



सत्यमेव जयते

File No.: 11071
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA),
TAMIL NADU)



Dated 17/10/2024



To,

satheesh sasidharan
satheesh sasidharan
No. 17-62, Vathikonam, Kumbacode, Vilavancode, Kanniyakumari District , Kanniyakumari ,
KANNIYAKUMARI, TAMIL NADU, 629151
satheeshaji1985@gmail.com

Subject: Grant of prior Environmental Clearance (EC) to the proposed Mining Project under the provisions of EIA Notification 2006-as amended regarding

Sir/Madam,

SEIAA-TN - Proposed Rough stone & Gravel quarry lease over an extent of 4.98.50Ha at SF.Nos.54/1, 54/2, 55/1, 55/2A (Part), 56/2B (Part), 57/3 (Part), 58/1 (Part) & 58/2A (Part) of Chandragiri Village, Ottapidaram Taluk, Thoothukudi District, Tamil Nadu by Thiru. S. Satheesh - under project category - "B2" and Schedule S.No. 1(a) – Issue of Environmental Clearance – Regarding.

Ref:

1. Online Proposal No. SIA/TN/MIN/486335/2024, Dated: 06.07.2024.
2. Application seeking Environmental Clearance dated: 12.07.2024.
3. Minutes of 490th SEAC meeting held on 09.08.2024.
4. Minutes of 751th authority meeting held on 02.09.2024.
5. Minutes of 761st authority meeting held on 07.09.2024.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24C0108TN5470846N
(ii) File No.	11071
(iii) Clearance Type	Mining EC Under 5 Ha
(iv) Category	B2
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals Rough stone and Gravel Quarry Project Belongs to S. Satheesh, Extent: 4.98.0ha, S.F.Nos. 54/1, 54/2, 55/1, 55/2A (Part), 56/2B (Part), 57/3 (Part), 58/1 (Part) and 58/2A (Part) of Chandragiri Village, Ottapidaram Taluk, Thoothukudi District.
(vii) Name of Project	

(ix) Location of Project (District, State)	TUTICORIN, TAMIL NADU
(x) Issuing Authority	SEIAA
(xii) Applicability of General Conditions	No

1. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-2(Part A, B and C)/EMP Reports were submitted to the SEIAA for an appraisal by the SEAC under the provision of EIA notification 2006 and its subsequent amendments.

2. The above-mentioned proposal has been considered by SEIAA in the meeting held on 07/10/2024. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above.

3. The SEAC, based on information submitted viz: Form2 (Part A, B)EMP report etc., & clarifications provided by the project proponent and after detailed deliberations on all technical aspects 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.

4. The SEIAA has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the SEAC hereby accords Environment Clearance for the instant proposal to Thiru. satheesh sasidharan under the provisions of EIA Notification, 2006 and as amended thereof subject to compliance of the Specific and Standard EC conditions as given in Annexure (2)

5. The Ministry/SEIAA-TN reserves the right to stipulate additional conditions, if found necessary.

6. The Environmental Clearance 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.

7. The PP is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.

8. Salient features of the proposal are as follows:

Sl.No	Details of the Proposal	Data Furnished
1.	Name of the Owner/Firm	Thiru. S. Satheesh, S/o. Sasidharan, No. 17-62, Vathikonam, Kumbacode, Vilavancode, Kanniyakumari District – 629 151
2.	Type of quarrying	Rough stone & Gravel quarry
3.	S.F Nos. of the quarry site	54/1, 54/2, 55/1, 55/2A (P), 56/2B (P), 57/3 (P), 58/1 (P) & 58/2A (P)
4.	Village in which situated	Chandragiri
5.	Taluk in which situated	Ottapidaram
6.	District in which situated	Thoothukudi
7.	Extent of quarry (in ha.)	4.98.5Ha
8.	Latitude & Longitude of all corners of the quarry site	08°59'43.3093" N to 08°59'49.6137" N 78°06'02.7015"E to 78°06'14.6180" E
9.	Topo Sheet No.	58 L/01
10.	Type of mining	Opencast Mechanized Mining
11.	Period of Current Mine Plan	5 Years
12.	Production (Quantity in m ³)	The lease period is for 5 years. The Mining plan is for the period of 5 years & production should not exceed 10,55,355 m³ of Rough Stone and 82,110 m³ of Gravel with an ultimate depth of mining is 47m BGL .
13.	Depth of Quarrying	47m BGL
14.	Depth of water table	68m – 70m
15.	Man Power requirement per day:	46 Employees

