

**PROCEEDINGS OF THE PUBLIC HEARING HELD ON THE 22<sup>ND</sup> JANUARY 2016 OF THE  
PROPOSED EXPANSION OF LIMESTONE MINE FROM 2.0 MTPA TO 5.0 MTPA AT NONGTRAI  
IN EAST KHASI HILLS DISTRICT, MEGHALAYA BY M/S LAFARGE UMIAM MINING PVT.  
LTD.**

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An Environmental Public Hearing in respect of the proposed Limestone Mine of M/s Lafarge Umiam Mining Pvt. Ltd. at Nongtrai in East Khasi Hills District, Meghalaya was held on the 22<sup>nd</sup> January 2016. The hearing which commenced from 11:00 A.M. was presided over by Shri P. S. Dkhar, IAS, Deputy Commissioner, Shillong, East Khasi Hills District.

At the outset, the Chairman welcomed the officers and public present at the Hearing and invited Shri. S. Syiem, Asst. Environmental Engineer, Meghalaya State Pollution Control Board (MSPCB), Shillong to give the welcome and introductory address.

Shri. S. Syiem, Asst. Environmental Engineer, welcomed the Chairman, the members of the Press, the project proponent and public who have turned up in large numbers to attend the Hearing. It is explained that the Environmental Public Hearing has been conducted as per the provisions of the EIA Notification, 2006 (14<sup>th</sup> September 2006) and subsequent amendment E.I.A. Notification No. S.O. 3067(E) Dtd 1<sup>st</sup> December 2009 issued by the Ministry of Environment, Forests & Climate Change (MoEF& CC), Govt. of India and explained that the objective of the Hearing is to solicit and record the opinions, views, comments or objections of the people residing in the adjoining areas of the Project site likely to be affected by the proposed expansion of the existing LIMESTONE MINE at Nongtrai from 2.0 MTPA to 5.0 MTPA, in East Khasi Hills District, Meghalaya by M/s Lafarge Umiam Mining Pvt. Ltd.

Further, he stated that the Environmental Public Hearing is a part of the Environmental Clearance process and that no decision on the Project will be taken during the Hearing as its role is strictly confined to recording of opinions, discussions, suggestions submitted in writing or orally so that the same can be submitted to the Ministry of Environment and Forests & Climate Change, Govt. of India. The Ministry will examine and scrutinize such views, comments, suggestions, etc. regarding the project as recorded during the hearing while processing the application for Environmental Clearance. He also emphasized that the Hearing should not be taken as a platform for any public debate. The views of the public are recorded and filmed. The proceedings are then drawn and submitted to the Ministry of Environment, Forest & Climate Change, New Delhi for the Environmental Clearance.

In the Opening Address Shri P. S. Dkhar, IAS, Deputy Commissioner, East Khasi Hills District and Chairperson, Environmental Public Hearing, welcomed the Public, the Local Headmen, NGOs, villagers, members of the press and representatives of M/s Lafarge Umiam Mining Pvt. Ltd. present at the Environmental Public Hearing. He invited those who wanted to speak to submit their names to the staff of the Meghalaya State Pollution Control Board and reiterated that speakers should not repeat the views, comments, etc. presented by those who spoke ahead of them.

On invitation from the Chair, Shri Narayan Sharma, Operation Director, M/s Lafarge Umiam Mining Pvt. Ltd. welcomed the Chairman, Officials from the Meghalaya State Pollution Control Board, Officials from the Police Department, the Headman, Secretary, Executive



Members and Members of the Dorbar of Nongtraï Village and Shella Village and everyone present in the Hearing. He briefed that M/s Lafarge Umiam Mining Pvt. Ltd. has been operating 2 MTPA limestone mining with the support and cooperation of everyone and gave a brief introduction on the expansion of Limestone Mining from 2 MTPA to 5 MTPA without any requirement of additional land as the mining of the proposed expansion will be done in existing mining leased area. He said that detailed environmental studies have been conducted as per the terms of reference approved by the MoEF and Climate Change, Govt. of India. He then invited Shri. Sushil Handa, Technical Director, M/s Environmental Resources Management India (P) Ltd. to give a presentation on the technical aspects and corporate social responsibilities.

