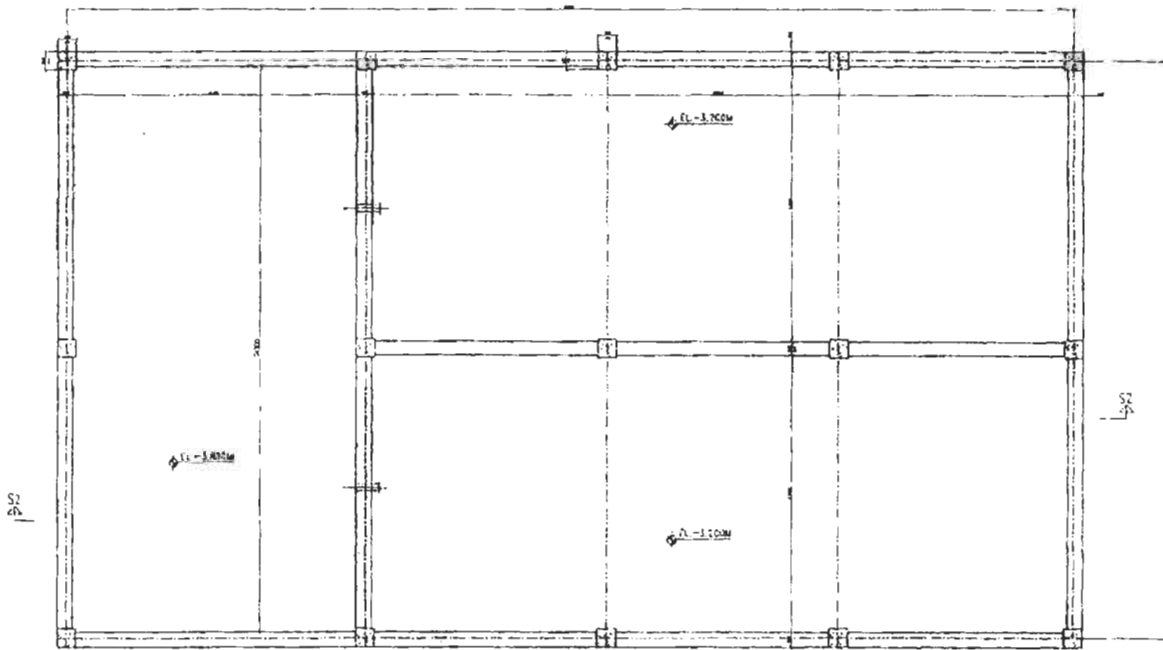
WATER STORAGE TANK
CAPACITY - 500 CUM

CT BLOWDOWN WATER STORAGE TANK

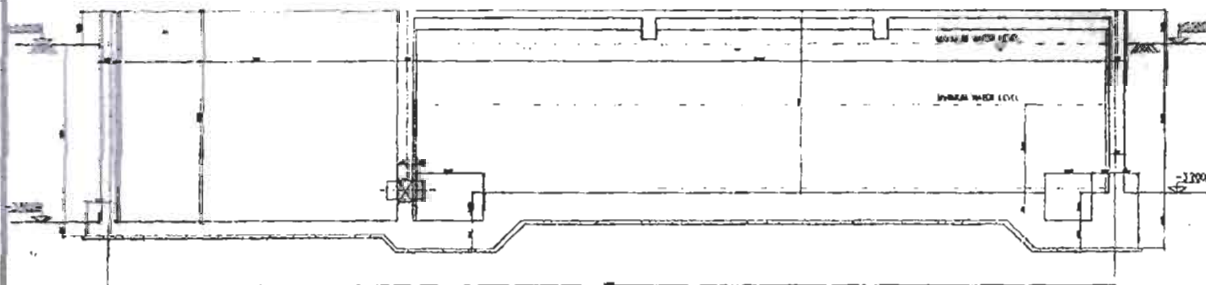


MEGHALAYA
CEMENTS LIMITED

SCALE N.T.S.	DRAWN BY GK	CH. BY UA	APPD. BY
DATE 4.03.2024			
DRG. NO - MCL/MISC/C.T B/W.TANK-001			REV 0




TANK BOTTOM PLAN



Elevation view(S2-S2)



WATER STORAGE TANK
CAPACITY- 990.59 CUM

RAW WATER STORAGE TANK			
 MEGHALAYA CEMENTS LIMITED			
SCALE N.T.S.	DRAWN BY G.K.	CHK. BY U.A.	APPR. BY
DATE 14.03.2024			
DRG NO MCL/MISC/RAW/W.TANK- 002			REV 0

FOR OFFICIAL USE ONLY

Technical series

सरकारी उपयोग के लिए केवल



Central Ground Water Board

केंद्रीय भूमिजल बोर्ड

Ministry Of Water Resources, River Development & Ganga Rejuvenation

जलसंसाधन, नदी विकास और गंगा संरक्षण मंत्रालय

GOVERNMENT OF INDIA

भारत सरकार

**REPORT ON RAIN WATER HARVESTING MEASURES IMPLEMENTED
BY M/s MEGHALAYA CEMENTS LIMITED AT VILLAGE- THANGSKAI,
SOUTH KHLIEJHARI, PO-LUMSHNONG,
DIST-EAST JAINTIA HILLS, MEGHALAYA**

State Unit Office

राज्य इकाई कार्यालय

Shillong

शिलांग

December, 2023



REPORT ON RAIN WATER HARVESTING MEASURES IMPLEMENTED BY M/s MEGHALAYA CEMENTS LIMITED AT VILLAGE- THANGSKAI, SOUTH KHLIEJHARI, PO-LUMSHNONG, DIST-EAST JAINTIA HILLS, MEGHALAYA

A request had been received from Meghalaya Cements Limited, Thangskai, East Jaintia Hills district vide letter No MCL/ENV/CGWB/Comm/2022-23/31 dated 7th November, 2022 to approve the Rainwater Harvesting scheme/project being carried out in their campus. The Regional Director, Central Ground Water Board, North Eastern Region, deputed officers of SUO, Shillong to carry out the inspection of the above mentioned ongoing project. Accordingly, the inspection had been carried out in a reason 25th April, 2023.

Inspection Team : Ms. Dakshina Rabha, Scientist-D(HG)
 Ms. Anenuo Pienyu, Scientist-C (HG)

Location details : Meghalaya Cements (Topcem Cement).
 Village - Thangskai
 District - East Jaintia Hills
 State - Meghalaya

Co-ordinates : 25°12'12.60" North Latitude
 92°22'47.83" East Longitude

Altitude : 798m.

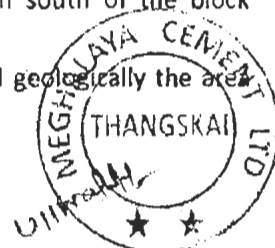
Introduction

The Meghalaya Cement Company wants expansion of cement plant by increasing its production capacity from existing 900 TPD to 2600 TPD along with 18MW Captive Power Plant at Thangskai, East Jaintia Hills district, Meghalaya. For this it requests amendment of Environmental Clearance relating to reduction of existing land area. On accepting the proposal of the company, State Environment Impact Assessment Authority impose some conditions for protecting the environment by developing green belt, restricting ground water extraction and recharging aquifer, recycling and reusing waste water, etc.

Scope of the Survey: State Environment Impact Assessment Authority in its environmental clearance report specifically instructed the company to practice rain water harvesting. It advised the company to prepare a detailed scheme for rain water harvesting to recharge the GW aquifer in consultation with CGWA/state GW Board within six months of receipt of Environmental Clearance. Accordingly this study was undertaken to examine the scope of rain water harvesting as well as possibility of recharging aquifer.

Location: M/S Meghalaya Cement Limited is located at village Thangskai, PO- Lumshnong, Dist- East Jaintia Hills, Meghalaya. Its distance from the state capital Shillong is 104 Kms on the National Highway number 44 connecting the capital and the eastern part of Assam passing through the district. The study area is located at a distance of 18 km south of the block headquarters Khliehrlat.

M/s Meghalaya Cements Limited is located (in an undulatory terrain and geologically the area



predominantly consists of Jaintia Group (Age: Paleocene-Eocene) of rocks which is comprised of Sandstone and Limestone of Shella Formation. The depth of weathered zone is 1-2 m followed by hard massive rocks.



Fig.1: Location of M/s Meghalaya Cement Limited.

At present the total population of the premises are 2214 (Office: 1358, Residential Quarter: 843, Floating Population, Guest House: 13). There is no groundwater abstraction structure in the campus to cater domestic need. The company does not have any plan to construct any groundwater structure in the campus.

At present the water supply in the campus, is provided from a nearby stream. Water harvested from rooftop of buildings is also used for domestic purposes which are collected in storage tanks and recharge pits. One depression spring is located in the campus. The spring water is collected in a tank and utilized for electricity generation.

Rain water harvesting scheme: To comply conditions of State Environment Impact Assessment Authority, the company compiled following data for preparations of rainwater harvesting schemes.

- (i) Rainfall data: The company collected rainfall data of Shillong rain gauge station for last 5 years due to non-availability of continuous time series data of nearby Jowai station (Table 1). The average annual rainfall is 6683mm while average monsoon rainfall is 4758mm.

Table1: 5 years rainfall data of IMD, Shillong station.

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
2016	13.7	8.8	83.7	1026.9	661.2	796.4	2603.8	318.6	644.4	335.6	25.7	7.5
2017	0.6	214.4	313.4	887.4	395.9	1537.9	1433	1523.6	854	471.9	11.8	35.8
2018	3.6	18.1	67.7	264.6	691.5	1129.7	1431.7	746.6	617.5	73.9	6.1	14.9
2019	0.1	28.9	22.5	271.9	913.5	1474.5	2210.6	731.3	1016.6	508.3	25.8	3.3
2020	28.1	14.9	31.2	265.1	1533.2	1465.5	1668.2	224.2	1361.4	327.7	17.2	0.0

- (ii) Roof area: The entire area is divided into two sectors, viz., Raw Material Shed and Residential Colony building. The roof area, roof materials, volume of rain water available and storage tank constructed of each sectors are as follows:



Sector	Roof materials	Roof area (Sq.m)	volume of rain water (m ³)	Storage tank constructed	Capacity of storage tanks (m ³)
Raw Material Shed	Tin	31557.42	168718.6	1	42
Residential Colony building	RCC	4777.194	25540.79	2	267.9x2=535.8

(iii) Recharge structure: The company constructed only one recharge structure to recharge 63m³ of water.

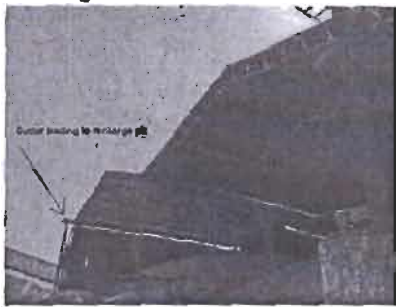


Fig.2:Raw Material Yard



Fig.5: Residential Quarters

Observation on compliance of State Environment Impact Assessment Authority conditions pertaining to Central Ground Water Board:

State Environment Impact Assessment Authority besides other conditions instructed the company for compliance of following conditions:

- (1) Special conditions no. vi) debarred the company from use of groundwater for power productions.

Observations of CGWB: At present the company is not extracting groundwater from bore well or dug well. However, spring water is utilized for power production. Spring water is in fact is groundwater oozing out due to intersection of water table with topographic contour.



