## **EXECUTIVE SUMMARY**

The project has been proposed for Mining of Lime Stone from the Private Land occupied by the lessee by open cast semi-mechanized method. Mining will be confined to the allotted lease area which lies in

Lessee/applicant	Area	Location	Lessee Address	Type of
	(Ha)			property
Shri Narsen Mawa	3.50	Temjalong, Wahlong Sirdarship, District- East Khasi Hills, Meghalaya	Village- Ichamati,  Mawlong  Sirdarship  District- East  Khasi Hills  State- Meghalaya	Private

The proposed project is an opencast semi-mechanized mining project, where mining of Lime Stone will be done. Excavators shall be deployed for the removal of overburden & inter burden. Methods of mining will be open cast semi-mechanized with drilling and blasting. Mining will be confined to the allotted lease area located in Temjalong, Wahlong Sirdarship, District-East Khasi Hills, Meghalaya from which a maximum of 198450 Tons/Annum of Lime stone will be excavated every year. Drilling and Blasting is proposed in this mining activity. Terms of Reference (ToR) for the proposed project has been granted by the SEIAA, Meghalaya vide its letter no. ML/SEIAA/MIN/EKH/P-12/2020/1392 dated, Shillong, the 29<sup>th</sup> June, 2020.

## Salient features of the project

1.	Online Proposal No.	SIA/ ML/MIN/50656/2020 dated 4 <sup>th</sup> February 2020
2.	File No. Allotted By SEIAA, Meghalaya	MKL/SEIAA/MIN/EKH/P-12/2020
3.	Name Of Proponent	Shri Narsen Mawa

4.	Full Correspondence Address Of Proponent	Village-Ichamati, Mawlong Sirdarship, East Khasi Hills, Meghalaya.		
5.	Name of Project	Temjalong Limestone Mine		
6.	Project Location	Temjalong, Wahlong Sirdarship, District- East Khasi		
7	Plot/Khasra/Gata No.	hills, Meghalaya.		
8.	Name Of Village	Temjalong, Wahlong Sirdarship		
9.	Tehsil	-		
10.	District	East Khasi Hills		
11.	Name Of Minor Mineral	Lime Stone		
12.	Sanctioned Lease Area In Ha	3.50 Ha		
13.	Mineable Area In Ha	3.50 Ha		
14.	Max. & Min mRL Within Lease Area	215 mRL to 180 mRL		
15.	Pillar Coordinates	Pillar	Latitude	Longitude
		1	25°11'00.03" N	91°42'32.48" E
		2	25°10'58.40" N	91°42'39.76" E
		3	25°10′55.08" N	91°42'40.07" E
		4	25°10′53.30" N	91°42'35.99" E
		5	25°10′56.17" N	91°42'30.97" E
16.	Total Mineable Reserve	27,98,600 Tons		
17.	Proposed Production / Year	1,98,450 Tons / Annum (Peak production)		
18.	Sanctioned Period of Mine Lease	Mining Lease not yet sanctioned		
19.	Production of Mine/Day	661.53 tons		
20.	Method of Mining	Open Cast Semi Mechanized with Drilling and Blasting		

21.	No. of Working Days	300
22.	Working Hours/Day	08 hrs max, Day Time
23.	No. of Workers	70
24.	No. of Vehicles Movement/Day	Depends on the market requirements
25.	Type Of Land	Private Land
26.	Max Depth of Mining	145 mRL
27.	Nearest Metalled Road From Site	3.5 KM, West
28.	Water Requirement	WATER REQUIREMENT
		1- Drinking & Domestic 1.6 KLD
		2-Dust Suppression.2.40 KLD
		3-Plantation 1.00KlD
		Total water requirement is about 5.00 KLD
29.	Name of the QCI Accredited	GEOGREEN ENVIRO HOUSE PVT LTD,
	Consultant With QCI No. And	LUCKNOW
	Period Of Validity	NABET/EIA/1720/IA0023
		Extended 8 October 2020.
30.	Any Litigation Pending Against The Project Or Land In Any Court.	No
31.	Proposed CER Cost	87500/-
32.	Propose EMP Cost	4,24,000/-
33.	No. of trees to be planted	450 Saplings

The baseline data was collected for the winter season i.e. December 2019 to February 2020 in the 10 km study area. The maximum value for **PM**<sub>2.5</sub> was observed,  $40.20 \,\mu\text{g/m}^3$  on Mawlong (AQ3) while 24 hours applicable limit is  $60 \mu\text{g/m}^3$  for industrial and mixed use areas. The area observes average **PM**<sub>2.5</sub> concentration in the range of  $30.20 - 40.20 \,\mu\text{g/m}^3$ .

