



सत्यमेव जयते

**File No: 10722**  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**(Issued by the State Environment Impact Assessment Authority(SEIAA),**  
**TAMIL NADU)**

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Dated 23/05/2024



To,

NARAYANAMURTHY LOGANATHAN  
NARAYANAMURTHY LOGANATHAN  
191, Rajeswari Nagar, 3rd Cross Street, Porur, Tiruvallur, Arcot Road Porur Chennai, TAMIL NADU,  
600116  
srilogaminesandminerals@yahoo.com

**Subject:** Grant of EC under the provision of the EIA Notification 2006-regarding.

**Sir/Madam,**

This is in reference to your application for Grant of EC under the provision of the EIA Notification 2006-regarding in respect of project N. Loganathan Quartz and Feldspar Quarry over an extent 2.45.0ha of S.F.no.718/A1 & 731/1A at Vellakoil Village, Kangeyam Taluk, Tiruppur District submitted to Ministry vide proposal number SIA/TN/MIN/451631/2023 dated 29/04/2024.

**Ref:** 1. Online Proposal No. SIA/TN/MIN/451631/2023, Dated: 07/11/2023  
2. The Project proponent submitted EC on 28.02.2024.

2. The particulars of the proposal are as below :

<b>(i) EC Identification No.</b>	EC23C0107TN5161952N
<b>(ii) File No.</b>	10722
<b>(iii) Clearance Type</b>	EC
<b>(iv) Category</b>	B2
<b>(v) Project/Activity Included Schedule No.</b>	1(a) Mining of minerals N. Loganathan Quartz and Feldspar Quarry over an extent 2.45.0ha of S.F.no.718/A1 & 731/1A at Vellakoil Village, Kangeyam Taluk, Tiruppur District
<b>(vii) Name of Project</b>	
<b>(viii) Name of Company/Organization</b>	NARAYANAMURTHY LOGANATHAN
<b>(ix) Location of Project (District, State)</b>	TIRUPPUR, TAMIL NADU
<b>(x) Issuing Authority</b>	SEIAA
<b>(xii) Applicability of General Conditions</b>	no
<b>(xiii) Applicability of Specific Conditions</b>	no

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) were submitted to the Ministry for an appraisal by the SEIAA under the provision of EIA notification 2006 and its subsequent amendments.
4. The above-mentioned proposal has been considered by State Environment Impact Assessment Authority(SEIAA) Appraisal Committee of SEIAA in the meeting held on 14/05/2024. The minutes of the meeting and all the Application and documents submitted [(viz. Form-1 Part A, Part B)] are available on PARIVESH portal which can be accessed by scanning the QR Code above.
5. The SEAC, based on information submitted viz: Form 1 (Part A, B and C) clarifications provided by the project proponent and after detailed deliberations on all technical aspects and public hearing issues and compliance thereto furnished by the Project Proponent, recommended the proposal for grant of Environment Clearance under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of Specific and Standard EC conditions as detailed in the point below.
6. The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the State Environment Impact Assessment Authority(SEIAA) Appraisal Committee hereby decided to grant EC for instant proposal of M/s. NARAYANAMURTHY LOGANATHAN under the provisions of EIA Notification, 2006 and as amended thereof.
7. The Ministry/SEIAA-TN reserves the right to stipulate additional conditions, if found necessary.
8. The EC to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
9. The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.
10. **Salient features of the proposal are as follows:**

Sl. No	Salient Features of the Proposal	
1.	Name of the Owner/Firm	: Thiru. N. Loganathan, S/o. Narayanamurthy, 191, Rajeswari Nagar, 3rd Cross Street, Porur, Tiruvallur-600116.
2.	Type of quarrying	: Quartz and Feldspar
3.	S.F Nos. of the quarry site	: 718/A1 & 731/1A
4.	Village in which situated	: Vellakoil
5.	Taluk in which situated	: Kangeyam
6.	District in which situated	: Tiruppur
7.	Extent of quarry (in ha.)	: 2.45.0Ha
8.	Latitude & Longitude of all corners of the quarry site	: 10°56'24.37"N to 10°56'30.02"N 77°40'58.77"E to 77°41'06.19"E
9.	Topo Sheet No.	: 58 – F/09
10.	Type of mining	: Opencast Mechanized Mining
11.	Period of Current Mine Plan	: 5 years
12.	Production (Quantity in m <sup>3</sup> )	: 95,593.5 Ts ROM which includes 38,237.4 Ts of Recovery (@40%). Recovery of 40% consists of 15,295 Ts of Quartz (@40%) & 22,942.4 Ts of Feldspar (@60%)
13.	Depth of Quarrying	: 25m
14.	Depth of water table	: 63m-68m
15.	Man Power requirement per day:	: 19 Nos.

