

STATE EXPERT APPRAISAL COMMITTEE (SEAC)

::MEGHALAYA::

**Silviculture Building Adjacent to 'SYLVAN' House,
Lower Lachumiere, East Khasi Hills, Shillong – 793001.**

MINUTES OF 63rd MEETING OF THE STATE EXPERT APPRAISAL COMMITTEE, MEGHALAYA SHILLONG HELD ON 16th and 17th January 2023, FOR ENVIRONMENTAL APPRAISAL OF NON-COAL MINING PROJECTS

Members of the Committee present:

Sl.No	Name	Designation	Signature
1	Shri. NababrataBhattacharjee	Chairman SEAC	-Sd-
2	Shri. Millanburg R. Sangma	Member	
3	Dr. Highland Kayang	Member	-Sd-
4	Shri. Gideon LamborlangKharkongor	Member	-Sd-
5	Shri. Pynbiang Singh Nongbri	Member	-Sd-
6	Dr. Shiva Shankar Chaturvedi	Member	-Sd-
7	Dr. (Mrs) Van Jennifer Joan Wallang	Member	-Sd-
8	Shri EvansaraShullai, MFS Deputy Conservator of Forest (SF &Env.)	Member Secretary SEAC	-Sd-

The 63rd meeting of State Expert Appraisal Committee (SEAC), Meghalaya, Shillong, held on 16th and 17th January 2023 from 10:30 A.M. on ward in the Conference Hall, office of the Principal Chief Conservator of Forests &HoFF, Meghalaya, Lower Lachumiere, Shillong – 793001, through blended mode method i.e. online and offline method. At the outset the Chairman Shri. NababrataBhattacharjee, welcomed all the members of the Committee present and called the meeting to order. He requested the Member Secretary to initiate the discussion as per the agenda circulated vide letter No.ML/SEAC/Meeting/Vol-IV/1/2022/24 dated the 13th January 2023, accordingly. All proposed mining areas are cross checked through google earth.

1. Confirmation of the minutes of the 62nd Meeting held on 29th November 2022.

The minutes were confirmed.

2. Action taken report as per the decision taken in the 62nd Meeting.

As per the decision taken in the 62nd Meeting of the State Expert Appraisal Committee held on 29th November 2022, (7) seven proposals for Environmental Clearance, and (2) ADS were recommended to the State Environment Impact Assessment Authority, Meghalaya.

ENVIRONMENTAL CLEARANCE

1. Proposal No.SIA/ML/MIN/405958/2022 submitted by Shri. Jan Unisakhiat G. Kyndiah (M/S Mawlyngad Boulder Stone Mine)

The Project Proponent, Shri Unisakhiat G. Kyndiah submitted online application vide proposal No. SIA/ML/MIN/405958/2022 for Environmental Clearance for Mawlyngad Boulder stone Mine for an area of 4.69 hectare. The proposal is for mining of boulder stone use for construction purposes, hence the project falls under Schedule 1(a) of category B2 of EIA Notification 2006. The area is located at Mawlyngad village, Khyrim Syiemship, East Khasi Hills District, Meghalaya and toposheet Survey of India No. G46N14 within the following GPS Coordinates:

Pillar No	GPS Coordinates	
	Latitude	Longitude
1	25° 31' 17.850"N	91° 56' 12.900"E
2	25° 31' 17.640"N	91° 56' 15.140"E
3	25° 31' 18.330"N	91° 56' 16.920"E
4	25° 31' 19.460"N	91° 56' 17.770"E
5	25° 31' 20.730"N	91° 56' 19.740"E
6	25° 31' 21.660"N	91° 56' 21.540"E
7	25° 31' 23.300"N	91° 56' 19.570"E
8	25° 31' 24.760"N	91° 56' 17.970"E
9	25° 31' 25.960"N	91° 56' 18.420"E
10	25° 31' 27.120"N	91° 56' 18.390"E
11	25° 31' 27.170"N	91° 56' 17.270"E
12	25° 31' 26.370"N	91° 56' 16.610"E
13	25° 31' 26.200"N	91° 56' 14.890"E
14	25° 31' 26.670"N	91° 56' 13.670"E
15	25° 31' 25.450"N	91° 56' 13.390"E
16	25° 31' 25.080"N	91° 56' 12.200"E

The proposed mining area is on lease vide Deed of Lease signed on the 12th of January 2022 for a period of 20 (Twenty) years, which was certified by Public Notary, East Khasi Hills, Meghalaya.



The applied area is a Non Forest Land which was confirmed by the Chief Conservator of Forests(T), Meghalaya, Shillong, vide letter No.MFG.39/42/NFLC/MINING/MMMCR/KH/Pt.II/2689, dated Shillong, the 6th June 2022 and Letter of Intent confirmed by the Divisional Forest officer, East Khasi Hills & RiBhoi (T) Division vide letter No.KH/8/ML/Stone/69/1188, dated Shillong, the 14th June, 2022 respectively.

The project proponent obtained a cluster certificate from the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/175/2022/06 dated Shillong, the 12th August 2022 where it is mentioned that there no approved mining plan located within 500 metres. Hence, the Environment Management Plan is not required.

The project proponent submitted the Mining Plan with Progressive Mine Closure Plan approved by the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/175/2022/02 dated Shillong, the 20th July 2022. The Mining Plan has been prepared to extract boulder stone at the rate of 2,00,112 MT per annum with a project cost of Rs.22.00 lakhs and the operations will be open cast, semi-mechanized method of mining.

The mineable reserves of boulder stone is of the order of 23, 07,360 MT. The production in the period of the mining plan will be around 10, 00,560 MT in 5 years. Therefore, the balance reserves will be (2307360 -1000560) or 1306800MT. If the production target is 200112MT, the balance reserve will be sufficient for (1306800 /200112) or 6.53 years. Thus, the total life of the mine is 5+6.53=11.53 or say 12 years

Recommendation

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth. The committee unanimously recommended for grant of Environment Clearance with the following conditions.

1. LOI ought to be renewed as the validity has expired.
2. A settling Tank is to be constructed, at a suitable site within the mining area for collection of debris, sediment, silt, fragmented stones etc carried by surface water channelized through the Curtain drain. The deposited debris, spoils etc are to be removed/cleared, both from the tank and drain as and when required. Overflowing water that flows downhill shall be dispersed but precautions to be taken that spoils etc. generated from mining are not carried along.



3. Garland drains is to be constructed along the periphery of the mining lease boundary to capture the storm water run-off from the mining area, all drains will link to a settling tank with compartments to check and arrest siltation in the mine water prior to discharge.
4. Curtain Drain is to be constructed properly to intercept the surface water from flowing into the mining area and water flowing out of the mine channelized to the Settling tank.
5. If any debris etc. overflows to adjoining land/agricultural field etc. during the mining operation, Monitoring Agency is to take necessary action as per relevant section(s) of Water (Prevention & Control of Pollution) Act, 1974.
6. In annual EMP budget under GREEN BELT, creation of plantations including nursery cost, fencing etc the notified norms of Forest and Environment Department, Govt of Meghalaya is to be followed strictly, including financial cost. Budget under said head stands revised accordingly.
7. To increase the allocation for plantation and maintenance to a minimum of Rs. 1 lakh per annum and double the number of plants to be planted.
8. CER should be included in the capital cost and it should be increased to a minimum of Rs 1 lakh annually.
9. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
10. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.
11. A board highlighting the name of project and project proponent, location name, total area of the mine, date of issue of EC by SEIAA and CTO & CTE by MSPCB should be installed at the entrance to the mining site and clearly visible.
12. Fencing of the boundary of site with minimum two strands of barbed wire or ordinary split bamboo fencing is to be erected all around the periphery of the approved mining area.
13. Storing and collection of water through rainwater harvesting for dust sprinkling and recharging of the aquifers.



II.Proposal No.SIA/ML/MIN/403199/2022 submitted by Smt. HeileenAntheaDiengdoh (M/S Phudkroh Limestone Mine).

