

STATE EXPERT APPRAISAL COMMITTEE – TAMIL NADU

Minutes of 359th meeting of the State Expert Appraisal Committee (SEAC) held on 02.03.2023 (Thursday) at SEIAA Conference Hall, 2nd Floor, Panagal Maligal, Saidapet, Chennai 600 015 for consideration of Building Construction Projects & Mining Projects

Agenda No: 359-01

(File No: 9437/2022)

Proposed Rough Stone and Gravel quarry lease over an extent of 1.62.0Ha SF.No.181/2 & 182/1 (Part) of Kalangal Village, Sular Taluk, Coimbatore District by Thiru.N.Manickaraj - Environmental Clearance (SIA/TN/MIN/287270/2022, dt: 05.08.2022)

Earlier, the proposal was placed in this 324th meeting of SEAC held on 21.10.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Thiru.N.Manickaraj has applied for Environmental Clearance for the Proposed of Rough Stone and Gravel quarry lease over an extent of 1.62.0Ha SF.No.181/2 & 182/1 (Part) of Kalangal Village, Sular Taluk, Coimbatore District, Tamil Nadu.
2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. The precise area communication was issued for the period of 5 years. The approved mining plan is for the period of five years & production should not exceed 81295 m³ of Rough Stone & 1296 m³ of Gravel. The annual peak production is 16,770 cu.m of Rough Stone (2nd Year). The ultimate depth is 52m BGL.
4. As per modified mining plan submitted by the PP, the revised Quantity for Five-year Production is 74,020m³ of Rough Stone & 1,296m³ Gravel up to a depth of 47.0m (Max) (2m Gravel and 45m Rough Stone). The annual peak production shall not exceed 16,770 cu.m of Rough Stone & 1296 m³ of Gravel

Detail of the Proposal	Data Furnished
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1	Name of the Owner/Firm	: Thiru.N.Manickaraj. S/o.Narayanasamy Gounder. No.3/4, Sri K.P.C. Nagar. Sulur Taluk. Coimbatore District - 641402
2	Type of quarrying (Rough Stone/Sand/Granite)	: Rough Stone and Gravel
3	S.F No. Of the quarry site with area break-up	: 181/2 & 182/1 (Part)
4	Village in which situated	: Kalangal
5	Taluk in which situated	: Sulur
6	District in which situated	: Coimbatore
7	Extent of quarry (in ha.)	: 1.62.0Ha
8	Latitude & Longitude of all corners of the quarry site	: 10°58'42.36"N to 10°58'46.40"N 79°06'46.16"E to 79°06'52.53"E
9	Topo Sheet No.	: 58 - F/01
10	Type of mining	: Opencast Semi-Mechanized of Mining
11	Period of quarrying proposed	: 5 years
12	Production (Quantity in m ³) & depth (m)	: 81295m ³ of Rough Stone & 1296m ³ of Gravel up to a depth of 52m (2m Gravel and 50m Rough Stone).
	Revised Production (Quantity in m ³) & depth (m)	: Revised Quantity for Five-year Production is 74,020m ³ of Rough Stone & 1,296m ³ Gravel up to a depth of 47.0m (Max) (2m Gravel and 45m Rough Stone).
13	Depth of quarrying	: 47m
14	Depth of water table	: 55m-60m BGL
15	Man Power requirement per day:	: 16 Nos.
16	Source of Water Requirement	: water vendors & Existing Borewell
17	Water requirement: 1. Drinking & domestic purposes (in KLD)	: 2.0 KLD 1.0 KLD 0.5 KLD

	2. Dust suppression, Green Belt & Wet Drilling (in KLD)	0.5 KLD
18	Power requirement	TNEB
19	Whether any habitation within 300m distance	: No
20	Precise area communication approved by the, District Collector, with date	: Na.Ka.No.476/Kanimam/2022, dt: 06.07.2022
21	Mining Plan approved by Assistant Director, Department of Geology and Mining with date	: Roc.No.476/Mines/2022, dt: 08.07.2022.
22	Assistant Director, Department of Geology and Mining 500m cluster letter	Rc.No.476/Mines/2022, dt: 08.07.2022
23	VAO certificate regarding 300m radius cluster	Letter dt: 15.07.2022
24	Project Cost (excluding EMP cost)	: Rs.44.70 Lakh
25	EMP cost	: Rs.67.17 Lakhs/5 Years
26	CER cost	: Rs.5 Lakhs

Based on the presentation and documents furnished by the project proponent, SEAC decided to obtain the following additional details from the PP.

- i. Revised quantity after formation and alignment of benches including photographs of fencing & Green belt.
- ii. Certified compliance report obtained from the IRO, MoEF & CC, Chennai (or) the DEE/TNPCB for the prior EC received in 2017 from the DEIAA.

Subsequently, the proposal was placed in the 569th Authority meeting held on 09.11.2022. The Authority after detailed discussions, decided to seek the following additional particulars.

- i. Details of impact of previous mining activity around the proposed mining area on the following
 - a) Soil health & bio-diversity.
 - b) Climate change leading to Droughts, Floods etc.
 - c) Aquatic & terrestrial vegetation in regard to pollution leading to release of Greenhouse gases (GHG), rise in Temperature. & Livelihood of the local people.
 - d) Possibilities of water contamination and impact on aquatic ecosystem health.
 - e) Agriculture, Forestry & Traditional practices.


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- f) Bio-geochemical processes and its foot prints including environmental stress.
- g) Sediment geochemistry in the surface streams & and water bodies.
- h) Erosion, Loss of habitat and land scape changes.
- i) Heavy metal contamination due to mine flow, acid flow from the proposed mining site during mining project period and post mine closure period.

In this connection, PP has furnished reply vide lr. Dt: 29.11.2022 and submitted modified mining plan & CCR from IRO (South Eastern Zone), MoEF&CC and details sought by the Authority.

As per modified mining plan, the revised quantity for Five-year Production is 74,020m³ of Rough Stone & 1,296m³ Gravel up to a depth of 47.0m (Max) (2m Gravel and 45m Rough Stone) and the revised production details is given below

MINEABLE RESERVES								
Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in m ³	Gravel Formation in m ³	Mineable Reserves of Rough stone in m ³	
XY-AB	IV	104	31	5	16120		16120	
	V	100	21	5	10500		10500	
TOTAL								26620
XY-CD	VII	81	50	5	15250		15250	
	VIII	58	40	5	11200		11200	
	IX	51	30	5	7650		7650	
	X	46	20	5	4600		4600	
TOTAL								38700
XIV- CD	I	54	12	2	1296	1296		
	II	49	12	5	2940		2940	
	III	39	12	5	2340		2340	
	IV	29	12	5	1740		1740	
	V	19	12	5	1140		1140	
	VI	9	12	5	540		540	
TOTAL							1296	8700
GRAND TOTAL							1296	74020


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Year	Section	Bench	Length in m	Width in (m)	Depth in (m)	Volume in m ³	Overall Permittance in m ³	Allowable Reserve of Rough Stone in m ³
I	XITL- CD	I	64	12	3	1296	1296	
		II	49	12	5	2940		2940
		III	39	12	5	2340		3540
		IV	39	12	5	1740		3740
		V	19	12	5	1140		3340
		VI	9	12	5	540		540
	XY-AB	IV	59	31	5	7755		7755
TOTAL							1296	16410
II	XY-AB	IV	64	31	5	6320		6320
		V	69	31	5	6405		6405
TOTAL								12725
III	XY-AB	V	39	31	5	2109		2109
		XY-CD	59	30	5	8730		8730
TOTAL								10839
IV	XY-CD	VII	39	60	5	6300		6300
		VIII	59	40	5	10800		10800
TOTAL								17100
V	XY-CD	VII	6	40	5	1200		1200
		IX	51	39	5	9945		9945
		X	49	39	5	4855		4855
TOTAL								16000
GRAND TOTAL							1296	74020

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the period of 5 Years and the ultimate depth of mining is upto 47m BGL and for the production of 74020 m³ of Rough Stone & 1296m³ of Gravel and however, the annual peak production shall not exceed 16,770 cu.m of Rough Stone & 1296 m³ of Gravel subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF & CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 pertaining to the mine working operations in the proposed quarry from the DMS, Chennai before obtaining the CTO.


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3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961 before the obtaining the CTO from the DEE/TNPCB.
4. The proponent shall maintain 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.
5. Further, the PP shall maintain the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 / 10 m as it is designed to take care of run-off water (size, gradient and length) before obtaining the CTO from TNPCB.
6. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
7. The PP shall carry out maximum of TWO rounds of controlled blast per day, restricted to the maximum of 50 to 60 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 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 20 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
8. However, within one year from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of Blast parameters for reducing the impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarry by adopting appropriate controlled blasting techniques', by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal and Anna University - 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.

9. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
10. 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.
11. 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.
12. 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.
13. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.
14. The PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 3 years of operation whichever is earlier, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal and Anna University - 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.
15. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.


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16. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and Its Integrated Regional Office (IRO) located in Chennai.
17. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
18. As per the MoEF& CC Office Memorandum F.No. 22-65/2017-(A.II) dated: 30.09.2020 and 20.10.2020 the proponent shall adhere EMP furnished.
19. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the activities as committed for the Panchayat union Middle School, Sular before obtaining CTO from TNPCB.

Agenda No: 359-02

(File No: 7016/2021)

Proposed Brick Earth quarry lease area over an extent of 2.07.0 Ha at S.F.Nos. 210/2, 209/5, 211/2, 209/7 and 210/3, Vengalur Group and Village, Paramakudi Taluk, Ramanathapuram District, Tamil Nadu by Thiru. R.Sankaranarayanan - For Environmental Clearance . (SIA/TN/MIN/40843/2019 Dt. 07.08.2019).

The proposal was placed in this 359th SEAC meeting held on 02.03.2023. The project proponent gave a detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
2. The salient features of the proposed project as follows

Name of the Owner/Firm	Thiru.R.Sankaranarayanan, Sri Arunaachiyamman Chamber Bricks, Mankulam Village.
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		Manamadurai Taluk, Sivagangai District - 630 606.
2.	Type of quarrying	Brick Earth
3.	S.F No. Of the quarry site with area break-up	210/2, 209/5, 211/2, 209/7 and 210/5
4.	Village in which situated	Vengalur Group and Village
5.	Taluk in which situated	Paramakudi
6.	District in which situated	Ramanathapuram
7.	Extent of quarry (in ha.)	2.07.0Ha
8.	Period of quarrying proposed	1 year
9.	Type of mining	Opencast Semi - Mechanized Mining with no drilling and blasting
10.	Production (Quantity in m ³)	As per the mining plan, the lease period is for one year. The production for one year not to exceed - 12,373 m ³ of Brick earth with ultimate depth of 1m (BGL).
11.	Annual peak Production (Quantity in m ³)	The annual peak production is 12373 cu.m of brick Earth.
12.	Ultimate Depth of quarrying	1m (BGL)
13.	Depth of water table	25m BGL
14.	Latitude & Longitude of all corners of the quarry site	09°31'44"N to 09°31'54"N 78°29'42"E to 78°29'49"E
15.	Top Sheet No.	58 - X/10
16.	Man Power requirement per day:	7 Nos.


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17.	Precise area communication approved by the District Collector, with date	Rc.No.1421/G&M.1/2018, Dated: 29.01.2019
18.	Mining Plan approved by Deputy Director, Department of Geology and Mining with date	Rc.No.1421/G&M.1/2018, Dated: 13.02.2019
19.	Deputy Director, Department of Geology and Mining 500m cluster letter	Rc.No.1421/G&M.1/2018, Dated: 18.07.2019
20.	VAO certificate regarding 300m radius cluster	Letter Furnished and dated nil.
21.	Water requirement:	2.0 KLD
22.	Power requirement a. Domestic Purpose	TNEB
23.	Project Cost	Rs.9,35,000/-
24.	EMP cost	Capital cost and recurring cost – Rs. 5.38 lakhs.
25.	CER cost	Rs.2,00,000/- as accepted by the PP

3. Earlier, this proposal was placed in the 268th SEAC Meeting held on 29.4.2022. Based on the presentation and document furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance, subject to the conditions as stated therein. In addition to the standard conditions issued by the MOEF & CC.
4. Subsequently, this proposal was placed in the 513th Authority meeting held on 30.05.2022. The Authority after detailed discussion, decided to call for the following details from the project proponent.
- To furnish the types of trees & No. of trees including (Palmyra trees) present within the proposed mine lease area.
5. Based on the proponent's reply vide letter dt: 27.06.2022, this proposal was again placed in the 551st Authority meeting held on 19.09.2022. After detailed

discussion, the Authority decided to request the Member Secretary SEIAA-TN to refer back the proposal to SEAC-TN stating the following reasons,

- i. The consent of Pattadhars not been registered.
 - ii. As per the order of Hon'ble Madurai Bench of Madras High Court Dated:28.08.2019 in WP (MD) No.20903 of 2016, the sand content should not be more than 40%. It is ascertained from the mineral composition analysis report issued by University of Engineering, Anna University, Dindigul, the sand content is more than 40%. The above said facts may be clarified.
 - iii. The kml file uploaded in the parivesh portal is not opening.
6. Further, this subject was again placed for reappraisal in the 322nd SEAC meeting held on 19.10.2022. Based on the presentation made by the proponent, SEAC noted and decided to call for details as follows.
- The PP shall furnish registered consent document from all pattadhars.
 - The composition/component of the minerals proposed to be quarried shall be tested in the laboratories authorized by the Dept of Geology & Mining such as Dept of Civil Engineering, NIT Trichy (or) Anna University - Dept of Soil Mechanics, CEG Campus and forwarded through AD/DD Mines following the directions of the Madurai High Court Judgement in this regard. However, the soil sample shall be extracted from the proposed quarrying area following the guidelines stipulated by the Dept of Geology & Mining in the presence of the Consultant/EIA Coordinator using proper methods & tools. The test certificate shall be vetted by the concerned Asst Director (Geology and Mining).
 - The proponent should produce a letter from the concerned Asst Director (Geology and Mining) stating that the location of quarry site does not lie adjoining to the rivers, streams, canals etc., and also does not come under any notified/declared protected zones in terms of the above Judgment. On receipt of the above details, SEAC would further deliberate on this project and decide the further course of action.


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Now, the PP had submitted a reply vide letter dated: 23.01.2023. Hence, the proposal was placed in this 359th SEAC meeting held on 02.03.2023. During the presentation, the SEAC noted the following.

- i. The PP has obtained consent registration from the pattadhars for these S.F.Nos. 209/5, 210/5, 211/2 only and the PP has requested EC for the same.
- ii. The PP has obtained mineral composition letter from Anna University, CEG Campus and the test report was vetted by the concerned Asst. Director (Geology and Mining) vide Roc.No.1421/G&M.1/2018, dated:20.01.2023.
- iii. The PP has obtained letter from the concerned Asst. Director (Geology and Mining) vide Roc.No.1421/G&M.1/2018, dated:09.11.2022 stating that the location of quarry site does not lie adjoining to the rivers, streams, canals etc., and also does not come under any notified/declared protected zones.