16.	Water requirement: 1. i) Drinking Water & Domestic 2. Purpose 3. ii) Dust suppression 4. iii) Green belt	:	2.0 KLD 0.3 KLD - 1.0 KLD 0.7 KLD
17.	Power requirement a. Domestic purpose b. Industrial Purpose		TNEB
18.	Precise area communication approved by Industries Department	:	Lr.No: G.O(2D).No.29 Industries (MMC.1) Department, dt: 21.12.2018
19.	Mining Plan approved by Additional Director, Commissionerate of G&M	:	Rc.No.9298/MM7/2023, dated:24.01.2024
20.	Department of G&M, Deputy Director 500m Cluster Letter		Roc.No.431/Mines/2023, dated:07.02.2024
21.	VAO Certificate Regarding Structures within 300m Radius		Nil
22.	Project Cost (excluding EMP cost)	:	Rs. 16,65,000/-
	EMP cost (in Rs. Lakh).	:	Capital Cost – Rs. 27,73,500/- Recurring Cost – Rs. 14,68,342/-
	CER cost (in Rs. Lakh).	:	Rs. 5,00,000/-
<p><b>Validity:</b>  <b>This Environmental Clearance is accorded for the quantity of 95,593.5 Ts ROM which includes 38,237.4 Ts of Recovery (@40%). Recovery of 40% consists of 15,295 Ts of Quartz (@40%) &amp; 22,942.4 Ts of Feldspar (@60%) and the depth upto 25m and the annual peak production should not exceed 22,053 Ts ROM which includes 8,821 Ts of Recovery (@40%). Recovery of 40% consists of 3,529 Ts of Quartz (@40%) &amp; 5,293 Ts of Feldspar (@60%).</b>  <b>The Environmental Clearance issued is valid as per the approved mine plan period and as per MoEF&amp;CC's notification S.O.1533(E) dated.14.09.2006 and S.O. 1807(E) dated 12.04.2022</b></p>			

#### 11. General Instructions:

- The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of SEIAA website where it is displayed.
  - The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt.
  - The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.
  - Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.
  - Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
  - The Regional Office of this SEIAA shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
  - Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- 12This issue with an approval of the Competent Authority. For information on deliberations, refer to the minutes of SEAC

and SEIAA available in the PARIVESH Portal.

**Copy To**

1. The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. The Additional Chief Secretary to Government, Environment and Forests Department, Tamil Nadu.
3. The Additional Chief Secretary to Government, Natural resource department, Tamil Nadu.
4. The Additional Principal Chief Conservator of Forests, Regional Office (SZ), 34, HEPC Building, 1st & 2nd Floor, Cathedral Garden Road, Nungambakkam, Chennai – 34.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
6. The Chairman, TNPC Board,76, Mount Salai, Guindy, Chennai-32
7. The District Collector, Tiruppur District
8. The Commissioner of Geology and Mines, Guindy, Chennai-32
9. Deputy Director, Department of Geology & Mining, Tiruppur District.
10. EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
11. File Copy

**Annexure 1**

**Specific EC Conditions for (Mining Of Minerals)**

**1. Seiaa Specific Condititon:**

S. No	EC Conditions
1.1	<ol style="list-style-type: none"><li>1. Keeping in view of MoEF&amp;CC's notification S.O.1533(E) dated.14.09.2006 and S.O. 1807(E) dated 12.04.2022, this Environmental Clearance is valid as per the approved mine plan period.</li><li>2. The EC granted is subject to review by District Collector, Mines Dept. and TNPCB on completion of every 5 years and also during the mine plan period, till the project life so as to review the EC conditions and to ensure that they have all been adhered to and implemented.</li><li>3. The topsoil/side burden/weathered rock should be used only for the purpose of progressive mine closure. Further, non-recoverable reserves i.e., mined waste should be used for filling of mines &amp; restoration of mining sites.</li><li>4. The project proponent shall submit a Certified Compliance Report obtained from IRO of MoEF&amp;CC to the monitoring, regulatory and other concerned authorities including SEIAA, while seeking a renewal of the mining plan to cover the project life.</li><li>5. There should be regular monitoring of air quality, water quality, ground water level and noise quality and reports regarding the same should be submitted to TNPCB, SEIAA &amp; IRO of MoEF&amp;CC once in every 6 months.</li><li>6. The proponent shall strictly adhere to the mining plan and half yearly and annual returns shall be submitted to the Director of Geology and Mining Department with copy marked to TNPCB, SEIAA &amp; IRO of MoEF&amp;CC.</li><li>7. Biodiversity in and around the project area should be monitored frequently and detailed biodiversity report should be submitted every year to SEIAA &amp; IRO of MoEF&amp;CC.</li><li>8. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and as per the amount committed and approved in EC for EMP. Status of progressive mine closure and green belt implementation should be included in the half yearly compliance report submitted to TNPCB, SEIAA &amp; IRO of MoEF&amp;CC.</li><li>9. As per the OM vide F. No. IA3-22/1/2022-IA-III [E- 172624] Dated: 14.06.2022, the Project Proponents are directed to submit the six-monthly compliance on the environmental conditions prescribed in the prior environmental clearance letter(s) through newly developed compliance</li></ol>