The Project Proponent, Smt. HeileenAntheaDiengdohsubmitted online application for Environmental Clearance vide proposal No. SIA/ML/MIN/403199/2022 for Environmental Clearance for Phudkroh Limestone Mine for an area of 4.80 hectares. The proposal for mining of limestone will be used in kilns for manufacturing of lime used as building material and hence the project fall under Schedule 1(a) of category B2 of EIA Notification 2006. The area is located at Phudkroh Area, MaharamSyiemship, South West Khasi Hills, Meghalaya and toposheet Survey of India No. G46N8 within the following GPS Coordinates:

Pillar No	GPS Coordinates	
	Latitude	Longitude
1	25°12'46.17"N	91°16'29.91" E
2	25°12'45.06"N	91°16'33.88" E
3	25°12'42.46"N	91°16'35.18" E
4	25°12'39.17"N	91°16'34.11" E
5	25°12'37.72"N	91°16'31.56" E
6	25°12'38.92"N	91°16'27.26" E
7	25°12'41.42"N	91°16'26.08" E
8	25°12'44.81"N	91°16'27.20" E

The proposed mining area is on lease vide Lease Agreement signed on the 25th of August,2020for a period of 30 (Thirty) years, which was certified by Public Notary, East Khasi Hills, Meghalaya.

The applied area is a Non Forest Land which was confirmed by the Conservator of Forests(T),Khasi&Jaintia Hills, Meghalaya, Shillong, vide letter No.MFG.39/42/NFLC/MINING/MMMCR/KH/10554, dated Shillong, the 24thNovember 2021 and Letter of Intent confirmed by the Divisional Forest Officer, SF & Territorial Division,West& South West Khasi Hills, vide letter No.T/W&SW/ML/LS/21-22/208/144 datedNongstoin the 2ndFebruary, 2022.

The project proponent has obtained a cluster certificate from the Mining Engineer, Directorate of Mineral Resources, Meghalaya, vide letter No.DMR/MM/161/2022/08 dated Shillong, the 8thJuly 2022 where it is mentioned that that there is no other mine lying within



500 metres from the applied mining lease area. Hence, the Environment Management Plan is not required.

The project proponent submitted mining plan approved by the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No. DMR/MM/161/2022/04 dated Shillong, the 6th May 2022. The Mining Plan has been prepared to extract limestone at 2,30,850 MT/annum with a project cost of Rs. 24.5 Lakhs and the operations will be open cast, semi-mechanized method of mining.

As per the mining plan, the mineable reserves of limestone is of the order of 37,13,600 MT. The production in the period of the mining plan will be around 11,54,250 MT in 5 years. Therefore, the balance reserves will be $(3713600 - 1154250)$ or 2559350 MT. If the production target is 230850 MT, the balance reserve will be sufficient for $(2559350 / 230850)$ or 11.08 years. Thus, the total life of the mine is $5 + 11.08 = 16.08$ or say 16 years.

Recommendation

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth. The committee unanimously recommended for grant of Environment Clearance with the following conditions.

1. LOI ought to be renewed as the validity has expired.
2. A settling Tank is to be constructed, at a suitable site within the mining area for collection of debris, sediment, silt, fragmented stones etc carried by surface water channelized through the Curtain drain. The deposited debris, spoils etc are to be removed/cleared, both from the tank and drain as and when required. Overflowing water that flows downhill shall be dispersed but precautions to be taken that spoils etc. generated from mining are not carried along.
3. Garland drains is to be constructed along the periphery of the mining lease boundary to capture the storm water run-off from the mining area, all drains will link to a settling tank with compartments to check and arrest siltation in the mine water prior to discharge.
4. Curtain Drain is to be constructed properly to intercept the surface water from flowing into the mining area and water flowing out of the mine channelized to the Settling tank.
5. If any debris etc. overflows to adjoining land/agricultural field etc. during the mining operation, Monitoring Agency is to take necessary action as per relevant section(s) of Water (Prevention & Control of Pollution) Act, 1974.



6. In annual EMP budget under GREEN BELT, creation of plantations including nursery cost, fencing etc the notified norms of Forest and Environment Department, Govt of Meghalaya is to be followed strictly, including financial cost. Budget under said head stands revised accordingly.
7. To increase the allocation for plantation and maintenance to a minimum of Rs. 1 lakh per annum and double the number of plants to be planted.
8. CER should be included in the capital cost and it should be increased to a minimum of Rs 1 lakh annually.
9. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
10. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.
11. A board highlighting the name of project and project proponent, location name, total area of the mine, date of issue of EC by SEIAA and CTO & CTE by MSPCB should be installed at the entrance to the mining site and clearly visible.
12. Fencing of the boundary of site with minimum two strands of barbed wire or ordinary split bamboo fencing is to be erected all around the periphery of the approved mining area.
13. Storing and collection of water through rainwater harvesting for dust sprinkling and recharging of the aquifers.

III. Proposal No.SIA/ML/MIN/406341/2022 submitted by Smt. Wilme K. Marak (M/S Kusimkolgre Sand and Gravel Permit)

The Project Proponent, Smt.Wilme K. Marak submitted online application vide proposal No.SIA/ML/MIN/406341/2022for Environmental Clearance for Kusimkolgre Sand and Gravel Permit for an area of 1.6 hectares. The proposal for mining of sand and gravel will be used for the construction purpose for development (Private as well as Government projects) and hence the project fall under Schedule 1(a) of category B2 of EIA Notification 2006. The area is located at Kusimkolgre, East Garo Hills District, Meghalaya and toposheet Survey of India No. G46M11within the following GPS Coordinates:

Pillar No	GPS Coordinates	
	Latitude	Longitude
1	25°31'29.21"N	90°34'55.09" E
2	25°31'31.61"N	90°35'0.05" E

3	25°31'30.51"N	90°35'5.96" E
4	25°31'28.82"N	90°35'6.27" E
5	25°31'28.87"N	90°34'59.58" E
6	25°31'29.89"N	90°34'58.70" E
7	25°31'28.74"N	90°34'55.76" E

The proposed mining area is on lease vide Lease Agreement signed between the Nokma of SimsangKusimkolgre and the Project Proponent and certified by the Garo Hills Autonomous District Council on the 8th of April,2022.

The applied area is a Non Forest Land which was confirmed by the Divisional Forest Officer, East&North Garo Hills (T) Division,Williamnagar vide letter No. B/16/SGM/1726-1732 dated Williamnagar, the 7thApril, 2022 and Letter of Intent vide No.B/16/SGM/2468 datedWilliamnagar the 20th July, 2022.

The project proponent has obtained a cluster certificate from the Divisional Mining Officer, East Garo Hills, Williamnagar, vide letter No.DMO- W/MP/15/2019/86 dated Williamnagarthe 12thOctober 2022 where it is mentioned that that there is no other mine lying within 500 metres from the applied mining lease area. Hence, the Environment Management Plan is not required.

The project proponent submitted mining plan approved by the Divisional Mining Officer, East Garo Hills, Williamnagar, vide letter No.DMO- W/MP/86/2022/81 dated Williamnagar the 28th September 2022. The Mining Plan has been prepared to extract sand and gravel at 13,560 TPAwith a project cost of Rs. 16.00 Lakhs and the operations will be open cast, semi-mechanized method of mining.

As per the mining plan, the mineable reserves are 50850 Cu M which will be excavated during 5 years period at the rate of 10170 Cu M per year. Thus life of quarry is 5 years.

Recommendation

After due screening and examination of all the documents submitted by the Project Proponent and deliberation by using kml file through google earth, the committee unanimously recommended for Reconsideration(as the project needs to be check as per the Enforcement and Monitoring Guidelines for Sand Mining).

IV. Proposal No. SIA/ML/MIN/283786/2022 submitted by Shri LeadarlyKharbani (M/SUmtngaw Limestone Mine).

The Project Proponent, Shri LeadarlyKharbani submitted online application for Environmental Clearance vide proposal No.SIA/ML/MIN/283786/2022 for Umtngaw Limestone Mine for mining of Lime stone for an area of 3.95 hectares. The proposal is for mining of lime stone to be used in kilns for manufacturing of lime used as building materials. The project falls under Schedule 1(a) of category B2 of EIA Notification 2006. The mining lease area is located at Umtngaw, Mawlong, MawlongSirdarship, East Khasi Hills, Meghalaya and toposheet Survey of India No.78O/12 within the following GPS Coordinates:

Pillar No	GPS Coordinates	
	Latitude	Longitude
1	25° 10. 709'N	91° 40.914'E
2	25° 10. 710' N	91° 40.954'E
3	25° 11.043 'N	91° 41.007'E
4	25° 11.043'N	91°40.970' E

The proposed mining area is on lease for a period of 50 years vide Deed of Lease executed on the 31st August 2020 certified by Notary, East Khasi Hills, Meghalaya.