Fig.2: Spring water collection tank with power generation chamber.

- (2) The company has prepared and implemented roof top rain water harvesting and recharging plan as mentioned earlier. However, the scheme is flawed due to use of excess rainfall data and choosing of wrong runoff coefficient. If IMD rainfall data of Jowai station was not available then they should use IMD grid data of Jaintia Hills. The IMD Grid data of Jaintia Hills for 10 years (2013-2022) is shown in Table: 3.

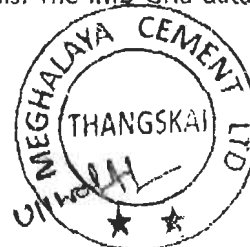


Table 3: Rainfall (mm) data of Jaintia Hills District, Meghalaya (source: India WRIS)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	0	10.12	60.41	98.51	440.32	210.86	299.4	282.57	194.63	120.77	0	1.9
2014	0.08	21.17	32.07	53.51	301.87	245.43	429.09	292.69	339.86	21.76	0.18	0.09
2015	16.14	15.36	28.64	258.55	214.52	357.91	290.41	333.3	266.12	53.93	19.21	4.78
2016	18.19	32.61	48.38	433.52	498.54	189.49	295.96	147.23	277.01	85.63	127.98	7.98
2017	0.25	48.43	237.77	444.39	261.56	426.47	299.33	341.97	319.22	280.34	18.38	55.23
2018	11.33	13.41	78.47	115.34	205.11	419.98	211	256.86	212.03	61.11	9.36	46.92
2019	0.12	18.61	37.16	137.79	291.51	291.2	366.88	220.35	211.67	231.89	25.66	0.68
2020	8.89	2.83	26.73	135.28	269.95	437.56	226.83	172.83	261.52	169.24	26.26	0.34
2021	2.07	0.21	66.45	120.33	200.05	244.69	230.54	315.36	109.11	185.47	0.05	21.66
2022	25.47	47.54	97.87	395.75	672.53	700.2	258.65	126.45	134.6	126.96	0.36	7.09

Runoff coefficient of tin and R.C.C. are 0.9 and 0.7 respectively (Source: Manual of Artificial Recharge of Groundwater (2007 & page: 118). With these data the total rain water volume available in the two sectors are as follows:

Sector	Roof materials	Runoff coefficient	Roof area (Sq.m)	volume of rain water (m ³)
Raw Material Shed	Tin	0.9	31557.42	55423.55
Residential Colony building	RCC	0.7	4777.194	6525.61

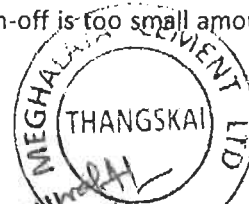
The storage tanks that are currently being built and those that are planned will collect approximately 1% of the total amount of rainwater that can be collected from the roof (61949.16 m³). If the volume of rainwater is not stored in toto, it may flow as surface runoff and breach the restrictions set forth in special condition number xxi.

- (3) The total quantity of run-off that is generated in the site is 185826.56 m³ (Table: 4)

Table 4: Quantum of runoff available through Rainwater harvesting (within premises) for 2600 TPD Cement Plant

S. N.	Particulars	Area (Sq.m) (To be filled)	Rainfall (m) (To be filled)	Runoff Coefficient*	Quantum of runoff available (Cum/Year)
	1	2	3	4	5(2*3*4)
1	Roof Top of building/Shed	36334.6	1.95142	0.85	60268.41682
2	Road/Paved area	49560	1.95142	0.65	62862.97945
3	Open Land (Rest of Area)	29540	1.95142	0.20	11528.97754
4	Green Belt (Plantation)	174800	1.95142	0.15	51166.17996
	Total (Sq.m)	477825	Total Quantum of available runoff (Cum/Year)		185826.55

It is necessary to manage 70% of the non-committed run-off after classifying 30% as committed run-off (committed to fill roof top rainwater harvesting structure). 10% of the total non-committed run-off can be considered to be infiltrated by natural process. So at least half of the remaining 60% non-committed run-off needs to be managed either by recharge or storage. In either case recharging 63m³ of surface run-off is too small amount



and it will not serve any purpose.

Before recharging, water level condition of the site needs to be measured periodically. The general criteria of recharge is that if post-monsoon water level is deeper than 5 mbgl (metre-below-ground-level) then only the artificial recharge technique can be applied. Since there is no mechanism to measure groundwater level in the site, the company should construct some ground water monitoring wells (preferably piezometers that can tap the sandstone aquifer) and measure the water level periodically as mentioned in the environmental clearance letter. After that only artificial recharge plan should be prepared. However, some ponds/tanks of appropriate dimensions should be constructed to conserve the non-committed surface run-off.

CONCLUSION AND RECOMMENDATION:

The rain water harvesting schemes is prepared with flawed data set. The constructed as well as proposed storage tanks will store nearly one percent of available rooftop rain water. It is determined that the 63m³ of rainwater intended for recharge is insufficient when taking into account of the volume of non-committed run-off. .

Recommendations:

- i. Appropriate numbers of storage tanks need to be constructed to catch the roof top rain water.
- ii. Dug wells/piezometer networks should be establish to monitor GW level and quality as per directions issued by ENVIRONMENTAL CLEARANCE letter (No.SEIAA/(PR-19/2012)/PT/PR-05/2015/444 dated Shillong the 9th June 2017)
- iii. Artificial recharge plan should be prepared to recharge the aquifer if the post-monsoon water level is deeper than 5 mbgl.
- iv. Tanks/ponds with appropriate dimensions connected with storm water drains should be constructed to conserve the non-committed run-off.

Acknowledgement

The authors gratefully acknowledge Sh. Ujjal Anurag, Dy. Manager (Env.) and other senior officers of M/s Meghalaya Cements Limited for their kind co-operation during the course of the site inspection.





भारत सरकार | Government of India

वाणिज्य और उद्योग मंत्रालय | Ministry of Commerce & Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो) | Petroleum & Explosives Safety Organisation (PESO)

पूर्व नाम: विस्फोटक विभाग | Formerly - Department of Explosives

घर क्रमांक २१६ दूसरी मंजिल, ११३१ बैंक के ऊपर, चंदमारी | House No. 216, 2nd Floor, above IDBI, Chandmari,

गुवाहाटी आसाम - ७८१०२१ गुवाहाटी | Guwahati, Assam Guwahati 781021

फोन (Phone) - 2652783 फैक्स (Fax) - 2652503

संख्या No. A/E/C/MG/PJ/S (A271)

दिनांक / Dated: 23/03/2022

सेवा में / To:

M/s. Meghalaya Cements Ltd.

Thangskai, East Jaintia Hills

Town/Pillage - East Jaintia Hills

Dist. EAST JAINTEA HILLS, State Meghalaya Pincode-793110

विषय /

Subject

Licence to possess for use of Ammonium Nitrate from a store house attached to explosives manufacturing unit (ANFO) situated at Survey No.: Lumpch Area, Village/Town: Village: Lumpshong, Dist. EAST JAINTEA HILLS, State Meghalaya
Licence No.: A/E/C/MG/PJ/S (A271) granted in Form P-3 of Ammonium Nitrate Rules, 2012 - Renewal regarding

महोदय / Sir(s).

आपके पत्र संख्या ६७३६ दिनांक 22/03/2022 के सन्दर्भ में अमोनियम नाइट्रेट नियम 2012 के प्ररूप पी-3 में जारी विषयक अनुज्ञप्ति दिनांक 31/3/2022 तक विधिवत नवीनीकृत कर आपको प्रेषित की जा रही है। (कृपया अनुज्ञप्ति की पावती स्वीकार करें।) Reference to your letter No. 6736 dated 22/03/2022, the subject licence duly renewed upto 31/3/2022 and issued in Form P-3 of Ammonium Nitrate Rules, 2012 is forwarded herewith. Please acknowledge receipt of the licence

अनुज्ञप्ति के आगामी नवीनीकरण हेतु कृपया निम्नलिखित दस्तावेज इस प्रकार प्रेषित करें कि यह दिनांक 31/3/2022 को या उससे पूर्व this office में प्राप्त हो जाए। For further renewal of licence, please submit the following documents so as to reach this office on or before 31/3/2022

- विधिवत भरा हुआ एवं हस्ताक्षरित प्ररूप आर - 1 / Application in Form R-1 duly filled in and signed
- एक से पाँच वर्ष के अनुज्ञप्ति शुल्कों का, अमोनियम नाइट्रेट नियम, 2012 के तहत ऑनलाइन आवेदन पोर्टल पर उपलब्ध ई-भुगतान सुविधा के माध्यम से लाइसेंस शुल्क ऑनलाइन जमा किया जाना है।
Licence fees renewable for one to five years, to be submitted online through a payment facility available on online application portal under the Ammonium Nitrate Rules, 2012
- मूल अनुज्ञप्ति सम अनुमोदित आरेखण / Original licence with approved plan
- इस सम्बन्ध में कृपया अमोनियम नाइट्रेट नियम, 2012 के नियम 36 का भी सन्दर्भ ले। In this connection, please also refer to Rule 36 of Ammonium Nitrate Rules, 2012
- (ग्रीन पासपोर्ट साइज के 6 फोटोशॉट जिन पर सामने की ओर काले रंग की अमिट स्वादी से ऑक्युपायर (अमोनियम नाइट्रेट नियम, 2012 के नियम 2 (O) के अन्तर्गत यथा परिभाषित) द्वारा विधिवत हस्ताक्षर किया गया हो। यदि जमा नहीं किया गया हो।) / Six copies of colour passport size photographs duly signed by the occupier (as defined under Rule 2 (O) of Ammonium Nitrate Rules, 2012) in front by 'black color indelible ink' (if not submitted)

संलग्नक / Enclosures :

भवदीय - Yours faithfully,

(एस. के. भोले) (S. K. Bhole)

विस्फोटक नियंत्रक / Controller of Explosives

For Joint Chief Controller of Explosives

कृते संयुक्त मुख्य विस्फोटक नियंत्रक

For Jt. Chief Controller of Explosives

गुवाहाटी Guwahati

प्रतिलिपि भेजा / Copy Forwarded to

1. District Magistrate, EAST JAINTEA HILLS (Meghalaya) for information

कृते संयुक्त मुख्य विस्फोटक नियंत्रक / For Joint Chief Controller of Explosives

गुवाहाटी Guwahati

नोट: शुल्क एवं अन्य विवरणों के बारे में अधिक जानकारी हेतु कृपया संगठन का वेबसाइट या PESO पर जाएँ। For more information regarding licence fees and other details, please visit our website or PESO office.