S. No	EC Conditions
	<p>module in the PARIVESH Portal from the respective login.</p> <p>10. The amount allocated for EMP should be kept in a separate account and both the capital and recurring expenditures should be done year wise for the works identified, approved and as committed. The work &amp; expenditure made under EMP should be elaborated in the bi-annual compliance report submitted and also should be brought to the notice of concerned authorities during inspections.</p>

**2. Seiaa Standard Condititon:**

S. No	EC Conditions
2.1	<p>Climate Change</p> <ol style="list-style-type: none"> <li>1. The proponent shall adopt strategies to decarbonize the building.</li> <li>2. The proponent shall adopt strategies to reduce emissions during operation (operational phase and building materials).</li> <li>3. The proponent shall adopt strategies to reduce temperature including the Building Façade.</li> <li>4. The proponent shall adopt methodology to control thermal environment and other shocks in the building.</li> <li>5. The proponent shall adopt detailed plan to reduce carbon footprints and also develop strategies for climate proofing and climate mitigation.</li> <li>6. The proponent shall adopt strategies to ensure the buildings in blocks are not trapping heat to become local urban heat islands.</li> <li>7. The proponent shall ensure that the building does not create artificial wind tunnels creating cold water and uncomfortable living conditions resulting in health issues.</li> <li>8. The activities should in no way cause emission and build-up Green House Gases. All actions to be eco-friendly and support sustainable management of the natural resources within and outside the campus premises.</li> <li>9. The proponent shall ensure that the buildings should not cause any damage to water environment, air quality and should be carbon neutral building.</li> </ol> <p>Health</p> <ol style="list-style-type: none"> <li>10. The proponent shall adopt strategies to maintain the health of the inhabitants.</li> </ol> <p>Energy</p> <ol style="list-style-type: none"> <li>11. The proponent shall adopt strategies to reduce electricity demand and consumption.</li> <li>12. The proponent shall provide provisions for automated energy efficiency.</li> <li>13. The proponent shall provide provisions for controlled ventilation and lighting systems.</li> <li>14. The proponent shall provide solar panels and contribute to the grid from the solar panel as proposed.</li> <li>15. All the construction of Buildings shall be energy efficient and conform to the green building norms. The PP shall ensure that carbon neutral building.</li> <li>16. The proponent shall provide adequate capacity of DG set (standby) for the proposed STP so as to ensure continuous and efficient operation.</li> </ol> <p>Regulatory Frameworks</p> <ol style="list-style-type: none"> <li>17. The proponent shall adopt methodologies to effectively implement the Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, &amp; Batteries (Management and Handling) Rules, 2001.</li> <li>18. The project proponent shall ensure to provide adequate elevated closed area earmarked for collection, segregation, storage &amp; disposal of wastes generated within the premises as per provisions of Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic</li> </ol>