The applied area is a Non Forest Land which was confirmed by the Divisional Forest Officer, East Khasi Hills & RiBhoi (T) Division vide letter No.KH/8/NOC/Limestone/41/Pt.IV/4541, dated Shillong, the 21st December 2020 and letter of Intent vide letter No.KH/8/ML/Limestone/68/ 4577 dated Shillong , the 22nd December 2021 respectively.

The project proponent obtained a cluster certificate from the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/109/2021/18 dated Shillong, the 10th August 2021 which states that there are two (2) approved mining plans lying within 500 metres from the applied mining lease area. Hence the applied mining area falls under cluster category since the total area of three mines is summed up to 11.01 hectares.

The project proponent submitted the Mining Plan with Progressive Mine Closure Plan approved by the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/109/2021/13 dated Shillong, the 7th July 2021. The Mining Plan has been prepared to extract lime stone at the rate of 201790 MTPA with a project cost of Rs.29.00 lakhs and the operations will be open cast, semi-mechanized method of mining.



The mineable reserves would be 2017900 Tonnes with an average annual production of 201790 (2017900/10=201790) Tonnes. The average annual production of limestone may be different from annual production of five years plan period. Thus, 1008625 Tonnes of the total mineable reserve will be worked out in first 5 years and the rest quantity of mineable reserve i.e. (2017900-1008625)= 1009275 Tonnes would be exhausted in further 5 years @201855 tonnes per annum. Therefore, the life of the mine will be 10 years (five years in plan period + 5 years in conceptual period).

The project was already awarded Term of Reference by the State Environment Impact Assessment Authority, Meghalaya vide letter No.ML/SEIAA/MIN/EKH/P-189/2021/996 dated 26th November 2021 and submitted the final EIA/EMP for the proposed Mining of Lime stone where the project proponent complied all the points in compliance to the Term of Reference prepared by CHAITANYA PROJECTS CONSULTANCY PVT. LTD.

The public hearing was held on 5th April 2022 which was conducted by the Meghalaya State Pollution Control Board and presided over by Smt. D.Phawa, ADC, EastKhasi Hills District.

Recommendation

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth and the presentation of the EIA/EMP. The committee unanimously recommended for grant of Environment Clearance with the following conditions.

1. LOI ought to be renewed as the validity has expired.
2. A settling Tank is to be constructed, at a suitable site within the mining area for collection of debris, sediment, silt, fragmented stones etc carried by surface water channelized through the Curtain drain. The deposited debris, spoils etc are to be removed/cleared, both from the tank and drain as and when required. Overflowing water that flows downhill shall be dispersed but precautions to be taken that spoils etc. generated from mining are not carried along.
3. A retaining wall of adequate height not less than 6 ft above the ground level and 4-6 ft below the ground level is to be constructed within mining site for stacking of Over Burden (OB), with the length of around 690 meter on the western, Eastern and Southern direction, sloping to the valley below to ensure that no spillage of OB materials.
4. Garland drains is to be constructed along the periphery of the mining lease boundary to capture the storm water run-off from the mining area, all drains will link to a settling tank with compartments to check and arrest siltation in the mine water prior to discharge.



5. Curtain Drain is to be constructed properly to intercept the surface water from flowing into the mining area and water flowing out of the mine channelized to the Settling tank.
6. If any debris etc. overflows to adjoining land/agricultural field etc. during the mining operation, Monitoring Agency is to take necessary action as per relevant section(s) of Water (Prevention & Control of Pollution) Act, 1974.
7. In annual EMP budget under GREEN BELT, creation of plantations including nursery cost, fencing etc the notified norms of Forest and Environment Department, Govt of Meghalaya is to be followed strictly, including financial cost. Budget under said head stands revised accordingly.
8. To increase the allocation for plantation and maintenance to a minimum of Rs. 1 lakh per annum and double the number of plants to be planted.
9. CER should be included in the capital cost and it should be increased to a minimum of Rs 1 lakh annually.
10. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
11. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.
12. A board highlighting the name of project and project proponent, location name, total area of the mine, date of issue of EC by SEIAA and CTO & CTE by MSPCB should be installed at the entrance to the mining site and clearly visible.
13. Fencing of the boundary of site with minimum two strands of barbed wire or ordinary split bamboo fencing is to be erected all around the periphery of the approved mining area.
14. Storing and collection of water through rainwater harvesting for dust sprinkling and recharging of the aquifers.

V. Proposal No. SIA/ML/MIN/277222/2022 submitted by Shri.ArbiTangdhara(M/S Ri-Laingut Limestone Mine)

The Project Proponent, Shri.ArbiTangdhara submitted online application for Environmental Clearance vide proposal No.SIA/ML/MIN/277222/2022for RiLaingut Limestone Mine for mining of Lime stone for an area of 0.66 hectares. The proposal is for mining of lime stone to be used for manufacturing of lime and as building materials for building,road and other construction works. The project falls under Schedule 1(a) of category B1 of EIA Notification 2006. The mining lease area is located at RiLaingut, LyntiDkhar, Sohbar village,



SohbarSirdarship, East Khasi Hills District, Meghalayaandtoposheet Survey of India No.78O/12 within the following GPS Coordinates:

Pillar No	GPS Coordinates	
	Latitude	Longitude
	25° 11' 13.99"N	91° 44' 51.69" E
	25° 11' 13.96"N	91° 44' 51.86 "E
	25° 11' 9.63"N	91° 44' 48.10"E
	25° 12' 11.38"N	91° 44' 46.25"E

The proposed mining area is on lease for 30 years vide lease agreement made on 18th February 2019 certified by Sub-Registrar, Sohra, EastKhasi Hills.

The applied area is a Non Forest Land which was confirmed by the Divisional Forest Officer, East Khasi Hills & RiBhoi Territorial Division, Shillong, vide letter No.KH/8/NOC/Limestone/41/Pt.IV/6267, dated Shillong, the 30th March 2021 and letter of Intent vide letter No.KH/8/ML/Limestone/68/6272, dated Shillong, the 30th March 2021 respectively.

The project proponent obtained a cluster certificate from the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/120/2021/07 dated Shillong, the 15th July 2021 which states that there are eleven (11) approved mining plan lying within 500 metres from the applied mining lease area. Hence the applied mining area falls under cluster category since the total area of twelve mines is summed up to 25.7715 hectares.

The project proponent submitted the Mining Plan with Progressive Mine Closure Plan approved by the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/120/2021/04 dated Shillong, the 2nd July 2021. The Mining Plan has been prepared to extract lime stone at the rate of 14450 TPA with a project cost of Rs. 21 lakhs and the operations will be open cast, semi-mechanized method of mining.

The mineable reserves of limestone are of the order of 1,59,500 tonnes. The production in the period of the mining plan will be around 72,250 tonnes in 5 years. Therefore, the balance reserves will be (159500 - 72250) or 87250 tonnes. If the production target is 14450 tonnes, the balance reserve will be sufficient for (87250/14450) or 6.03 years. Thus, the total life of the mine is 5+6.03=11.03 or say 11 years.



The project was already awarded Term of Reference by the State Environment Impact Assessment Authority, Meghalaya vide letter No.ML/SEIAA/MIN/EKH/P-175/2021/587 dated 22nd September 2021 and submitted the final EIA/EMP for the proposed Mining of Lime stone where the project proponent complied all the points in compliance to the Term of Reference prepared by CHAITANYA PROJECTS CONSULTANCY PVT. LTD.

The public hearing was held on 17th December 2021 which was conducted by the Meghalaya State Pollution Control Board and presided over by Smt. D.Phawa, ADC, East Khasi Hills District and Chairperson, EPH.

Recommendation

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth and the presentation of the EIA/EMP. The committee unanimously recommended for grant of Environment Clearance with the following conditions.