Based on the presentation made by the proponent and the documents, SEAC decided to recommend the proposal for the grant of Environmental Clearance for quantity of 12,373 m³ of Brick Earth for the period of 1 year with maintaining an ultimate pit depth of 1m BGL, subject to the standard conditions & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The concerned AD/DD, Dept. of Geology and Mining shall examine the documents related to land registration and ensure the ownership of the land proposed by the PP before execution of the lease agreement.
3. Tree plantation & fencing around the mine lease area shall be completed before obtaining the CTO, from the TNPCB.
4. The proponent shall mandatorily appoint the required number of statutory officials and the competent persons in relevant to the proposed quarry site as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.


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5. 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.
6. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
7. 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 i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not 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.
8. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
9. The proponent shall ensure that the slope of dumps is suitably vegetated in scientific manner with the native species to maintain the slope stability, prevent erosion and surface run off. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps.
10. 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 and submit the consolidated report to TNPCB once in six months.


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11. 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. The report on the periodic monitoring shall be submitted to TNPCB once in 6 months.
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 to be adopted by considering the wind direction.
13. 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 in consultation with the DFO, State Agriculture University. 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.
14. 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
15. **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.
16. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
17. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50m 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.

18. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
19. The proponent shall ensure that the transportation of the quarried materials 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 rough stones; and transport of rough stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
20. 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.
21. After mining operations are completed, the mine closure activities as indicated in the mine closure plan shall be strictly carried out by the Proponent fulfilling the necessary actions as assured in the Environmental Management Plan.
22. The Project proponent 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 that is fit for the growth of fodder, flora, fauna etc.
23. 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.
24. The project proponent shall ensure that the provisions of the MMRD, 1956, 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.
25. 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


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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.

26. 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.
27. 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.
28. 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.
29. The Project proponent shall install a Display Board at the entrance of the mining lease area/abutting the public Road, about the project information as shown in the Appendix -II of this Minutes.
30. 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.
31. As accepted by the Project proponent the CER cost is Rs. 2.0 lakhs and the amount shall be spent for the committed activities in Nedungulam Primary School, as committed, before obtaining CTO from TNPCB.

Agenda No: 359 - 03

(File No: 9368/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 1.73.0 Ha at S.F.Nos. 337/2 of Pachapalayam Village, Sulur Taluk, Coimbatore District, Tamil Nadu by Tmt. K. Bhakhyalakshmi -For Environmental Clearance (SI/TN/MIN/272724/2022, 16.05.2022).

The proposal was placed in this 359th meeting of SEAC held on 02.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:


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1. The Project Proponent, Trmt. K. Bhakiyalakshmi has applied for Environmental Clearance for the Proposed Rough Stone & gravel quarry lease over an extent of 1.73.0 Haat S.F.Nos. 337/2, Pachapalayam Village, Sulur Taluk, Coimbatore District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. Earlier online appl No. SIA/TN/MIN/131536/2019 dt: 14.12.2019 (File No. 7365/2020) was appraised vide 156th SEAC meeting held on 18.06.2020. Based on the presentation made by the proponent and the documents furnished, the Committee noted that the earlier EC was granted by SEIAA vide Lr. Dt: 18.07.2013 to a depth of 31.5m whereas the proponent has mined to a depth of 41.5m as per the report furnished during presentation. When clarification was requested by the SEAC, consultant explained that before EC was granted to a depth of 31.5 m already 10m depth was mined out, totalling to 41.5m. The proponent has mined out only 31.5 m as per the EC granted. However, neither proponent nor the consultant has furnished document evidence from competent authority for the same. Hence the Project Proponent was instructed to get clarification for the above from the Assistant Director, Department of Geology and Mining, Coimbatore.
4. Meanwhile, the PP had submitted a new application vide online No. 272724/2022 dated: 16.05.2022 (9368/2022) for the same in the parivesh portal without disclosing the fact of previous application submitted by the proponent.
5. The PP had submitted a reply for the queries raised in the 156th meeting of SEAC held on 18.06.2020.

Now, the subject was placed in this 359th meeting of SEAC held on 02.03.2023. During the meeting, the EIA coordinator has submitted an explanation letter. The Committee, hence, directed the PP to withdraw the new application submitted vide online application 272724/2022 dated: 16.05.2022 (9368/2022), after which the Committee will examine the replies given in File No. 7365.


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Agenda No: 359 - 04

(File No: 9415/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 1.10.5 Ha at S.F.Nos. 492/A3 & 492/B2 of Kodanthur South Village, Aravakurichi Taluk, Karur District, Tamil Nadu by Thiru.R.Gunasekaran -For Environmental Clearance (SI/TN/MIN/284685/2022, 22.07.2022).

The proposal was placed in this 359th meeting of SEAC held on 02.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
2. Quarrying in this lease area was earlier carried out and Environmental clearance was obtained from SEIAA, Tamil Nadu vide Lt.No. SEIAA-TN/F.No.2201/EC/1(a)/119/2013 dated 15.04.2014 for Rough stone quarrying for the quantity of 103360 cu.m of Rough Stone upto a depth of 12m at S.F.Nos. 492/A1, A2, A3, 492/B1 & 492/B2 of Kodanthur South Village, Aravakurichi Taluk, Karur District, Tamil Nadu over 3.99.5 Ha of the lease area.

Quantitative Assessment (Table No. 303)
The quarrying is restricted up to a depth of 12m only. Availability of Resources is given below.

Dimensions
 Maximum Length = 330m
 Maximum Width = 175m
 Maximum Depth = 12m

Table-1

Suction	Width	Length in (m)	Width in (m)	Depth in (m)	Volume in m ³	Geological Resources of Rough Stone in m ³	Proposed
Total							

3. Earlier Precise area communication issued vide Rc.No.611/mine/2014. Dated: 02.06.2014 states that

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மேட்டி ஆபத்தினால் செயற்கை ஆணை எண்.243/எஃஃ/2013, திகி.14.08.2013ஆய் ரத்து செய்யப்பட்டது எனவும், தற்போது அதே ஸ்மார்ட் லைசன்ஸ் தராத திரு.ஆர்.குணசேகரன் என்பவர் நினைக்கப்படும் செயற்கை ஆணை, லைசன்ஸ் ஸ்மார்ட் செயற்கை ஆணையாக, திரு. குணசேகரன் என்பவர் கீழ்க்கண்ட சந்தர்ப்பம் உட்பட செயற்கை ஆணைக்கு சம்பந்தம் ஏற்படுத்தி ஸ்மார்ட் ஆணை.492/A1, A2 மற்றும் 111 ஆகியவற்றில் உள்ளது எனவும், ஸ்மார்ட் ஆணை.492/A3 மற்றும் 492/B2 ஆகியவற்றில் ஏற்படுத்தும் ஏதும் திட்டம் எனவும், ஏற்படுத்தும் திட்ட அளவின் வரம்பில் மேட்டி ஆபத்தினால் திட்டமிடும் திட்டமிடும் ஸ்மார்ட் ஆணை.492/A3 மற்றும் 492/B2 ஆகியவற்றில் ஏற்படுத்தும் ஏதும் திட்டம் 10 மீட்டர் முதல் 15 மீட்டர் வரம்பில் தரப்படும் எனவும், ஸ்மார்ட் ஆணை.492/A3 மற்றும் 492/B2 ஆகியவற்றில் ஏற்படுத்தும் ஏதும் திட்டம் 1 முதல் 2 மீட்டர் வரம்பில் தரப்படும் எனவும், அந்தந்த சந்தர்ப்பம் வரம்பில் தரப்படும் எனவும்.

4. Hence, the Existing pit depth is 15m.
5. The PP has obtained Certified Compliance Report vide Lr.No. E/P/12.1/2022-23/SEIAA/107/TN/103 dated: 22.09.2022.
6. It has been observed that the quarry lease area is demarcated on the ground with wire fencing and the PP is carrying out Green belt development.
7. The solar panels are located 600m away from the proposed project site.
8. The salient features of the proposed project as follows

1.	Name of the Owner/Firm	Thiru.R.Gunasekaran, S/o.Ramasamygounder, Door No.4/171-1, Pon Nagar, Aandankovil East, Manmangalam, Karur -639002.
2.	Type of quarrying	Rough Stone and Gravel
3.	S.F No. of the quarry site with area break-up	492/A3 & 492/B2
4.	Village in which situated	Kodanthur south
5.	Taluk in which situated	Aravakurichi
6.	District in which situated	Karur

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7.	Extent of quarry (in ha.)	1.10.5 Ha
8.	Period of quarrying proposed	5 Years
9.	Type of mining	Opencast -Semi Mechanized mining
10.	Production (Quantity in m ³)	As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 125415 cu.m of Rough stone & 12870 cu.m of Gravel.
11.	Annual peak Production (Quantity in m ³)	The annual peak production is 25960 cu.m of rough stone & 5590 cu.m of Gravel.
12.	Existing depth	15m
13.	Ultimate Depth of quarrying	40m BGL (2m Gravel + 38m Rough Stone)
14.	Depth of water table	60m in summer to 55m in rainy season
15.	Latitude & Longitude of all corners of the quarry site	10°54'43.90" N to 10°54'47.79" N 77°47'4.11" E to 77°47'7.45" E
16.	Top Sheet No.	58 F/13
17.	Man Power requirement per day:	14 nos
18.	Precise area communication issued with date	Rc.No.121/mines/2021. Dated: 28.06.2022.
19.	Mining Plan approved by Deputy Director, Department of Geology and mining with date	Rc.No.121/mines/2021, Dated: 12.07.2022.
20.	500m cluster letter issued Deputy Director, Department of Geology and mining with date	Rc.No.121/mines/2021, Dated: 14.07.2022.
21.	VAO certificate regarding 300m radius cluster	Letter Dated: 02.07.2022

22.	Water requirement: 1. Drinking & Domestic Water (in KLD) 2. Dust suppression(in KLD) 3. Greenbelt (in KLD)	4.0 KLD 2.5 KLD 1.0 KLD 0.5 KLD
23.	Power requirement b. Domestic Purpose	TNEB 102486Litres of HSD
24.	Project Cost	Rs.72,50,675/-
25.	EMP cost	Capital cost: Rs.23,55,519/- Recurring cost/annum: Rs.14,44,540/-
26.	CER cost	Rs.5,00,000/- as accepted by the PP

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for total excavation quantity exceed 1,25,415m³ of rough stone & 12,870m³ of Gravel with maintaining an ultimate pit depth of 40m BGL & annual peak production capacity of 25960 cu.m of rough stone & 5590 cu.m of Gravel subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
3. The PP shall submit the 'Notice of Opening' of the quarry to the Regional Inspector/Director of Mines Safety, Chennai Region under the section 16 of the


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Mines Act, 1952 and in accordance with the Reg. 3 of MMR 1961 before obtaining the CTO.

4. The proponent shall construct 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/map showing the same before obtaining the CTO from TNPCB.
5. Further, the PP shall construct the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
6. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.
7. However, the PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 2 years of operation whichever is earlier, by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. 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.
8. As a part of EC Compliance, the PP shall carry out the tree plantation (2000 nos) to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
9. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarries.

10. The PP shall carry out maximum of two rounds of controlled blast only per day, restricted to the maximum of 50 to 60 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 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 10 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
11. However, as few structures are located within 200-300 m, the PP shall carry out the scientific studies on 'Design of Blast parameters for reducing the impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarry by adopting appropriate controlled blasting techniques', within one year from the commencement of mining operations, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal and Anna University – 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.
12. 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.
13. The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him only as per the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
14. The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
15. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.


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16. The PP shall carry out the comprehensive hydrogeological studies within 2 years from the commencement of the quarrying operation to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, Anna University Chennai-Dept of Geology, CEG Campus, and University of Madras -Dept of Geology, Chennai etc shall be carried out before the commencement of mining operations. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
17. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
18. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
19. As per the MoEF& CC Office Memorandum F.No. 22-65/2017-1A.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere EMP furnished.
20. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Panchayat Union Middle School, Kodanthur Village as committed, before obtaining CTO from TNPCB.

Agenda No: 359-05


(File No: 8529/2022)

Proposed Rough Stone Quarry lease over an extent of 3.35.0Ha in S.F.Nos.63/2 (Part) of Bargur Village, Bargur Taluk, Krishnagiri District, Tamil Nadu by Thiru.C.Selvan – For Environmental Clearance. (SIA/TN/MIN/405429/2022, dated 05.11.2022)

The proposal was placed in this 359th meeting of SEAC held on 02.03.2023. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following:


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1. The project proponent, Thiru.C.Selvan has applied for Environmental Clearance for the Proposed Rough Stone Quarry lease over an extent of 3.35.0Ha in S.F.Nos.63/2 (Part) of Bargur Village, Bargur Taluk, Krishnagiri District, Tamil Nadu.
2. The project/activity is covered under category "B1" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006, as amended.
3. ToR issued vide Letter No. SEIAA - TN/F.No.8529/SEAC/ToR-993/2021 dated 28.07.2021 restricting the maximum depth of mining to 43m considering the environmental impacts due to the mining, safety of the working personnel and following the principle of the sustainable mining and consequently the maximum minable quantity of 7.99,240 cu.m of Rough stone is permitted for mining over five years.
4. Public Hearing on 15.06.2022
5. EIA report submitted on: 07.11.2022.