S. No	EC Conditions
	<p>Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, &amp; Batteries (Management and Handling) Rules, 2001.</p> <p>19. The proponent shall provide elevator as per rules CMDA/DTCP.</p> <p>Database maintenance &amp; audits</p> <p>20. The database record of environmental conditions of all the events from pre-construction, construction and post-construction should be maintained in digitized format.</p> <p>21. The proponent should maintain environmental audits to measure and mitigate environmental concerns.</p> <p>Biodiversity</p> <p>22. There should not be any impact due to the modification of the habitat on critically endangered species, biodiversity, etc.,.</p> <p>23. The proponent shall ensure that the proposed activities in no way result in the spread of invasive species.</p> <p>24. The proponent shall adopt sustainability criteria to protect the micro environment from wind turbulences and change in aerodynamics since high rise buildings may stagnate air movements.</p> <p>25. The proponent shall ensure almost safety for the existing biodiversity, trees, flora &amp; fauna shall not disturb under any circumstances.</p> <p>26. The proponent shall develop building-friendly pest control strategies by using non chemical measures so as to control the pest population thereby not losing beneficial organisms.</p> <p>27. The proponent shall adopt strategies to prevent bird hits.</p> <p>Safety measures</p> <p>28. The proponent should develop an emergency response plan in addition to the disaster management plan.</p> <p>29. The proponent shall develop detailed evacuation plan for disabled people and safety evacuation plan in emergencies.</p> <p>30. All bio-safety standards, hygienic standards and safety norms of working staff and patients to be strictly followed as stipulated in EIA/EMP.</p> <p>31. The disaster management and disaster mitigation standards to be seriously adhered to avoid any calamities.</p> <p>32. The proponent shall provide the emergency exit in the buildings.</p> <p>33. The proponent shall adhere to the provision and norms regard to fire safety prescribed by competent authority.</p> <p>Water/Sewage</p> <p>34. The proponent shall ensure that no treated or untreated sewage shall be let outside the project site &amp; shall find access to nearby water-bodies under any circumstances other than the permitted mode of disposal.</p> <p>35. The proponent shall provide STP of adequate capacity as committed and shall continuously &amp; efficiently operate STP so as to satisfy the treated sewage discharge standards prescribed by the TNPCB time to time.</p> <p>36. The proponent shall periodically test the treated sewage the through TNPCB lab /NABL accredited laboratory and submit report to the TNPCB.</p> <p>37. The proponent shall periodically test the water sample for the general water quality core parameters including fecal coliform within the proposed project site through TNPCB lab /NABL accredited laboratory and submit report to the concerned authorities.</p> <p>38. The proponent shall ensure that provision should be given for proper utilization of recycled water.</p> <p>39. The project proponent shall adhere to storm water management plan as committed.</p> <p>Parking</p> <p>40. The project proponent shall adhere to provide adequate parking space for visitors of all inmates including clean traffic plan as committed.</p>

S. No	EC Conditions
	<p>Solid waste Management</p> <p>41. The proponent shall ensure that no form of municipal solid waste shall be disposed outside the proposed project site at any time.</p> <p>42. The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.</p> <p>EMP</p> <p>43. The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.</p> <p>44. The proponent shall ensure that all activities of EMP shall be completed before obtaining CTO from TNPCB.</p> <p>45. The proponent shall provide and ensure the green belt plan is implemented as indicated in EMP. Also, the proponent shall explore possibilities to provide sufficient grass lawns.</p> <p>Others</p> <p>46. As per the 'Polluter Pay Principle', the proponent will be held responsible for any environmental damage caused due to the proposed activity including withdrawal of EC and stoppage of work.</p> <p>47. The project proponent shall adhere to height of the buildings as committed.</p>



## **CONDITIONS IMPOSED BY SEAC:**

### **SEAC SPECIFIC CONDITIONS:**

1. The PP shall furnish the letter obtained from the competent authority for shifting of LT line passing through the quarry site before the CTO.
2. The PP shall **register promptly through online in the Shram Suvidha Portal** which is the official portal of Ministry of Labour & Employment, Govt of India to obtain **Labour Identification Number (LIN) before obtaining the CTO from the TNPCB.**
3. Further, the PP shall send the 'Notice of Opening' indicating the appointment of First Class/Second Class Mine Manager for managing the quarrying operations and the proposed usage of HEMM shall be sent to the Director of Mines Safety, Chennai Region of the Mine under the provisions of MMR 1961 atleast 30 days before the commencement of the mining operation immediately after the execution of lease.
4. The PP shall provide occupational health safety display board at the quarry site.
5. The PP shall provide mask, goggles, helmets and gloves to their employees at the quarry site.
6. The PP shall mark the DGPS reference pillars painted with blue & white colour indicating the safety barrier of 7.5 m to be left under the Rule 13 (1) of MCDR, 1988 within the lease boundary and protective bunds, before obtaining the CTO from the TNPCB.
7. The PP shall appoint a First Class/Second Class Mine Manager for managing the quarrying operations before the execution of lease and a copy of the appointment shall be sent to the Director of Mines Safety, Chennai Region along with Notice of Opening of the Mine under the provisions of MMR 1961.
8. **The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.**
9. **Since the structures are situated within a radial distance of 500 m,** the PP shall carry out the scientific studies **within a period of six months** from the commencement of quarrying operations, to design the **controlled mild blast parameters for reducing the blast-induced ground/air- vibrations** and eliminating the fly rock from the blasting operations carried out in the quarry, by involving anyone of these reputed

Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

10. The PP shall furnish an affidavit indicating the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.
11. As a part of eco-friendly blasting operation, the PP shall practice the line drilling along the periphery of the blast layout to suppress the propagation of shock waves outwards in all the directions.
12. The PP shall not carry out the deep hole larger diameter blasting and the secondary blasting of oversize fragments /boulders during the life of the lease period.
13. The PP shall only carry out the NONEL-based (or) Electronic Detonator based blasting operation for controlling the environmental impacts with keeping the security guards at a radial distance of 500 m by ensuring that all persons within such area have taken proper shelter.
14. The PP shall annually carry out an Occupational Health Survey (OHS) includes free silica test, in accordance with the guidelines & period of examination laid in the DGMS (Tech.) (S&T) Circular No. 01 of 2011, on OHS of the persons working in mines prone to generate the airborne dust, under Section 9A of Mines Act, 1952 by actively involving State Government officials and Non-Government Organizations (NGO) working in the Occupational Health Survey (Medical Examination). A copy of such annual compliance certificate shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
15. The PP shall install the tall wind sheets and 3-tired thick vegetation along the lease boundary before obtaining the CTO from the TNPCB to eliminate the possibility of air borne dust flowing into the surrounding environment.
16. The PP shall ensure that the loaded trucks are firmly covered with tarpaulin so as not expose any material and to avoid the spillage during the transportation.
17. As accepted by the Project Proponent the CER cost of **Rs. 5 Lakhs** and the amount

shall be spent for the activities as committed towards Panchayat Union Primary School, Kattupalayam Village, Kangeyam Taluk, Tiruppur District, before obtaining CTO from TNPCB.

**SEAC STANDARD CONDITIONS:**

1. The PP shall inform send the 'Notice of Opening' of the quarry to the Director of Mines Safety, Chennai Region before obtaining the CTO from the TNPCB.
2. The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
3. The proponent shall appoint the statutory competent persons relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961, as amended from time to time.
4. Within a period one month from the execution of lease deed, the PP shall ensure that the persons deployed in the quarry including all the contractual employees/truck drivers shall undergo initial/periodical training in the DGMS approved GVTC situated in Trichy / Salem / Hosur.
5. The PP shall construct a garland drain of size, gradient and length around the proposed quarry incorporating garland canal, silt traps, siltation pond and outflow channel connecting to a natural drain should be provided prior to the commencement of mining. Garland drain, silt-traps, siltation ponds and outflow channel should be de-silted periodically and geo-tagged photographs of the process should be included in the HYCR.
6. Monitoring of drainage water should be carried out at different seasons by an NABL accredited lab and clear water should only be discharged into the natural stream. Geo-tagged photographs of the drainage and sampling site should be submitted along with HYCR.
7. The proponent shall install the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs showing the same before obtaining the CTO from TNPCB.
8. The Proponent shall submit a conceptual 'Slope Stability Action Plan' incorporating the benches & accessible haul road approved by the concerned AD

(Mines) for the proposed quarry to the DEE/TNPCB at the time of obtaining the CTO.

9. The PP shall ensure that the persons employed in the quarry whether permanent, temporary or contractual are undergoing the initial/periodical medical examination in the DGMS approved OHS Clinics/Hospitals as per the DGMS Circular No. 01 of 2011 before they are engaged in mining activities.
10. The PP shall ensure that the persons employed in the quarry whether permanent, temporary or contractual are provided with adequate PPEs before engaged in mining operations.
11. The PP shall meticulously carry out the mitigation measures as spelt out in the approved EMP.
12. Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology should be adopted by considering the wind direction.
13. The Project Proponent shall ensure that the funds earmarked for environmental protection measures are kept in a separate bank account and should not be diverted for other purposes. Year-wise expenditure should be included in the HYCR.
14. The Project Proponent shall send a copy of the EC to the concerned Panchayat/local body.
15. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required, in coordination with the concerned Govt. Authority.
16. Perennial sprinkling arrangements shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals and submit the consolidated report to TNPCB once in six months.
17. The Proponent shall ensure that the noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures are undertaken accordingly. The report on the periodic monitoring shall be included in the HYCR.
18. Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology to be adopted by considering the wind direction.

19. The purpose of green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
20. Taller/one year old saplings raised in appropriate size of bags (preferably eco-friendly bags) should be planted in proper spacing as per the advice of local forest authorities/botanist/horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
21. **Noise and Vibration Related:** (i) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs, (ii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
22. The PP shall carry out maximum of only one round of controlled blast per day, restricted to the maximum of 30 to 40 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 500 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 20 m from the site of blasting.
23. The PP shall also ensure that the blasting operations are not carried out on a 'day after day' basis and a minimum 24 hours break should be observed between blasting days to reduce the environmental impacts effectively.
24. If 'Deep-hole large diameter drilling and blasting' is required, then the PP shall obtain special permission from DGMS.
25. The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone of 500 m from the boundary of the quarry. The PP shall use the jack hammer drill machine fitted with the dust

extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.