1. LOI ought to be renewed as the validity has expired.
2. A settling Tank is to be constructed, at a suitable site within the mining area for collection of debris, sediment, silt, fragmented stones etc carried by surface water channelized through the Curtain drain. The deposited debris, spoils etc are to be removed/cleared, both from the tank and drain as and when required. Overflowing water that flows downhill shall be dispersed but precautions to be taken that spoils etc. generated from mining are not carried along.
3. Garland drains is to be constructed along the periphery of the mining lease boundary to capture the storm water run-off from the mining area, all drains will link to a settling tank with compartments to check and arrest siltation in the mine water prior to discharge.
4. Curtain Drain is to be constructed properly to intercept the surface water from flowing into the mining area and water flowing out of the mine channelized to the Settling tank.
5. If any debris etc. overflows to adjoining land/agricultural field etc. during the mining operation, Monitoring Agency is to take necessary action as per relevant section(s) of Water (Prevention & Control of Pollution) Act, 1974.
6. In annual EMP budget under GREEN BELT, creation of plantations including nursery cost, fencing etc the notified norms of Forest and Environment Department, Govt of Meghalaya is to be followed strictly, including financial cost. Budget under said head stands revised accordingly.



7. To increase the allocation for plantation and maintenance to a minimum of Rs. 1 lakh per annum and double the number of plants to be planted.
8. CER should be included in the capital cost and it should be increased to a minimum of Rs 1 lakh annually.
9. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
10. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.
11. A board highlighting the name of project and project proponent, location name, total area of the mine, date of issue of EC by SEIAA and CTO & CTE by MSPCB should be installed at the entrance to the mining site and clearly visible.
12. Fencing of the boundary of site with minimum two strands of barbed wire or ordinary split bamboo fencing is to be erected all around the periphery of the approved mining area.
13. Storing and collection of water through rainwater harvesting for dust sprinkling and recharging of the aquifers.

VI. Proposal No.SIA/ML/MIN/67625/2021 submitted by Shri. SoshinLaitmon (RiJyrkha Limestone Mine)

The Project Proponent, Shri SoshinLaitmon submitted online application for Environmental Clearance vide proposal No.SIA/ML/MIN/67625/2021 for RiJyrkha Limestone Mine for mining of Lime stone for an area of 0.75 hectares. The proposal is for mining of lime stone to be used in kilns for manufacturing of lime used as building materials. The project falls under Schedule 1(a) of category B2 of EIA Notification 2006. The mining lease area is located at Ri-Jyrkha, MawlongSirdarship, East Khasi Hills District, Meghalaya and toposheet Survey of India No.78O/12 within the following GPS Coordinates:

Pillar No	GPS Coordinates	
	Latitude	Longitude
1	25° 12' 06.20''N	91° 41' 06.10'' E
2	25° 12' 01.30''N	91° 41' 06.00''E
3	25° 12' 00.00''N	91° 41' 04.20''E
4	25° 12' 04.80''N	91° 41' 04.30''E

The proposed mining area is on lease for 30 years vide Lease Deed made on the 5th day of November 2020, certified by Notary, Govt of Meghalaya, EastKhasi Hills District.

The applied area is a Non Forest Land which was confirmed by the Divisional Forest Officer, East Khasi Hills & RiBhoi Territorial Division, Shillong, vide letter NO.KH/8/NOC/Limestone/41/Pt.IV/4716, dated Shillong, the 5th March 2020 and letter of Intent vide letter No.KH/8/ML/Limestone/68/4733, dated Shillong, the 5th March, 2020 respectively.

The project proponent obtained a cluster certificate from the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/115/2021/13 dated Shillong, the 4th August 2021 which states that there are four (4) approved mining plan lying within 500 metres from the applied mining lease area. Hence the applied mining area falls under cluster category since the total area of five mines is summed up to 7.475 hectares.

The project proponent submitted the Mining Plan with Progressive Mine Closure Plan approved by the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/115/2021/8 dated Shillong, the 12th July 2021. The Mining Plan has been prepared to extract lime stone at the rate of 34,406 TPA with a project cost of Rs.22.5 lakhs and the operations will be open cast, semi-mechanized method of mining.

The mineable reserve would be 240840 Tonnes with an average annual production of 34406 $(240840/7 = 34406)$ Tonnes. The average annual production of limestone may be different from annual production of five years plan period. Thus 171940 Tonnes of the total mineable reserve i.e. $(240840 - 171940) = 68900$ Tonnes would be exhausted in further 2 years @ 34450 Tonnes per annum. Therefore, the life of the mine will be 7 years (Five years in plan period + Two years in conceptual period).

The project was already awarded Term of Reference by the State Environment Impact Assessment Authority, Meghalaya vide letter No.ML/SEIAA/MIN/EKH/P-196/2021/1245 dated 26th November 2021 and submitted the final EIA/EMP for the proposed Mining of Lime stone where the project proponent complied all the points in compliance to the Term of Reference prepared by CHAITANYA PROJECTS CONSULTANCY PVT. LTD.

The public hearing was held on 5th April 2022 which was conducted by the Meghalaya State Pollution Control Board and presided over by Smt. D.Phawa, ADC, EastKhasi Hills District.

Recommendation

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth and the



presentation of the EIA/EMP. The committee unanimously recommended for grant of Environment Clearance with the following conditions.

1. LOI ought to be renewed as the validity has expired.
2. A settling Tank is to be constructed, at a suitable site within the mining area for collection of debris, sediment, silt, fragmented stones etc carried by surface water channelized through the Curtain drain. The deposited debris, spoils etc are to be removed/cleared, both from the tank and drain as and when required. Overflowing water that flows downhill shall be dispersed but precautions to be taken that spoils etc. generated from mining are not carried along.
3. A retaining wall of adequate height not less than 6 ft above the ground level and 4-6 ft below the ground level is to be constructed within mining site for stacking of Over Burden (OB), with the length of around 200 meter on the Northern, Eastern and Southern direction, sloping to the valley below to ensure that no spillage of OB materials.
4. Garland drains is to be constructed along the periphery of the mining lease boundary to capture the storm water run-off from the mining area, all drains will link to a settling tank with compartments to check and arrest siltation in the mine water prior to discharge.
5. Curtain Drain is to be constructed properly to intercept the surface water from flowing into the mining area and water flowing out of the mine channelized to the Settling tank.
6. If any debris etc. overflows to adjoining land/agricultural field etc. during the mining operation, Monitoring Agency is to take necessary action as per relevant section(s) of Water (Prevention & Control of Pollution) Act, 1974.
7. In annual EMP budget under GREEN BELT, creation of plantations including nursery cost, fencing etc the notified norms of Forest and Environment Department, Govt of Meghalaya is to be followed strictly, including financial cost. Budget under said head stands revised accordingly.
8. To increase the allocation for plantation and maintenance to a minimum of Rs. 1 lakh per annum and double the number of plants to be planted.
9. CER should be included in the capital cost and it should be increased to a minimum of Rs 1 lakh annually.
10. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
11. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.



12. A board highlighting the name of project and project proponent, location name, total area of the mine, date of issue of EC by SEIAA and CTO & CTE by MSPCB should be installed at the entrance to the mining site and clearly visible.
13. Fencing of the boundary of site with minimum two strands of barbed wire or ordinary split bamboo fencing is to be erected all around the periphery of the approved mining area.
14. Storing and collection of water through rainwater harvesting for dust sprinkling and recharging of the aquifers.

VI. Proposal No. SIA/ML/MIN/285125/2022 submitted by Shri. Solomon Gassah (M/S Amkroh Limestone Mine).

The Project Proponent, Shri. Solomon Gassah submitted online application vide proposal No. SIA/ML/MIN/285125/2022 for Environmental Clearance for mining of Lime stone for an area of 1.25 hectares. The proposal is for mining of lime stone to be used for construction purposes. The project falls under Schedule 1(a) of category B2 of EIA Notification 2006. The mining lease area is located at Amkroh, Nongtalang, West Jaintia Hills District, Meghalaya and toposheet Survey of India No.83C/3 within the following GPS Coordinates:

Pillar No	GPS Coordinates	
	Latitude	Longitude
1	25° 14.751'N	92° 5.956'E
2	25° 14.780'N	92° 5.956'E
3	25° 14.770'N	92° 5.902'E
4	25° 14.739'N	92° 5.880'E
5	25° 14.713'N	92° 5.881'E
6	25° 14.725'N	92° 5.962'E

The proposed land is on lease vide Lease Agreement made on the 5th October 2018 for a period of 10 years, which certified by Sub-Registrar, Amlarem Civil Sub Division, West Jaintia Hills District, Meghalaya.