The maximum value for **PM**<sub>10</sub> was observed as 59.60  $\mu$ g/m<sup>3</sup> on project site (AQ1) while 24 hours applicable limit is  $100\mu$ g/m<sup>3</sup> for industrial and mixed use areas. The area observes average **PM**<sub>10</sub> concentration in the range of  $50 - 59.60 \mu$ g/m<sup>3</sup>.

The maximum value for  $SO_2$  was observed, as 7.0  $\mu$ g/m³on Sohbar (AQ4) while 24 hours applicable limit is  $80\mu$ g/m³ for industrial and mixed use areas. The average  $SO_2$  concentration lies in between 5.1-7.0  $\mu$ g/m³.

The maximum value for  $NO_2$  was observed, as 14.9  $\mu$ g/m³ at Mawlong (AQ3) while 24 hours applicable limit is  $80\mu$ g/m³ for industrial and mixed use areas. The area observes average  $NO_2$  concentration in the range of 12.0-14.90  $\mu$ g/m³. All the villages have observed value well under the prescribed limit.

## **Environmental Management Plan (EMP)**

Proper environmental management plan is proposed for "Lime Stone" mining project to mitigate the impact during the mining operation.

- No labour camps will be established on site.
- No cooking, or burning of woods will be allowed in the nearby area.
- Prior to commencement of mining, a short awareness program will be conducted for labours to make them aware of way of working and various precautions to be taken while at work. Such program will be repeated occasionally.
- In the event of any some causality or injury to any animal occurs, proper treatment will be given.
- No tree cutting, chopping, lumbering, uprooting of shrubs and herbs will be allowed.
- Corridor movement of wild animals, if exists mining operations will be avoided in the area.
- It will be ensured that noise produced due to vehicles movement while carrying stone is within the permissible noise level.
- No piling of Stone will be done in adjoining area.
- If wild animals are noticed crossing the area, they will not be disturbed or chased away, instead the labors will move away from their path.

## **Environment Monitoring Program**

S. No.	Activity	Schedule				
Air Po	Air Pollution Monitoring					
1.	Ambient air monitoring of parameters specified by MoEF (PM <sub>10</sub> , SO <sub>2</sub> & No <sub>2</sub> ).	Twice in a Year except monsoon				
Water	Water Quality Monitoring					
2.	Monitoring water quality surface water from the river	Twice in a Year except monsoon				
3.	Monitoring of one sample of tube well and open well at mine / nearby location. Parameters are essential parameters as per IS: 10500:1991.	Twice in a Year except monsoon				
4.	Monitoring of water spray requirements	Log-sheet of water spray will be maintained on daily basis				
Noise (	Quality Monitoring					
5.	Noise in the ambient atmosphere in mining lease	Twice in a Year except monsoon				
Greenl	Greenbelt Maintenance					
6.	Monitoring schedule for Greenbelt development as per mining plan	Yearly				
Soil Qu	uality Monitoring					
7.	Soil at six locations	Twice in a Year except monsoon				

The proposed project is expected to provide employment to local people in different activities such as mining, sizing (sieving) transportation and plantation activities. The revenue generated from the production and sale of mineral will also add to the exchequer of government, which in turn will help in the growth of state economy. Excavated material will cater the huge increasing demand of mineral in the fast-growing construction industry of Meghalaya and nearby states etc. The project is not expected to have any major adverse impact on the environment and whatever impacts are anticipated during the EIA study will be minimized with the help of suitable mitigation measures.