

## 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 (Ha)	Location of Mine	Name of Lessee & Address	Type of property
Smt. Jelika Khongrymmai	1.64	Village Temsuwai, Elaka Wahlong Sirdarship, District- East Khasi Hills, State- Meghalaya	Smti. Jelika Khongrymmai, Mawthang Sohkhylung, Wahlong 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 Village Temsuwai, Elaka Wahlong Sirdarship, Tehsil- Shella Bholaganj, District- East Khasi Hills, State- Meghalaya from which a maximum of 81,000 TPA 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.

### Salient features of the project

1.	Name of Proponent	Smt. Jelika Khongrymmai
2.	Full Correspondence Address Of Proponent	Mawthang Sohkhylung, Wahlong Sirdarship, District- East Khasi Hills, State- Meghalaya
3.	Name of Project	Limestone Mining Project
4.	Project Location	Village Temsuwai, Elaka Wahlong Sirdarship, District- East Khasi Hills, State- Meghalaya
5.	Plot/Khasra/Gata No.	-
6.	Name of Village	Temsuwai, Elaka Wahlong Sirdarship

7	Tehsil	Shella Bholaganj																														
8.	District	East Khasi Hills																														
9.	Name Of Minor Mineral	Limestone																														
10.	Sanctioned Lease Area In Ha	1.64 Ha																														
11.	Mineable Area In Ha	1.64 Ha																														
12.	Max. & Min mRL Within Lease Area	155 mRL (Highest) 90 mRL (Lowest)																														
13.	Pillar Coordinates	<table> <tr> <th>Pillar</th><th>Latitude</th><th>Longitude</th></tr> <tr> <td>1</td><td>25°11'1.50" N</td><td>91°42'11.90" E</td></tr> <tr> <td>2</td><td>25°11'0.70" N</td><td>91°42'12.50" E</td></tr> <tr> <td>3</td><td>25°10'59.80" N</td><td>91°42'13.80" E</td></tr> <tr> <td>4</td><td>25°10'57.60" N</td><td>91°42'14.10" E</td></tr> <tr> <td>5</td><td>25°10'57.70" N</td><td>91°42'15.50" E</td></tr> <tr> <td>6</td><td>25°10'59.20" N</td><td>91°42'17.70" E</td></tr> <tr> <td>7</td><td>25°11'0.58" N</td><td>91°42'18.31" E</td></tr> <tr> <td>8</td><td>25°11'4.10" N</td><td>91°42'16.80" E</td></tr> <tr> <td>9</td><td>25°11'1.70" N</td><td>91°42'15.70" E</td></tr> </table>	Pillar	Latitude	Longitude	1	25°11'1.50" N	91°42'11.90" E	2	25°11'0.70" N	91°42'12.50" E	3	25°10'59.80" N	91°42'13.80" E	4	25°10'57.60" N	91°42'14.10" E	5	25°10'57.70" N	91°42'15.50" E	6	25°10'59.20" N	91°42'17.70" E	7	25°11'0.58" N	91°42'18.31" E	8	25°11'4.10" N	91°42'16.80" E	9	25°11'1.70" N	91°42'15.70" E
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14.	Total Mineable Reserve	10,05,000 Tons																														
15.	Proposed Production / Year	81,000 TPA																														
16.	Sanctioned Period of Mine Lease	Mining Lease not yet sanctioned																														
17.	Production of Mine/Day	300 tons																														
18.	Method of Mining	Open Cast Semi Mechanized with Drilling and Blasting																														
19.	No. of Working Days	300																														
20.	Working Hours/Day	08 hrs max, Day Time																														
21.	No. of Workers	33																														
22.	No. of Vehicles Movement/Day	30 (Borth Side)																														
23.	Type of Land	Private Land																														
24.	Max Depth of Mining	72 mRL																														
25.	Nearest Metalled Road From Site	SH-5, 0.38 Kms, West																														

26.	Water Requirement	1-Drinking & Domestic 1.6 KLD 2-Dust Suppression 2.40 KLD 3-Plantation 1.0 KLD Total water requirement is about 5.0 KLD
27.	Name of the QCI Accredited Consultant With QCI No. And Period Of Validity	GEOGREEN ENVIRO HOUSE PVT LTD, LUCKNOW NABET/EIA/1720/IA0023 Extended 5 <sup>th</sup> October 2021.
28.	Any Litigation Pending Against The Project Or Land In Any Court.	No
29.	Proposed CER Cost	1.0 Lacs
30.	Propose EMP Cost	4.40 Lacs
31.	No. of trees to be planted	540 Saplings
32.	Life of Mine	14 Years (as per approved mining plan)

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 PM10 was observed as 59.60 µg/m<sup>3</sup> Diengkain (A2) while 24 hours applicable limit is 100 µg/m<sup>3</sup> for industrial and mixed-use areas. The area observes average PM10 concentration in the range of 50.0 µg/m<sup>3</sup> – 59.60 µg/m<sup>3</sup>.

The maximum value for PM2.5 was observed, 40.2 µg/m<sup>3</sup> Mawlong (A3) while 24 hours applicable limit is 60 µg/m<sup>3</sup> for industrial and mixed use areas. The area observes average PM2.5 concentration in the range of 28.6 µg/m<sup>3</sup> – 40.2 µg/m<sup>3</sup>.

The maximum value for SO<sub>2</sub> was observed, as 7.0 µg/m<sup>3</sup> on Sohbar (A4) while 24 hours applicable limit is 80µg/m<sup>3</sup> for industrial and mixed use areas. The average SO<sub>2</sub> concentration lies in between 4.9 µg/m<sup>3</sup> - 7.0 µg/m<sup>3</sup>.

The maximum value for NO<sub>2</sub> was observed, as 14.9 µg/m<sup>3</sup> at A3, A4, A5 & A6 while 24 hours applicable limit is 80 µg/m<sup>3</sup> for industrial and mixed use areas. The area observes average

NO<sub>2</sub> concentration in the range of 11.90 - 14.90 µg/m<sup>3</sup>. All the villages have observed value well under the prescribed limit.

Ambient noise levels were measured at 08 locations around the proposed project site. Minimum and maximum noise levels recorded during the day time were from 47.2 Leq dB to 54.9 Leq dB respectively and minimum and maximum level of noise during night time were 39.6 Leq dB and 46.7 Leq dB respectively. Noise levels at all locations were observed to be within the prescribed limits and Ambient Air Quality Standards in respect of Noise is available online at [http://cpcb.nic.in/divisionsofheadoffice/pci2/noise\\_rules\\_2000.pdf](http://cpcb.nic.in/divisionsofheadoffice/pci2/noise_rules_2000.pdf).

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

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

- No labor 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 labors 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
<b>Air Pollution Monitoring</b>		
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
<b>Water Quality Monitoring</b>		

S.No.	Activity	Schedule
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
<b>Noise Quality Monitoring</b>		
5.	Noise in the ambient atmosphere in mining lease	Twice in a Year except monsoon
<b>Greenbelt Maintenance</b>		
6.	Monitoring schedule for Greenbelt development as per mining plan	Yearly
<b>Soil Quality Monitoring</b>		
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.