The applied area is a Non Forest Land which was confirmed by the Divisional Forest Officer, Jaintia Hills Territorial Division, Jowai vide letter No. JH/S.Quarry/2009-10/476/B/2235, dated Jowai, the 5th August 2019 and letter of Intent vide letter No. JH/SG/M.L/L.S/2020-21/B/459 dated Jowai, the 20th July 2020 respectively.

The project proponent obtained a cluster certificate from the Divisional Mining Officer, Directorate of Mineral Resources, Meghalaya, Jowai vide letter No.DMO-J/40/MM/Mining Plan/2020-2021/135 dated, Jowai, the 8th March 2021 which states that there are three (3) approved mining plan lying within 500 metres from the applied mining lease area. Hence the applied mining area falls under cluster category since the total area of total four mines is summed up to 14.65 hectares.

The project proponent submitted the Mining Plan with Progressive Mine Closure Plan approved by the Divisional Mining Officer, Directorate of Mineral Resources, Meghalaya, Jowai vide letter No.DMO-J/40/MM/Mining Plan/2020-21/125 dated Jowai, the 30th October 2020. The Mining Plan has been prepared to extract lime stone at the rate of 60391 TPA with a project cost of Rs.12.00 lakhs and the operations will be open cast, semi-mechanized method of mining.

The total mineable reserve would be 603445 tonnes with an average annual production of 60345 (603445/10) tonnes and production of limestone in first five years will be 300821 tonnes. The average annual production of stone may be different from the annual production of first five years. The balance mineable reserve, 302624 Tonnes will be worked out in the subsequent 5 years. Therefore, the life of the mine will be 10 years (First five years in plan period + Subsequent Five years in conceptual period.)

The project was already awarded Auto Generated Term of Reference and submitted the final EIA/EMP for the proposed Mining of Lime stone where the project proponent complied all the points in compliance to the Term of Reference prepared by CHAITANYA PROJECTS CONSULTANCY PVT. LTD.

The public hearing was held on 25th February 2022 which was conducted by the Meghalaya State Pollution Control Board and presided over by Shri. A.S Mukhim, MCS, ADC, West Jaintia Hills District.

Recommendation:

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth and the presentation of the EIA/EMP, the committee unanimously recommended for ADS (As per verification from google earth it was observed the proposed mining site appears to be worked out/operated within part of the proposed area. Hence, Project Proponent is to obtain a written justification from concerned department like Mining & Geology/DMR in approving the mining lease.



VIII. Proposal No.SIA/ML/MIN/406170/2022 submitted by Shri KhrikshonLyngkhoi (M/S.KhrikshonLyngkhoi 's Boulder Stone Mine)

The Project Proponent, Shri KhrikshonLyngkhoi submitted online application vide proposal No.SIA/ML/MIN/406170/2022 for Environmental clearance for KhrikshonLyngkhoi's boulder Stone Mine for mining of boulder stone for an area of 4.45 hectares. The proposal is for mining of boulder stone use for construction purposes, hence the project fall under Schedule 1(a) of category B2 of EIA Notification 2006. The area is located at Umduba, Raid Marwet, RiBhoi District, Meghalaya and toposheet Survey of India No. G46H16 within the following GPS Coordinates:

Pillar No	GPS Coordinates	
	Latitude	Longitude
1	26° 04' 20.16''N	91° 49' 48.10'' E
2	26° 04' 15.80''N	91° 49' 48.28''E
3	26° 04' 14.80''N	91° 49' 58.40''E
4	25° 04' 19.90''N	91° 49' 58.20''E

The proposed mining area belongs to the project proponent through Deed of Sale made on the 8th of November, 2011 and certified by Sub-registrar, Nongpoh.

The applied area is a Non Forest Land which was confirmed by the Divisional Forest Officer, Khasi hills (T) Division, Shillong vide letter No.KH/9/NOC/STONE/41/Pt.III/4126, dated Shillong, the 5th September 2017 and letter of Intent vide letter No.KH/8/ML/Stone/69/4125, dated Shillong, the 5th September , 2017 respectively.

The project proponent obtained a cluster certificate from the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/58/2017/21 dated Shillong, the 10th September 2020 which states that there are seven (7) approved mining plan lying within 500 metres from the applied mining lease area. Hence the applied mining area falls under cluster category since the total area of eight mines is summed up to 24.91 hectares.

The project proponent submitted the Mining Plan with Progressive Mine Closure Plan approved by the Director of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/57/2017/1737 dated Shillong, the 30th November 2017. The Mining Plan has



been prepared to extract lime stone at the rate of 643608 TPA with a project cost of Rs.20 lakhs and the operations will be open cast, semi-mechanized method of mining.

As per the approved Mining Plan, the anticipated life of mine for this proposal will be approximately 6 years.

Before the project has been granted Environmental Clearance by the District Environment Impact Assessment Authority Vide Letter No.DCRB (LR) 1/2018/Rev/540/1123 Dated 16.07.2018. Later the mining lease got terminated as per the NGT Court case in OA 48/029 in JitulVs State of Meghalaya, as it was discovered that the mining lease falls under cluster. Therefore, Environmental Impact Assessment/Environmental Management Plan is required.

The project was already awarded Auto Generated Term of Reference and submitted the final EIA/EMP for the proposed Mining of Lime stone where the project proponent complied all the points in compliance to the Term of Reference prepared by GEOGREEN ENVIRO HOUSE PVT. LTD.

The public hearing was held on 26th November 2021 which was conducted by the Meghalaya State Pollution Control Board and presided over by Shri. B.J.Kharshandi, MCS, ADC, RiBhoi District.

Recommendation:

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth and the presentation of the EIA/EMP. The committee unanimously deferred for further reconsideration in view of the Hon'ble National Green Tribunal vide final judgement dated 27.05.2022 in the matter of JitulDekaVs Union of India &Ors ,where all Environmental Clearances granted by DEIAA has been terminated due to cluster situation. In relation to this, the Government of Meghalaya, Forest and Environment Department has issued a termination order of the earlier mining lease granted to Shri KhrikshonLyngkhoi at Umduba, Raid Marwet, RiBhoi District, Meghalaya vide order No.FOR/CC/26/2019/Pt-IV/1299 dated Shillong the 18th January 2023.

IX.Proposal No.SIA/ML/MIN/186809/2020 submitted by Smt. RestiMajhong (M/S Mawthlen Stone Quarry)

Environmental Clearance for Mawthlen Stone Quarry for an area of 0.42 hectare located at Mawthlen, Raid Marngar, RiBhoi District, Meghalaya.



The Proposal was given ADS in the 62nd Meeting of the SEAC held on 29th November 2022, as per verification, the project proponent was to furnish the following):

- From google earth it was observed the proposed mining site appears to be worked out/operated within part of the proposed area. Hence, Project Proponent is to obtain a written justification from concerned department like Mining & Geology/DMR in approving the mining lease.
- Photographs of boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected and GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.

In response to the ADS raised by the committee in the 62nd meeting of the State Expert Appraisal Committee, the project proponent has submitted a certificate from the office of the Deputy Commissioner, RiBhoi District, Nongpoh justifying that there is no mining operation carried out in the proposed mining site. She has also furnished the photographs of the boundary pillars.

Recommendation:

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth and the project proponent has complied to the ADS. The committee unanimously recommended for grant of Environment Clearance with the following conditions.

1. LOI ought to be renewed as the validity has expired
2. A settling Tank is to be constructed, at a suitable site within the mining area for collection of debris, sediment, silt, fragmented stones etc carried by surface water channelized through the Curtain drain. The deposited debris, spoils etc are to be removed/cleared, both from the tank and drain as and when required. Overflowing water that flows downhill shall be dispersed but precautions to be taken that spoils etc. generated from mining are not carried along.
3. Garland drains is to be constructed along the periphery of the mining lease boundary to capture the storm water run-off from the mining area, all drains will link to a settling tank with compartments to check and arrest siltation in the mine water prior to discharge.
4. Curtain Drain is to be constructed properly to intercept the surface water from flowing into the mining area and water flowing out of the mine channelized to the Settling tank.