Details of the Project		
1.	Name of the Owner / Firm	Thiru.C. Selvan S/o. Chinnamaadhu No.4/268, Kumbalapadi Indur, agar Koodal Village Dharmapuri - 636 803
2.	Type of quarrying (savudu / Rough stone / Sand / Granite)	Rough Stone
3.	S.F No. of the quarry site	63/2 (p)
4.	Village	Bargur
5.	Taluk	Bargur
6.	District	Krishnagiri
7.	Extent of Quarry (In ha.)	3.35.0Ha Government land
8.	Period of Quarrying proposed	5 years
9.	Type of Mining	Open cast semi mechanized method
10.	Production (Quantity in m ³)	As per the approved mining plan. Geological reserves:


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		17,90,278 cu.m of Rough stone and the Ultimate depth is 57m 5-year Production: 5,29,243 cu.m of Rough stone -Restricted as per ToR The annual peak production as per mining plan is 1,45,730 cu.m of Rough Stone (2 nd year)
11.	Proposed Depth of Mining	41m
12.	Latitude & Longitude of all corners of the quarry site	12° 33' 21.83"N to 12° 33' 31.00"N 78° 21' 43.58"E to 78° 21' 53.65"E
13.	Topo sheet No.	57- L/06
14.	Man power requirement	13 Nos
15.	Precise Area Communication	Roc.No.211/2019/Mines dated 13.06.2019
16.	Mining plan approval letter	Roc.No.211/2019/mines dated. 06.09.2019
17.	500m letter	Roc.No.211/2019/mines dated. 24.10.2019
18.	Water requirement: 1. Drinking & domestic purposed (in KLD) 2. Dust Suppression (in KLD) & Green Belt (in KLD)	2.5 KLD 0.5 KLD 1.0KLD & 1.0 KLD
19.	Power requirement: a. Domestic purpose b. Industrial Purpose	TNEB DG set
20.	Depth of Water table	65m
21.	Whether any habitation within 300m distance	No
22.	Project cost	Rs. 64,00,000/-
23.	EMP cost	Capital Cost- Rs. 19,57,000/- Recurring Cost/Annum- Rs. 12,32,950/-
24.	CER cost	Rs. 5,00,000/-
25.	VAO letter dated	Letter dated: 04.02.2021

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the production quantity of 5,29,243 cu.m of Rough Stone to the depth of 41m for a period of 5 years and however not exceeding the annual peak production of 1,45,730


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m³ of Rough stone as per the approved mining plan subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The Project Proponent (PP) shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region before obtaining the CTO and get the necessary statutory permission under the MMR, 1961 pertaining to the quarry working operations.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
4. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Refresher' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy.
5. The Project Proponent shall furnish slope stability action plan to the concerned AD (Mines) for the planned working by maintaining appropriate benches incorporating the haul road with proper gradient as the depth of the proposed quarry is exceeding 30 m, before obtaining CTO from TNPCB.
6. However, the Project Proponent shall carry out the scientific studies to assess the slope stability of the benches of the proposed quarry (or) the benches made in all the quarries of this duster site collectively if amalgamation is done and when the depth of the working touches 30 m (or) during the 3rd year whichever is earlier, by involving any of these reputed Research and Academic Institutions


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· CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal and Anna University – 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..

7. Since few habitations are located within 160-300 m, the PP shall obtain necessary permission from the Regional inspector of Mines (Director of Mines Safety), DGMS, Chennai Region after the execution of the lease before the commencement of quarrying operations to carry out the scientific studies on 'Design of Blast parameters for reducing the impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarry by adopting appropriate controlled blasting techniques', by involving any of these reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal and Anna University – 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.
8. The Project Proponent shall develop the Green belt activities (tree plantations) in the safety zone as stipulated in the Mining Plan around the periphery of the proposed quarry lease before obtaining the CTO from the TNPCB.
9. The Project Proponent shall not carry out the secondary rock breakage involving blasting operations and use only the non-explosive techniques such as rock breaker, etc.
10. The Project Proponent shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.

11. The Project Proponent 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.
12. The Project Proponent shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him as per the provisions of MMR 1961.
13. The Project Proponent shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
14. The Project Proponent shall also install necessary dust and noise extraction system around mineral handling area with proper enclosures before obtaining the CTO from TNPCB.
15. Since the quarry is located in the cluster, the Project Proponent shall ensure strict compliance of the provisions given under the Mines Rules, 1955 for the health and welfare of the persons employed therein.
16. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
17. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
18. 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.


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19. As accepted by the Project proponent the CER cost is Rs. 5.0 lakh and the amount shall be spent for the activities committed during SEAC appraisal before obtaining CTO from TNPCB.

20. The Project Proponent shall cater to the needs of the local population such as employment opportunities, adequate Air Pollution Control measures etc, as committed during public hearing.

Agenda No: 359 - 06

(File No: 4400/2022)

Existing Black Granite quarry over an extent of 1.30.5Ha at S.F.No. 47/4, Kunnam Village, Vanur Taluk, Kancheepuram District, Tamil Nadu by M/s. Enterprising Enterprises - for Terms of Reference under violation.
(SIA/TN/MIN/23671/2019, 07/04/2018)

The proposal was placed in this 359th Meeting of SEAC held on 02.03.2023. The project proponent gave detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, M/s. Enterprising Enterprises, has applied for the Terms of Reference under violation for the Existing Black Granite quarry over an extent of 1.30.5Ha at S.F.No. 47/4, Kunnam Village, Vanur Taluk, Kancheepuram District, Tamil Nadu
2. The proposed quarry/activity would fall under Category "B" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The Lease was granted by Industries department vide G.O. Ms. No. 125 dated: 02.04.1993. The lease was executed on 06.04.1993 and lease expires on 05.04.2023.
4. Earlier The proposal was placed in the 567th Authority meeting held on 08.11.2022. After detailed discussion, SEIAA noted that
 1. The proposal was placed in 79th SEAC meeting and subsequently in 112th SEAC meeting held on 29.05.2018.

The proposal was recommended for the grant of Standard TOR for mining projects as specified by MoEF & CC subject to the above conditions in


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addition to the Additional TOR specified by the SEAC to deal with the violation aspects of the mining projects.

2. Subsequently, the proposal was placed in 309th Authority meeting held on 01.06.2018.

The Authority discussed in detail; it was found that the mining plan presented by the proponent during approval is not enclosed. The mining plan given in the proposal has also expired in the year 2017-18. Hence, the Authority decided to address the applicant to furnish the approved mining plan.

3. Subsequently, a letter was addressed to the PP vide Lr No. SEIAA-TN/F.4400/2017 Dated 07.06.2018 to furnish the details called for in 309th SEIAA meeting.

Subsequently, a letter was addressed to the PP vide Lr No. SEIAA-TN/F.4400/2016/NGT Dated 28.10.2020 to furnish the following details to Member Secretary, SEIAA-TN within thirty days from the date of receipt of this letter so as to consider your proposal for EC/ToR under both violation or non-violation categories in accordance with existing Rules.

1. The details of validity of Mining plan as approved by the competent Authority.
2. Copy of approved scheme of mining in case of renewal.
3. Letter stating that the quarry lease deed has not been cancelled or terminated and is subsisting as on date.
4. Present status of operation of quarry.
5. Details of abandoned/expired, existing and proposed quarries located within 500m radius of the quarry lease area in the prescribed format obtained from AD/DD of the Department of Geology and Mining
6. The latest VAO certificate regarding the location of habitations within 300m radius from the periphery of the site.

If any reply is not received within the stipulated time, it will be construed that you are not interested in the continuing the project and your file will


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be recorded without further notice. It is also informed that the processing fee will also be forfeited without further notice.

4. Further, the proponent has given a reply letter to the previously called for additional details dated: 28.11.2020 received to the O/o SEIAA on 02.12.2020.
5. Subsequently, the proponent has submitted a request letter dated 28.11.2020 received to the O/o SEIAA on 19.03.2021 stating that

"The documents sought from us namely the details of validity of Mining Plan as approved by the competent Authority and the copy of approved scheme of mining in case of renewal is pending with the concerned authority, we will submit the same to the Hon'ble Authority as and when we receive it.

Therefore, in view of the judgment in NGT OA 136/2017 and W.M.P. Nos. 3361, 3362 & 3721 of 2018 and W.P. No. 11189 of 2017, it is clear that we do not fall under the violation category as our Application for EC dated 23.10.2015 is prior to the cutoff 31.03.2016 as specified by the Hon'ble Apex Court in Deepak Kumar vs. State of Haryana and Ors. (2012 (4) SCC 629) and as stated by the Hon'ble NGT (52) in M/s. Gem Granites vs. MOEF&CC and Ors. O.A. No. 140/2017, 281/2017 and 282/2017.."

Hence, in the view of the above facts, SEIAA decided to refer back the proposal to SEAC for further scrutiny and appraisal and recommend its remarks to SEIAA.

Based on the presentation and documents furnished by the project proponent, SEAC decided to grant of Terms of Reference (TOR) under Violation category, and subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and the EIA/EMP report along with assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter by the accredited consultants.

1. The PP shall furnish an Independent Chapter 13 as per the MoEF & CC Violation Notification – S.O. 804 (E), dated. 14.03.2017 prepared by the accredited consultants within a period of one year from the issue of this specific ToR, comprises of assessment of ecological damage for the project activities carried out during the violation period, and the remediation plan and natural & community resource augmentation plan corresponding to the ecological damage assessed and economic benefit derived due to violation as a condition of Environmental Clearance.
2. The proponent must submit approved scheme of mining along with EIA Report for the proposed period of quarrying approved by the competent authority.
3. The proponent must withdraw the duplicate applications in Parivesh Portal vide Online proposal Number SIA/TN/MIN/27198/2018 dated: 09.09.2017.
4. The PP shall enumerate the details of the structures/sheds and its age, type & nature of construction with photographs located in 50m, 100m, 200m : 300m along with number of habitants, etc.
5. As a part of procedural formalities as per the MoEF & CC Violation Notification – S.O. 804 (E), dated. 14.03.2017, the action will be initiated by the competent authority under section 15 read with section 19 of the Environment (Protection) Act, 1986 against violation.
6. The PP shall furnish a letter from DFO on the proximity details of nearest Reserve Forest, Wild Life sanctuaries & Protected areas with respect to the proposed project site.
7. The proponent must submit 500m cluster certificate along with EIA Report, if not submitted earlier.
8. In the case of proposed lease in an existing (or old) quarry where the benches are not formed (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed


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quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.

9. The Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry during the appraisal while obtaining the EC, when the depth of the working is extended beyond 30 m below ground level.
10. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/1 Class mines manager appointed by the proponent.
11. The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site.
12. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
 - a) What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
 - b) Quantity of minerals mined out.
 - c) Highest production achieved in any one year
 - d) Detail of approved depth of mining.
 - e) Actual depth of the mining achieved earlier.
 - f) Name of the person already mined in that leases area.
 - g) If EC and CTO already obtained, the copy of the same shall be submitted.
 - h) Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.

12. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology and geology of the mining lease area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
13. The PP shall carry out Drone video survey covering the cluster, Green belt , fencing etc.,
14. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.
15. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment and the remedial measures for the same.
16. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
17. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided.


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18. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.
19. The Proponent shall carry out the Cumulative impact study due to mining operations carried out in the quarry specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
20. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
21. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
22. Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided.
23. Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be considered.


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24. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
25. Impact on local transport infrastructure due to the Project should be indicated.
26. A tree survey study shall be carried out (nos., name of the species, age, diameter etc.) both within the mining lease applied area & 300m buffer zone and its management during mining activity.
27. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
28. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
29. The Public hearing advertisement shall be published in one major National daily and one most circulated Tamil daily.
30. The PP shall produce/display the EIA report, Executive summary and other related information with respect to public hearing in Tamil Language also.
31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
32. 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-I in consultation with the DFO, State Agriculture University. The plant


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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.

33. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted 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
34. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
35. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
36. Occupational Health Impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
37. Public health Implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
38. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

39. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
40. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
41. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site photographs which shall duly be certified by MoEF&CC, Regional Office, Chennai (or) the concerned DEE/TNPCB.
42. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
43. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

Agenda No: 359 - 07

(File No: 9375/2022)

Proposed Rough Stone and Gravel quarry over an extent of 2.49.00 Ha at S.F.No.594 (Part) of Prancheri Village, Manur Taluk Tirunelveli District, Tamil Nadu by Thiru P Manokaran - for Environmental Clearance.

(SIA/TN/MIN/281629/2022, 05.07.2022)

The proposal was placed in this 359th Meeting of SEAC held on 02.03.2023. The project proponent gave detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

5. The Project Proponent, Thiru P Manokaran, has applied for the **Environmental Clearance** for the proposed Rough Stone and Gravel quarry lease over an extent of 2.49.00 Ha at S.F.No.594 (Part) of Prancheri Village, Manur Taluk Tirunelveli District, Tamil Nadu
6. The proposed quarry/activity would fall under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.


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7. As per the mining plan, the lease period is 5 years and the mining plan period is five years. The quantum of mining for the entire five-year period should not exceed - 4,43,700 cu.m. of Rough Stone and 33,056 cu.m. of Gravel. The Annual peak production is 91,980 cu.m of Rough stone & 17,856 Cu.m of Gravel. The ultimate depth of mining- 42 metres below GL.

1	Name of the Owner/Firm	:	Thiru. P.Manoharan S/o. Paul Thomas No. 5/52, Kanavilai Street Avaralkulam,Pazhavor Rachapuram Tirunelveli - 627133
2	Type of quarrying	:	Rough stone and Gravel
3	S.F No. of the quarry site	:	594 (Part)
4	Village in which situated	:	Prancherl
5	Taluk in which situated	:	Manur
6	District in which situated	:	Tirunelveli
7	Extent of quarry (in ha.)	:	2,49.0 Ha
8	Latitude & Longitude of all corners of the quarry site	:	08°55'18.49" N to 08°55'23.90" N 77°45'08.37" E to 77°45'14.96" E
9	Topo Sheet No.	:	58-H/13
10	Type of mining	:	Opencast Mechanized Mining
11	Period of quarrying proposed	:	5 years
12	Production (Quantity in m ³)	:	4,43,700m ³ of Rough Stone & 33,056m ³ of Gravel
13	Depth of quarrying	:	42m (2m Gravel + 40m Rough stone)
14	Depth of water table	:	Depth of Summer season = 58m Depth of Rainy season = 53m
15	Man Power requirement per day:	:	40 Nos.

16	Water requirement: 1. Drinking & domestic purposes 2. Dust suppression 3. Green Belt	: 2.5 KLD 0.6 KLD 1.5 KLD 0.4 KLD
17	Power requirement a. Domestic Purpose b. Industrial Purpose	TNEB 3,60,470 Liters of HSD will be utilized for 5 years
18	Precise area communication approved by the Assistant Director, with date	: Rc.No.M3/34899/2020, Dated 02.05.2022
19	Mining Plan approved by Assistant Director, Department of Geology and Mining with date	: Rc.No.M3/34899/2020, Dated 14.05.2022
20	Assistant Director, Department of Geology and Mining 500m cluster letter	Rc.No.M3/34899/2020, Dated 14.05.2022
21	VAO certificate regarding 300m radius cluster	Letter dated: 06.06.2022
22	Project Cost (excluding EMP cost)	: Rs. 59,75,000/-
23	EMP cost	: Capital Cost - Rs. 29,76,300 Recurring Cost - Rs. 23,66,550
24	CER cost	Rs. 5,00,000

The proposal is now placed in the 359th SEAC meeting held on 02.03.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the ultimate depth of mining up to 42m BGL and the production of 4,43,700 m³ of Rough stone and 33,056 m³ of Gravel. The annual peak production shall not exceed 91,980 m³ of


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Rough stone and 17,856 m³ of Gravel subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF&CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.
2. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 pertaining to the mine working operations in the proposed quarry from the DMS, Chennai before obtaining the CTO.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961 before the obtaining the CTO from the DEE/TNPCB.
4. The proponent shall maintain 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.
5. Further, the PP shall maintain the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 / 10 m as it is designed to take care of run-off water (size, gradient and length) before obtaining the CTO from TNPCB.
6. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
7. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed


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quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.