26. The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him in accordance with the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
27. The proponent shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by the quarrying operations and shall complete this work before the conclusion of such operations as per the Environmental Management Plan & the approved Mine Closure Plan.
28. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
29. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50 m safety distance from water body should be maintained without carrying any activity. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.
30. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
31. The proponent shall ensure that the transportation of the quarried granite stones shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried granite stones; and transport of granite stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
32. To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
33. The Project Proponent shall comply with the provisions of the Mines Act, 1952, MMR 1961 and Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
34. The project proponent shall ensure that the provisions of the MMDR Act, 1957 & the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are

compiled by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.

35. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCB) and the Director of Mines Safety (DMS), Chennai Region by the proponent without fail.
36. The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
37. All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the Precise area communication letter issued by concerned District Collector should be strictly followed.
38. That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.
39. As per the directions contained in the OM F.No.22-34/2018-IA.III dated 16th January 2020 issued by MoEFCC, the Project Proponent shall, undertake re-grassing the mining area and any other area which may have been disturbed due to his mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The compliance of this direction shall be included in the Half Yearly Compliance Report which will be monitored by SEAC at regular intervals.
40. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
41. As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated:

30.09.2020 and 20.10.2020 the proponent shall adhere to the EMP as committed.

**AFFIDAVIT FURNHSED BY THE PROPONENT**

The Proponent has furnished affidavit in Hundred Rupees stamp paper attested by the Notary stating that

**I, Thiru. N. Loganathan, S/o. Narayana Moorthy, 450/1, Arcot Road, Porur, Chennai, Tamil Nadu State – 600 116 solemnly declare and sincerely affirm that**

I have applied for getting Environment Clearance to SEIAA, Tamil Nadu State for quarrying of **Quartz & Feldspar Quarry Project over an Extent of 2.45.0Ha of Patta land in S.F.No. 718/A1 and 731/1A of Vellakoil Village, Kangeyam Taluk, Tiruppur District, Tamil Nadu State.**

I swear to state and confirm that within 10km area of the quarry site, I have applied for environment clearance, none of the following is situated:

- a. Protected areas notified under the wild life (Protection) Act, 1972,
  - b. Critically polluted areas as notified by the central pollution control board constituted under water (Prevention and Control of Pollution) Act, 1974,
  - c. Eco-Sensitive areas as notified.
  - d. Interstate Boundary
1. I will spend the amount of Rs. 5 Lakhs towards Corporate Environment Responsibility (Revised CER) for the following activities to the Panchayat Union Kattupalayam, Vellakoil, Kangeyam Taluk, Tiruppur District.

Sl. No.	Description	Cost breakup
1	Renovation of existing toilets and its maintenance	<b>5,00,000/-</b>
2	Painting of Classrooms	
3	Carrying out plantation in the school boundary @ 100 Nos	
4	Providing environmental related books to the school	
5	Providing Water Tank with Motor to the School	
<b>TOTAL</b>		

2. The total area of following quarries located within 500m radius from the periphery of my quarry site details as shown below:

**i) Details of Existing Quarries:**

S. No.	Name of the Owner	Mineral	S.F. No	Extent in Hects.	Lease Period	Lease Details
1.	P. Senthil	Rough Stone and Gravel	226/B	1.24.5ha	08.03.2022 to 07.03.2027	Deputy Director Geology and Mining Tiruppur proceedings in R.C. 295/2021/Mines Dated:08.03.2022
2.	Thiru.N. Loganathan	Quartz and Feldspar	718/A1, 731/1A	2.45.0ha	21.01.2019 to 20.10.2019	G.O(2D) No.29 Industries (MMC 1) Department Dated: 21.12.2018

**ii) Details of Lease Expired and Abandoned Quarries:**

S. No.	Name of the Owner	S.F. No	Extent in Hects.	Lease Period	Remarks
1.	A. N. Ramasamy	715/B	0.92.0ha	18.02.2009 to 17.02.2014	Rough Stone Quarry

**iii) Details of Proposed Quarries: NIL**

4. There will not be hindrance or disturbance to the people living during quarrying activities and transportation of the mineral.
5. There is no approved habitation within 300m radius from the periphery of my quarry.
6. I swear that afforestation will be carried out during the course of quarrying operation and maintained.
7. The required insurance will be taken in the name of the laborers working in my quarry site.
8. The existing road from the main road to quarry is in good condition and the same is being maintained and utilized for Transportation of Rough stone.
9. I will not engage any child labor in my quarry site and I aware that engaging child labor is punishable under the law.