अनुमति प्रारूप P-3
(अमोनियम नाइट्रेट नियम, 2012 की अनुसूची I की क्रम संख्या 3 और नियम 35 देखें)

LICENCE FORM P-3
(See Sr No.-3 of Schedule I and rule 35
of Ammonium Nitrate Rules, 2012)

विस्फोटक विनिर्माण इकाई (एनएफओ) से जुड़े गोदाम से, अमोनियम नाइट्रेट के उपयोग के लिए रखने हेतु अनुमति
Licence to possess for use of Ammonium Nitrate from a store house attached to explosives manufacturing unit (ANFO)

अनुमति संख्या | Licence No. : A/EC/MG/P3/S(A271)
वार्षिक अनुमति शुल्क | Annual licence Fee Rs. 1000/-



अनुमति एतद्वारा जारी की जाती है
Licence is hereby granted to :
M/s. Meghalaya Cements Ltd. (अधिष्ठाता : Ramesh Kumar Parcek)
Thangshai, East Jaintia Hills,
शहर : गाँव - East Jaintia Hills
जिला- EAST JAINTHIA HILLS, राज्य- Meghalaya, पिन कोड - 793210
Phone - , Email - , फैक्स-

- अनुमतिधारी का स्तर Company
Status of licensee holder Company
- अनुमति केवल निम्नलिखित प्रयोजन हेतु दी गई है विस्फोटक विनिर्माण इकाई (एनएफओ) से जुड़े गोदाम से, अमोनियम नाइट्रेट के उपयोग के लिए रखने हेतु अनुमति
Licence is valid only for the following purpose Licence to possess for use of Ammonium Nitrate from a store house attached to explosives manufacturing unit (ANFO)
- अनुमति अमोनियम नाइट्रेट की निम्नलिखित मात्रा के लिए दी गई है :
Licence is valid for the following quantity of Ammonium Nitrate

नाम तथा विवरण Name and Description	किसी एक समय में मात्रा (कि.ग्रा.) Quantity at a time (Kg.)	किसी एक वित्तीय वर्ष में कय की जाने वाली अमोनियम नाइट्रेट की मात्रा (कि.ग्रा.) Quantity of Ammonium Nitrate to be purchased in a financial Year (Kg.)
Ammonium Nitrate (Solid)	40000	180000

- अनुमति परिसर निम्नलिखित आरेख(णों) के अनुरूप होगा
The licensed premises shall conform to the following drawing(s)
आरेख संख्या | Drawing No : A/EC/MG/P3/S(A271) दिनांक | Dated : 13/06/2014
- अनुमति परिसर निम्नलिखित पते पर स्थित है
The licensed premises are situated at following address
Survey No, Umpeh Area, शहर/गाँव | Town/Village Village: Lumshnong
पुलिस स्टेशन | Police Station Lumshnong जिला | District EAST JAINTHIA HILLS राज्य | State Meghalaya
पिन कोड | Pin Code : 793210 फोन | Phone : ईमेल | E-Mail : mines@topeem.in फैक्स | Fax :
- अनुमति परिसर में निम्नलिखित सुविधाएँ उपलब्ध हैं
The licensed premises consist of following facilities
Consist of one store house.
- अनुमति समय-समय पर यथा संशोधित विस्फोटक अधिनियम 1884 एवं उसके अधीन बनाए गए अमोनियम नाइट्रेट नियम, 2012 की शर्तें, अतिरिक्त शर्तें तथा निम्नलिखित उपबन्धों के अधीन जारी की जाती हैं
(i) इस क्रम संख्या 5 में उल्लिखित आरेख (जिसमें स्थल, निर्माण एवं अन्य विवरण दर्शाए गए हैं)।
(ii) अनुमति जारी करने वाले प्राधिकारी द्वारा हस्ताक्षरित अनुमति की शर्तें एवं अतिरिक्त शर्तें।

The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Ammonium Nitrate Rules, 2012 framed there under and the conditions, additional conditions and Annexures
(i) Drawings (showing site, constructional and other details) as stated in serial No. 5 above
(ii) Conditions and Additional Conditions of this licence signed by the licence issuing authority



(A 271)

8. यह अनुमति 31 मार्च 2019 तक वैध रहेगी।
This licence shall remain valid till 31st day of March 2019.

यह अनुमति विस्फोटक अधिनियम, 1884 या उसके अधीन बनाए गए अमोनियम नाइट्रेट नियम, 2012 या इस अनुमति की किसी शर्त का उल्लंघन करने पर या यदि अनुमति परिसर, आरेखण और उससे सलग्न उपाधर में दर्जित विवरण के अनुरूप नहीं पाए जाने पर निरस्त या प्रतिरुद्ध की जा सकती है।

This licence is liable to be suspended or revoked for any violation of the Explosives Act 1884 or Ammonium Nitrate Rules, 2012 framed there under or the conditions of this license if the licensed premises are not found conforming to the description shown in the plans and annexure attached hereto.

दिनांक : Date : 13/06/2019

Sd/-
संयुक्त मुख्य विस्फोटक नियंत्रक
Joint Chief Controller of Explosives
पूर्वचल, कोलकाता : East Circle office, Kolkata

Amendments :

- Change in Authorized Signatory/ Occupier/ Partners/ Directors dated : 26/08/2015
- Change in Authorized Signatory/ Occupier/ Partners/ Directors dated : 06/03/2019

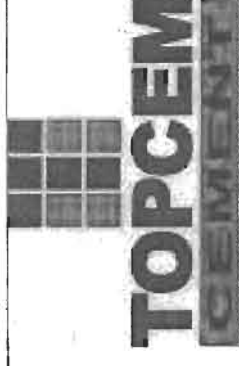
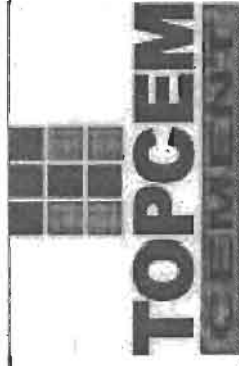
अनुमति नवीकरण के लिए पंटांकन : Endorsement for renewal of licence

नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry	अनुमति प्राधिकारी के हस्ताक्षर Signature of licensing authority
23/03/2022	31/03/2022	Jt. Chief Controller of Explosives, Guwahati कुल सचिव मुख्य विस्फोटक नियंत्रक

सांविधिक चेतावनी: अमोनियम नाइट्रेट कानून का दुरुपयोग जख्मी और मृतक का कारण बन सकता है।
Statutory Warning : Misuse of Ammonium Nitrate shall constitute serious criminal offence under the law.
गुवाहाटी, Guwahati

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.





PRESENTATION

ON

CSR & WELFARE ACTIVITIES

FROM

OCTOBER' 2024 TO MARCH' 2025

ORGANIZED BY

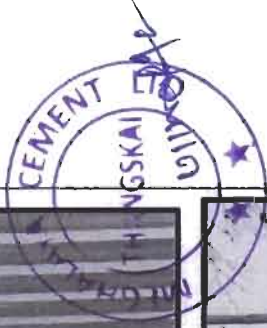
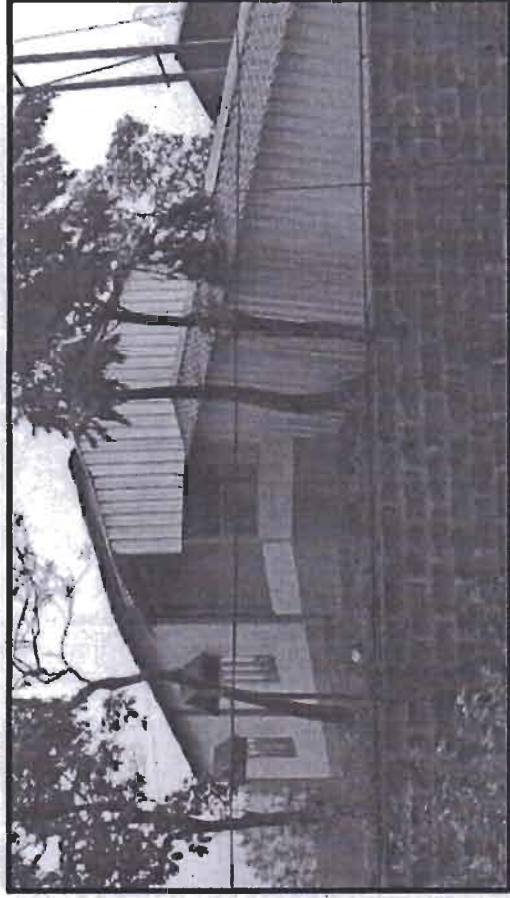
MEGHALAYA CEMENTS LIMITED,

THANGSKAI



Annexure - 8

**CONSTRUCTED CHURCH AT COMPANY PREMISES FOR LOCAL COMMUNITIES.
-(APL'2024)**



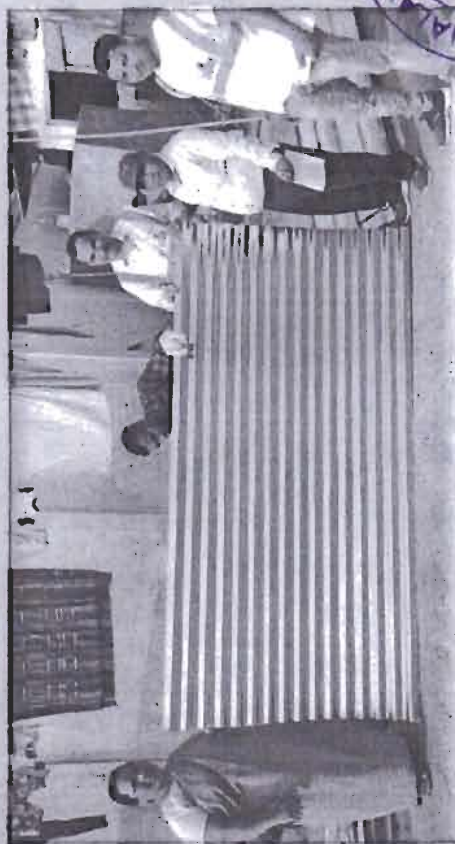
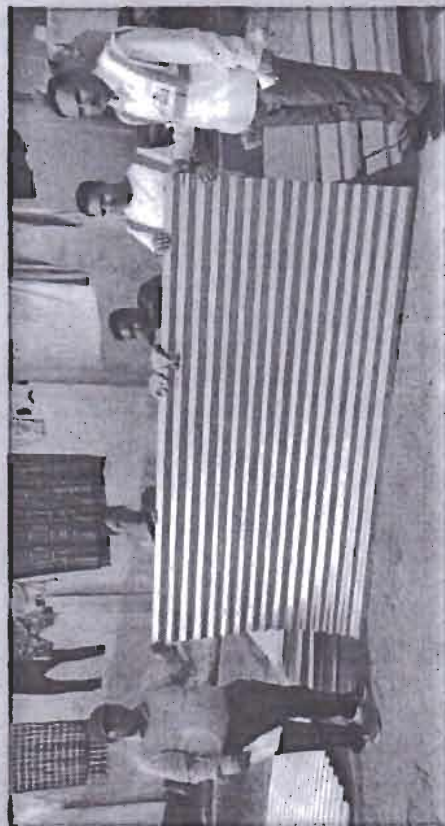
Annexure-X

DUSTBIN DISTRIBUTION TO WAHAJER, THANGSKAI & CHIEHRUPHI VILLAGE (20 NOS. FOR EACH VILLAGE).
-(APRIL'2024)



Annexure-2

CGI SHEET DISTRIBUTION TO THE NEEDY VILLAGERS OF WAHAJER
VILLAGE, WHO WERE AFFECTED BY THE DEVASTATING HAILSTORM
CAUSED BY CYCLONE REMEL.
-(11th JUNE 2024)



Annexure - X

FOOTBALL BOOT DISTRIBUTION TO THREE VILLAGE THANGSKIA,
WAHIAJER & CHIEHRUPHI CHILDREN (JUNE 2024)



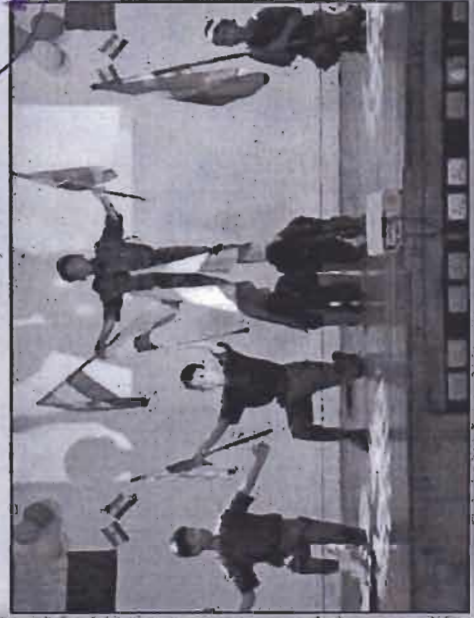
Annexure - X

PROVIDED BARRICADES & SIGN BOARD TO THE THE UMTRA INFILTRATION CHECK POST, MEGHALAYA (JULY 2024)



Annexure - X

**Honoring Freedom with Unity and Pride: A Tribute to the Nation by
Topcem Public School Students.
-(15th AUG'2024)**



Annexure-X

Meghalaya Cements Limited (Topcem Cement) Officials, along with Headman, Assistant Headman, Secretary and other people of **Wahiajer Village** joined hands to initiate a **Plantation Drive**, fostering a sense of community and environmental responsibility.