16.	Water requirement: 1. Drinking water, Dust suppression & Green belt	2.4 KLD
17.	Power requirement	TNEB 8,57,968 Liters of HSD for the entire life
18.	Precise area communication approved by the Assistant Director, Department of G&M.	Roc. No. G.M.1/47/2024, Dated: 10.06.2024
19.	Mining Plan approved by Assistant Director, Department of G&M.	Roc. No. G.M.1/47/2024, Dated: 21.06.2024
20.	500m Cluster Letter approved by the Assistant Director, Department of G&M.	Roc. No. G.M.1/47/2024, Dated: 21.06.2024
21.	VAO Certificate Regarding Structures within 300m Radius	Letter Dated:24.06.2024
22.	Project Cost (excluding EMP cost)	Rs.3,70,65,000/-
23.	EMP cost (in Rs. Lakh).	Rs.266 Lakhs
24.	CER Cost (in Rs. Lakh).	Rs.5,00,000

Validity:

This Environmental Clearance is accorded for the quantity of 10,55,355 m³ of Rough Stone and 82,110 m³ of Gravel up to the depth of mining 47m BGL and the annual peak production should not exceed 2,45,435 m³ of Rough Stone and 38,070 m³ of Gravel.

The Environmental Clearance issued is valid as per the approved mine plan period and as per MoEF&CC's notification S.O.1533(E) dated 14.09.2006 and S.O. 1807(E) dated 12.04.2022.

9. Gener Instructions:

(i)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.

(ii)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.

(iii)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.

(iv)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.

(v)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.

(vi)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.

10. This 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 Principal Secretary to Government, Environment, Climate Change and Forests Department, Tamil Nadu.
3. The Additional Chief Secretary to Government, Natural Resources 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 Chairperson, TNPC Board, 76, Mount Salai, Guindy, Chennai-32.

7. The District Collector, Thoothukudi District.

8. The Commissioner of Geology and Mines, Guindy, Chennai - 32.

9. Assistant Director, Department of Geology & Mining, Thoothukudi 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 Conditions:

S. No	EC Conditions
1.1	<p>After detailed discussions, The Authority decided to call for the additional details, In this continuation, The PP has submitted the reply vide letter dated 23.09.2024</p> <p>Now, The subject is placed in 761st authority meeting held on 07.10.2024. After detailed discussions, the Authority taking into account the reply submitted by the PP and</p> <p>After detailed discussions, the Authority taking into account of the PP's reply and the recommendations of SEAC and also the safety aspects, and to ensure sustainable, Proximity of water table, kml and ecological consideration scientific and systematic mining, SEIAA decided to grant Environmental Clearance for the quantity of 10,55,355 m3 of Rough Stone and 82,110 m3 of Gravel to the depth of mining 47m BGL and the annual peak production should not exceed 2,45,435 m3 of Rough Stone and 38,070 m3 of Gravel .This is also subject to the conditions imposed by SEAC, normal conditions stipulated by MOEF&CC in addition to the following conditions and the conditions in Annexure 'A' of this minutes.</p> <p>11. Keeping in view of MoEF&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.</p> <p>12. The EC granted is subject to review by District Collector, Mines Dept. and TNPCB on completion of every 5 year 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.</p> <p>13. The project proponent shall submit a Certified Compliance Report obtained from IRO of MoEF&CC to the monitoring, regulatory and other concerned authorities including SEIAA, while seeking a renewal of the mining plan to cover the project life.</p> <p>14. 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 & IRO of MoEF&CC once in every 6 months.</p> <p>15. 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 & IRO of MoEF&CC.</p> <p>16. Biodiversity in and around the project area should be monitored frequently and detailed biodiversity report should be submitted every year to SEIAA & IRO of MoEF&CC.</p> <p>17. 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 & IRO of MoEF&CC.</p> <p>18. 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</p>

S. No	EC Conditions
	<p>prescribed in the prior environmental clearance letter(s) through newly developed compliance module in the PARIVESH Portal from the respective login.</p> <p>19. 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 & 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> <p>20. The plantation of saplings shall be carried out in the earmarked greenbelt area as a part of the tree plantation campaign “Ek Ped Ma Ke Naam” and the details of the same shall be uploaded in the MeriLiFE Portal (https://merilife.nic.in).</p>