10. All types of safety / protective equipment will be provided to all the laborers working in my quarry.
11. No permanent structures, temples etc., are located within 500m radius from the periphery of my quarry.

## **12. REVISED EMP BUDGET**

Mitigation Measure	Provision for Implementation	Capital	Recurring
Compaction, gradation and drainage on both sides for Haulage Road	Rental Dozer & drainage construction on haul road @ Rs. 10,000/- per hectare; and yearly maintenance @ Rs. 10,000/- per hectare	24500	24500
Fixed Water Sprinkling Arrangements + Water sprinkling by own water tankers	Fixed Sprinkler Installation and New Water Tanker Cost for Capital; and Water Sprinkling (thrice a day) Cost for recurring	800000	50000
Muffle blasting – To control fly rocks during blasting	Blasting face will be covered with sand bags / steel mesh / old tyres / used conveyor belts	0	5000
Wet drilling procedure / latest eco-friendly drill machine with separate dust extractor unit	Dust extractor @ Rs. 25,000/- per unit deployed as capital & @ Rs. 2500 per unit recurring cost for maintenance - 2 Units	50000	5000
No overloading of trucks/tippers/tractors	Manual Monitoring through Security guard	0	5000
Stone carrying trucks will be covered by tarpaulin	Monitoring if trucks will be covered by tarpaulin	0	10000
Enforcing speed limits of 20 km/hr within ML area	Installation of Speed Governors @ Rs. 5000/- per Tipper/Dumper deployed - 2 Units	10000	500
Regular monitoring of exhaust fumes as per RTO norms	Monitoring of Exhaust Fumes by Manual Labour	0	5000
Regular sweeping and maintenance of approach roads for at least about 200 m from ML Area	Provision for 2 labours @ Rs.10,000/labour (Contractual) per Hectare	0	49000
Installing wheel wash system near gate of quarry	Installation + Maintenance + Supervision	50000	20000
Source of noise will be during operation of transportation vehicles, HEMM for this proper maintenance will be done at regular intervals.	Provision made in Operating Cost	0	0
Oiling & greasing of Transport vehicles and HEMM at regular interval will be done	Provision made in Operating Cost	0	0
Adequate silencers will be provided in all the diesel engines of vehicles.	Provision made in Operating Cost	0	0
It will be ensured that all transportation vehicles carry a fitness certificate.	Provision made in Operating Cost	0	0
Safety tools and implements that are required will be kept adequately near blasting site at the time of charging.	Provision made in OHS part	0	0
Line Drilling all along the boundary to reduce the PPV from blasting activity and implementing controlled blasting.	Provision made in Operating Cost	0	0

Proper warning system before blasting will be adopted and clearance of the area before blasting will be ensured.	Blowing Whistle by Mining Mate / Blaster / Competent Person	0	0
Provision for Portable blaster shed	Installation of Portable blasting shelter	50000	2000
NONEL Blasting will be practiced to control Ground vibration and fly rocks	Rs. 30/- per 6 Tonnes of Blasted Material	0	248542
Waste management (Spent Oil, Grease etc.,)	Provision for domestic waste collection and disposal through authorized agency	5000	20000
	Installation of dust bins	5000	2000
Bio toilets will be made available outside mine lease on the land of owner itself	Provision made in Operating Cost	0	0
Size 6' X 5' with blue background and white letters as mentioned in MoM Appendix II by the SEAC TN	Fixed Display Board at the Quarry Entrance as permanent structure mentioning Environmental Conditions	10000	1000
Air, Water, Noise and Soil Quality Sampling every 6 Months for Compliance Report of EC Conditions	Submission of 2 Half Yearly Compliance - Lab Monitoring Report as per CPCB norms	0	50000
Silicosis Test for the Employees	Test like Chest X-ray, Lung function tests, etc., Employees - 19 Nos	0	57000
Sheet fencing to avoid dust propagation to the nearby hamlets	Construction of Sheet fencing East and South direction	2000000	20000
Occupational Health and Safety related to Quartz and Feldspar Mine	Separate Name Board mentioning occupational health hazards related to quartz mining and precaution measures	10000	2000
Workers will be provided with Personal Protective Equipment's	Provision of PPE @ Rs. 4000/- per employee with recurring based on wear and tear (say, @ Rs. 1000/- per employee) - 19 Employees	76000	19000
Health check-up for workers will be provisioned	IME & PME Health check-up @ Rs. 1000/- per employee	0	19000
First aid facility will be provided	Provision of 2 Kits per Hectare @ Rs. 2000/-	0	4900
Mine will have safety precaution signages, boards.	Provision for signages and boards made	10000	2000
No parking will be provided on the transport routes. Separate provision on the south side of the hill will be made for vehicles /HEMMs. Flaggers will be deployed for traffic management	Parking area with shelter and flags @ Rs. 50,000/- per hectare project and Rs. 10,000/- as maintenance cost	122500	10000
Installation of CCTV cameras in the mines and mine entrance	Camera 4 Nos, DVR, Monitor with internet facility	30000	5000
Implementation as per Mining Plan and ensure safe quarry working	Mines Manager (1 <sup>st</sup> Class / 2 <sup>nd</sup> Class / Mine Foreman) under regulation 34 / 34 (6) of MMR, 1961 and Mining Mate under regulation 116 of MMR, 1961 @ 40,000/- for Manager & @ 25,000/- for Foreman / Mate	0	780000
Progressive Closure Activity - Surface Runoff management	Provision for garland drain @ Rs. 10,000/- per Hectare with maintenance of Rs. 5,000/- per annum	12140	5000