In his presentation, Shri. Sushil Handa informed that public hearing notices have been issued in all the leading local newspapers in English and Khasi dated 22/12/2015 and 19/01/2016. He gave a description about the background and project proposal where M/s Lafarge Umiam Mining Pvt. Ltd. has obtained all the requisite approvals for existing 2 MTPA limestone mining and the limestone extracted is crushed to 80mm and transported to Bangladesh through a long belt conveyor (LBC) of 17 Kms in which 7 kms within India and remaining 10 Kms in Bangladesh. He said that the proposed expansion will be done within the existing 100 Ha. of mine lease area and other infrastructure area without any requirement of additional land. He further gave a description about the mine location and distances where Nongtraï limestone mining lease area of 100 Ha. falls within Nongtraï Village, Mawsynram Block, and major part of Long Belt Conveyor falls under Shella Village of Shella Bholaganj Block, East Khasi Hills District, Meghalaya. The mine site is located at 15 km aerial distance (30 km road distance) southwest of Cherrapunjee (the nearest town) and 14 km aerial distance (37 km road distance) south of Mawsynram. The mine site is accessible from Shillong by road connecting Shella Bazaar through Cherrapunjee (96 km). And from Shella Bazaar, a foot bridge across the Umiam River connects to the mine site. The Mine site is also approachable from Shillong through Mawsynram & Nongtraï by road (110 km). He also informed that there are no national park, wildlife sanctuary located within 10 km radius from mine site. Survey of India Maps and Google Maps are also displayed showing the location of the limestone mine.

He then gave a description about the proposed expansion project where the mining area will remain the same i.e 100 Ha with a mining lease period of 30 years. He explained about the limestone reserves where in situ reserve is 153.13 million tonnes & recoverable is 132.57 million tonnes with a pit depth of up to 90 m RL and the devoid of overburden. He informed that the lifespan of the mine for the existing 2 MTPA is 62 years but 27 years if the project is expanded to 5.0 MTPA. He explained about the mining methods to be used which includes the use of mechanized opencast method and combination of Drilling-Blasting-Excavation-Dumper-Haulage-Crushing, a bench height of 10 m & bench width of no less than 20 m will be maintained and no secondary blasting is involved instead the use of hydraulic rock breakers. The limestone crusher capacity of the existing 2 MTPA is 800 TPH and for the proposed expansion it will be increased to 1260 TPH. The daily production for existing 2 MTPA is 6,667 tonnes per day and will be increased to 16,667 tonnes per day for the



proposed expansion. The Explosive to be used will be the existing approved explosive magazines with no change in capacities.

The existing Long Belt Conveyor Speed will be increased to 6 m/sec (max) for the expansion project from 4 m/sec. He then further gave an explanation about the embedded controls for the expansion project. He explained that the drilling of holes will be carried out with state of the art machinery and the blasting will be done as per Director General of Mines Safety Guidelines and expert advice of Central Institute of Mining and Fuel Research, Government of India (CIMFR). Use of automatic water sprinkling system and use of water tankers for water sprinkling on approach road to the mine and in working pit area will also be carried out. He also briefed that during the crushing operation, provision of dust suppression system in crusher, water sprinkling will continue to be provided while unloading of limestone to crusher hopper and water spraying in the intermediate belts will be done and the Long Belt Conveyor will be covered from the top and sides of the conveyor. He briefed that five Packaged Sewage Treatment Plants to treat domestic wastewater from residential set ups and at mine's office has been set up and Effluent Treatment Plant for treatment of wash wastewater generated from the workshop has also been set up. He also briefed that the disposal of solid waste will be carried out with the assistance of Shillong Municipal Board. The hazardous wastes are stored temporarily and disposed off as per Meghalaya State Pollution Control Board authorization. Plantation of 30,108 saplings both inside and outside the mines premises is done and a Biodiversity Conservation Plan has been prepared.

He explained that the mine operations will be as per the Indian Bureau of Mines (IBM) approved mining scheme, Director General Mines Safety Guidelines, approvals of Meghalaya State Pollution Control Board, Ministry of Environmental Forests and Climate Change and other statutory requirements and implementation of progressive mine closure by plantation in the mined out benches. He then explained about the baseline conditions which were monitored for the project. The study is divided into two zones i.e. the core zone-mine site and the buffer zone-area surrounding mine up to 10 kms. Twin sinkholes are located outside the mine towards the south. The climate is a sub-tropical type which is influenced by hilly topography on the west, north and east sides. Flood plains exist to the south which extends upto Bangladesh and the annual rainfall is 7,780 mm (last 5 years average). Ambient Air Quality was monitored by an NABL and Ministry of Environmental Forests and Climate Change accredited laboratory at 8 locations in the study area which includes respirable particulate matter (PM10 & PM2.5), Sulphur Dioxide, Oxides of Nitrogen and Carbon Monoxide. The results of the study conducted were found to be well within National Ambient Air Quality Standards (NAAQS). Further day time noise levels in residential areas were observed within prescribed limit of 55 dB(A) and night time noise levels remained within the prescribed norm of 45 dB(A) except at two locations where it is likely attributed due to flow of nearby Umiam River and local activities. He also briefed that the water analysis results of upstream and downstream of Phlangkaruh and Umiam Rivers shows quality of water conforming to designated best use as classified by CPCB - Classes A & B and analysis results of ground water at five locations showed all parameters were within the drinking water limits (IS 10500). He said that a detailed ecological survey was done by North Eastern Hill