2. Seiaa Standard Conditions:

S. No	EC Conditions
2.1	<p>a) EC Compliance:</p> <ol style="list-style-type: none"> 1. The Environmental Clearance is accorded based on the assurance from the project proponent that there will be full and effective implementation of all the undertakings given in the Application Form, Pre-feasibility Report, mitigation measures as assured in the Environmental Impact Assessment/ Environment Management Plan and the mining features including Progressive Mine Closure Plan as submitted with the application. 2. All the conditions as presented by the proponent in the PPT during SEAC appraisal should be addressed in Full. 3. The proponent shall submit Compliance Reports on the status of compliance of the stipulated EC conditions including results of monitored data. It shall be sent to the respective Regional Office of Ministry of Environment, Forests and Climate Change, Govt. of India and also to the Office of State Environment Impact Assessment Authority (SEIAA). 4. Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986. <p>b) Applicable Regulatory Frameworks:</p> <ol style="list-style-type: none"> 5. The project proponent shall strictly adhere to the provisions of Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, along with their amendments, Minor Mineral Conservation & Development Rules, 2010 framed under MMDR Act 1957, National Commission for protection of Child Right Rules, 2006, Wildlife Protection Act, 1972, Forest Conservation Act, 1980, Biodiversity Conservation Act, 2016, the Biological Diversity Act, 2002, Biological diversity Rules, 2004 & TN Forest Act, 1882 and Rules made there under and also any other orders passed by the Hon’ble Supreme Court of India/Hon’ble High Court of Madras and any other Courts of Law relating to the subject matter. <p>c) Safe mining Practices:</p> <ol style="list-style-type: none"> 6. The AD/DD, Dept. of Geology & Mining shall ensure operation of the proposed quarry after the submission of slope stability study conducted through the reputed research & Academic Institutions such as NIRM, IITs, NITS Anna University, and any CSIR Laboratories etc and ensure strict compliance and implementation of bench wise recommendations/action plans as recommended in the scientific slope stability study. 7. A minimum buffer distance specified as per existing rules and statutory orders shall be maintained from the boundary of the quarry to the nearest dwelling unit or other structures, and from forest boundaries or any other ecologically sensitive and archeologically important areas or the specific distance specified by SEIAA in EC as per the recommendations of SEAC depending on specific local conditions.

S. No	EC Conditions
	<p>d) Water Environment – Protection and mitigation measures:</p> <p>8. The proponent shall ensure that the activity does not disturb the water bodies, neighboring open wells, bore wells and natural flow of surface and groundwater, nor cause any pollution, to water sources in the area nor effect the water quality and water quantity in the water sources.</p> <p>9. Water level in the nearest dug well in the downstream side of the quarry should be monitored regularly and included in the Compliance Report.</p> <p>10. Quality of water discharged from the quarry should be monitored regularly as per the norms of State Pollution Control Board and included in the Compliance Report.</p> <p>11. Rain Water Harvesting facility should be installed as per the prevailing provisions of TNMBR/TNCDBR, unless otherwise specified. Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.</p> <p>12. Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the compliance reports to SEIAA. At any stage, if it is observed that ground water table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.</p> <p>13. Garland drains and silt traps are to be provided in the slopes around the core area to channelize storm water. De-silting of Garland canal and silt traps have to be attended on a daily basis. A labour has to be specifically assigned for the purpose. The proponent shall ensure the quality of the discharging storm water as per the General Effluent Discharge Standards of CPCB.</p> <p>e) Air Environment – Protection and mitigation measures:</p> <p>14. The activity should not result in CO₂ release and temperature rise and add to micro climate alternations.</p> <p>15. The proponent shall ensure that Monitoring is carried out with reference to the quantum of particulate matter during excavation; blasting; material transport and also from cutting waste dumps and haul roads.</p> <p>f) Soil Environment – Protection and mitigation measures:</p> <p>16. The proponent shall ensure that the operations neither result in loss of soil biological properties and nutrients nor deplete the indigenous soil seed bank and disturb the mycorrhizal fungi, soil organism, soil community and result in eutrophication of soil and water. Further, the activities should not disturb the soil properties and seed and plant growth. Soil amendments as required to be carried out, to improve soil health.</p> <p>17. Bio remediation using microorganisms should be carried out to restore the soil environment to enable carbon sequestration.</p> <p>18. The proponent shall ensure that the mine restoration is done using mycorrhizal VAM, vermincomposting, Biofertilizers and the topsoil is protected and used in planting activities, site restoration and establishment of green belt in the area to ensure soil health and biodiversity conservation.</p> <p>19. The top soil shall be temporarily stored at earmarked place (s) and used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. At critical points, use of geotextile shall be undertaken for stabilization of the dump. Protective wall or gabions should be made around the dump to prevent erosion / flow of sediments during rains. The entire excavated area shall be backfilled.</p> <p>20. Activities should not result in invasion of site by exotic and alien plant and animal species and disturb the native biodiversity and soil micro flora and fauna.</p> <p>g) Noise Environment – Protection and mitigation measures:</p> <p>21. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines. The activity of the proponent should not effect the biological clock of the villages resulting in stress, sleeping disorders affecting health.</p> <p>h) Biodiversity - Protection and mitigation measures:</p>