5. If any debris etc. overflows to adjoining land/agricultural field etc. during the mining operation, Monitoring Agency is to take necessary action as per relevant section(s) of Water (Prevention & Control of Pollution) Act, 1974.
6. In annual EMP budget under GREEN BELT, creation of plantations including nursery cost, fencing etc the notified norms of Forest and Environment Department, Govt of Meghalaya is to be followed strictly, including financial cost. Budget under said head stands revised accordingly.
7. To increase the allocation for plantation and maintenance to a minimum of Rs. 1 lakh per annum and double the number of plants to be planted.
8. CER should be included in the capital cost and it should be increased to a minimum of Rs 1 lakh annually.
9. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
10. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.
11. A board highlighting the name of project and project proponent, location name, total area of the mine, date of issue of EC by SEIAA and CTO & CTE by MSPCB should be installed at the entrance to the mining site and clearly visible.
12. Fencing of the boundary of site with minimum two strands of barbed wire or ordinary split bamboo fencing is to be erected all around the periphery of the approved mining area.
13. Storing and collection of water through rainwater harvesting for dust sprinkling and recharging of the aquifers.

X. Proposal No.SIA/ML/MIN/273527/2022 submitted by Shri Chui Pohlynjar(M/S Nongtalang Limestone Mine).

Environmental Clearance for Nongtalang Limestone Mine for mining of Lime stone for an area of 4.3 hectares located at Thanghunai, ElakaNongtalang, West Jaintia Hills District, Meghalaya.

The Proposal was given ADS in the 61st Meeting of the SEAC held on 25th October 2022, as per verification, the project proponent was to furnish the following):



- Photographs of boundary pillars and GPS coordinates of each pillars carved/painted clearly on the pillars with Red colour is to be furnished.
- As per verification from google earth it was observed the proposed mining site appears to be worked out/operated within part of the proposed area. Hence, Project Proponent is to obtain a written justification from concerned department like Mining & Geology/DMR in approving the mining lease.
- In Form-2: The Total Geological Reserves is 1.39 Million Tons and the Mineable Reserves is 1.3 Million Tons. Whereas in the Mining Plan the Total Geological Reserves and the Mineable Reserves are 1.3 million Tonnes and 1300000 Tonnes respectively. Hence, the project proponent is to be furnished the correct figures.

In response to the ADS raised by the State Expert Appraisal Committee, the project proponent has submitted a certificate from the office of the Divisional Mining Officer, West Jaintia Hills, Jowai, Meghalaya justifying that there is no mining operation carried out in the proposed mining site. He has also furnished photographs of all erected boundary pillars with GPS coordinates of each pillars painted clearly with Red colour and correction in Form-2 has been made.

Recommendation:

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth and the project proponent has complied to the ADS. The committee unanimously recommended for grant of Environment Clearance with the following conditions.

1. LOI ought to be renewed as the validity has expired
2. A settling Tank is to be constructed, at a suitable site within the mining area for collection of debris, sediment, silt, fragmented stones etc carried by surface water channelized through the Curtain drain. The deposited debris, spoils etc are to be removed/cleared, both from the tank and drain as and when required. Overflowing water that flows downhill shall be dispersed but precautions to be taken that spoils etc. generated from mining are not carried along.
3. Garland drains is to be constructed along the periphery of the mining lease boundary to capture the storm water run-off from the mining area, all drains will link to a settling tank with compartments to check and arrest siltation in the mine water prior to discharge.
4. Curtain Drain is to be constructed properly to intercept the surface water from flowing into the mining area and water flowing out of the mine channelized to the Settling tank.



5. If any debris etc. overflows to adjoining land/agricultural field etc. during the mining operation, Monitoring Agency is to take necessary action as per relevant section(s) of Water (Prevention & Control of Pollution) Act, 1974.
6. In annual EMP budget under GREEN BELT, creation of plantations including nursery cost, fencing etc the notified norms of Forest and Environment Department, Govt of Meghalaya is to be followed strictly, including financial cost. Budget under said head stands revised accordingly.
7. To increase the allocation for plantation and maintenance to a minimum of Rs. 1 lakh per annum and double the number of plants to be planted.
8. CER should be included in the capital cost and it should be increased to a minimum of Rs 1 lakh annually.
9. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
10. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.
11. A board highlighting the name of project and project proponent, location name, total area of the mine, date of issue of EC by SEIAA and CTO & CTE by MSPCB should be installed at the entrance to the mining site and clearly visible.
12. Fencing of the boundary of site with minimum two strands of barbed wire or ordinary split bamboo fencing is to be erected all around the periphery of the approved mining area.
13. Storing and collection of water through rainwater harvesting for dust sprinkling and recharging of the aquifers.

XI. Proposal No.SIA/ML/MIN/177198/2020 submitted by Shri Ivan Lyngdoh (M/S Ampynsemkura Boulder Stone Mine)

Environmental Clearance for Ampynsemkura Boulder Stone Mine for an area of 3.72 hectares located at Ampynsemkura, HimaJirangSyiemship, RiBhoi District, Meghalaya.

The proposal was put up on the 59th SEAC Meeting where the committee has unanimously deferred the proposal for Site Visit as the area being in very close proximity to the Assam border and in view of recent judicial intervention in the sensitive border area before



recommending the case to SEIAA for grant of EC. The Committee conducted an onsite inspection to the proposed Mining site on the 29th October 2022 and the field visit report has been prepared and uploaded for the same.

Recommendation:

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth and verification on actual site visit. The committee unanimously recommended for grant of Environment Clearance with the following conditions.

1. LOI ought to be renewed as the validity has expired
2. A settling Tank is to be constructed, at a suitable site within the mining area for collection of debris, sediment, silt, fragmented stones etc carried by surface water channelized through the Curtain drain. The deposited debris, spoils etc are to be removed/cleared, both from the tank and drain as and when required. Overflowing water that flows downhill shall be dispersed but precautions to be taken that spoils etc. generated from mining are not carried along.
3. Garland drains is to be constructed along the periphery of the mining lease boundary to capture the storm water run-off from the mining area, all drains will link to a settling tank with compartments to check and arrest siltation in the mine water prior to discharge.
4. Curtain Drain is to be constructed properly to intercept the surface water from flowing into the mining area and water flowing out of the mine channelized to the Settling tank.
5. If any debris etc. overflows to adjoining land/agricultural field etc. during the mining operation, Monitoring Agency is to take necessary action as per relevant section(s) of Water (Prevention & Control of Pollution) Act, 1974.
6. In annual EMP budget under GREEN BELT, creation of plantations including nursery cost, fencing etc the notified norms of Forest and Environment Department, Govt of Meghalaya is to be followed strictly, including financial cost. Budget under said head stands revised accordingly.
7. To increase the allocation for plantation and maintenance to a minimum of Rs. 1 lakh per annum and double the number of plants to be planted.
8. CER should be included in the capital cost and it should be increased to a minimum of Rs 1 lakh annually.



9. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
10. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.
11. A board highlighting the name of project and project proponent, location name, total area of the mine, date of issue of EC by SEIAA and CTO & CTE by MSPCB should be installed at the entrance to the mining site and clearly visible.
12. Fencing of the boundary of site with minimum two strands of barbed wire or ordinary split bamboo fencing is to be erected all around the periphery of the approved mining area.
13. Storing and collection of water through rainwater harvesting for dust sprinkling and recharging of the aquifers.