-(20th Aug'2024)

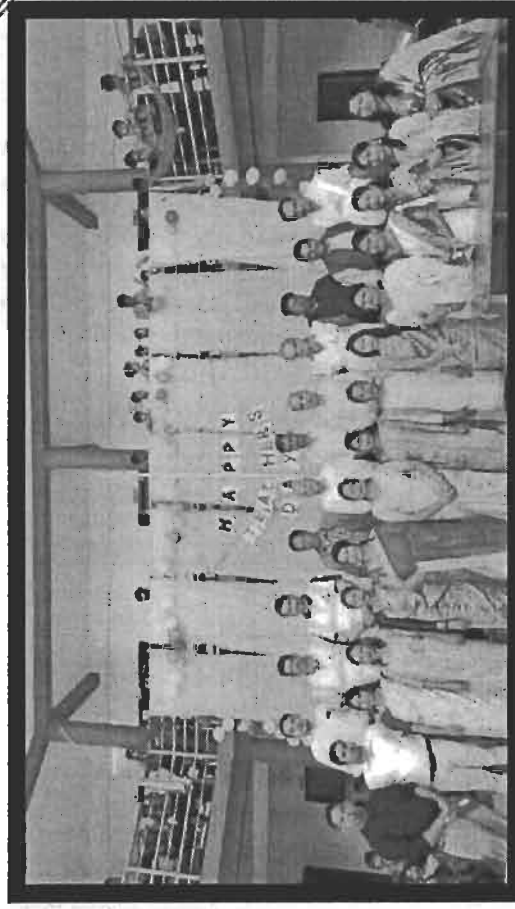


Organized a Rudrabhishek ceremony at our MCL Plant Temple, bringing our team together in a shared moment of devotion and gratitude. Wishing peace, prosperity, and success for all.



On the auspicious Teacher's Day, we honors the dedication and passion of educators with the inauguration of two pioneering facilities at Topcem Public School: 1. Art & Music Class & 2. Advanced Computer Laboratory.

-(05th Sept'2024)



Inaugurated X-ray and Laboratory Facility at the MCL Occupational Health Center, to deliver top-quality healthcare services to both our employees and the surrounding community.

-(05th September 2024)



Annexure -X

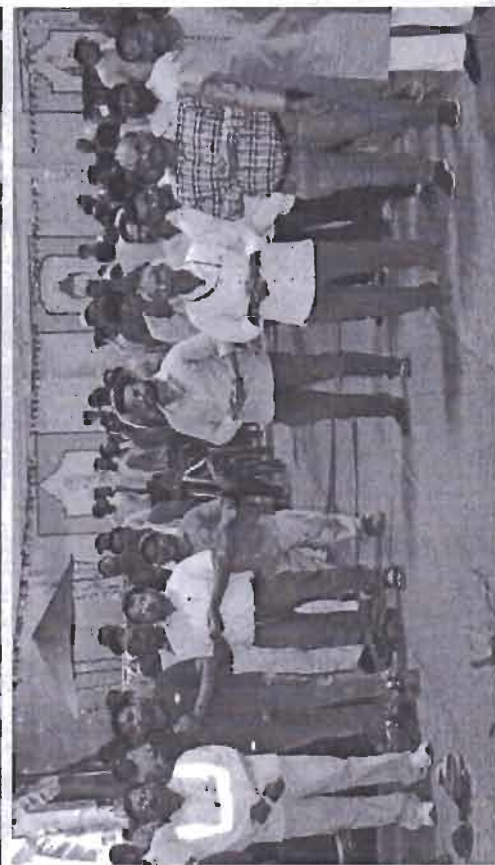
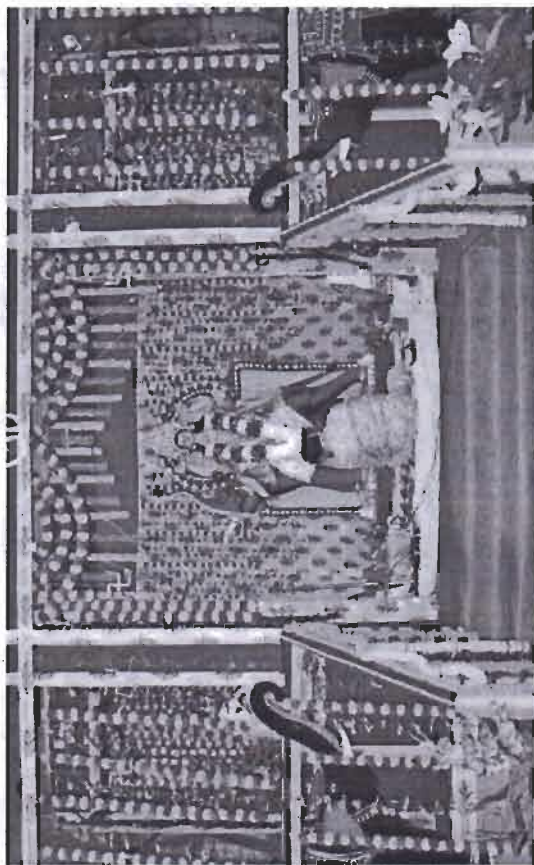
Celebrates the achievements of students from Thangskai, Wahiajer & Chiehruphi with the SSLC Awards 2023 & 2024 for their stellar performance in the SSLC exams of 2023 & 2024. We extend financial assistance to these bright young minds, supporting their educational journey and also provide the financial assistance to poor students to pursue their education.

-(14 SEPT'2024)



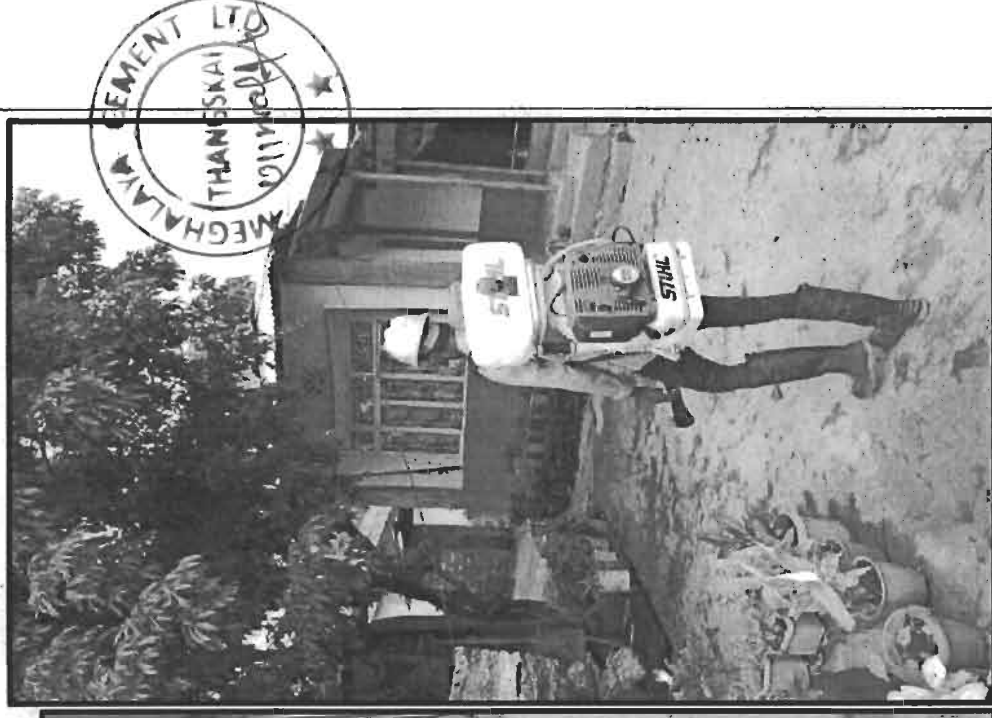
Annu - 2

Vishwakarma Puja is a significant day of celebration, dedicated to Lord Vishwakarma, the divine architect and engineer of the universe.
-(17 Sept'24)



CEMENT LTD
THANGSKAI
Dhaka

PEST CONTROL SERVICE AT THANGSKAI, WAHIAJER &
CHIEHRUPHI VILLAGE.
-(Sept'2024)

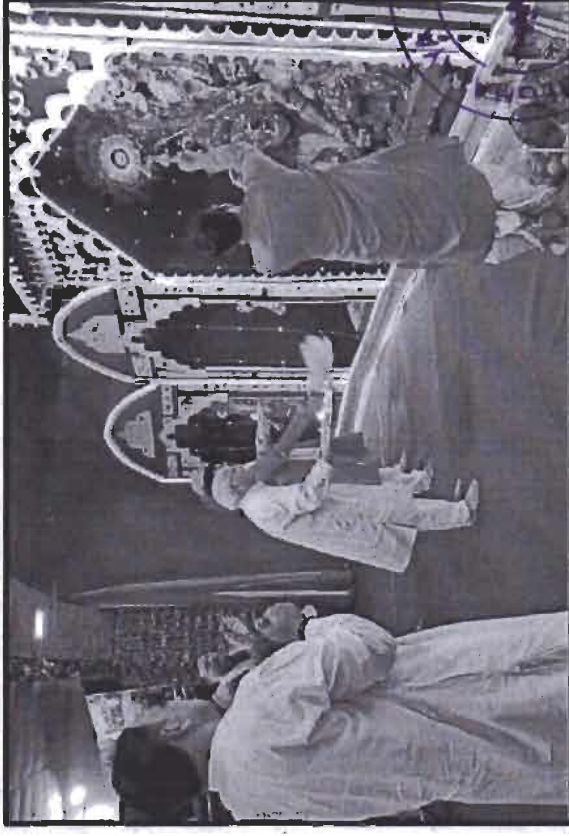


ORGANIZED WEEKLY CLEAN DRIVE PROGRAMME FOR THREE VILLAGE
(THANGSKAI, WAHLAJER & CHIEHRUPHI).
-(Sept'2024 to till date)



Annexure - 2

NAVRATRI & DURGA PUJA AT MCL CAMPUS (TOPCEM RECREATION CLUB)
- (03rd - 12th Oct'2024)