S. No	EC Conditions
	<p>22. The proponent should ensure that there is no disturbance to the agriculture plantations, social forestry plantations, waste lands, forests, sanctuary or national parks. There should be no impact on the land, water, soil and biological environment and other natural resources due to the mining activities.</p> <p>23. No trees in the area should be removed and all the trees numbered and protected. In case trees fall within the proposed quarry site the trees may be transplanted in the Greenbelt zone. The proponent shall ensure that the activities in no way result in disturbance to forest and trees in vicinity. The proponent shall ensure that the activity does not disturb the movement of grazing animals and free ranging wildlife. The proponent shall ensure that the activity does not disturb the biodiversity, the flora & fauna in the ecosystem. The proponent shall ensure that the activities do not disturb the resident and migratory birds. The proponent shall ensure that the activities do not disturb the vegetation and wildlife in the adjoining reserve forests and areas around. Also, the activities should not disturb the agro biodiversity, agro farms, green lands and grazing fields of all types. Actions to be taken to promote agroforestry, mixed plants to support biodiversity conservation in the mine restoration effort.</p> <p>24. The proponent shall ensure that all mitigation measures listed in the EIA/EMP are taken to protect the biodiversity and natural resources in the area.</p> <p>i) Climate Change:</p> <p>25. There should be least disturbance to landscape resulting in land use change, contamination and alteration of soil profiles leading to Climate Change.</p> <p>26. Operations should not result in GHG releases and extra power consumption leading to Climate Change.</p> <p>27. Mining through operational efficiency, better electrification, energy use, solar usage, use of renewable energy should try to decarbonize the operations.</p> <p>28. Mining should not result in water loss from evaporation, leaks and wastage and should support to improve the ground water.</p> <p>29. Mining activity should be flood proof with designs and the drainage, pumping techniques shall ensure climate-proofing and socio-economic wellbeing in the area and vicinity.</p> <p>j) Reserve Forests & Protected Areas:</p> <p>30. The activities should provide nature based support and solutions for forest protection and wildlife conservation.</p> <p>31. The project activities should neither result in forest fires, encroachments nor create forest fragmentation and disruption of forest corridors and alter the geodiversity and geological heritage of the area.</p> <p>32. There should be no disturbance to the freshwater flow from the forest impacting the water table and wetlands.</p> <p>33. The project proponent should support all activities of the forest department in creating awareness to local communities on forest conservation.</p> <p>34. The activities should not result in temperature rise due to increased fossil fuels usage disrupting the behaviour of wildlife and flora.</p> <p>35. The activities should support and recognise the rights and roles of indigenous people and local communities and also support sustainable development.</p> <p>36. The project activities should support the use of renewables for carbon capture and carbon storage in the project site and forest surrounds.</p> <p>37. The project activities should not result in changes in forest structure, habitats and genetic diversity within forests.</p> <p>k) Green Belt Development:</p> <p>38. The proponent shall ensure that in the green belt development more indigenous trees species as suggested in Appendix of SEAC Minutes are planted and that the area is restored and rehabilitated with native trees .</p> <p>l) Workers and their protection:</p> <p>39. The project proponent is responsible for implementing all the provisions of labour laws</p>