8. However, the PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 2 years of operation whichever is earlier, by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. 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.
9. The PP shall carry out maximum of TWO rounds of controlled blast per day, restricted to the maximum of 50 to 60 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 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 20 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
10. However, within one year from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of Blast parameters for reducing the impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarry by adopting appropriate controlled blasting techniques', by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal and Anna University - 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.
11. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.


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12. 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.
13. 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.
14. 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.
15. The PP shall meticulously carry out the mitigation measures as spell out in the revised EMP.
16. Since a tank is located at a distance of 460 m from the proposed quarry site, the PP shall carry out the comprehensive hydrogeological studies within 2 years from the commencement of the quarrying operation to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal, Anna University Chennai-Dept of Geology, CEG Campus, and University of Madras -Dept of Geology, Chennai etc shall be carried out before the commencement of mining operations. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
17. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.


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18. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.

19. 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.

20. In lieu of CER, the project proponent agreed to spend an amount of Rs 5,00,000/- towards Conservation Cost in the form of Demand Draft to the Head Account of Respective DFO, as the proposal falls within 10Km radius from Protected Area - Gangaikondan Spotted Deer Sanctuary.

Agenda No: 359 - 08

(File No: 9433 /2022)

Proposed Earth Quarry over an extent of 1.47.5Ha at SF.No.1285/ 1A & 1285/ 2A of Mottanuthu Village, Andipatti Taluk, Theni District by Thiru.R. Thangapanidan - For Environmental Clearance.

(Proposal No. SIA/TN/MIN/285848/2022, dt: 28/07/2022)

The proposal was placed in this 359th Meeting of SEAC held on 02.03.2023. The project proponent gave detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Thiru.R. Thangapanidan, has applied for the **Environmental Clearance** for the proposed Earth Quarry over an extent of 1.47.5Ha at SF.No.1285/ 1A & 1285/ 2A of Mottanuthu Village, Andipatti Taluk, Theni District, Tamil Nadu
2. The proposed quarry/activity would fall under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan, the lease period is 3 years and the mining plan period is three years. The quantum of mining for the entire five-year period should not exceed - 16,380 cu.m. of Earth. The Annual peak production is 5,460 cu.m of Earth. The ultimate depth of mining- 2 metres below GL.


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TAMIL NADU FOREST DEPARTMENT

From
Thiru. Srihan R. Reddy, I.F.S.,
Principal Chief Conservator of Forests
and Chief Wildlife Warden (PAC),
Forest Head Quarters Building,
Gandhi-Velachery Main Road,
Near Kamalapuram Check Post,
Chennai - 600 032.

To
The Member Secretary,
State Environment Impact Assessment
Authority, Tamil Nadu,
3rd Floor, Paragal Building,
Saidapet, Chennai - 15.

Ref. No. WLS/29838/2022 dated 28-12-2022

Sr.

Sub: Eco Sensitive Zone - Srivilliputhur Megamalai Tiger Reserve -
Considering deemed 10 Km Eco Sensitive Zone boundary for
development projects and initiating proposal of Eco Sensitive Zone for
the Srivilliputhur Megamalai Tiger Reserve - Clarification sought for -
Regarding.

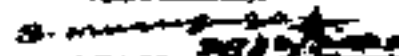
Ref: Member Secretary, SEIAA-TN letter No. SEIAA-TN/F. No. 7378/2016
dated 08-08-2022

With reference to the above, it is informed that Srivilliputhur Megamalai Tiger
Reserve does not come under the protected area. However the tiger reserve comprises
two protected areas i.e., Srivilliputhur Grizzled Squirrel Wildlife Sanctuary and
Megamalai Wildlife Sanctuary and certain non-sanctuary RPs. The "Guidelines for
preparation of Eco Sensitive Zones around National Parks and Wildlife Sanctuaries"
issued by the Government of India vide letter P. No. 1-9/2007-WL-1 (gr) dated 09-02-11
is only for National Parks and Wildlife Sanctuaries.

2) Based on the above, final notification of Megamalai Wildlife Sanctuary had
been issued by the Government of India vide S.O. No. 3651 (E) dated 10-10-2019 to an
extent of Eco Sensitive Zone varies from 'Zero' Km to 1.7 Km and Srivilliputhur Grizzled
Squirrel Wildlife Sanctuary vide S.O. No. 3974 (E) dated 30-10-2019 to an extent of Eco
Sensitive Zone varies from 'Zero' Km to 6.2 Km.

3) Hence, deemed 10 Km of Eco Sensitive Zone notification for Srivilliputhur
Megamalai Tiger Reserve is not applicable and fresh Eco Sensitive Zone notification is
also not required, since the above said two sanctuaries Eco Sensitive Zone notification
have already been issued by the Government of India.

Yours faithfully,


for Principal Chief Conservator of Forests
and Chief Wildlife Warden (PAC)



4. The proposal is for mining of Earth; the salient features of the proposal are as follows:




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1	Name of the Owner/Firm	: Thiru.R. Thangapanidan S/o Ramar No.1-92, Kaliyammankovil Street, Manjinayakkanparti, Boothipuram, Bodinaickanur Taluk, Theni District.
2	Type of quarrying	: Earth
3	S.F No. of the quarry site	: 1285/1A & 1285/2A
4	Village in which situated	: Mottanuthu
5	Taluk in which situated	: Andipatti
6	District in which situated	: Theni
7	Extent of quarry (in ha.)	: 1.47.50 Ha
8	Latitude & Longitude of all corners of the quarry site	: 09°55'18.83" N to 09°55'23.35" N 77°33'41.60" E to 77°33'46.32" E
9	Topo Sheet No.	: 58-G/09
10	Type of mining	Opencast method of shallow mining without drilling and blasting
11	Period of quarrying proposed	: 3 years
12	Production (Quantity in m ³)	: 16,380m ³ of Earth
13	Depth of quarrying	: 2m
14	Depth of water table	: 36m
15	Man Power requirement per day:	7 Nos.
16	Water requirement: 4. Drinking & domestic purposes 5. Dust suppression 6. Green Belt	: 1.0 KLD 0.3 KLD 0.4 KLD 0.3 KLD
17	Power requirement c. Domestic Purpose	TNEB


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	d. Industrial Purpose	2,730 Liters of HSD will be utilized for the entire project life
18	Precise area communication approved by the Assistant Director, with date	: Na.Ka.No.862/Kanimam/2021. Dated: 13.06.2022
19	Mining Plan approved by Assistant Director, Department of Geology and Mining with date	: Rc.No.862/2021 - Mines, Dated: 29.06.2022
20	Assistant Director, Department of Geology and Mining 500m cluster letter	: Rc.No.862/Mines/2021. Dated: 04.07.2022
21	VAO certificate regarding 300m radius cluster	: Letter dated: 30.06.2022
22	Project Cost (excluding EMP cost)	: Rs. 7.78,000/-
23	EMP cost	: Capital Cost - Rs. 4.93 Lakhs Recurring Cost - Rs. 1.68 Lakhs
24	CER cost	: Rs. 1,50,000

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the maximum period of 3 Years for the production quantity of 16,380 m³ of Earth and the peak production does not exceed 5,460 m³ of Earth/year & the ultimate depth of mining upto 2m BGL subject to the standard conditions & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority from time to time, subject to a maximum of thirty years, whichever is earlier.

2. The proponent shall mandatorily appoint the statutory competent persons accordingly for the proposed quarry size to satisfy the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
3. 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.
4. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.


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10. 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.
11. **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.
12. 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.
13. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
14. 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.
15. 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.
16. The Project Proponent shall take all possible precautions for the protection of environment and control of pollution while carrying out the mining or

processing of granite in the area for which such licence or lease is granted, as per

17. 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.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.


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23. The Project Proponent shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under.
24. 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.
25. 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.
26. 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.
27. As accepted by the Project proponent the CER cost is Rs. 1.50 lakhs and the amount shall be spent for the Government Middle School, Ganesapuram Village as committed, before obtaining CTO from TNPCB.

Agenda No: 359 - 09
(File No: 4793/2018)

Existing Grey Granite (Paradiso) Mine Lease over an extent of 1.21.0 Ha at S.F.No. 438 (part) in Jagodevipalayam Village, Bargur Taluk, Krishnagiri District, Tamil Nadu by Tmt.S. Naseera - For Environmental Clearance (SA/TN/MIN/37047/2015 dated 30.12.2015)

The proposal is placed in this 359th meeting of SEAC held on 02.03.2023. The details of the project are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Tmt.S. Naseera has applied for Environmental Clearance for the Existing Grey Granite (Paradiso) Mine Lease over an extent of 1.21.0 Ha


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at S.F.No. 438 (part) in Jagadevipalayam Village, Bargur Taluk, Krishnagiri District, Tamil Nadu.

2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
3. The salient features of the project are as follows:

1	Name of the Owner/Firm	Tmt. S.Naseera, W/o. Thiru. Syed Ahamed, Jittobanapalli, Thogarapalli Post. Krishnagiri District – 635 203
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	Grey Granite (Paradiso) Quarry
3	S.F No. Of the quarry site with area break-up	438 (part)
4	Village in which situated	Jagadevipalayam
5	Taluk in which situated	Bargur
6	District in which situated	Krishnagiri
7	Extent of quarry (in ha.)	1.21.0 Ha
8	Latitude & Longitude of all corners of the quarry site	12°28'22.3"N to 12°28'26.8"N 78°20'21.1"E to 78°20'25.7"E
9	Topo Sheet No.	57 U7
10	Type of mining	Open cast Semi Mechanized Mining
11	Period of quarrying proposed	5 years
12	Production (Quantity in m ³)	RoM – 24,665m ³ , Grey Granite (@ 20% recovery) – 4933m ³
13	Depth of quarrying	36m below ground level
14	Depth of water table	50 - 40m
15	Man Power requirement per day:	18 Nos.

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16	Water requirement: 1. Drinking & domestic purposes 2. Dust suppression 3. Green Belt	3.0 KLD 1.0 KLD 1.0 KLD 1.0 KLD
17	Power requirement	1,66,960 Liters of HSD for the entire project life
18	Precise area communication approved by the Principal Secretary to Government with date	G.O.(3D) No.15, Industries (MME-2) Department date:14.02.2011.
19	Mining Plan approved by the Commissioner, Dept. of Geology and Mining with date	Rc.No.1121/MMA/2023 Dated: 20.02.2023
20	500m cluster letter issued by the Deputy Director (i/c), Dept. of Geology and Mining with date	Roc.No.355/2015/Mines-1 Dated: 24.06.2016.
21	VAO certificate regarding habitations in 300m radius	Letter dated: 10.06.2016.
22	Project Cost (excluding EMP)	Rs.33,00,000/-
23	EMP cost	Capital cost: Rs.27,85,700/- Recurring cost: Rs.11,22,720/-
24	ToR Issued details	ToR under violation Issued letter No. SEIAA-TN/F. No. 4793/SEAC/ToR-477/2018 Dated: 07.06.2018.
25	Amendment ToR details	Amendment to ToR was issued vide Letter No. SEIAA-TN/F. No. 4793/SEAC/ToR-477/A/2018 Dated: 30.07.2018.


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4. The proponent was issued with ToR under violation category vide Letter No. SEIAA-TN/F. No. 4793/SEAC/ToR-477/2018 Dated: 07.06.2018 for carrying out mining operations without obtaining Environmental Clearance.
5. Then the proponent submitted an application seeking extension of validity in the Terms of Reference issued under violation In the PARIVESH Portal vide application no. SIA/TN/MIN/269653/2022 and it was placed for appraisal in the 308th meeting of SEAC held on 01.09.2022. During the presentation the proponent stated as follows:

"We have submitted the application seeking Terms of Reference for Environmental Clearance for the existing Grey Granite (Paradiso) quarry over an extent of 1.21.0 Ha in S.F.Nos.438 (Part) at Jagadevipalayam village of Krishnagiri Taluk, Krishnagiri District under violation category.

As per the National Green Tribunal, Southern Zone, Chennai Original application no.136/2017 (SZ), dated.30.06.2020, our quarry lease does not attract violation and 100% cost penalty, the lease may be as normal application.

Hence, we would like to withdraw the above-mentioned proposals and also we have withdrawn the Terms of Reference online proposal no.SIA/TN/MIN/27188/2018 dated on 11.09.2017 and Terms of Reference online proposal no.SIA/TN/MIN/23825/2018 dated on 07.04.2018, Online Proposal No.SIA/TN/MIN/211252/2021 dated 30.07.2021 (terms of reference) – TOR Extension and Online Proposal No.SIA/TN/MIN/269653/2022 dated.26.04.2022 (terms of reference) – TOR Extension and kindly consider the same.

We would like to withdraw the above-mentioned proposals which was submitted to SEIAA"

The Committee after detailed discussions considered the reasons specified by the PP and decided that SEIAA may accept the TOR 'withdrawal request' of the proponent.


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Subsequently, it was placed in 553rd Authority meeting held on 21.09.2022. The authority decided to accept the withdrawal request of the proponent after obtaining the letter/details from AD mines as mentioned in the minutes.

On receipt of the details, the proposal for Environmental Clearance is placed in this 359th meeting of SEAC held on 02.03.2023.

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for RoM - 24,665m³, Grey Granite (@ 20% recovery) - 4933m³ but not exceeding an annual peak production of 1259 m³ of Black Granite up to an ultimate depth of 36m BGL, subject to the standard conditions as per the Annexure of this minutes & normal conditions stipulated by MOEF&CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by the competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification No. S.O. 1807(E) Dt. 12.4.2022.
2. 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 the EMP as committed.
3. The proponent shall obtain a 'Star Rating' system awarded by Anna University, Chennai annually to the mining lease being operated for their efforts and shall contribute Rs.5 Lakhs for the initiatives taken for successful implementation of the Sustainable Development Framework (SDF).
4. The proponent is requested to prepare Standard Operating Procedure for using Diamond Wire Saw Cutting method before obtaining CTO.
5. The proponent shall mandatorily appoint the statutory Mines Manager & other statutory competent persons and the Geologist in relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Granite Conservation & Development Rules, 1999 respectively.


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6. 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.
7. The proponent shall construct 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/map showing the same before obtaining the CTO from TNPCB.
8. The PP shall strictly adhere with the safety provisions as laid for the operation of Diamond Wire Saw machines and use of Cranes vide DGMS Tech Circulars No: 02 of 29.11.2019 & No. 10 of 19.07.2002 respectively.
9. The PP shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
10. The PP shall ensure that the Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral reject (Granite waste) dumps. The water so collected in such sump should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly de-silted and maintained properly.
11. Further, the PP shall construct the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
12. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
13. 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 i.e., quantum of Granite, waste, over burden, side burden and top soil etc. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall


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not be carried out without prior approval of the MoEF & CC, 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.