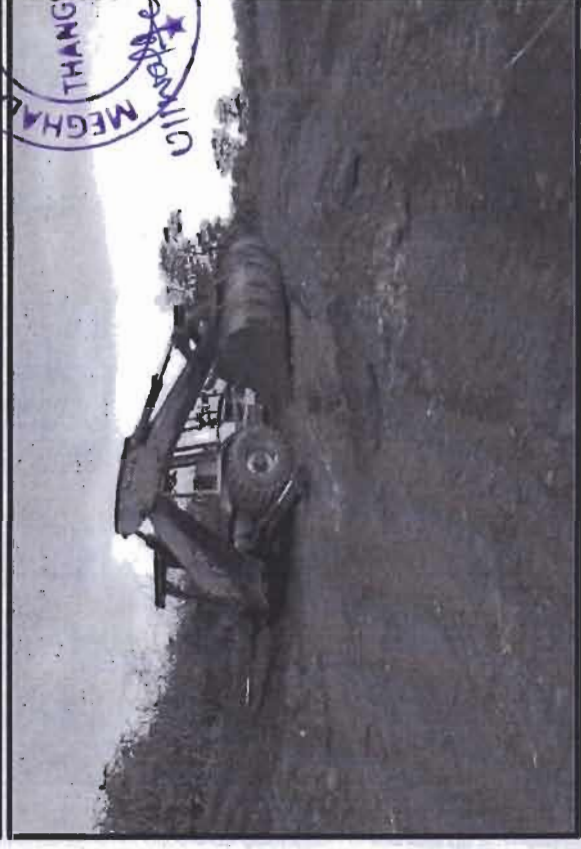
Annexure -X

SWACHH BHARAT ABHIYAN AT COMPANY CAMPUS AND THREE VILLAGES
(THANGSKAI, WAHIAJER & CHIEHRUPHI VILLAGE) -(02nd Oct'2024)



Annexure-X

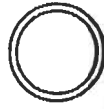
**FOOTBALL GROUND DEVELOPMENT WORK PROGRESS AT
CHIEHRUPHI VILLAGE.
-(Oct'2024)**



Organized a free Medical Health checkup camp at Thangskai village.
-(Nov'2024)



**Orgnized a free Medical Health checkup camp at Wahiajer village.
-(Dec'2024)**



**Organized a free Medical Health checkup camp at Chiehruphi village.
-(Dec'2024)**

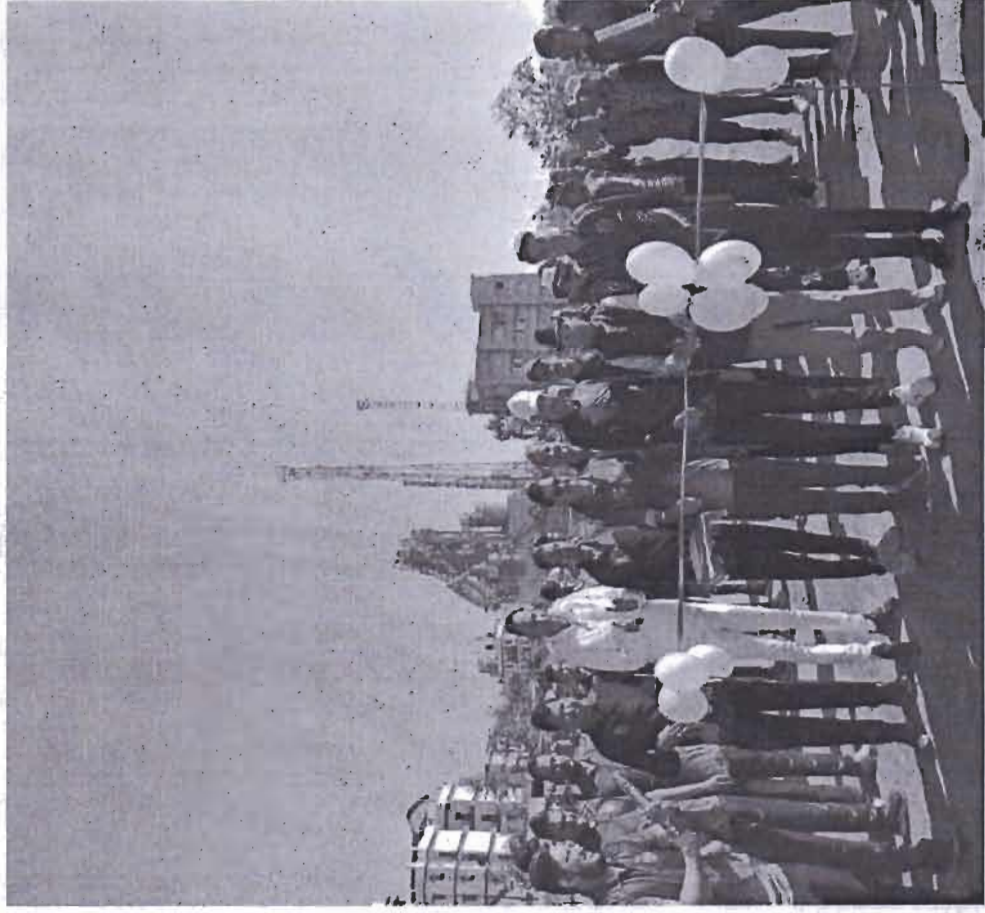


Shot on OnePlus
By RUPAM(BU) 2024 12/13 10:32

**Topcem Christian Fellowship has been celebrated Advance Christmas.
-(Dec'2024)**



**Inaugural ceremony of the Topcem Premier League session 2024 -25.
- (Dec' 2024)**



Annexure - 8

**Maha Shivratri Puja has been celebrated at MCL Temple.
- (Feb' 2025)**



Annexure-2

organized a free Medical camp and emergency Ambulance service at Chiehruphi village jingiaseng samla KJP synod mihngi.

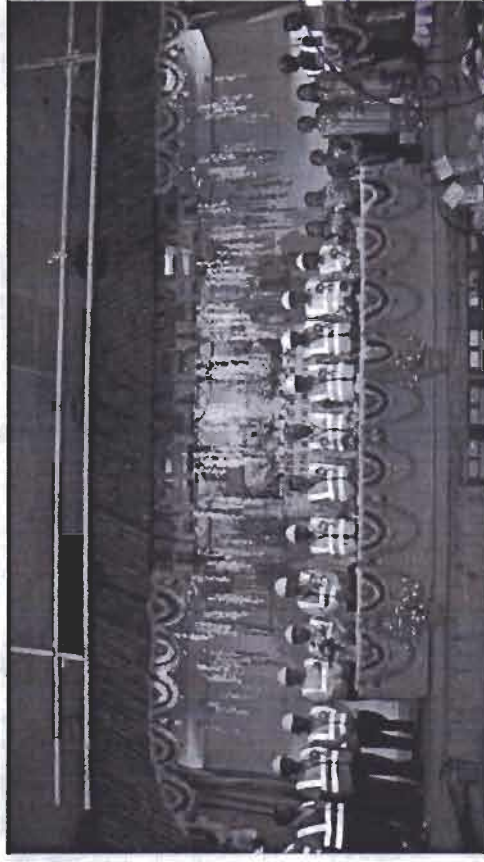
-(Mar' 2025)



Annexure - X

Celebrated the "National Safety Day/Week campaign program inside
our Plant premise along with whole Nation.

- (Mar' 2025)



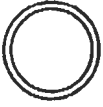
Anexura-X

DONATED TIMBER & C.G.I FOR REPAIRING THE SCHOOL.

- (Mar' 2025)



- (Mar' 2025)



EMPHASIS ON EDUCATION (April 2024 to March 2025)



- Monthly Salary for 01 TEACHER OF Chiehruphi
Higher Secondary School.
- Rs. 31000/- per month
- October'24 to March'25 (06 month X 31000/-)
- Total Rs. = 186000/-



Annexure - X

Expenditure Incurred for Socio-Economic Development under CSR (From 01.10.2024 to 31.03.2025)



SL.NO.	HEADING	AMOUNT
1	Emphasis on Education	1,01,500
2	Sports Activity	64,500
3	Encouraging/Felicitation prog. For Students.	45,000
4	Polio Immunization Camps, Family planning, etc.	4,86,816
5	Infrastructure development of Hospitals/Schools	21,000
6	Cement Distribution Programme.	43,15,186
7	Plant Distribution Programme.	421
8	Donation to Churches, Road & House Repairing etc.	1,49,250
9	Community Feast	71,778
9	Drinking water supplying scheme.	3,30,320
10	Village Development Funds.	3,12,500
Total (In Rs.)		58,98,271



Annexure-X



THANK
YOU



Report No.: ENV/MCL/24-25/SW-10/01

Date : 07/11/2024

Order No.: 4700032340

Date : 21/10/2024

Report Issued To: **M/S. MEGHALAYA CEMENTS LIMITED**
Village: Thangskai; PO: Lumshnong, Meghalaya

SURFACE WATER ANALYSIS RESULTS

Sample Ref. No.: MCL/2024/SW-2510/01

Sample Source : Um-Lunar River Upstream

Sample Type : Surface Water

Collected On : 25-10-2024

Received On : 28-10-2024

Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* in the Absence of Alternate Source
1.	Colour, Hazen Units, Max.	15	5	15
2.	Odour	Agreeable	Agreeable	Agreeable
3.	Temperature	24.6	--	--
4.	pH Value	6.68	6.5 - 8.5	No Relaxation
5.	Suspended Solids	43	--	--
6.	Total Dissolved Solids, mg/l, Max.	129	500	2000
7.	Conductivity, μ S/cm	182	--	--
8.	Dissolved Oxygen, mg/l, Min.	6.4	--	--
9.	Biochemical Oxygen Demand, mg/l, Max.	<1.0	--	--
10.	Chemical Oxygen Demand, mg/l, Max.	27	--	--
11.	Oil and Grease, mg/l, Max.	<4.0	--	--
12.	Residual Chlorine, mg/l, Min.	<0.01	0.2	1
13.	Total Hardness (as CaCO_3), mg/l, Max.	8.4	200	600
14.	Calcium (as Ca), mg/l, Max.	26	75	200
15.	Magnesium (as Mg), mg/l, Max.	9	30	100
16.	Iron (as Fe), mg/l, Max.	<0.001	0.3	No Relaxation
17.	Total Chromium, (as Cr), mg/l, Max	<0.001	0.05	No Relaxation
18.	Ammonical Nitrogen (as N), mg/l, Max.	1.9	--	--
19.	Total Kjeldahl Nitrogen (as NH_3), mg/l, Max.	5.8	--	--
20.	Free Ammonia (as NH_3), mg/l, Max.	<0.01	--	--

*Limits as per IS 10500:2012

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, **ENVIROCON**

NOTE:

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2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

Core Services: Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs
Associate Services: Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No.: ENV/MCL/24-25/SW-10/02
Date : 07/11/2024

Order No.: 4700032340
Date : 21/10/2024

Report Issued To: **M/S. MEGHALAYA CEMENTS LIMITED**
Village: Thangskai; PO: Lunishnong, Meghalaya