S. No	EC Conditions
	<p>applicable from time to time to quarrying /Mining operations. The workers on the site should be provided with on-site accommodation or facilities at a suitable boarding place, protective equipment such as ear muffs, helmet, etc.</p> <p>40. The proponent has to provide insurance protection to the workers and the working hours and wages shall be implemented/enforced as per the Mines Act, 1952 in the case of existing mining or provide the affidavit in case of fresh lease before execution of mining lease.</p> <p>m) Transportation:</p> <p>41. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a bypass road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centres.</p> <p>42. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.</p> <p>n) Storage of wastes</p> <p>43. The project proponent shall store/dump the waste generated within the earmarked area of the project site for mine closure as per the approved mining plan.</p> <p>o) CER/EMP:</p> <p>44. The CER should be fully Implemented and fact reflected in the Half-yearly compliance report.</p> <p>45. The EMP shall also be implemented in consultation with local self-government institutions & Govt. departments as indicated in SEAC meeting.</p> <p>p) Directions for Reclamation of mine sites:</p> <p>46. The mining closure plan should strictly adhere to appropriate soil rehabilitation measures to ensure ecological stability of the area. Reclamation/Restoration of the mine site should ensure that the Geotechnical, physical, chemical properties are sustainable that the soil structure composition is buildup, during the process of restoration. The proponent shall ensure that the mine closure plan is followed as per the mining plan and the mine restoration should be done with native species, and site restored to near original status. The proponent shall ensure that the area is ecologically restored to conserve the ecosystems and ensure flow of goods and services.</p> <p>47. A crucial factor for success of reclamation site is to select sustainable species to enable develop a self-sustaining eco system. Species selected should easily establish, grow rapidly, and possess good crown and preferably be native species. Species to be planted in the boundary of project site should be un palatable for cattle's/ goats and should have proven capacity to add leaf-litter to soil and decompose. The species planted should be adaptable to the site conditions. Should be preferably pioneer species, deciduous in nature to allow maximum leaf-litter, have deep root system, fix atmospheric nitrogen and improve soil productivity. Species selected should have the ability to tolerate altered pit and toxicity of and site. They should be capable of meeting requirement of local people in regard to fuel fodder and should be able to attract bird, bees and butterflies. The species should be planted in mixed association.</p>

S. No	EC Conditions
	<p>48. Top soil with a mix of beneficial microbes (Bacteria/Fungi) to be used for reclamation of mine spoils. AM Fungi (Arbuscular mycorrhizal fungi), plant growth promoting Rhizo Bacteria and nitrogen fixing bacteria to be utilized. Soil and moisture conservation and water harvesting structures to be used where ever possible for early amelioration and restoration of site. Top soil is most important for successful rehabilitation of mined sites. Topsoil contains majority of seeds and plant propagation, soil microorganism, Organic matter and plant nutrients. Wherever possible the topsoil should be immediately used in the area of the for land form reconstruction, to pre mining conditions.</p> <p>49. Over burdens may be analyzed and tested for soil characteristics and used in the site for revegetation. Wherever possible seeds, rhizome, bulbs, etc., of pioneering spices should be collected, preserved and used in restoring the site. Native grasses seeds may be used as colonizers and soil binders, to prevent erosion and allow diverse self- sustaining plant communities to establish. Grasses may offer superior tolerance to drought, and climatic stresses.</p> <p>50. Reclamation involves planned topographical reconstruction of site. Care to be taken to minimize erosion and runoff. Topsoil should have necessary physical, chemicals, ecological, properties and therefore should be stored with precautions and utilized for reclamation process. Stocked topsoil should be stabilized using grasses to protect from wind. Seeds of various indigenous and local species may be broad casted after topsoil and treated overburden are spread. Alkaline soils, acidic soils, Saline soils should be suitably treated/amended using green manure, mulches, farmyard manure to increase organic carbon. The efforts should be taken to landscape and use the land post mining. The EMP and mine closure plan should provide adequate budget for re-establishing the site to pre-mining conditions. Effective steps should be taken for utilization of over burden. Mine waste to be used for backfilling, reclamation, restoration, and rehabilitation of the terrain without affecting the drainage and water regimes. The rate of rehabilitation should be similar to rate of mining. Efforts should to taken to aesthetically improve the mine site. Action taken for restoration of the site should be specifically mentioned in the EC compliances.</p>



SEAC SPECIFIC CONDITIONS:

- 1) The prior Environmental Clearance granted for this mining project shall be valid subject to the standard conditions as per the **Annexure I** of this minutes & normal conditions stipulated by MOEF &CC.
- 2) Tree plantation & fencing and installation of garland drainage with siltation tank around the mine lease area shall be completed before execution of the mine lease.
- 3) The PP shall obtain 'No Objection Certificate' for High Tension Line passing within 300 m from the lease boundary from Competent Authority under the provisions of the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations 2023, before obtaining CTO.
- 4) The PP shall ensure that the loaded trucks are covered with a tarpaulin cover to avoid the spillage & dust pollution while transportation.
- 5) 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.**
- 6) The PP shall abide by the mitigation and restoration measures provided in the final Environment Impact Assessment and Environment Management plan prepared for the project life.
- 7) The project proponent shall maintain 7.5m greenbelt in safety zone and such plantation should not be disturbed.
- 8) The PP shall abide by all the conditions as stipulated in accordance with the provisions of MMR 1961 and DGMS Circular No.7 of 1997 while carrying out the controlled blasting operations through a statutorily competent persons appointed by him.
- 9) The proponent shall carryout suppression of dust generated due to transport vehicles by continuous water spraying using tankers.
- 10) The project proponent shall not use village road for mineral transportation purpose.
- 11) As a part of Ground Water Management, the PP shall carry out the scientific studies **to assess the existing hydrogeological conditions (water table in the core & buffer zones) and impacts of the quarrying operation on the ground water level present in the core zone**, during the 2nd year of the mining operation, by involving any one of the reputed Research and Academic Institutions. 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.

- 12) The PP shall strictly satisfy the requirements of the provisions of Mines Act 1952, the regulations of MMR 1961 and the DGMS Circulars, the Environment Act & Rules, 1986, Explosives Act 1884, Explosive rules 1983 and other laws, orders pertaining to the quarry operation without any deviation.
- 13) 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.
- 14) At the time of lease execution, the PP shall submit a Slope Stability Action Plan for the proposed quarrying operations keeping both the benches and haulroad accessibility intact, in accordance with MMR 1961 & DGMS Circulars.
- 15) As accepted by the Project Proponent the CER cost is **Rs. 5 Lakhs** and the amount shall be spent towards Panchayat Union Middle School, Chandragiri Village, Thoothukudi District for the activities as committed before obtaining CTO from TNPCB.

SEAC STANDARD CONDITIONS:

- 16) The proponent shall mandatorily appoint the statutory competent persons and commence the quarry operations within the purview of Mines Act 1952.
- 17) The proponent shall erect fencing all around the boundary of the proposed area with gates for entry/exit before the commencement of the operation and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
- 18) Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
- 19) The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation. No change in basic mining proposal shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form of Short-Term Permit (STP), Query license or any other name.
- 20) Perennial sprinkling arrangement 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.
- 21) 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 undertaken accordingly.

- 22) 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.
- 23) 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.
- 24) 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.
- 25) **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, (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
- 26) 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.
- 27) The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
- 28) 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.
- 29) 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.
- 30) The Project Proponent shall comply with the provisions of the Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.

- 31) The project proponent shall ensure that the provisions of the MMDR Act, 1957, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are complied 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.
- 32) 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) by the proponent without fail.
- 33) 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.
- 34) Prior clearance from Forestry & Wild Life including clearance from committee of the National Board for Wildlife as applicable shall be obtained before starting the quarrying operation, if the project site attracts the NBWL clearance, as per the existing law from time to time.
- 35) 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.
- 36) 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.
- 37) 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.
- 38) 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 EMP furnished.

AFFIDAVIT FURNISHED BY THE PROPONENT

I, **Thiru. S. Satheesh, S/o. Sasidharan, No. 17-62, Vathikonam, Kumbacode, Vilavancode, Kanniyakumari District, Tamil Nadu State – 629 151**, solemnly declare and sincerely affirm that:

I have applied for getting Environment Clearance to SEIAA, Tamil Nadu State for quarrying of **Rough Stone and Gravel Quarry over an extent of 4.98.5ha of Patta Land in S.F. No. 54/1, 54/2, 55/1, 55/2A(P), 56/2B(P), 57/3(P), 58/1(P) & 58/2A(P), Chandragiri Village, Ottapidaram Taluk, Thoothukudi 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. Critically polluted areas as notified by the central pollution control board constituted under water (Prevention and Control of Pollution) Act, 1974,
- b. Eco-Sensitive areas as notified.
- c. Interstate Boundary

1. I will spend the amount of Rs. 5 Lakhs towards Corporate Environment Responsibility and the details are as follows:

CER -1

Panchayat Union Middle School, Chandragiri Village, Thoothukudi District.