TERM OF REFERENCE

I. Proposal No. SIA/ML/MIN/404212/2022 submitted by Green Valley Industries Limited (GVIL Shale Mine).

The Project Proponent, Green Valley Industries Limited submitted online application for Term of Reference vide proposal No:SIA/ML/MIN/404212/2022 for GVIL Shale Mine for an area of 4.77 hectares. The proposal is for mining of shale which will be used as additive for cement plant. The project falls under Schedule 1(a) of category B2 of EIA Notification 2006. The mining lease area is located at Brichyrnot Village, ElakaNarpuh, East Jaintia Hills District, Meghalaya with top sheet Survey of India No.G4608 within the following GPS Coordinates:

Pillar No	GPS Coordinates	
	Latitude	Longitude
1	25° 09'38.3''N	92° 24'31.1''E
2	25° 09'36.0''N	92° 24'31.5''E
3	25° 09'35.0''N	92° 24'30.8''E
4	25° 09'34.4''N	92° 24'31.3''E
5	25° 09'33.4''N	92° 24'31.5''E
6	25° 09'33.7''N	92° 24'30.5''E
7	25° 09'32.3''N	92° 24'30.3''E
8	25° 09'31.8''N	92° 24'28.6''E
9	25° 09'29.5''N	92° 24'28.4''E
10	25° 09'28.8''N	92° 24'28.1''E
11	25° 09'28.3''N	92° 24'28.6''E
12	25° 09'28.4''N	92° 24'30.3''E
13	25° 09'29.6''N	92° 24'34.4''E
14	25° 09'30.7''N	92° 24'34.9''E
15	25° 09'31.0''N	92° 24'34.9''E
16	25° 09'31.3''N	92° 24'34.7''E
17	25° 09'32.6''N	92° 24'35.3''E
18	25° 09'34.0''N	92° 24'35.0''E
19	25° 09'34.3''N	92° 24'34.4''E

20	25° 09'35.2"N	92° 24'34.3"E
21	25° 09'35.5"N	92° 24'34.5"E
22	25° 09'36.0"N	92° 24'34.5"E
23	25° 09'36.9"N	92° 24'35.1"E
24	25° 09'36.8"N	92° 24'36.4"E
25	25° 09'36.0"N	92° 24'37.7"E
26	25° 09'37.0"N	92° 24'38.2"E
27	25° 09'38.8"N	92° 24'38.2"E
28	25° 09'38.9"N	92° 24'38.4"E
29	25° 09'39.9"N	92° 24'38.0"E
30	25° 09'39.4"N	92° 24'35.8"E
31	25° 09'38.6"N	92° 24'33.5"E

The proposed mining area is on lease for periods of 25 years vide Lease Agreement made on the 25th April 2019 at Nongsning certified by District Registrar, East Jaintia Hills District, Meghalaya.

The applied area is a Non Forest Land which was confirmed by the Conservator of Forests(T),Khasi&Jaintia Hills, Meghalaya,Shillong, vide letter No.MFG.22/385/Vol-II/11243, dated Shillong, the 2nd December 2021and Letter of Intent confirmed by the Divisional Mining Officer, Directorate of Mineral Resources, Meghalaya, Jowai, vide letter DMO-J/ML-MM/1/2019-20/04 dated Jowai the 30th January, 2020.

The project proponent obtained a cluster certificate from the Division Mining Officer, Directorate of Mineral Resources,Meghalaya, Jowai vide letter No.DMO-J/66/MM/Mining Plan/2021-22/07 dated Jowai, the 4th April 2022which states that there is one (1) approved mining plan lying within 500 metres from the applied mining lease area. Hence the applied mining area falls under cluster category since the total area of two mines is summed up to 9.44 hectares.

The project proponent submitted the Mining Plan with Progressive Mine Closure Plan approved by the Divisional Mining Officer, Directorate of Mineral Resources,Meghalaya,Jowai vide letter No.DMO-J/66/MM/MiningPlan/2021-22/03 dated Jowai, the 4thApril 2022. The Mining Plan has been prepared to extract lime stone at the rate of 76584 MTPA with a project cost of Rs.21.50 lakhs and the operations will be open cast, mechanized method of mining.

The mineable reserves of Shale are of the order of 10,93,658 MT. The production in the period of the mining plan will be around 3,24,023 MT in 5 years. Therefore, the balance reserves will be $1093658 - 324023 = 769635$ MT. If the yearly production target is 76584 MT, the balance reserve will be sufficient for $(769635 / 76584) = 10.04$ years. Thus, the total life of the mine is $5 + 10 = 15$ years.

Recommendation:

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth, the committee unanimously recommended for standard Terms of Reference (ToR) with the following additional conditions:

1. LOI ought to be renewed as the validity has expired.
2. Site photographs together with photographs and other related details of site visits by resource persons of NABET accredited consultant of project proponent, with their names and profession/designation, together with date(s) of visit, date(s) of data collection including names of instrument/machine actually used in the field, during preparation of EIA report, is to be clearly highlighted in the EIA/EMP report.
3. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
4. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.
5. Plagiarism check certificate for EIA/EMP report has to be furnished.
6. Source of data taken from external sources is to be mentioned clearly.

II. Proposal No.SIA/ML/MIN/406324/2022 submitted by Shri. Ken Momin (M/S Umduba Stone Quarry)

The Project Proponent, Shri Ken Momin submitted online application for Term of Reference vide proposal No:SIA/ML/MIN/406324/2022 for Term of Reference for Umduba Stone Quarry for mining of boulder stone for an area of 2.22 hectares. The proposal is for mining of boulderstone use for construction purposes, hence the project fall under Schedule 1(a) of category B2 of EIA Notification 2006. The mining lease area is located at Umduba, P.O Jorbil,P.S. Khanapara, Raid Marwet, RiBhoiDistrict, Meghalaya and toposheet Survey of India No. G46H16 within the following GPS Coordinates:



Pillar No	GPS Coordinates	
	Latitude	Longitude
1	26° 03'50.01''N	91° 49'37.50''E
2	26° 03'47.20''N	91° 49'36.10''E
3	26° 03'46.30''N	91° 49'38.40''E
4	26° 03'42.35''N	91° 49'44.03''E
5	26° 03'46.84''N	91° 49'43.70''E

The proposed mining area belong to the Project Proponent vide Gift Deed made on the 13th day of September 2018 at Nongpoh and certified by the Sub-Registrar Nongpoh, RiBhoi District, Meghalaya.

The applied area is a Non Forest Land which was confirmed by the Divisional Forest Officer, East Khasi Hills & Ri-Bhoi (T) Division, Shillong vide letter No.KH/9/NOC/Stone/41/Pt.V/ dated Shillong, the 1st November, 2018 and Letter of Intent vide letter No.KH/8/ML/Stone/69/5114, dated Shillong, the 6th November, 2018 respectively.

The project proponent obtained a cluster certificate from the Mining Engineer, Directorate of Mineral Resources, Meghalaya, vide letter No.DMR/MM/11/2018/09 dated Shillong, the 25th August 2022 which states that there are nine (9) approved mining plan lying within 500 metres from the applied mining lease area. Hence the applied mining area falls under cluster category since the total area of ten mines is summed up to 21.26 hectares.

The project proponent submitted the Mining Plan with Progressive Mine Closure Plan approved by the Mining Engineer, Directorate of Mineral Resources, Meghalaya, Shillong vide letter No.DMR/MM/11/2018/85 dated Shillong, the 25th April 2019. The Mining Plan has been prepared to extract boulder stone at the rate of 92,224MTPA with a project cost of Rs.18.50 lakhs and the operations will be open cast, semi-mechanized method of mining.

The mineable reserves would be 1382702 Tonnes with an average annual production of (1382702/15=92180) Tonnes Per Year and production of stone in first five years will be 460715 Tonnes. The average annual production of stone may be different from the annual production of first five years. The balance mineable reserve 921987 Tonnes will be worked out in the subsequent 10 years. Therefore, the life of the mine will be 15 years (first 5 years in plan period + 10 years in conceptual period).

Recommendation:

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth, the

committee unanimously recommended for standard Terms of Reference (ToR) with the following additional conditions:

1. LOI ought to be renewed as the validity has expired.
2. Site photographs together with photographs and other related details of site visits by resource persons of NABET accredited consultant of project proponent, with their names and profession/designation, together with date(s) of visit, date(s) of data collection including names of instrument/machine actually used in the field, during preparation of EIA report, is to be clearly highlighted in the EIA/EMP report.
3. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
4. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.
5. Plagiarism check certificate for EIA/EMP report has to be furnished.
6. Source of data taken from external sources is to be mentioned clearly.
7. From google earth it was observed the proposed mining site appears to be worked out/operated within part of the proposed area. Hence, Project Proponent is to obtain a written justification from concerned department like Mining & Geology/DMR in approving the mining lease.