SURFACE WATER ANALYSIS RESULTS

Sample Ref. No. : MCL/2024/SW-2510/02
Collected On : 25-10-2024

Sample Source : Um-Lunar River Downstream
Received On : 28-10-2024

Sample Type : Surface Water
Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* in the Absence of Alternate Source
1.	Colour, Hazen Units, Max.	18	5	15
2.	Odour	Agreeable	Agreeable	Agreeable
3.	Temperature	24.6	--	--
4.	pH Value	6.63	6.5 - 8.5	No Relaxation
5.	Suspended Solids	57	--	--
6.	Total Dissolved Solids, mg/l, Max.	143	500	2000
7.	Conductivity, μ S/cm	190	--	--
8.	Dissolved Oxygen, mg/l, Min.	6.9	--	--
9.	Biochemical Oxygen Demand, mg/l, Max.	<1.0	--	--
10.	Chemical Oxygen Demand, mg/l, Max.	41	--	--
11.	Oil and Grease, mg/l, Max.	<4.0	--	--
12.	Residual Chlorine, mg/l, Min.	<0.01	0.2	1
13.	Total Hardness (as CaCO_3), mg/l, Max.	9.2	200	600
14.	Calcium (as Ca), mg/l, Max.	29	75	200
15.	Magnesium (as Mg), mg/l, Max.	10	30	100
16.	Iron (as Fe), mg/l, Max.	<0.001	0.3	No Relaxation
17.	Total Chromium, (as Cr), mg/l, Max	<0.001	0.05	No Relaxation
18.	Ammonical Nitrogen (as N), mg/l, Max.	3.2	--	--
19.	Total Kjeldahl Nitrogen (as NH_3), mg/l, Max.	6.9	--	--
20.	Free Ammonia (as NH_3), mg/l, Max.	<0.01	--	--

*Limits as per IS 10500:2012

Analysis Protocol: IS 3025



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Report No.: ENV/MCL/24-25/SW-12/01

Date : 07/01/2025

Order No.: 4700032842

Date : 11/12/2024

Report Issued To : **M/S. MEGHALAYA CEMENTS LIMITED**
Village: Thangskai; PO: Lumshnong, Meghalaya

SURFACE WATER ANALYSIS RESULTS

Sample Ref. No. : MCL/2024/SW-2312/01

Sample Source : Um-Lunar River Upstream

Sample Type : Surface Water

Collected On : 23-12-2024

Received On : 27-12-2024

Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* in the Absence of Alternate Source
1.	Colour, Hazen Units, Max.	11	5	15
2.	Odour	Agreeable	Agreeable	Agreeable
3.	Temperature	25.2	--	--
4.	pH Value	6.73	6.5 - 8.5	No Relaxation
5.	Suspended Solids	36	--	--
6.	Total Dissolved Solids, mg/l, Max.	76	500	2000
7.	Conductivity, μ S/cm	148	--	--
8.	Dissolved Oxygen, mg/l, Min.	6.5	--	--
9.	Biochemical Oxygen Demand, mg/l, Max.	<1.0	--	--
10.	Chemical Oxygen Demand, mg/l, Max.	33	--	--
11.	Oil and Grease, mg/l, Max.	<4.0	--	--
12.	Residual Chlorine, mg/l, Min.	<0.01	0.2	1
13.	Total Hardness (as CaCO_3), mg/l, Max.	7.2	200	600
14.	Calcium (as Ca), mg/l, Max.	19	75	200
15.	Magnesium (as Mg), mg/l, Max.	2	30	100
16.	Iron (as Fe), mg/l, Max.	<0.001	0.3	No Relaxation
17.	Total Chromium, (as Cr), mg/l, Max	<0.001	0.05	No Relaxation
18.	Ammonical Nitrogen (as N), mg/l, Max.	0.5	--	--
19.	Total Kjeldahl Nitrogen (as NH_3), mg/l, Max.	2.8	--	--
20.	Free Ammonia (as NH_3), mg/l, Max.	<0.01	--	--

*Limits as per IS 10500:2012

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/MCL/24-25/SW-12/02

Date : 07/01/2025

Order No.: 4700032842

Date : 11/12/2024

Report Issued To : **M/S. MEGHALAYA CEMENTS LIMITED**
Village: Thangskai; PO: Lumshnong, Meghalaya

SURFACE WATER ANALYSIS RESULTS

Sample Ref. No. : MCL/2024/SW-2312/02

Sample Source : Um-Lunar River Downstream

Sample Type : Surface Water

Collected On : 23-12-2024

Received On : 27-12-2024

Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* in the Absence of Alternate Source
1.	Colour, Hazen Units, Max.	12	5	15
2.	Odour	Agreeable	Agreeable	Agreeable
3.	Temperature	25.2	--	--
4.	pH Value	6.71	6.5 - 8.5	No Relaxation
5.	Suspended Solids	43	--	--
6.	Total Dissolved Solids, mg/l, Max.	81	500	2000
7.	Conductivity, μ S/cm	152	--	--
8.	Dissolved Oxygen, mg/l, Min.	6.5	--	--
9.	Biochemical Oxygen Demand, mg/l, Max.	<1.0	--	--
10.	Chemical Oxygen Demand, mg/l, Max.	35	--	--
11.	Oil and Grease, mg/l, Max.	<4.0	--	--
12.	Residual Chlorine, mg/l, Min.	<0.01	0.2	1
13.	Total Hardness (as CaCO_3), mg/l, Max.	7.6	200	600
14.	Calcium (as Ca), mg/l, Max.	21	75	200
15.	Magnesium (as Mg), mg/l, Max.	2	30	100
16.	Iron (as Fe), mg/l, Max.	<0.001	0.3	No Relaxation
17.	Total Chromium, (as Cr), mg/l, Max	<0.001	0.05	No Relaxation
18.	Ammonical Nitrogen (as N), mg/l, Max.	0.8	--	--
19.	Total Kjeldahl Nitrogen (as NH_3), mg/l, Max.	3.2	--	--
20.	Free Ammonia (as NH_3), mg/l, Max.	<0.01	--	--

*Limits as per IS 10500:2012

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON



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Report No.: ENV/MCL/24-25/SW-02/01

Order No.: 4700033628

Date : 07/03/2025

Date : 19/02/2025

Report Issued To : **M/S. MEGHALAYA CEMENTS LIMITED**
Village: Thangskai; PO: Lumshnong, Meghalaya

SURFACE WATER ANALYSIS RESULTS

Sample Ref. No. : MCL/2025/SW-2302/01

Sample Source : Um-Lunar River Upstream

Sample Type : Surface Water

Collected On : 23-02-2025

Received On : 26-02-2025

Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* in the Absence of Alternate Source
1.	Colour, Hazen Units, Max.	11	5	15
2.	Odour	Agreeable	Agreeable	Agreeable
3.	Temperature	25.3	--	--
4.	pH Value	6.61	6.5 - 8.5	No Relaxation
5.	Suspended Solids	42	--	--
6.	Total Dissolved Solids, mg/l, Max.	81	500	2000
7.	Conductivity, μ S/cm	166	--	--
8.	Dissolved Oxygen, mg/l, Min.	6.2	--	--
9.	Biochemical Oxygen Demand, mg/l, Max.	<1.0	--	--
10.	Chemical Oxygen Demand, mg/l, Max.	29	--	--
11.	Oil and Grease, mg/l, Max.	<4.0	--	--
12.	Residual Chlorine, mg/l, Min.	<0.01	0.2	1
13.	Total Hardness (as CaCO_3), mg/l, Max.	21	200	600
14.	Calcium (as Ca), mg/l, Max.	11	75	200
15.	Magnesium (as Mg), mg/l, Max.	3	30	100
16.	Iron (as Fe), mg/l, Max.	<0.001	0.3	No Relaxation
17.	Total Chromium, (as Cr), mg/l, Max	<0.001	0.05	No Relaxation
18.	Ammonical Nitrogen (as N), mg/l, Max.	0.9	--	--
19.	Total Kjeldahl Nitrogen (as NH_3), mg/l, Max.	2.6	--	--
20.	Free Ammonia (as NH_3), mg/l, Max.	<0.01	--	--

*Limits as per IS 10500:2012

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

- NOTE:**
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Associate Services: Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No.: ENV/MCL/24-25/SW-02/02

Date : 07/03/2025

Order No.: 4700033628

Date : 19/02/2025

Report Issued To : **M/S. MEGHALAYA CEMENTS LIMITED**
Village: Thangskai; PO: Lumshnong, Meghalaya

SURFACE WATER ANALYSIS RESULTS

Sample Ref. No. : MCL/2025/SW-2302/02

Sample Source : Um-Lunar River Downstream

Sample Type : Surface Water

Collected On : 23-02-2025

Received On : 26-02-2025

Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* in the Absence of Alternate Source
1.	Colour, Hazen Units, Max.	16	5	15
2.	Odour	Agreeable	Agreeable	Agreeable
3.	Temperature	25.3	--	--
4.	pH Value	6.55	6.5 - 8.5	No Relaxation
5.	Suspended Solids	48	--	--
6.	Total Dissolved Solids, mg/l, Max.	88	500	2000
7.	Conductivity, μ S/cm	176	--	--
8.	Dissolved Oxygen, mg/l, Min.	5.9	--	--
9.	Biochemical Oxygen Demand, mg/l, Max.	<1.0	--	--
10.	Chemical Oxygen Demand, mg/l, Max.	27	--	--
11.	Oil and Grease, mg/l, Max.	<4.0	--	--
12.	Residual Chlorine, mg/l, Min.	<0.01	0.2	1
13.	Total Hardness (as CaCO_3), mg/l, Max.	28	200	600
14.	Calcium (as Ca), mg/l, Max.	17	75	200
15.	Magnesium (as Mg), mg/l, Max.	6	30	100
16.	Iron (as Fe), mg/l, Max.	<0.001	0.3	No Relaxation
17.	Total Chromium, (as Cr), mg/l, Max	<0.001	0.05	No Relaxation
18.	Ammonical Nitrogen (as N), mg/l, Max.	1.8	--	--
19.	Total Kjeldahl Nitrogen (as NH_3), mg/l, Max.	3.6	--	--
20.	Free Ammonia (as NH_3), mg/l, Max.	<0.01	--	--

*Limits as per IS 10500:2012

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.
2. Results refer only to the particular parameters tested.
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, I.O.C.L (AOD) New Market, Digboi – 786171, Assam.