Progressive Closure Activity Barbed Wire Fencing to quarry area will be provisioned.	Per Hectare fencing Cost @ Rs. 2,00,000/- with Maintenance of Rs 10,000/- per annum	242800	10000
Progressive Closure Activity Green belt development - 500 trees per one hectare - Proposal for 1230 Trees - (630 Inside Lease Area & 600 Outside Lease Area)	Site clearance, preparation of land, digging of pits / trenches, soil amendments, transplantation of saplings @ 200 per plant (capital) for plantation inside the lease area and @ 30 per plant maintenance (recurring)	112000	16800
	Avenue Plantation @ 300 per plant (capital) for plantation outside the lease area and @ 30 per plant maintenance (recurring)	27000	2700
Implementation of Final Mine Closure Activity as per Approved Mining Plan on Last Year	Few activities already covered as progressive closure activities as greenbelt development, wire fencing, garland drain. *For Final Closure Activities 15% of the proposed closure cost will be spent during the final mine closure stage - Last Year	#59091	0
Contribution towards Green Fund. As per TNMMCR 1959, Rule 35 A	The Contribution towards Green Funds @ 10% of Seigniorage fee are indicated as part of EMP Budge and not necessarily implemented in the Project Site	#229756	0
As per MoEF &CC OM 22-65/2017-IA.III Dated 25.02.2021	Detailed Description in following slides and Budget allocation is included as per MoeEF & CC OM	500000	0
<b>TOTAL</b>		<b>2773500</b>	<b>1468342</b>

### **EMP BUDGET SUMMARY BREAKUP YEAR WISE**

Year	Total Cost
<b>2024-25</b>	<b>₹ 42,41,842/-</b>
2025-26	₹ 15,41,759/-
2026-27	₹ 16,18,847/-
2027-28	₹ 16,99,789/-
2028-29	₹ 19,16,717/-
<b>TOTAL</b>	<b>110 LAKHS</b>

I ensure to do all the social and Environment commitment as mentioned in the scheme of mining to the best of my knowledge.

### **DETAILS OF QUARRIES LOCATED WITHIN 500M RADIUS FROM THE PROPOSED QUARRY:**

The Project Proponent has submitted a copy of the letter obtained from the Deputy Director, Department of Geology and Mining, **Tiruppur** District in his letter Roc.No.431/Mines/2023, dated:07.02.2024 has stated that the details of other quarries within a radius 500m from the boundary of the proposed quarry site as follows:

**Details of Existing Quarries:**

S. No.	Name of the Owner	Mineral	S.F. No	Extent in Hects.	Lease Period	Lease Details
1.	P. Senthil	Rough Stone and Gravel	226/B	1.24.5ha	08.03.2022 to 07.03.2027	Deputy Director Geology and Mining Tiruppur proceedings in R.C. 295/2021/Mines Dated:08.03.2022
2.	Thiru.N. Loganathan	Quartz and Feldspar	718/A1, 731/1A	2.45.0ha	21.01.2019 to 20.10.2019	G.O(2D) No.29 Industries (MMC 1) Department Dated: 21.12.2018

**ii) Details of Lease Expired and Abandoned Quarries:**

S. No.	Name of the Owner	S.F. No	Extent in Hects.	Lease Period	Remarks
1.	A. N. Ramasamy	715/B	0.92.0ha	18.02.2009 to 17.02.2014	Rough Stone Quarry

**iii) Details of Proposed Quarries: NIL**