University (NEHU), Shillong during monsoon season in 2014 covering core and buffer zones and no threatened floral species are found in the core zone. As no additional land is required for the expansion Project, therefore there will be no additional families which will be directly affected due to the expansion of the Project and no resettlement & rehabilitation is also involved.

He further explained that a detailed impact assessment study has been done as part of the Environment Impact Assessment study alongwith mitigation measures. He explained that Point, Line & Area sources of emissions of PM<sub>10</sub>, PM<sub>2.5</sub> SO<sub>2</sub>, NO<sub>x</sub> & CO for Air Quality was monitored and it was found that it had minor residual impact at all the surrounding settlements/locations. Also noise emissions from machineries, crusher, workshop, parking areas, diesel generators, movement of heavy machinery and light vehicles & Long Belt Conveyor was monitored and it was found that it has minor residual impact for which the resultant day and night time noise levels at settlements will remain within the prescribed standards. Ground vibration and air overpressure was monitored with blasting as the main source and it was found to have minor residual impact for the existing project for which ground vibration is expected to remain less than the DGMS permissible limit of 10 mm/second and air overpressure to remain less than DGMS prescribed limit of 134 decibel Linear (dBL) which lasts for a few milli seconds. Blasting will be carried out strictly as per the Central Institute of Mining and Fuel Research, Government of India (CIMFR). It was also found that subsidence falls in low category. He further showed that topography change is only of the existing mine lease area i.e for 2.0 MTPA and no additional land area will be involved for the proposed expansion. For mine decommissioning & mine closure, he informed that the area will be restored and garland drains will be developed along the northern periphery. Discharge of rainwater will flow through storm water drains with silt traps. Surface water resources have been assessed as minor residual impact. The water requirement for the proposed expansion will increase to 200 m<sup>3</sup>/day as against the existing 150 m<sup>3</sup>/day which will be met from Phlangkaruh/Umiam rivers. He informed that siltation due to surface runoff was also assessed as minor residual impact since the mine is devoid of overburden and limestone rock being very hard and comes under non erodible category and negligible sediment load. The waste generation was also assessed as a minor residual impact for which disposal of wastes will be done as per approval and authorization of Meghalaya State Pollution Control Board. Hydrological resources were assessed as a minor residual impact since no springs exist in the mine.

Mining will continue to be done up to 90 m RL much above the Phlangkaruh spring levels of 22 m RL. Reading of piezometers shows that the water level remains much above the Phlangkaruh springs. The ecology and wildlife was assessed as a minor residual impact as no additional forestland is involved. During the mining phase the socio economics & community health & safety has been assessed to have a positive residual impact but during mine closure and decommissioning, it will have a minor residual impact as the reclaimed land of related project components will be given back to Nongtraï and Shella Dorbars and impact will be positive. During post mine closure payments to communities and Special Purpose



Vehicle will stop for which awareness will be provided 5(five) years prior to decommissioning.

He further showed about the project benefits in terms of financial benefits and Corporate Social Responsibility activities. The financial benefit includes payments in terms of royalty, mineral cess, welfare cess, SPV and rent and annual payments to Nongtraï and Shella Village Dorbars. He informed that CSR activities will continue to be done for improvements in health, education, skill development, infrastructure development and plantation drives. The CSR activities done are shown along with photographs. Clip reports by Media are also being shown. He also showed the awards and accolades that M/s Lafarge Umiam Mining Pvt. Ltd. has been awarded by prominent counsels and bureaus – namely Director General of Mine Safety and Indian Bureau of Mines. Shri. Sushil Handa finally concluded that elaborate environmental management and monitoring plans have been developed to ensure that systems will be in place for effective environmental and social performance by Lafarge Umiam Mining Pvt. Ltd. for the expansion Project. The project will result in benefits to communities through rental, annual payments to Nongtraï and Shella Village Durbars, royalty & cess payments, payment to SPV for welfare activities, revenue generation for Government of Meghalaya and Government of India. For the proposed 5.0 MTPA expansion, he informed that the estimated capital cost of the environmental management plan is Rs. 7.1 Crores and the recurring cost will be Rs 2.1 Crore per annum.