Core Services: Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs
Associate Services: Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Annexure - XI

MEGHALAYA CEMENTS LIMITED

Six Monthly Fugitive Emission Report, South Khliehleri Limestone Mine (31.05 Ha), 2024-2025

Location	Oct 2024	Nov2 024	Dec 2024	Jan 2025	Feb 2025	Mar 2025	Avg.	Permissible Limits for: Rural Areas (By MSPCB 24 hrs Monitoring)
Drilling Area	1035	1049	1057	945	1879	1329	1215.66	5000 μ g/m ³
Blasting Point	1754	1769	1793	1893	1935	2254	1899.66	5000 μ g/m ³
Loading Point	2346	2375	2686	2237	4271	4125	3006.66	5000 μ g/m ³
Unloading Point	989	1215	1269	962	1159	1023	1102.83	5000 μ g/m ³

Prepared By

Abhigyan Gautam

(Abhigyan Gautam)

Checked & Verified By

Ujjwal Anurag

(Ujjwal Anurag)



MEGHALAYA CEMENTS LIMITED

Six Monthly Ambient Air Quality Survey Report, South Khliehjeri Limestone Mine (31.05 Ha), 2024-2025

Pollutants	Location	Oct' 2024	Nov' 2024	Dec' 2024	Jan' 2025	Feb' 2025	Mar' 2025	Avg.	Permissible Limits for Rural Areas (By MSPCB 24 hrs Monitoring)
SO ₂	A1. North -East (Near Soil Dump)	7.7	7.9	7.7	7.3	11.9	11.9	9.067	80 µg/m ³
	A2. North - West(Near Haul Road)	8.6	8.8	8.6	7.6	9.8	14.6	9.667	80 µg/m ³
	A3.Southern side (Near Lease Boundary)	7.3	7.4	7.2	6.7	8.6	8.2	7.567	80 µg/m ³
NO _x	A1. North -East (Near Soil Dump)	8.1	8.4	8.2	7.9	15.6	15.8	10.66	80 µg/m ³
	A2. North - West(Near Haul Road)	9.4	9.6	9.3	8.2	11.7	16.3	10.75	80 µg/m ³
	A3.Southern side (Near Lease Boundary)	7.7	7.9	7.7	7.2	10.9	11.2	10.90	80 µg/m ³

Prepared By

(Abhigyan Gautam)

Checked & Verified By

Ujjwal
(Ujjwal Anurag)



Annexure - XII

MEGHALAYA CEMENTS LIMITED

Six Monthly Fugitive Emission Report, South Khliehleri Limestone Mine (31.05 Ha), 2024-2025

Location	Oct 2024	Nov2 024	Dec 2024	Jan 2025	Feb 2025	Mar 2025	Avg.	Permissible Limits for Rural Areas (By MSPCB 24 hrs Monitoring)
Drilling Area	1035	1049	1057	945	1879	1329	1215.66	5000µg/m ³
Blasting Point	1754	1769	1793	1893	1935	2254	1899.66	5000µg/m ³
Loading Point	2346	2375	2686	2237	4271	4125	3006.66	5000µg/m ³
Unloading Point	989	1215	1269	962	1159	1023	1102.83	5000µg/m ³

Prepared By

(Abhigyan Gautam)



Checked & Verified By

Ujjwal
(Ujjwal Anurag)

SOUTH KHLIEHJARI LIMESTONE MINE
AFFORESTATION REPORT, 2024-25
(1st October'2024 to 31st March'2025)

1.	Name of the Mine	South Khliehjar Limestone Mine
2.	Owner's Name	Ramesh Kumar Pareek
3.	District / State	East Jaintia Hills/Meghalaya
4.	Mineral Worked	Limestone
5.	Category of the Mine	A

AFFORESTED DURING THE QUARTER ENDING DECEMBER ((1st October'2024
to 31st December, 2024)

No. of trees planted		Area covered (in Ha.)		No. of trees survived		Survival rate	
WML	OML	WML	OML	WML	OML	WML	OML
1	2	3	4	5	6	7	8
400	Nil	0.00	N/A	352	N/A	88.00%	N/A

AFFORESTED DURING THE QUARTER ENDING MARCH (1st January to 31st
March, 2025)

No. of trees planted		Area covered (in Ha.)		No. of trees survived		Survival rate	
WML	OML	WML	OML	WML	OML	WML	OML
1	2	3	4	5	6	7	8
50	Nil	0.03	N/A	32	N/A	64.00	N/A

AFFORESTED DURING THE PERIOD ((1st October'2024 to 31st March'2025)

No. of trees planted		Area covered (in Ha.)		No. of trees survived		Survival rate	
WML	OML	WML	OML	WML	OML	WML	OML
450	Nil	0.03	N/A	384	N/A	85.33%	N/A

Note: - WML - Within Mining Lease; OML - Outside Mining Lease

K C Sahu
Mines Manager
South Khliehjar Limestone Mine



Report No.: ENV/MCL/24-25/WW-01/01

Date : 08/02/2025

Order No.: 4700033255

Date : 17/01/2025

 Report Issued To : **M/S. MEGHALAYA CEMENTS LIMITED**
 Village: Thangskai; PO: Lumshnong, Meghalaya
WASTE WATER ANALYSIS RESULTS

Sample Ref. No. : MCL/2025/ETP-3101/01

Sample Source : ETP Outlet (MCL)

Sample Type : ETP Treated Water

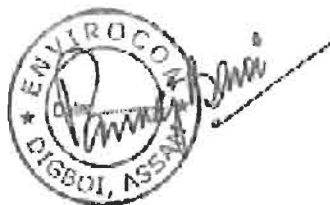
Collected On : 31-01-2025

Received On : 03-02-2025

Collected By : ENVIROCON Representative

Sl. No.	Parameters	Results	Limit [G.S.R. 422(E), 19.05.1993]
1	Ph	6.78	6.5 - 9.0
2	Temperature, °C	25.2	shall not exceed 5°C above the receiving water temperature
3	Total Suspended Solids (as TSS), mg/l	19	100
4	Biochemical Oxygen Demand (as BOD), mg/l	21	30
5	Chemical Oxygen Demand (as COD), mg/l	68	250
6	Oil & Grease, mg/l	<4.0	10.0
7	Total Residual Chlorine, mg/l	<0.01	1.0
8	Ammonical Nitrogen (as N), mg/l	17	50
9	Total Kjeldahl Nitrogen (as NH ₃), mg/l	32	100
10	Free Ammonia (as NH ₃), mg/l	<0.01	5.0

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

- NOTE:**
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Core Services: Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs
Associate Services: Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Meghalaya Cements Ltd.

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

Environment Management Cell DetailsDept: Environment

Doc. No: MCL/IMS /PA/MR/DS

Sl. No.	Equipments Name	Model	Range	Make
1	B.O.D Incubator -1	BTI - 06 / 73514, Bio Technique India	Site -6 Cu.Ft., Temp. Range - 5° to 60°C., Accuracy - ± 0.5°C.	Innovative Instruments & Controls CLP,
2	Stack Sampler	VSS - 1 - PLS / 01-DTH-2016 / Vayubodhan Envirotech Instrumentation	0 to 60 LPM & 0-to 3 LPM	Envirotech Instruments Pvt. Ltd
3	Stack Sampler	APM -620 / 797- DTI-05 / Vayubodhan Envirotech Instrumentation	0 to 60 LPM & 0-to 3 LPM	Envirotech Instruments Pvt. Ltd
4	Stack Velocity Monitor	APM -602 / 835 DTJ - 05 / Vayubodhan Envirotech Instrumentation	0 to 60 LPM & 0-to 3 LPM	Envirotech Instruments Pvt. Ltd
5	Fine Particulate Sampler (03 Nos.)	APM-550 / 583 - DTK-2010, 586-DTK-2010, 563-DTK-2010 / Envirotech Instrumentation	Range of flow Rate - 16.54-16.50, 16.56-16.48, 16.54-16.52	Envirotech Instruments Pvt. Ltd.
6	Gaseous Pollutant Sampler (02 Nos.)	APM-433 / 1.146 - DTK-2010, 2.150-DTK-2010 / Envirotech Instrumentation	Range -0 to 3 LPL	Envirotech Instruments Pvt. Ltd.
			Range -0 to 10 Micro meter in Diameter.	
7	High Volume Sampler (03 Nos.)	APM-430 / 1.640-DTL-05, 2.641-DTL-05, 3.642-DTL-05 / Vayubodhan Envirotech Instrumentation	Range of Flow rate - 1.1 to 1.7 Cu M ³ /min	Envirotech Instruments Pvt. Ltd.
8	COD- Digestion	Cat No. CE-HC-011 / 11007 / Commercial	Up to 15°C., Least Count-1°C	Commercial
9	Hot Air Oven	Internal ID-MCL/Env/HAO-1	Up to 250°C., Least Count-0.1°C	Commercial
10	Digital Balance	/ 4114676 / Cy.304 CE	0 to 220 grms	Indian Calibration Services
11	S Type Pitot Tube	For Flow measurement	03 to 30 m/s	Envirotech Instruments Pvt. Ltd.
12	L Type Pitot Tube	For Flow measurement	03 to 30 m/s	Envirotech Instruments Pvt. Ltd.
13	Flue Gas Analyzer	Model No. 054218002	For SO ₂ , Nox, Co, Co ₂ & O ₂ measurement in Flue gas	Make - KANE

HOD

Meghalaya Cements Ltd.

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

Environment Management Cell DetailsDept: Environment

Doc. No: MCL/IMS /PA/MR/DS

14	Respirable dust samplers	Serial No. 640-DTL-2005, . 641-DTL-2005, . 642-DTL-2005	For Measurement of PM 10 & PM 2.5	Make- Envirotech Inst. (P) Ltd.
15	Automatic station for recording of micrometeorological parameter	DT-	For Rain fall, temperature, RH & wind speed measurement	AIMIL LTD
16	Sound pressure level meter	Model No. 05D101013	For noise level monitoring	Make- Raytheon Tech.
17	Stack monitoring kits	01-DTH-2016	For Measurement of Dust emission form Stacks	Make- Envirotech Inst. (P) Ltd.
19	Automatic station for recording of Ambient Quality Monitoring	Installed near gate no. 03	Form real time monitoring of Ambient air quality	Supplied Swan Environmental
20	Automatic station for recording of Stack Emission Monitoring	For RABH, Cooler ESP, Cement Mills and CPP stack emission monitoring	Form real time monitoring of stack emission	Supplied by Glens
21	Portable Air Quality Analyzer	For Real time Ambient air quality monitoring	Form real time monitoring of stack emission	Supplied by M/s. Swan Environmental
23	Temperature Gun	Model No. IRX-63	Range (-) 50°C to 1850°C	Make- HTC
24	pH Meter	Sl. No, 361/7928	Range 0 to 14	Systronics
25	Nephlo Meter	Sl. No, 1307138	Range 0 to 200 NTU	
26	Conductivity	Sl. No. S/6117-01-17		
27	CHROMIUM VI CHEMICAL TEST KIT	-----	Chromium, Hexavalent Range: 0.0 to 1.0 mg/L Chromium, Hexavalent Resolution: 02. mg/L	HANNA EQUIPMENTS (INDIA) PVT. LTD.