14. The Proponent shall ensure that the overburden, waste rock and non-saleable granite generated during prospecting or mining operations of the granite quarry shall be stored separately in properly formed dumps on grounds earmarked. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps. Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
15. 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 and submit the consolidated report to TNPCB once in six months.
16. 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. The report on the periodic monitoring shall be submitted to TNPCB once in 6 months.
17. The PP shall also develop the Green belt around the office buildings, along the side of the roads and on backfill areas, if any, apart from along the mine lease boundary. 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 in consultation with the DFO, State Agriculture University and local school/college authorities. 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.

18. Taller/one year old saplings raised in appropriate size of bags (preferably eco-friendly bags) should be planted in proper spacing
19. 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.
20. **Dust, Noise and Vibration Related:** Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers should be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed. Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
21. The impact on fauna species in the mining area is mostly due to noise vibration and loss of vegetation cover. No working is proposed during night time, i.e., after 6 pm. No lighting is allowed to spread outside quarry lease area.
22. 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 and the abandonment of the granite quarry as assured in the Environmental Management Plan & the approved Mine Closure Plan.
23. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
24. 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.


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25. 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.
26. 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.
27. 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.
28. The project proponent shall ensure that the provisions of the MMDR Act, 1957, the Granite Conservation and Development Rules 1999, the MCDR 2017 and Tamil Nadu Minor Mineral Concession Rules 1959 are complied by carrying out the quarrying operations in a skilful, 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.
29. 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.
30. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
31. 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.

32. All the conditions imposed by the concerned Assistant/Deputy Director, Geology & Mining, in the mining plan approval letter and the Precise area communication letter issued by the concerned District Collector should be strictly followed.
33. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat / local representatives, if any, from whom any suggestion/representation has been received while processing the proposal.
34. 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.
35. As accepted by the Project Proponent the revised CER cost is Rs. 5 lakhs and the amount shall be spent for the committed activities towards Government Higher School, Thogarapalli before obtaining CTO from TNPCB.

Agenda No: 359 - 10

(File No.7439/2020)

Proposed Earth Quarry lease over an Extent of 3.64.5 Ha in S.F.No. 712/2C, 712/2D & 712/2E (P), Thirumullaivasal Village, Sirkazhi Taluk, Mayiladuthural (Formerly Nagapattinam) District, Tamil Nadu by Thiru. V. Senthamilseran – For Environmental clearance (SIA/TN/MIN/142135/2020, dated: 10.02.2020)

The proposal is placed in this 359th meeting of SEAC held on 02.03.2023. The details of the project furnished by the proponent are given in the website (partvesh.nic.in).

The SEAC noted the following:

1. The Proponent, Thiru. V. Senthamilseran, has applied for Environmental Clearance for the Proposed Earth Quarry lease over an Extent of 3.64.5 Ha in S.F.No. 712/2C, 712/2D & 712/2E (P), Thirumullaivasal Village, Sirkazhi Taluk, Mayiladuthural (Formerly Nagapattinam) District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.


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3. The salient features of the project are as follows:

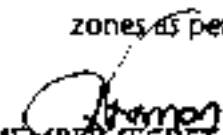
1	Name of the Owner/Firm	Thiru. V.Senthambiseran, S/o Varatharajan, No.4/365, Kaliyamman Kovil Street, Thirumullaivasal, Sirkazhi Taluk, Mayiladuthurai (Formerly Nagapattinam) District – 609 113.
2	Type of quarrying (Earth/Rough Stone/Sand/Granite)	Earth Quarry
3	S.F No. Of the quarry site with area break-up	712/2C, 712/2D & 712/2E (P)
4	Village in which situated	Thirumullaivasal
5	Taluk in which situated	Sirkazhi
6	District in which situated	Mayiladuthurai (Formerly Nagapattinam) District.
7	Extent of quarry (in ha.)	3.64.5Ha
8	Latitude & Longitude of all corners of the quarry site	11°15'37.05"N to 11°15'43.51"N 79°49'46.20"E to 79°49'52.41"E
9	Topo Sheet No.	58-M/15
10	Type of mining	Open cast Method of shallow quarrying
11	Period of quarrying proposed	2 years
12	Production (Quantity in m ³)	60,860m ³ of earth
13	Depth of quarrying	2m below ground level
14	Depth of water table	15m below ground level
15	Man Power requirement per day:	8 Nos.
16	Water requirement: 6. Drinking & domestic purposes 7. Dust suppression 8. Green Belt	2.40 KLD 0.45 KLD 1.20 KLD 0.75 KLD
17	Power requirement	10,320 litres of HSD for the entire project life

18	Precise area communication issued by the District Collector, Dept. of G&M with date	Rc.No.270/Mines/2018 Dated:10.01.2019.
19	Revised Mining Plan approved by the Assistant Director, Dept. of Geology and Mining with date	Rc.No.270/Mines/2018 Dated:23.08.2022.
20	500m cluster letter issued by the Assistant Director, Dept. of Geology and Mining with date	Rc.No.270/Mines/2018 Dated:09.12.2019.
21	VAO certificate regarding habitations in 300m radius	Dated.02.01.2020
22	Project Cost (excluding EMP)	Rs.24.52.000/-
23	EMP cost	Capital cost: Rs.17.47.900/- Recurring cost: Rs.6.40.890/-

The project proponent has submitted a soil test report obtained from the Department of Civil Engineering, NIT, Trichy vide letter dated:28.04.2022. According to the test report, the total % of sand in the soil sample is 40% and the soil is classified as High Plastic Silt (MH).

Earlier, the proposal was placed in 159th, 209th & 298th meeting of SEAC and was deferred for reasons as stated in the minutes. In 298th meeting held on 22.07.2022, the Committee decided to obtain the following additional details from the proponent to avoid the discrepancies associated with the term 'savudu':

- i) The PP shall revise the existing Mining Plan for incorporating the correct name of the mineral available in the proposed quarry lease and the same shall be furnished after it is duly approved by the concerned AD (Mines) of the district.
- ii) Soil sampling should be carried out by NABET Accredited consultant by adopting standard protocols in the presence of EIA Coordinator/Geologist indicating the place of sampling with coordinates, lithological details of the site, video & photographs and the same shall be submitted for analysis to NIT Trichy and to furnish the report.
- iii) The PP shall also get a letter from the concerned AD (Mines) stating the location status of the proposed site whether it falls under notified areas (or) protected zones as per the order of the High Court.


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Based on the presentation and details furnished by the project proponent, SEAC recommended to grant of Environmental Clearance for the production of 60,860m³ of earth for the maximum period of Two years with an ultimate depth of 2 m BGL, subject to the standard conditions & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier.
2. Tree plantation & fencing around the mine lease area shall be completed before starting the production.
3. The proponent shall mandatorily appoint the required number of statutory officials and the competent persons in relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
4. 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.
5. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
6. 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 i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not 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.

7. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
8. The proponent shall ensure that the slope of dumps is suitably vegetated in scientific manner with the native species to maintain the slope stability, prevent erosion and surface run off. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps.
9. 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 and submit the consolidated report to TNPCB once in six months.
10. 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. The report on the periodic monitoring shall be submitted to TNPCB once in 6 months.
11. 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.
12. 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 in consultation with the DFO, State Agriculture University. 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.
13. 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


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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

14. **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.
15. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
16. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50m 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.
17. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
18. The proponent shall ensure that the transportation of the quarried materials 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 rough stones; and transport of rough stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
19. 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.
20. After mining operations are completed, the mine closure activities as indicated in the mine closure plan shall be strictly carried out by the Proponent fulfilling the necessary actions as assured in the Environmental Management Plan.

21. The Project proponent 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 that is fit for the growth of fodder, flora, fauna etc.
22. 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.
23. The project proponent shall ensure that the provisions of the MMRD, 1956, 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.
24. 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.
25. 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.
26. 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.
27. 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.


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28. The Project proponent shall install a Display Board at the entrance of the mining lease area/abutting the public Road, about the project information as shown in the Appendix -II of this Minutes.

29. 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.

30. As accepted by the Project proponent the CER cost is Rs. 2.0 lakhs and the amount shall be spent for the committed activities towards Government Higher Secondary School, Thirumullaivasal Village, Sirkazhi taluk, Mayiladuthural District, before obtaining CTO from TNPCCB.

Agenda No: 359-11

(File No: 9371/2022)


Proposed Rough Stone & Gravel quarry Lease over an extent of 0.89.0 Ha at S.F.No. 250/1A, 1B & 1C in Andipalayam Village, Kinathukadavu Taluk, Coimbatore District, Tamil Nadu by Tvl.Negamam Granites Private Limited - For Environmental Clearance (SIA/TN/MIN/279983/2022 dated 25.06.2022)

The proposal is placed in this 359th SEAC meeting held on 02.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

SEAC noted the following:

1. The Project Proponent, Tvl.Negamam Granites Private Limited has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry Lease over an extent of 0.89.0 Ha at S.F.No. 250/1A, 1B & 1C in Andipalayam Village, Kinathukadavu Taluk, Coimbatore District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The salient features of the project are as follows:

1	Name of the Owner/Firm	Tvl. Negamam Granites Private Limited, No.5/63, Seripalayam, Kinathukadavu Taluk, Coimbatore District - 641120.


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2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	Rough Stone and Gravel Quarry
3	S.F No. Of the quarry site with area break-up	250/1A, 1B & 1C
4	Village in which situated	Andipalayam
5	Taluk in which situated	Kinathukadavu
6	District in which situated	Coimbatore
7	Extent of quarry (in ha.)	0.89.0Ha
8	Latitude & Longitude of all corners of the quarry site	10°47'51.62"N to 10°47'55.15"N 77°05'02.20"E to 77°05'05.76"E
9	Topo Sheet No.	58 - F/01.
10	Type of mining	Opencast Mechanized Mining Method
11	Period of quarrying proposed	5 years
12	Production (Quantity in m ³)	73850m ³ of Rough stone & 11988m ³ of gravel
13	Depth of quarrying	37m below Ground level
14	Depth of water table	74-69m
15	Man Power requirement per day:	15 Nos
16	Water requirement:	1.3 KLD
	1. Drinking & domestic purposes	0.2 KLD
	2. Dust suppression	0.7 KLD
	3. Green Belt	0.4 KLD
17	Power requirement	61,072 litres of HSD for the entire project life
18	Precise area communication Issued by the Assistant Director, Dept. of Geology & Mining with date	Rc.No.163/Mines/2020, date:17.03.2022.
19	Mining Plan approved by the Assistant Director, dept. of Geology and Mining with date	Rc.No.163/Mines/2020, date:07.04.2022.
20	500m cluster letter Issued by the Assistant Director, Dept. of Geology and Mining with date	Rc.No.163/Mines/2020, date:07.04.2022.
21	VAO certificate regarding habitations in 300m radius	30.05.2022.

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22	Project Cost (excluding EMP)	Rs.29,22,000/-
23	EMP cost	Capital cost: Rs.19,70,300/- Recurring cost: Rs.6,55,740/-

Based on the presentation and documents furnished by the project proponent, after detailed deliberations, SEAC considering the safety aspects, decided to recommend the proposal for the grant of Environmental Clearance for the restricted quantity of 73,250 m³ of Rough Stone & 11,988m³ of Gravel for an ultimate depth of 32m Below ground level with annual peak production of 15,300m³ of rough stone, subject to the standard conditions as per the Annexure-I of this minutes & normal conditions stipulated by MOEF&CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 before obtaining the CTO.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961 before the obtaining the CTO from the DEE/TNPCB.
4. The proponent shall maintain 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.
5. Further, the PP shall maintain the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 / 10 m as it is designed to take care of run-off water (size, gradient and length) before obtaining the CTO from TNPCB.

6. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1997.
7. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
8. 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.
9. 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.
10. 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.
11. Since few structures/sheds are located within 300 m, the PP shall obtain necessary permission from the Regional Inspector of Mines, (DMS), Chennai Region within immediately after the execution of lease before the commencement of quarrying operations to carry out the scientific studies on 'Design of Suitable Controlled blast parameters for reducing the cumulative impact of blast-induced grounds caused due to operation of the Quarry', by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal, and Anna University Chennai-CEG Campus, etc shall be carried out before the commencement of mining operations. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
12. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.


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13. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF&CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
14. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
15. The PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 4 years of operation whichever is earlier, by involving a reputed Research and Academic Institution such as NIRM, IITs, NIT-Dept of Mining Engg, Surathkal, Anna University Chennai-CEG Campus, and any CSR Laboratories etc. 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.
16. The PP shall obtain necessary procedural permissions immediately after the execution of the lease from the competent authorities for carrying out the amalgamation with the neighbouring mines for the safety reasons.
17. 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.
17. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Government High School, Andipalayam, Coimbatore District for the activities as committed, before obtaining CTO from TNPCB.

Agenda No: 359-12

(File No: 9390/2022)

Proposed Rough Stone & Gravel quarry Lease over an extent of 1.80.0 Ha at S.F.No. 141/2 in Kanniyam Village, Tindivanam Taluk, Villupuram District, Tamil Nadu by Thiru.K.Chandrasekar – For Environmental Clearance (SIA/TN/MIN/282563/2022 dated 07.07.2022)


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The proposal is placed in this 359th SEAC meeting held on 02.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

SEAC noted the following:

1. The Project Proponent, Thiru.K.Chandirasekar has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry Lease over an extent of 1.80.0 Ha at S.F.No. 141/2 in Kanniyam Village, Tindivanam Taluk, Villupuram District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The salient features of the project are as follows:

Sl. No.	Particulars	Details
1	Name of the Owner/Firm	K. Chandirasekar, S/o, Krishnamoorthi, No. 287, Mettu Street, Eraiur Village, Vanur Taluk, Vilupuram District – 604 304.
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	Rough Stone and Gravel Quarry
3	S.F No. Of the quarry site	141/2
4	Village in which situated	Kanniyam
5	Taluk in which situated	Tindivanam
6	District in which situated	Villupuram
7	Extent of quarry (in ha)	1.80.0Ha
8	Latitude & Longitude of all corners of the quarry site	12°04'33.30"N to 12°04'39.65"N 79°38'35.22"E to 79°38'40.64"E
9	Topo Sheet No.	57 – P/12
10	Type of mining	Opencast Mechanized Mining Method
11	Period of quarrying proposed	10 years
12	Production (Quantity in m ³)	2,19,880m ³ of Rough stone, 38,556m ³ of Weathered Gravel and 13,816 m ³ of Gravel
13	Depth of quarrying	44m below ground level.