The same was interpreted in the local language by Smti. Deimaphishisha Dhar, Regulatory Officer, M/s Lafarge Umiam Mining Pvt. Limited.

The Chairperson then invited Shri. S. Syiem, Asst. Environmental Engineer, MSPCB, to present the written presentations, comments, etc. received by the Board. The following are the written presentation received:

1. Shri Thrasterwell Lyngdoh, Nongtraï
2. Secretary Dorbar Shnong Shella

The translations of the written presentations in local language are enclosed as Annexures I & II.

The Chairperson of the Committee then invited the public to offer their comments, suggestions, objections etc.

SL. No.	NAME & ADDRESS	COMMENTS/SUGGESTIONS/REMARKS
1.	Mr. B. Lyngdoh Headman Dorbar Shnong, Nongtraï Village	He introduced himself as a Headman of Nongtraï. He extends his support for the project on behalf of the people of Nongtraï as the people of the village has greatly benefitted through Corporate Social Responsibility activities and other activities of M/s Lafarge Umiam Mining Pvt. Ltd. He pointed that whatever was given in the presentation is true and he feels that with the proposed expansion from 2.0 MTPA to 5.0



		MTPA the people of Nongtraï village will benefit more. He hopes that everyone present in the public hearing will give their support towards the proposed expansion by the company on the grounds of development, education, better roads, etc. He also added that since no additional land is required there is no objection for the proposed expansion.
2.	Mr. K. P. Wahlang Secretary Dorbar Shnong, Nongtraï Village	He also extends his support to the expansion. He gave a brief description on the benefits especially in terms of the improvement in the socio economic life of the people of Nongtraï village. The existence of the Special Purpose Vehicle has also greatly benefitted the people of the area. The presence of the company has also improved the health scenario in the village and various programmes for the youth are also being organized by the company. Since the inception of the company migration of people from the village to other parts of the state has reduced.
3.	Mr. T. L. Rapmai Member of Nongtraï Village	He extends his support. He feels that he is happy with the coming of the company in the area as they are greatly benefitted by it. He narrated an incident where some environment people from Delhi had come and conducted Ambient Air Quality Monitoring in his house and to his surprise the results of air quality is very good. He also mentioned that the mortality rate has also decreased ever since Lafarge has started its operation in the area due to timely help from the company. He pointed out the people are also aware about cleanliness. Lastly he stated that the existence of the company has not affected the environment in any way and he expects the people should take care of the environment through the help of the company.
4.	Mr. Robert Reenborne Teacher of Environmental Science, St. Anthony's School, Shillong and Member of Nongtraï Village	He opined that environment and development are both sides of the same coin. He informed that mining activities in the area has started since 1700's. He feels that if the mining activities are not being undertaken, the development of the place will go back 100 years. He stated that he wants to come back to his village as he had noticed so many developmental activities happening in his village. He extended his gratitude to Lafarge that if not for them the development of the area would go 50 years back. He extends his support to the expansion.
5.	Mr. Brosterwell Ora Secretary Dorbar Shnong, Shella Village	He read a letter addressed to the Member Secretary Meghalaya State Pollution Control Board. A Copy of the translated version is given

		at Annexure-II. In his letter he raised an issue on the blasting, water seepage from the mines into Umiam river and he gave a suggestion that Lafarge should take necessary steps to control the said issues and if such steps are taken, the Dorbar Shnong Shella will support the expansion project by M/s Lafarge.
6.	Mr. Roy Kupa Synrem Shella Village	He expressed his views on the development aspect contributed by Lafarge. He also reiterated that alongwith developmental works there will also be losses in certain areas. As per his findings, he stated that the ground shakes during blasting activities by the company and the smoke emitted from the blasting sites affects the nearby villages. He requested the company to take care of the issues addressed and he supports the proposed expansion by M/s LUMPL

The Public Hearing ended with a vote of thanks from the Chairperson to all the officials, participants, Headmen of different Villages, members of the press and the public present at the Hearing for their co-operation. He also informed that the proceedings of the Hearing will be sent to the MoEF&CC, Delhi for further necessary action.



Shri. P. S. Dkhar, IAS,  
Deputy Commissioner,  
East Khasi Hills District & Chairperson, E.P.H.