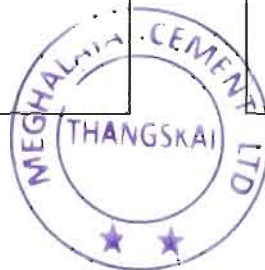
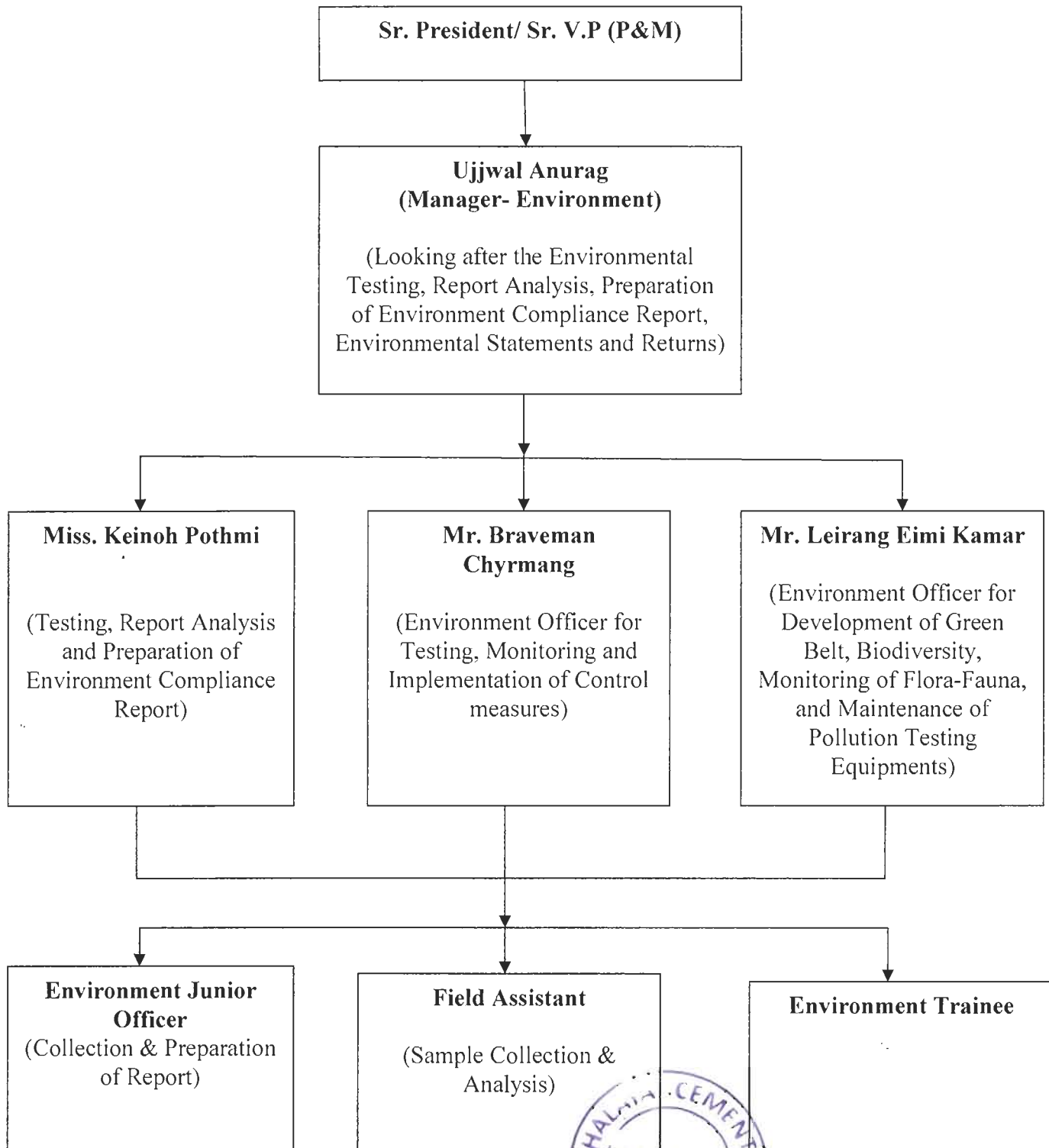
Uimala
HOD

Meghalaya Cements Ltd.

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

Environment Management Cell DetailsDept: Environment

Doc. No: MCL/IMS /PA/MR/DS



Ujjwal Anurag

HOD

M/s MEGHALAYA CEMENTS LIMITED

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

Expenditure incurred against Enviromental Protection Measures of South Khliehjari during the year 2024-25 (from October,2024 to March,2025)

1	2	3	4
Sl no	Head	Subhead	Total Expenditure incurred (in lakh)
1	Plantation	Pre plantation cost to develop the area for ready for plantation	6.45
		i. Dumping & dozing of soil to make the area plain	
		ii. Spreading of Topsoil	
		Sappling & Plantation cost	
		Maintenance cost	
		i. Manuring	
		ii. Watering	
		iii. Watching	
		iv. Fencing	
2	Dust suppression	Cost against Water sprinkler used in haul road, loading & unloading point	7.12
3	Preparation of Retaining wall, Checkdam, Siltation Tanks and Garland drains	Maintenance of Siltation Tanks	5.27
		Maintenance of Retaing wall	
		Maintenance of Garland drains	
5	PPE supply to mine workers	Nose Mask	0.68
		Ear Muffs	
		Safety Shoe	
		Safety Helmet	
		Safety Goggles	
		Safety Hand Gloves	
6	Water Treatment	Capitla investment for Water Treatment Plant	0.50
		Recurring cost for water treatment	
7	Maintenance of Effluent Treatment Plant	Chemical consumption for treatment of effluents (lime, bleaching powder, alum etc.)	0.50
		Power cost	
		Manpower cost	
8	Dump Compaction	Compection of dumps by compactor	2.8
		Total	22.82





MEGHALAYA CEMENTS LIMITED

CIN- U26942ML2003PLC007125



Ref: - MCL/Env/MsPCB/2025-2026/08

Date: - 05/05/2025

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

Subject: Submission of Form 'V' of 31.05 Ha. South Khliehji Limestone Mine for the financial year 2024- 2025.

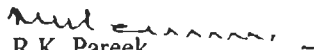
Dear Sir,

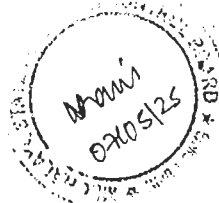
We are herewith submitting the Annual Environmental Statement of 31.05 Ha. South Khliehji Limestone Mine for the financial year 2024-2025.

Thanking You,

Yours faithfully,

For Meghalaya Cements Limited


R.K. Pareek
(Sr. President)



ISO 9001:2015 & 14001:2015
50001:2011 Certified Company

Sales & Marketing Office :
Mega Plaza, 4th Floor, Christian Basti
G.S. Road, Guwahati - 781 005
Tel. : 0361 2345421/22/23, 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 0505
E-mail : kolkata@topcem.in

Registered Office :
Village: Thangskai, P.O. & P.S. Lumshnong
District : East Jaintia Hills, Meghalaya, PIN: 793210
Tel. : +91 89742 17765 / 70850 58469 / 98625 09599
E-mail : meghalaya@topcem.in



HELPLINE NO : 18001233666

ENVIRONMENT PROTECTION RULES 1986**[FORM-V]**

(See rule 14)

Environmental Audit report for the period**[From 01-04-2024 to 31-03-2025]****PART – A**

(i) Name and address of the owner/occupier of the industry, operation or process:-

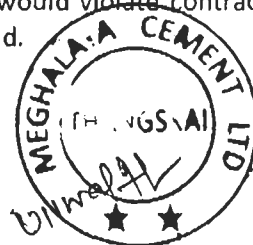
Shri R.K. Pareek**M/s Meghalaya Cements Limited,****Vill:- Thangskal,****P.O:- Lumshnong****Meghalaya, Pin-793210**(ii) Industry category: - **South Khliehjar Lime Stone Mine- 31.05 ha.****[Primary (STC Code-AADCM8079PST001)****Secondary (SIC Code-3241)**(iii) Production capacity (per Year): - **2240740** Unit: - **MT**(iv) Year of establishment: - **2017**(v) Date of the last environmental statement submitted: - **29th May'2024.****PART – B****Water and Raw Material Consumption****(i) Water consumption m³/d**Process : - **Not Applicable**Cooling : - **Not Applicable**Domestic : - **Not Applicable****Process water consumption per unit of products output**

Name of products	During the current financial year 2023-24	During the current financial year 2024-25
	(1)	(2)
(1)	Not Applicable	Not Applicable
(2)	Not Applicable	Not Applicable
(3)	Not Applicable	Not Applicable

(ii) Raw Material consumption

*Name of raw material	Name of products	Consumption of Raw material per unit of output (MT)	
		During the previous financial year 2023-24	During the current financial year 2024-25
Limestone	Cement grade Limestone	1119141 MT	1114455 MT

*Industry may use codes disclosing details of raw materials would violate contractual obligations, otherwise all industries have to name the raw materials used.



PART – C**Pollution discharged to environment / unit of output**

(Parameters as specified in the consent issued)

(i) Pollutants	Quantity of pollutants discharged mass / day	Concentrations of pollutants discharges (mass/ volume)	Percentage of variation from prescribed standards with reasons
(a) Water	Not Applicable	Not Applicable	Not Applicable
(b) Air			Concentration of pollutants is within the prescribed limit.
i) PM ₁₀	100 µg/m ³	76.86 µg/m ³	
ii) PM _{2.5}	60 µg/m ³	42.15 µg/m ³ (Average of last three months)	

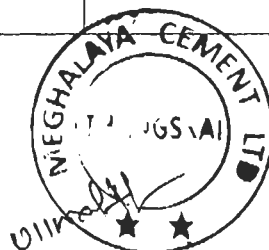
PART – D**Hazardous Waste**

[As specified under Hazardous Wastes (Management and Handling) rules, 1989]

Hazardous Wastes	Total Quantity (kg)	
	During the current financial year 2023-24	During the current financial year 2024-25
(a) From process	Not Applicable	Not Applicable
(b) From pollution control facilities	Not Applicable	Not Applicable

PART – E**Solid Waste**

Solid Wastes	Total Quantity	
	During the current financial year 2023-24	During the current financial year 2024-25
(a) From process	Not Applicable	Not Applicable
(b) From pollution control facilities	Not Applicable	Not Applicable
(c) (1) Quantity recycled or re-utilized within the unit	Not Applicable	Not Applicable
(2) Sold	Not Applicable	Not Applicable
(3) Disposed	Not Applicable	Not Applicable



PART – F

Please specify the characteristics (in terms of composition of quantum) of Hazardous as well as Solid waste and indicate disposal practice adopted for both the categories of wastes :- **Not Applicable.**

PART – G

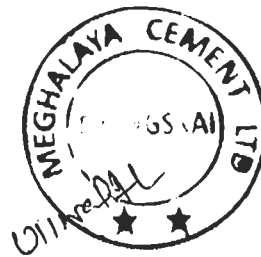
Impact of pollution abatement measures taken on conservation of natural resources and on the cost of production: - **The low grade limestone is being used along with the high grade limestone through blending as per need of lime content for maintaining the raw-mix quality. Hence the material is consumed in totality.**

PART – H

Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution: -**Already pollution control measures are taken and functioning properly .Thus regular maintenance will be done as and when required.**

PART – I

Any other particulars for improving the quality of environment: - **We are adopting plantation activities for improving the environment. We have planted total of 730 nos. of species of different plants upto 31st March, 2025 since inception within and outside the mining lease area and their rate of survival is satisfactory.**



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SHILLONG WEDNESDAY, MAY 30, 2018

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ISSUE NO. 287

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Unprecedented security for counting of votes in Amnati

MDA justifies

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Information Office, Shilling: Republic of China, 1001 Road,
near Meghalaya High Court, Shilling, India. Ph. 036550-50460

“Meghalaya Cements Limited has started the mining activity in South Khliehjar Mines over an area of 31.05 Ha. falling under the village Thangkai of Elaka Narpah and they are conducting their activity in good manner and maintaining the environmental hazards within the limit.”

GLOBAL PROJECTS CONSTRUCTION CORPORATION LTD.
(A GOVT OF INDIA ENTERPRISE)
Industrial Estate, (Central) Sholing, Ph. 044-2537852

RIGID E-TENDER NOTICE

UNIT 01-16-19/ 271

Many Asian Police works in the states of North East and

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and will be available at website <https://npsoc.sprpc.in>.

* www.tycc.gov.in refer

ZONAL MANAGER

W/OFC:MTI I W PHRA.: PRESIDING

OF MICHAEL W. PHILIP: PRESIDING

III. FR.: SUBORDINATE

ATTORNEY GENERAL COURT :: AT SHILLONG

Document: 9416 No. 3 of 2016

Journal of Interpersonal Violence

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Prof. Dr. Sangeeta Tripathi, Director, APM Group Publications
 - Panna Viro Samaj Bhawan, Jyoti Nagar, Kirti Nagar, Gurgaon-122002
 Ph: 0124-973555, 9956551114, 9856145555 www.apmgroup.com apm@apmgroup.com