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14	Depth of water table	53m-48m below ground level
15	Man Power requirement per day:	18 Nos.
16	Water requirement: 4. Drinking & domestic purposes 5. Dust suppression 6. Green Belt	2.8 KLD 0.5 KLD 1.5 KLD 0.8 KLD
17	Power requirement	No details furnished
18	Precise area communication approved by the Assistant Director (i/c), Dept. of Geology & Mining with date	Rc.No.A/G&M/272/2020, date:28.02.2022.
19	Mining Plan approved by the Assistant Director(i/c), Dept. of Geology and Mining with date	Rc.No.B/G&M/272/2020, date:09.05.2022.
20	500m cluster letter issued by the Deputy Director, Dept. of Geology and Mining with date	Rc.No.B/G&M/272/2020, date:30.06.2022.
21	VAO certificate regarding habitations in 300m radius	11.03.2022.
22	Project Cost (excluding EMP)	Rs.38.79,000/-
23	EMP cost	Capital cost: Rs.23.74,000/- Recurring cost: Rs.16,76,762/-

Based on the presentation and documents furnished by the project proponent, after detailed deliberations, SEAC considering the safety aspects, decided to recommend the proposal for the grant of Environmental Clearance for the restricted quantity of 2,16,370 m³ of Rough Stone, 38,556m³ of Weathered Gravel and 13,816 m³ of Gravel for an ultimate depth of 39m Below ground level with annual peak production of 22,845m³ of rough stone, subject to the standard conditions as per the Annexure-I of this minutes & normal conditions stipulated by MOEF&CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 18076 dated 12.04.2022.

2. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 before obtaining the CTO.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961 before the obtaining the CTO from the DEE/TNPCB.
4. The proponent shall maintain 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.
5. Further, the PP shall maintain the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 / 10 m as it is designed to take care of run-off water (size, gradient and length) before obtaining the CTO from TNPCB.
6. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
7. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
8. 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.
9. 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.
10. 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


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the non-exposure of public within the danger zone of 500 m from the boundary of the quarry.

11. Within six months from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of Suitable blast parameters for reducing the cumulative impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarry by adopting appropriate controlled blasting techniques', by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
12. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
13. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
14. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
15. The PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 4 years of operation whichever is earlier, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. 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.
16. 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.

17. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Government School, Kanniyam, Villupuram District for the activities as committed. before obtaining CTO from TNPCB.

Agenda No: 359-13

(File No: 9397/2022)

Proposed Rough Stone & Gravel quarry Lease over an extent of 0.89.0 Ha at S.F.No. 66/2 (Part) in Thirumalayampalayam North Village, Madukkarai Taluk, Coimbatore District, Tamil Nadu by Mr.S.Rathina Velusamy – For Environmental Clearance (SIA/TN/MIN/283830/2022 dated.16.07.2022)

The proposal is placed in this 359th SEAC meeting held on 02.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

SEAC noted the following:

1. The Project Proponent, Mr.S.Rathina Velusamy has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry Lease over an extent of 0.89.0 Ha at S.F.No. 66/2 (Part) in Thirumalayampalayam North Village, Madukkarai Taluk, Coimbatore District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The salient features of the project are as follows:

1	Name of the Owner/Firm	Mr.S. Rathina Velusamy, S/o. K. Subramaniam, No.16/237. Iyyappan Kovil Street, Madukkarai Taluk, Coimbatore District - 641 105.
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	Rough Stone and Gravel Quarry
3	S.F No. Of the quarry site	66/2(part)
4	Village in which situated	Thirumalayampalayam North


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5	Taluk in which situated	Madukkarai
6	District in which situated	Coimbatore
7	Extent of quarry (in ha.)	0.89.0Ha
8	Latitude & Longitude of all corners of the quarry site	10°52'4.94"N to 10°52'8.07"N 76°55'11.09"E to 76°55'16.08"E
9	Topo Sheet No.	58-B/13
10	Type of mining	Opencast Mining Method
11	Period of quarrying proposed	5 years
12	Production (Quantity in m ³)	69.898m ³ of Rough stone & 6324m ³ of gravel
13	Depth of quarrying	20m Below ground level
14	Depth of water table	55m – 50m
15	Man Power requirement per day:	14 Nos
16	Water requirement:	3.0 KLD
	7. Drinking water	0.3 KLD
	8. Utilized water	0.7 KLD
	9. Dust suppression	1.0 KLD
	10. Green Belt	1.0 KLD
17	Power requirement	56970 litres of HSD for the entire project life
18	Precise area communication approved by the Assistant Director, Dept. of G&M with date	Rc.No.170/Mines/2022 dated:04.07.2022.
19	Mining Plan approved by the Assistant Director, Dept. of Geology and Mining with date	Rc.No.170/Mines/2022 dated:07.07.2022.
20	500m cluster letter issued by the Assistant Director, dept. of Geology and Mining with date	Rc.No.170/Mines/2022 date:07.07.2022.
21	VAO certificate regarding habitations in 300m radius	Enclosed: Nil dated
22	Project Cost (excluding EMP)	Rs.32,47,900/-
23	EMP cost	Capital cost: Rs.18,87,067/- Recurring cost: Rs.12,97,280/-

Based on the presentation and documents furnished by the project proponent, after detailed deliberations, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the quantity of 69,898m³ of Rough stone & 6324m³ of gravel for an ultimate depth of 20m Below ground level with annual peak production of 17,220m³ of rough stone, subject to the standard conditions as per the Annexure-I of this minutes & normal conditions stipulated by MOEF&CC. In addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807E dated 12.04.2022.
2. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 before obtaining the CTO.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961 before the obtaining the CTO from the DEE/TNPCB.
4. The proponent shall maintain 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.
5. Further, the PP shall maintain the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 / 10 m as it is designed to take care of run-off water (size, gradient and length) before obtaining the CTO from TNPCB.
6. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.


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7. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
8. 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.
9. 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.
10. 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.
11. Within one year from the commencement of mining operations, the PP shall carry out the scientific studies in coordination with the other quarry owners located in the cluster domain on 'Design of Suitable blast parameters for reducing the cumulative impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarries in the cluster by adopting appropriate controlled blasting techniques', by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
12. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
13. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.

14. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
15. The PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 4 years of operation whichever is earlier, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Suratkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
16. The PP shall furnish the details on the transportation route for their vehicles movement to the concerned DEE/TNPCB before obtaining the CTO.
17. 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.
18. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for two Government Schools for the activities as committed, before obtaining CTO from TNPCB.

Agenda No: 359-14

(File No: 9434/2022)

Proposed Rough Stone quarry Lease over an extent of 2.00.0 Ha at S.F.No. 169 (part) In Jinjupalli Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu by Tmt.V.Jayaprabha – For Environmental Clearance (SIA/TN/MIN/286168/2022 dated 13.08.2022)

The proposal is placed in this 359th SEAC meeting held on 02.03.2023. The details of the project furnished by the proponent are given in the website (parvesh.nic.in).

SEAC noted the following:

1. The Project Proponent, Tmt.V.Jayaprabha has applied for Environmental Clearance for the Proposed Rough Stone quarry Lease over an extent of 2.00.0 Ha at S.F.No. 169 (part) in Jinjupalli Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item I(a) "Mining Projects"


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of the Schedule to the EIA Notification, 2006.

3. The salient features of the project are as follows:

1	Name of the Owner/Firm	Tmt. V. Jayapraba W/o. Murugan, D.No.2/226, Thalavaipalli Village, Samanthamalai Post, Krishnagiri Taluk, Krishnagiri District - 635 121.
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	Rough Stone Quarry
3	S.F No. Of the quarry site with area break-up	169(part)
4	Village in which situated	Jinjupalli
5	Taluk in which situated	Krishnagiri
6	District in which situated	Krishnagiri
7	Extent of quarry (in ha.)	2.00.0Ha
8	Latitude & Longitude of all corners of the quarry site	12°33'04.28"N to 12°32'56.11"N 78°09'11.09"E to 78°09'12.60"E
9	Topo Sheet No.	57-L/2
10	Type of mining	Opencast Semi Mechanized Mining
11	Lease Period of quarrying granted	10 years
12	Production (Quantity in m ³)	3,04,425m ³ of Rough stone & 26.159m ³ of top soil
13	Depth of quarrying	36.5m below ground level
14	Depth of water table	62m below ground level
15	Man Power requirement per day:	18 Nos.
16	Water requirement:	5.0 KLD
	11. Drinking & domestic purposes	1.0 KLD
	12. Dust suppression	3.0 KLD
	13. Green Belt	1.0 KLD
17	Power requirement	2,47,896 litres of HSD for the entire project life

18	Precise area communication approved by the District Collector with date	Rc.No.529/2022/Mines dated:21.04.2022
19	Mining Plan approved by the Deputy Director, Dept. of Geology and Mining with date	Rc.No.529/2022/Mines, Dated:10.06.2022.
20	500m cluster letter issued by the Deputy Director, Dept. of Geology and Mining with date	Roc.No.529/2022/Mines Dated:10.06.2022
21	VAO certificate regarding habitations in 300m radius	Letter dated: 18.06.2022.
22	Project Cost (excluding EMP)	Rs. 2,87,70,000/-
23	EMP cost	Capital cost: Rs.10.05 Lakhs Recurring cost: Rs.15.46 Lakhs

Based on the presentation and documents furnished by the project proponent, after detailed deliberations, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the quantity of 3,04,425m³ of Rough stone & 26,159m³ of top soil for an ultimate depth of 36.5m Below ground level with annual peak production of 55,125m³ of rough stone, subject to the standard conditions as per the Annexure-I of this minutes & normal conditions stipulated by MOEF&CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 18076 dated 12.04.2022.
2. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 before obtaining the CTO.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961 before the obtaining the CTO from the DEE/TNPCB.


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4. The proponent shall maintain 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.
5. Further, the PP shall maintain the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 / 10 m as it is designed to take care of run-off water (size, gradient and length) before obtaining the CTO from TNPCB.
6. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
7. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
8. 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.
9. 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.
10. 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 including the village road situated closely.
11. Within one year from the commencement of mining operations, the PP shall carry out the scientific studies in coordination with the other quarry owners located in the cluster domain on 'Design of Suitable blast parameters for reducing the cumulative impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarries in the cluster by adopting appropriate controlled blasting techniques', by involving any of the reputed Research and Academic

Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.

12. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
13. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
14. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
15. The PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 4 years of operation whichever is earlier, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance..
16. 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.
17. As accepted by the Project proponent the CER cost is Rs. 6 lakhs and the amount shall be spent for the Government (RMSA) Higher Secondary School, Veppanapalli for the activities as committed, before obtaining CTO from TNPCB.


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Agenda No: 359-15

(File No: 8567/2021)


Proposed Rough Stone quarry lease over an extent of 4.94.5Ha at S.F.No. 170(Part), Kunnavakkam Village, Thirukazhukundram Taluk, Chengalpattu District, Tamil Nadu by M/s. Salem Mines & Aggregates - For Environmental Clearance. (SIA/TN/MIN/81966/2021, dated:08.08.2022)

The proposal was placed in 359th meeting of SEAC held on 02.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Proponent, M/s. Salem Mines & Aggregates has applied seeking Environmental Clearance for the proposed Rough Stone quarry lease over an extent of 4.94.5Ha at S.F.No. 170(Part), Kunnavakkam Village, Thirukazhukundram Taluk, Chengalpattu District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & the production should not exceed 9,82,419m³ of rough stone & 28080m³ of Topsoil with an ultimate depth of mining is 41m (11m above ground level + 30m below ground level) [as per approved ToR]. The annual peak production is 228180m³ of Rough Stone (4th year), 28080m³ of Topsoil (1st year).
4. ToR issued vide letter No - SEIAA-TN/F.No.8567/SEAC/TOR-1029/2021 dated 26.08.2021.
5. Public hearing conducted on Dated: 05.05.2022.


Salem Mines & Aggregates	
1	Name of the Owner/Firm M/s. Salem Mines & Aggregates Thiru.R.Gopal(Partner) No.09, Nagarathinam Nagar Extension, Thiruneermalai Road West Tambaram, Chennai-600045.


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2	Type of quarrying	Rough stone
3	S.F No. Of the quarry site with area break-up	170(part)
4	Village in which situated	Kunnavakkam
5	Taluk in which situated	Thirukazhukundram
6	District in which situated	Chengalpattu
7	Extent of quarry (in ha.)	4.94.5Ha
8	Period of quarrying proposed	5 years
9	Type of mining	Opencast semi Mechanized Mining
10	Production (Quantity in m ³)	As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & the production should not exceed 982419m ³ of rough stone & 28080m ³ of Topsoil with an ultimate depth of mining is 41m (11m above ground level + 30m below ground level)(as per approved ToR). The annual peak production is 228180 m ³ of Rough Stone (4 th year) and 28080 m ³ of Topsoil (1st year).
11	Latitude & Longitude of all corners of the quarry site	12°33'30" N to 12°33'41" N 80°04'17"E to 80°04'26"E
12	Top Sheer No.	66 D/02
13	Man Power requirement per day:	32 Empolyees
14	Precise area communication approved by the District Collector, with date	Na.Ka.No.2646/Kanimam/2020 dated: 04.05.2020
15	Mining Plan approved by the Deputy Director, Department of Geology and Mining with date	Rc.No.2646/Kanimam/2020 dated: 08.06.2020


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16	AD mines 500m cluster letter by the Deputy Director, Department of Geology and Mining with date.	Rc. No.2646/Kanimam/2020 dated: 08.06.2020
17	Water requirement: 7. Drinking & domestic purposes 8. Dust suppression & Green Belt (in KLD)	4.0 kLD 2.0 kLD 2.0 kLD
18	Power requirement e. Domestic Purpose f. Industrial Purpose	TNEB -
19	Depth of quarrying	11m Above Ground Level & 30m Below Ground Level
20	Depth of water table	58m
21	Whether any habitation within 300m distance	No
22	Project Cost	Rs. 810.50 Lakhs
23	EMP cost	Rs. 165.94 Lakhs
24	CER Cost	Rs. 16.32 Lakhs
25	VAO letter dated	Letter dated: 19.04.2021
26	ToR issued	ToR issued vide Lr.No.SEIAA-TN/F.No.8567/SEAC/TOR1029/2021 dated 26.08.2021.
27	Public Hearing Details	Public hearing conducted on Dated: 05.05.2022.

As suggested by the committee, the revised production Plan & section after leaving minimum safety distance of 150m for the structures in the south western side and maintaining more than the minimum desired width of 12m in the pit bottom in mining plan is given as below,


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Revised Production Details

YEAR	YEARLY PRODUCTION (m ³)				
	AS PER APPROVED MINING PLAN 56m(11m above ground level and 45m below ground level)		AS PER APPROVED TOR RESERVES 41m(11m above ground level and 34m below ground level)		REVISED AS PER SEAC MEETING LEAVING FROM 180 M SAFETY DISTANCE FROM NEARBY STRUCTURES 56m(11m above ground level and 45m below ground level)
	ROUGHSTONE (m ³)	TOP SOIL (m ³)	ROUGHSTONE (m ³)	TOP SOIL (m ³)	
I	226970	26080	226970	26080	
II	226694	-	226694	-	
III	223700	-	223700	-	
IV	228180	-	228180	-	
V	229135	-	76875	-	

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for total excavation quantity of 8,72,602m³ of Rough Stone and 23,600m³ of Topsoil not exceeding the annual peak production of 174722m³ of Rough Stone and 23,600m³ of Top soil with maintaining an ultimate pit depth of 56m BGL (11m above ground level + 45m below ground level) subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF & CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation


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as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.