Activities as follows:

Sl. No.	Description	Cost breakup
1	Renovation of existing toilets and its maintenance	Rs.5,00,000/-
2	Plantation along the School boundary	
3	Providing Environmental related books to the school library	
4	Providing Colour Printer, Tables & Chairs and drinking water facility to the school	
5	Construction of rooftop to the school	
	Total	Rs.5,00,000/-

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

(i) Existing Quarries:

S. No.	Name and address of the Lessee	Quarry Location	Extent in Hect.	File No & Lease Period
-Nil-				

(i) Abandoned Quarries:

S. No.	Name and address of the Lessee	Quarry Location	Extent in Hect.	File No & Lease Period
-Nil-				

(i) Proposed Quarries:

S. No.	Name and address of the Lessee	Quarry Location	Extent in Hect.
1.	Thiru.S.Satheesh, S/o.Sasidharan, 17-62. Vathikonam, Kumbakode, Vilavancode, Kanniyakumari District – 629 151	S.F.Nos.54/1, 54/2, 55/1, 55/2A(P), 56/2B(P), 57/3(P), 58/1(P) and 58/2A(P) Chandragiri Village, Ottapidaram Taluk	4.98.50
Total			4.98.50

3. There will not be hindrance or disturbance to the people living during quarrying activities and transportation of the mineral.
4. There is no approved habitation within 300m radius from the periphery of my quarry.
5. I swear that afforestation will be carried out during the course of quarrying operation and maintained.
6. The required insurance will be taken in the name of the laborers working in my quarry site.
7. 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.
8. I will not engage any child labor in my quarry site and I aware that engaging child labor is punishable under the law.
9. All types of safety / protective equipment will be provided to all the laborers working in my quarry.
10. No permanent structures, temples etc., are located within 500m radius from the periphery of my quarry.

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	49850	49850

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 - 4 Units	100000	10000
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 – 8 Units	40000	2000
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	99700
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 /Compentent 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	2743923
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
1. Progressive Closure Activity - Surface Runoff management	Provision for garland drain @ Rs. 10,000/- per Hectare with maintenance of Rs. 5,000/- per annum	49850	5000
2. 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	997000	10000
3. Progressive Closure Activity Green belt development - 500 trees per one hectare - Proposal for 2500 Trees - (600 Inside Lease Area & 1900 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)	120000	18000
	Avenue Plantation @ 300 per plant (capital) for plantation outside the lease area and @ 30 per plant maintenance (recurring)	570000	57000
4. 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	#148650	0
5. 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	#9498195	0
Size 6' X 5' with blue background and white letters as	Fixed Display Board at the Quarry Entrance as permanent	10000	1000

mentioned in MoM Appendix II by the SEAC TN	structure mentioning Environmental Conditions		
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
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) - 46 Employees	184000	46000
Health checkup for workers will be provisioned	IME & PME Health checkup @ Rs. 1000/- per employee	0	46000
First aid facility will be provided	Provision of 2 Kits per Hectare @ Rs. 2000/-	0	9970
Slope stability action plan	Slope Stability action in the end of fourth year plan period	200000	0
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	249250	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 st Class / 2 nd 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
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
TOTAL		4019950	4064443

EMP BUDGET SUMMARY BREAKUP YEAR WISE

Year	Total Cost
1st year	₹ 80,84,393/-
2nd year	₹ 42,67,665/-

3rd year	₹ 44,81,048/-
4th year	₹ 47,05,101/-
5th year	₹ 50,89,006/-
Total	₹ 266 Lakhs

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 Assistant Director, Department of Geology and Mining, Thoothukudi District in his letter Roc. No. G.M.1/47/2024, Dated: 21.06.2024 has stated that the details of other quarries within a radius 500m from the boundary of the proposed quarry site as follows:

(i) Existing Quarries:

S. No.	Name and address of the Lessee	Quarry Location	Extent in Hect.	File No & Lease Period
-Nil-				

(i) Abandoned Quarries:

S. No.	Name and address of the Lessee	Quarry Location	Extent in Hect.	File No & Lease Period
-Nil-				

(i) Proposed Quarries:

S. No.	Name and address of the Lessee	Quarry Location	Extent in Hect.
1.	Thiru.S.Satheesh, S/o.Sasidharan, 17-62. Vathikonam, Kumbakode, Vilavancode, Kanniyakumari District – 629 151	S.F.Nos.54/1, 54/2, 55/1, 55/2A(P), 56/2B(P), 57/3(P), 58/1(P) and 58/2A(P) Chandragiri Village, Ottapidaram Taluk	4.98.50
Total			4.98.50