III. Proposal No. SIA/ML/MIN/401371/2022 submitted by Shri. Hilarious Ymbon (M/S Pliangsaw Limestone Mine).

The Project Proponent, Shri Hilarious Ymbon submitted online application for Term of Reference vide proposal No.SIA/ML/MIN/401371/2022 for Pliangsaw Limestone Mine for mining of Lime stone for an area of 1.99 hectares. The proposal is for mining of lime stone to be used in kilns for manufacturing of lime used as building materials. The project falls under Schedule 1(a) of category B2 of EIA Notification 2006. The mining lease area is located at Pliangsaw, Elakanongtalang, West Jaintia Hills District, Meghalaya and toposheet Survey of India No. G46O4 within the following GPS Coordinates:

Pillar No	GPS Coordinates	
	Latitude	Longitude
1	25°13'25.47"N	92°04'03.65" E
2	25°13'25.71"N	92°03'59.15" E
3	25°13'20.80"N	92°03'57.62" E
4	25°13'21.26"N	92°04'03.35" E



The proposed mining area is on lease for a period of 15 years vide Deed of Lease made on the 5th day of January 2022 at Jowai certified by the Public Notary, West Jaintia Hills District, Meghalaya.

The applied area is a Non Forest Land which was confirmed by the Divisional Forest Officer, Jaintia Hills Territorial Division vide letter No.JH/IR/I.R/F.C/2022-23/985/B/424, dated Jowai, the 8th June 2022 and Letter of Intent vide letter No.JH/H.Y/M.L/L.S/2022-23/B/581 dated Jowai, the 6th July 2022 respectively.

The project proponent obtained a cluster certificate from the Divisional Mining Officer, Directorate of Mineral Resources, Meghalaya, Jowai vide letter No.DMO-J/75/MM/Mining Plan/2022-23/20 dated Jowai, the 3rd August 2022 which states that there are four (4) approved mining plans lying within 500 metres from the applied mining lease area. Hence the applied mining area falls under cluster category since the total area of these five mines is summed up to 16.24 hectares.

The project proponent submitted the Mining Plan with Progressive Mine Closure Plan approved by the Divisional Mining Officer, Directorate of Mineral Resources, Meghalaya, Jowai vide letter No.DMO-J/75/MM/Mining plan/2022-23/19 dated Jowai the 1st August 2022. The Mining Plan has been prepared to extract lime stone at the rate of 100575MTPA with a project cost of Rs.22.50 lakhs and the operations will be open cast, semi-mechanized method of mining.

The mineable reserves of limestone is of the order of 832880MT. The production in the period of this mining plan will be around 502525MT in 5 years. Balance reserves will be $832880 - 502525 = 330355$ MT. If the yearly production target is 100575 tonnes, then the balance reserves will sufficient for $330355 / 100575 = 3.28$ years. Thus, the total life of the mine is $5 + 3.28 = 8.28$ or say 9 years.

Recommendation:

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth, the committee unanimously recommended for standard Terms of Reference (ToR) with the following additional conditions:

1. LOI ought to be renewed as the validity has expired.
2. Site photographs together with photographs and other related details of site visits by resource persons of NABET accredited consultant of project proponent, with their names and profession/designation, together with date(s) of visit, date(s) of data collection



including names of instrument/machine actually used in the field, during preparation of EIA report, is to be clearly highlighted in the EIA/EMP report.

3. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
4. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.
5. Plagiarism check certificate for EIA/EMP report has to be furnished.
6. Source of data taken from external sources is to be mentioned clearly.
7. From google earth it was observed the proposed mining site appears to be worked out/operated within part of the proposed area. Hence, Project Proponent is to obtain a written justification from concerned department like Mining & Geology/DMR in approving the mining lease.

IV. Proposal No. SIA/ML/MIN/82965/2022 submitted by Shri Salchangbarth B. Marak

The Project Proponent, Shri Salchangbarth B. Marak submitted online application for Term of Reference vide proposal No.SIA/ML/MIN/82965/2022 for Dajongpara Stone Mine for mining of boulder stone for an area of 9.81 hectares. The proposal is for mining of boulder stone use for construction purposes, hence the project fall under Schedule 1(a) of category B2 of EIA Notification 2006. The mining lease area is located at Dajongpara, North Garo Hills District, Meghalaya and toposheet Survey of India No.78K/5 within the following GPS Coordinates:

Pillar No	GPS Coordinates	
	Latitude	Longitude
1	25°56'13.45"N	90°27'53.08" E
2	25°56'12.68"N	90°27'54.10" E
3	25°56'12.37"N	90°27'56.04" E
4	25°56'23.80"N	90°27'57.50" E
5	25°56'22.14"N	90°27'51.66" E
6	25°56'15.58"N	90°27'40.55" E
7	25°56'08.93"N	90°27'39.68" E
8	25°56'01.76"N	90°27'45.73" E
9	25°56'04.80"N	90°27'47.88" E
10	25°56'09.55"N	90°27'42.19" E



11	25°56'13.93"N	90°27'40.92" E
12	25°56'17.50"N	90°27'46.97" E
13	25°56'16.64"N	90°27'49.64" E

The proposed mining area is on lease for a period of 20 years vide Lease Deed made on the 9th day of July 2020 certified by the Assistant Registrar, North Garo Hills District, Meghalaya.

The applied area is a Non Forest Land which was confirmed by the Chief Conservator of Forests (T), Meghalaya, Shillong, vide letter No.MFG.39/42/NFLC/MINING/MMMCR/2016/GH/12396, dated Shillong, the 23rd December 2021 and Letter of Intent confirmed by the Principal Chief Conservator of forests & HoFF, Meghalaya vide letter No.MFG.39/42/LOI/MMMCR/2016/1688, dated Shillong, the 18th May, 2022 respectively.

The project proponent has obtained a cluster certificate from the Divisional Mining Officer, East Garo Hills, Williamnagar, vide letter No.DMO-W/MP/15/2019/65 dated Williamnagar the 18th August 2022 where it is mentioned that there are two (2) approved mining plans lying within 500 metres from the applied mining lease area. Hence the applied mining area falls under cluster category since the total area of three mines is summed up to 24.32 hectares.

The project proponent submitted mining plan approved by the Divisional Mining Officer, East Garo Hills, Williamnagar, vide letter No.DMO-W/MP/83/2022/53 dated Williamnagar the 22nd July 2022. The Mining Plan has been prepared to extract boulder stone at 478453 Tonnes with a project cost of Rs. 43.00 Lakhs and the operations will be open cast, semi-mechanized method of mining.

As per the mining plan, the mineable reserves would be 9569060 Tonnes with an average annual production of 478453 (9569060/20=478453) Tonnes. The average annual production of limestone may be different from annual production of five years plan period. Thus 2391446 Tonnes of the total mineable reserve will be worked out in first five years and the rest quantity of mineable reserve i.e.(9569060-2391446)=7177614 Tonnes would be exhausted in further 15 years @ 478508 Tonnes per annum. Therefore, the life of the mine will be 20 years (five years in plan period + fifteen years in conceptual period).

Recommendation:

After due screening and examination of all the documents submitted by the Project Proponent and site cross checking and deliberation by using kml file through google earth, the committee unanimously recommended for standard Terms of Reference (ToR) with the following additional conditions:

1. LOI ought to be renewed as the validity has expired.
2. Site photographs together with photographs and other related details of site visits by resource persons of NABET accredited consultant of project proponent, with their names and profession/designation, together with date(s) of visit, date(s) of data collection including names of instrument/machine actually used in the field, during preparation of EIA report, is to be clearly highlighted in the EIA/EMP report.
3. Boundary pillars with the height not less than 2.5 feet above the ground level and 1.5 feet below ground and minimum 8 inches on all face of pillar should be erected.
4. GPS coordinates of each pillars should be carved/painted clearly on the pillars with Red colour.
5. Plagiarism check certificate for EIA/EMP report has to be furnished.
6. Source of data taken from external sources is to be mentioned clearly.

The meeting ended with a vote of thanks to the chair.



Chairman,

State Expert Appraisal Committee,
Meghalaya, Shillong