3. The PP shall inform the 'Notice of Opening' of the quarry to the Director of Mines Safety/Chennai Region before obtaining the CTO.
4. The proponent shall construct 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/map showing the same before obtaining the CTO from TNPCB.
5. The PP shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction, shall install fencing and Garland drain before obtaining the CTO from the TNPCB.
6. Since the quarry is located in the duster, the Project Proponent shall ensure strict compliance of the provisions given under the Mines Rules, 1955 for the health and welfare of the persons employed therein.
7. Further, the PP shall construct the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
8. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.
9. However, the PP shall carry out the scientific studies to assess the slope stability of the working benches and proposed quarry wall within six months of commencement of quarrying operation, by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. 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. As a part of EC Compliance, the PP shall carry out the tree plantation (2000 nos) to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
11. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarries.
12. The PP shall carry out maximum of two rounds of controlled blast only per day, restricted to the maximum of 50 to 60 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 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 10 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
13. Since the quarry lies in a cluster situation, the PP shall furnish a Standard Operating Procedure for carrying out the safe method of carrying out the blasting operation to the concerned DEE/TNPCB before obtaining the CTO from the TNPCB while considering the adjacent quarries lies in a radial distance of 500 m from their quarry.
14. 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.
15. The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him only as per the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
16. The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations


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situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.

17. Since few structures are existing within 300 m, within one year from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of Suitable blast parameters for reducing the cumulative impact of blast-induced ground/air vibrations and fly rock caused due to quarrying operation by adopting appropriate controlled blasting techniques', by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
18. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
19. The PP shall carry out the comprehensive hydrogeological studies once in two years to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, Anna University Chennai-Dept of Geology, CEG Campus, and University of Madras -Dept of Applied Geology, Chennai etc shall be carried out within one year after the commencement of mining operations. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
20. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.

21. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
22. 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.
23. As accepted by the Project proponent the CER cost is Rs.16.32.000 lakhs and the amount shall be spent for the Govt School, Sodiyambakkam as committed, before obtaining CTO from TNPCB.

Agenda No: 359-16

(File No: 9246/2022)

Proposed Rough Stone and Gravel quarry lease over an extent of 1.00.0 Ha at S.F.Nos.133/1A2 (P) & 133/1B (P) of Thensangampalayam Village, Animalai Taluk, Coimbatore District, Tamil Nadu by Thiru. N.Mahalingam— For Environmental Clearance. (SIA/TN/MIN/270509/2022 dated:09.05.2022)

Earlier, this proposal was placed in 301st Meeting of SEAC held on 06.08.2022. The details of the project furnished by the proponent are available in the website (www.parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Thiru. N.Mahalingam has applied for Environmental Clearance for the proposed Rough stone and Gravel quarry lease over an extent of 1.00.0 Ha at S.F.Nos.133/1A2 (P) & 133/1B (P) of Thensangampalayam Village, Animalai Taluk, Coimbatore District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per mining plan, the lease period is for 5 years, the total quantity of recoverable should not exceed 64,510 cu.m of Rough Stone and 13,172 cu.m of Gravel with an ultimate depth of mining is 17m (BGL)(2m Gravel + 15m Rough Stone). The annual peak production as per mining plan is 13,180 cu.m of rough stone (3rd year) & 5,624 cu.m of gravel (2nd year).


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The PP has made the presentation and furnished the details in the Meeting. Based on the presentation & details furnished by the PP the SEAC decided to call for the following details.

1. Since the Anamalai Tiger Reserve is located within 10km & its ESZ is yet to be notified, the PP shall obtain and submit NBWL Clearance.

Again the proposal was placed in 316th Meeting of SEAC held on 30.09.2022. The Committee noted that the PP was absent for the meeting and hence the PP shall furnish the reason for the same.

Now the proposal was placed in this 359th Meeting of SEAC held on 02.03.2023. The Committee noted the PP has not submitted NBWL Clearance as stated in 301st Meeting of SEAC held on 06.08.2022. Hence SEAC decided that the PP shall furnish NBWL Clearance.

Agenda No: 359-17

(File No: 9377/2022)

Proposed Rough Stone quarry lease area over an extent of 0.81.0 Ha at S.F.No. 415/3B, of Vellarivelli Village, Edappadi Taluk, Salem District, Tamil Nadu by Thiru. K. Ravisuthan- For Environmental Clearance. (SLA/TN/MIN/280987/2022, dated: 01.07.2022).

The proposal was placed in 314th Meeting of SEAC held on 23.09.2022. The details of the project furnished by the proponent are available in the website (www.parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Thiru. K. Ravisuthan has applied for Environmental Clearance for the proposed Rough Stone quarry lease over an extent of 0.81.0 Ha at S.F.Nos. 415/3B, at Vellarivelli Village, Edappadi Taluk, Salem District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

Based on the presentation and documents furnished by the project proponent, SEAC decided to obtain the following details.


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- (i) The project proponent shall furnish certified compliance report.
- (ii) The proponent shall enumerate on the details of the structures located within 100m, 200m, 300m radius from the proposed mine lease area indicating the type of structure/building, usage/purposes of such building – commercial/industrial/residential/farm house/Govt. building such as Sub-station, occupants of such buildings/structures, ownership of the buildings/structures-whether it belongs to the PP (or) not, etc.
- (iii) The proponent shall construct the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit as recommended in the DGMS Circular, 11/1959 and shall furnish the details of the photographs/map showing the same and the tree plantation completion work as committed earlier.

Now the proposal was placed in this 359th Meeting of SEAC held on 02.03.2023. The committee noted that the EIA co-ordinator has failed to furnish the details of the structures located within 100m, 200m, 300m radius from the proposed mine lease area indicating the type of structure/building, usage/purposes of such building – commercial/industrial/residential/farm house/Govt. building such as Sub-station, occupants of such buildings/structures, ownership of the buildings/structures-whether it belongs to the PP (or) not. Further, the committee has noted that there are 57 houses, 3 temples and 12 cattle sheds are existing around 300m radius of the project site. Hence SEAC decided not to recommend the proposal.

Agenda No: 359-18

(File No: 9435/2022)

Proposed Rough Stone quarry lease over an extent of 1.20.00 Ha at S.F.No. 197/2(Part), Jinjupall/Village, krishnagiri Taluk, krishnagiri District, Tamil Nadu by Thiru. C. Murugesan- For Environmental Clearance. (SI/TN/MIN/286200/2022, dated:13.08.2022)

The proposal was placed in this 359th meeting of SEAC held on 02.03.2023. The details of the project furnished by the proponent are given in the website (partvesh.nic.in).

The SEAC noted the following:

1. The Proponent, Thiru. C. Murugesan has applied for Environmental Clearance for the proposed Rough Stone quarry lease over an extent of 1.20.00 Ha at


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S.F.No. 197/2(Part), Jinjupalli Village, krishnagiri Taluk, krishnagiri District, Tamil Nadu.

2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan the lease period is 10 years. The mining plan is for the period of ten years & the production should not exceed 1,57,770m³ of Rough stone & 18,288m³ of Topsoil (Gravel) with an ultimate depth of mining is 32m (2mAGL + 30mBGL). The annual peak production is 23,660m³ of Rough Stone (6th year) and 6624m³ of Topsoil (1st year).

1	Name of the Owner/Firm	Thiru.C.Murugesan, S/o.Chinnappan. D.No.3/132.Thippanapalli village, Thippanapalli post, krishnagiri Taluk, krishnagiri District-635115.
2	Type of quarrying	Rough stone
3	S.F No. of the quarry site with area break-up	197/2(PART)
4	Village in which situated	Jinjupalli
5	Taluk in which situated	krishnagiri
6	District in which situated	krishnagiri
7	Extent of quarry (in ha.)	1.20.00 Ha
8	Period of quarrying proposed	10 years
9	Type of mining	Opencast semi Mechanized Mining
10	Production (Quantity in m ³)	As per the mining plan the lease period is 10 years. The mining plan is for the period of ten years & the production should not exceed 1,57,770m ³ of Rough stone & 18,288m ³ of Topsoil (Gravel) with an ultimate depth of

		mining is 32m (2m AGL+30mBGL). The annual peak production is 23,660m ³ of Rough Stone (6 th year) and 6624m ³ of Topsoil (1 st year).
11	Latitude & Longitude of all corners of the quarry site	12°33'34.20" N to 12°33'38.78" N 78°09'17.20"E to 78°09'21.55"E
12	Top Sheet No.	57L/2,3
13	Man Power requirement per day:	18 Employees
14	Precise area communication approved by the District Collector, with date	Na.Ka.No.530/2022/Kanlmam,dated: 21.04.2022
15	Mining Plan approved by the Deputy Director, Department of Geology and Mining with date	Rc.No.530/2022/Mines dated: 10.06.2022
16	AD mines 500m cluster letter by the Deputy Director, Department of Geology and Mining with date.	Rc.No.530/2022/Mines,dated: 10.06.2022
17	Water requirement: 1. Drinking & domestic purposes 2. Dust suppression 3. Green Belt (in KLD)	5.0 KLD 1.0 KLD 3.0 KLD 1.0 KLD
18	Power requirement a. Domestic Purpose b. Industrial Purpose	TNEB 176298 Litres of HSD for the entire period of life
19	Depth of quarrying	23m BGL
20	Depth of water table	62m
21	Whether any habitation within 300m distance	No
22	Project Cost	Rs. 1,72,30,000
23	EMP cost	Rs. 164.11 Lakhs
24	CER Cost	Rs. 5 Lakhs
25	VAO letter dated	Letter dated: 18.06.2022.


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In approved Mine plan for 7m x 7m bench parameters are given. As suggested by the committee, the EIA Co-ordinator has revised the Plan & section for 5m x 5m bench parameters and maintained desired pit bottom width.

BENCH PARAMETERS			
YEAR	AS PER APPROVED MINE PLAN		REVISD AFTER SEAC MEETING
	Height IN M	Bench width IN M	
1-5	7	5	23m (2m above and 21m bgl)
5-10	7	5	+ 21m bgl
Total			44 (2m above and 42m bgl)

REVISED PRODUCTION DETAILS

YEAR	REVISED YEARLY PRODUCTION (m ³)			
	AS PER APPROVED MINING PLAN		REVISED AS PER SEAC MEETING	
	ROUGHSTONE (m ³)	TOP SOIL (m ³)	ROUGHSTONE (m ³)	TOP SOIL (m ³)
I	22,113	6624	15390	6624
II	22,260	6480	14550	6480
III	22,442	5184	16205	5184
IV	18,665	-	17365	-
V	20,160	-	19695	-
VI	24,808	-	23660	-
VII	19264	-	19035	-
VIII	25004	-	5025	-
IX	24024	-	14910	-
X	17829	-	11935	-

The revised details of Year wise, bench wise, minable reserves after leaving necessary bottom width.

- Depth of 32m (2m above and 30m bgl) @ 5m x 5m bench parameters


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YEARWISE DEVELOPMENT AND PRODUCTION (1st - Five Years)								
Year	Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in (m ³)	Movable Reserves in m ³ (100%)	Top Soil (Gravel) in m ³
I-Year	XY-AB	I	35	65	7			650
		II	35	63	5	11025	11025	
		III	8	300	2			2400
		IV	9	97	5	4005	4005	
II-Year	XY-CD	I	30	100	2			600
		II	30	97	5	14550	14550	
III-Year	XY-CD	I	24	100	2			480
		II	23	97	5	11135	11135	
		III	10	101	5	5050	5050	
IV-Year	XY-AB	III	30	52	5	7850	7850	
		IV	1	100	5	400	400	
		V	25	43	5	5375	5375	
		VI	20	101	5	10100	10100	
V-Year	XY-CD	III	20	101	5	10100	10100	
Total						88005	88005	3600

YEARWISE DEVELOPMENT AND PRODUCTION (2nd - Five Years)							
Year	Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in (m ³)	Movable Reserves in m ³ (100%)
VI-Year	XY-CD	IV	52	91	5	23660	23660
VII-Year	XY-CD	V	47	81	5	19085	19085
VIII-Year	XY-AB	V	20	93	5	9300	9300
		VI	15	23	5	1725	1725
IX-Year	XY-CD	VI	42	71	5	14910	14910
X-Year	XY-AB	VII	10	13	5	650	650
	XY-CD	VII	37	61	5	11285	11285
Total						78645	78645

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for total excavation quantity of 1,57,770m³ of Rough Stone and 18,288m³ of Topsoil not exceeding the annual peak production of 23,660m³ of Rough Stone (6th year) and 6624m³ of Topsoil (1st year) with maintaining an ultimate pit depth of 32m BGL (2m AGL+30mBGL)subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.

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2. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
3. The PP shall inform the 'Notice of Opening' of the quarry to the Director of Mines Safety/Chennai Region before obtaining the CTO.
4. The proponent shall construct 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/map showing the same before obtaining the CTO from TNPCB.
5. The PP shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction, shall install fencing and Garland drain before obtaining the CTO from the TNPCB.
6. Further, the PP shall construct the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
7. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the development of the benches from top to downwards systematically keeping the benches intact for the proposed quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.
8. However, the PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the working quarry touches 30 m agl/bgl (or) after the completion of 2 years of operation whichever is earlier, by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to

the SELAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

9. As a part of EC Compliance, the PP shall carry out the tree plantation (2000 nos) to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
10. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarries.
11. The PP shall carry out maximum of two rounds of controlled blast only per day, restricted to the maximum of 50 to 60 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 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 10 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
12. 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.
13. The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him only as per the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
14. The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
15. Since few structures/sheds are existing within 300 m, within one year from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of Suitable blast parameters for reducing the cumulative impact of blast-induced ground/air vibrations and fly rock caused due to quarrying


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operation by adopting appropriate controlled blasting techniques', by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.

16. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
17. The PP shall carry out the comprehensive hydrogeological studies once in two years to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal, Anna University Chennai-Dept of Geology, CEG Campus, and University of Madras -Dept of Applied Geology, Chennai etc shall be carried out before the commencement of mining operations. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
18. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
19. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
20. 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.
21. As accepted by the Project proponent the CER cost is Rs.5,00,000 lakhs and the amount shall be spent for the Govt School, Kummanur Village as committed, before obtaining CTO from TNPCB.

Agenda No.359-19
(File No: 7378/2020)

Proposed Rough stone quarry lease over an extent of 2.00.0 Ha in S.F.No.705(part-II) Kottaiyur Village, Srivilliputtur Taluk Virudhunagar District, Tamil Nadu by Thiru. M.Krishnakumar - For Environmental Clearance (SIA/TN/MIN/134892/2020,dated,t 03.01.2020)

Earlier, this proposal was placed in 161stSEAC Meeting held on 26.06.2020, 199thSEAC held on 09.02.2021 & 241st SEA meeting held on 2.11.2021. The details of the project furnished by the proponent are given on the website (Parivesh.nic.in).

The SEAC noted the following:

1. The Proponent, Thiru.M.Krishnakumar, has applied for Environmental Clearance for the proposed rough stone quarry lease over an extent of 2.00.0 Ha in S.F.No. 705 (Part-II) Kottaiyur Village, Srivilliputtur Taluk, Virudhunagar District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
3. The production for the five years states that the total quantity of recoverable as 3,25,120 cu.m of rough stone and the ultimate depth of mining is 40m (25 m above ground level and 15 m below ground level).

1	Name of the Owner/Firm	: Thiru. M. Krishnakumar, S/o. Sri.E.Muthusamy, D.No: SF4, G Block, Woraiyur Housing Unit, Salai Road, Trichirapalli District - 620 003.
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	: Rough Stone
3	S.F No. of the quarry site with area break-up	: 705 (Part-II)
4	Village in which situated	: Kottaiyur
5	Taluk in which situated	: Srivilliputhur


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6	District in which situated	:	Virudhunagar
7	Extent of quarry (in ha.)	:	2.00.0 Ha
8	Period of quarrying proposed	:	5 Years
9	Type of mining	:	Opencast Mechanized Mining
10	Production (Quantity in m ³)	:	325120 cu.m of Rough Stone to the depth of 40m (25m AGL+ 15m BGL) In a period of 5 years and not exceeding annual peak production of 65690 m ³ of Rough stone
11	Latitude & Longitude of all corners of the quarry site	:	09°39'25.5"N to 09°39'31.3"N 77°41'14.8"E to 77°41'20.60"E
12	Topo Sheet No.	:	58-G/10
13	Man Power requirement per day:	:	11 Nos
14	Precise area communication approved by District Collector with date	:	Na.Ka.K.V.1/250/2018, dated: 28.03.2018
15	Mining Plan approved by Deputy Director, Department of Geology and Mining with date	:	Roc. No: KV1/250/2018, dated: 18.04.2018
16	Water requirement: 9. Drinking water & domestic purposes (in KLD) 10. Dust Suppression (in KLD) 11. Green Belt (in KLD)	:	2.5 KLD 1.0 KLD 1.0 KLD 0.5 KLD
17	Power requirement g. Domestic Purpose h. Industrial Purpose	:	TNEB 2,60,096 Liters of HSD
18	Depth of quarrying	:	40m (25m AGL + 15m BGL)
19	Depth of water table	:	45m-50m bgl
20	Whether any habitation within 300m distance	:	No
21	Project Cost (including EMP cost)	:	Rs. 4,93,80,626/-
22	EMP cost	:	Capital Cost - Rs. 26,56,000/ year Recurring Cost - Rs. 19,70,012/Year Total Cost - 1,35,86,500/ 5 years
23	CER cost	:	Rs. 5,00,000/-
24	Assistant Director, mines 500m cluster letter	:	ROC. No: KV1/250/2018, dated: 11.12.2018
25	VAO certificate regarding 300m radius cluster	:	Letter dated 21.08.2019

Based on the presentation made by the proponent and the documents furnished the committee instructed the project proponent to furnish the following details;

1. Necessary clarification shall be obtained from the DFO, Virudhunagar that the proposed project does not fall under section 5 of the Environment (Protection) Act, 1986 issued by MoEF&CC Vide its direction dated: 13.11.2013 for restricting the mining activity nearby Western Ghats.
2. The project proponent should submit the details on the exact distance of Srivilliputtur Grizzled Squirrel Wildlife Sanctuary from the proposed Project site boundary from the competent Authority.

The Project proponent furnished above said details to SEIAA-TN on 13.01.2021. TamilNadu Forest Department vide letter dated 04.12.2020 has stated that the distance between the boundary of the Eco-sensitive zone and proposed site is 475 meters. The distance between the boundary of the Grizzled squirrel Wildlife Sanctuary, Srivilliputtur and the proposed site is 2.14 km.

The Proposal was once again placed in 199th SEAC held on 09.02.2021. Based on the proponent documents furnished, the SEAC decided to get clarification from the Chief Wildlife Warden, Chennai regarding whether the mine is located within the Eco-sensitive Zone.

The proposal was again placed for appraisal in this 241th meeting of SEAC held on 03.11.2021.

SEAC noted that Wildlife Warden, Grizzled Squirrel Wildlife Sanctuary, Srivilliputtur vide Lr. Dt: 04.12.2020 has stated that the distance between this proposed rough stone quarry lease at S.F.No. 705 (Part-II) Kottaiyur Village, Srivilliputtur Taluk, Virudhunagar District, Tamil Nadu and the boundary of Eco- Sensitive Zone & boundary of Grizzled Squirrel Wildlife Sanctuary, Srivilliputtur are 475 m and 2.14 km respectively.

MoEF&CC vide notification Dt: 30.10.2019, has notified Eco- Sensitive Zone for Grizzled Squirrel Wildlife Sanctuary, Srivilliputtur, in the state of Tamilnadu and in the Para 1 of Page No. 20 it is stated as:

"NOW THEREFORE, In exercise of the power conferred by sub-section(1) and clauses (v) and (xiv) of sub-section (2) and sub-section (3) of section 3 of the Environment (Protection) Act 1986 (29 of 1986) read with sub-rule (3) of rule 5 of the Environment


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(Protection) Rules, 1986, the Central Government hereby notifies an area with an extent varying from zero kilometers (due to Inter-state boundary) to 6.2 kilometers around the boundary of Srivilliputhur Grizzled Squirrel Wildlife Sanctuary in the State of Tamil Nadu as the Srivilliputhur Grizzled Squirrel Wildlife Sanctuary as Eco-sensitive Zone (herein after referred to as the Eco-sensitive Zone) details of which are as under, namely:-

1. Extent and boundaries of Eco-sensitive Zone. - (1) The extent of Eco-sensitive
2. Zone varies from zero kilometers (due to Inter-state boundary) to 6.2 kilometers around the Srivilliputhur Grizzled Squirrel Wildlife Sanctuary. The area of the Eco-Sensitive Zone is 305.86 square kilometers.
3. The boundary description of the Eco Sensitive Zone is appended at Annexure I.
4. The map of the Protected Area demarcating the Eco-sensitive Zone boundary is at Annexure IIA-E.
5. List of Geo co-ordinates of the boundary of the Protected Area and the Eco-Sensitive Zone is at Annexure III in Table (A) and (B) respectively.
6. The list of villages falling within the Eco-sensitive Zone along with their Geo co-ordinates at prominent points is appended as Annexure IV."

On the other hand, the Wild Life Warden letter states that the proposed quarry is located at 2.14 km from the boundary of the Grizzled Squirrel Wildlife Sanctuary and hence the SEAC after detailed deliberation has decided not to recommend the proposal for the grant of Environmental Clearance.

Subsequently it was placed in 484th SEIAA meeting held on 3.2.2022 and Authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the Project proponent adding that in the event of representation being received, it may be forwarded to SEAC for further course of action.

The PP has made the representation on 18.7.2022 along with a letter from Wild Life Warden dt. 4.12.2020 & PCCF le dt. 16.12.2022. In this regard the MS SEIAA has requested certain clarification from PCCF vide Ir No. SEIAA-TN letter No. SEIAA-TN/F.No.7378/2016 Dt. 8.8.2022. The PCCF letter Dt. 28.12.2022 is as follows.


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TAMIL NADU FOREST DEPARTMENT

From
 Shri. Suresh K. Reddy, I.P.S.,
 Principal Chief Conservator of Forests
 and Chief Wildlife Warden (PCCF)
 Forest Head Quarters Building,
 Deputy-Commissioner's Office,
 Nagar Mahalingapuram Check Post,
 Chennai - 600 032.

To
 The Member Secretary,
 State Environment Impact Assessment
 Authority, Tamil Nadu,
 3rd Floor, Pasupathi Building,
 Saidapet, Chennai - 15.

Ref. No. 2022/29420/10227 dated 29-12-2022

Re: Eco Sensitive Zone - Srivilliputhur Mupramathi Tiger Reserve -
 Considering demand 10 Km Eco Sensitive Zone boundary for
 development projects and revisiting proposal of Eco Sensitive Zone for
 the Srivilliputhur Mupramathi Tiger Reserve - Clarification sought for -
 Reporting.

Ref: Member Secretary, SEIAA-TN letter No. SEIAA-TN/8. No. 7270/2020
 dated 09-09-2022

With reference to the above, it is informed that Srivilliputhur Mupramathi Tiger Reserve does not come under the protected area. However the tiger reserve comprises the protected areas i.e. Srivilliputhur Grizzled Squirrel Wildlife Sanctuary and Mupramathi Wildlife Sanctuary and certain non-sanctuary RPs. The "Guidelines for preparation of Eco Sensitive Zones around National Parks and Wildlife Sanctuaries" issued by the Government of India vide letter P. No. 1-9/2007-WL-1 (pt. dated 09-01-19) apply for National Parks and Wildlife Sanctuaries.

1) Based on the above final notification of Mupramathi Wildlife Sanctuary 2019 issued by the Government of India vide S.O. No. 3651 (II) dated 16-10-2019, the extent of Eco Sensitive Zone varies from 2km to 17 Km and Srivilliputhur Grizzled Squirrel Wildlife Sanctuary vide S.O. No. 2774 (II) dated 28-10-2019 to an extent of Eco Sensitive Zone varies from 2km to 6.2 Km.

2) Hence, demand 10 Km of Eco Sensitive Zone notification for Srivilliputhur Mupramathi Tiger Reserve is not applicable and final Eco Sensitive Zone notification is also not required, since the above said two sanctuaries Eco Sensitive Zone notification have already been issued by the Government of India.

Yours faithfully,


 for Principal Chief Conservator of Forests
 and Chief Wildlife Warden (PCCF)



With the above remarks it was again been placed in 359th SEAC meeting held on 23.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to accept the remarks of PCCF and decided to recommend the proposal for the grant of Environmental Clearance for the production quantity of 325120 cu.m of Rough Stone to the depth of 40m (25m AGL+ 15m BGL) in a period of 5 years and not exceeding annual peak production of 65690 m³ of Rough stone as per


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the approved mining plan subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.
2. The Project Proponent (PP) shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region before obtaining the CTO and get the necessary statutory permission under the MMR 1961 pertaining to the quarry working operations.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
4. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Refresher' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy.
5. The Project Proponent shall furnish slope stability action plan to the concerned AD (Mines) for the planned working by maintaining appropriate benches incorporating the haul road with proper gradient as the depth of the proposed quarry is exceeding 30 m, before obtaining CTO from TNPCB.
6. However, the Project Proponent shall carry out the scientific studies to assess the slope stability of the benches of the proposed quarry (or) the benches made in all the quarries of this cluster site collectively if amalgamation is done and when the depth of the working touches 30 m (or) during the 3rd year whichever is earlier, by involving a reputed Research and Academic Institution such as

NIRM, IIT-Chennai, NIT-Dept of Mining Engineering, Surathkal, Anna University Chennai-CEG Campus, and any CSIR Laboratories etc. 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.

7. Within six months of the commencement of mining operations, the Project Proponent shall carry out the scientific studies on 'Cumulative Impacts of the blasting operations carried out in the quarry on the surrounding prominent structures within 500 m from the mine lease such as blast-induced ground/air vibrations and fly rock', by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal, and Anna University Chennai-CEG Campus, etc. 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.
8. The Project Proponent shall develop the Green belt activities (tree plantations) in the safety zone as stipulated in the Mining Plan around the periphery of the proposed quarry lease before obtaining the CTO from the TNPCB.
9. The Project Proponent shall not carry out the secondary rock breakage involving blasting operations and use only the non-explosive techniques such as rock breakers, etc.
10. The Project Proponent shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
11. The Project Proponent 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.


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12. The Project Proponent shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him as per the provisions of MMR 1961.
13. The Project Proponent shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
14. The Project Proponent shall also install necessary dust and noise extraction system around mineral handling area with proper enclosures before obtaining the CTO from TNPCB.
15. Since the quarry is located in the cluster, the Project Proponent shall ensure strict compliance of the provisions given under the Mines Rules, 1955 for the health and welfare of the persons employed therein.
16. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
17. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
18. 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.
19. As accepted by the Project proponent, in lieu of CER cost is Rs. 5.0 lakh shall be spent for conservation activities in SMTR in consultation with DFO/ Deputy Director SMTR before obtaining CTO from TNPCB.


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20. The Project Proponent shall cater to the needs of the local population such as employment opportunities, adequate Air Pollution Control measures etc, as committed during public hearing.

Agenda No.359-20

(File No: 8519/2022)

Proposed Rough stone quarry lease over an extent of 1.20.0 Ha in S.F.No.56/1(part-5) Kothapetta Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu by Tmt. SA. Sumithashankar - For Environmental Clearance (SIA/TN/MUN/62641/2021 ,dated 23.7.2022)

This proposal was placed in 359th SEAC meeting held on 2.3.2023. The details of the project furnished by the proponent are given on the website (Parivesh.nic.in).

The SEAC noted the following:

1. The Proponent, Tmt. SA. Sumithashankar, has applied for Environmental Clearance for the proposed rough stone quarry lease over an extent of 1.20.0 Ha in S.F.No.56/1(part-5) Kothapetta Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
3. Tor Granted vide Lr.No. SEIAA-TN/F.No.8519/SEAC/ToR-992/2021 Dt. 28.7.2021.
4. Public hearing conducted on 7.6.2022
5. The mining plan is for the period of Five years and the production for the five years states that the total quantity of recoverable as 179843 cu.m of rough stone and the annual peak production is 41690 Cu.m. The ultimate depth of mining is 40m (10 m above ground level and 30 m below ground level).

1	Name of the Owner/Firm	:	Tmt. SA. Sumithashankar W/o. Shankar Raj, No.252, Merbanda Village, Venkatapuram.
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		Krishnagiri Taluk, Krishnagiri District - 635 001.
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	: Rough Stone
3	S.F No. of the quarry site with area break-up	: 56/1 (Part-5)
4	Village in which situated	: Kothapetta
5	Taluk in which situated	: Krishnagiri
6	District in which situated	: Krishnagiri
7	Extent of quarry (in ha.)	: 1.20.0 Ha
8	Period of quarrying proposed	: 5 years
9	Type of mining	: Opencast Manual Mining
10	Production (Quantity in m ³)	: 1,79,843 m ³ of Rough Stone
11	Latitude & Longitude of all corners of the quarry site	: 12°32'53.25"N to 12°32'57.45"N 78°12'29.71"E to 78°12'35.28"E
12	Topo Sheet No.	: 57-L/02
13	Man Power requirement per day:	: 30 Nos.
14	Precise area communication approved by District Collector with date	: Na.Ka.En.49/2016/Kanimam, dated:29.02.2016
15	Mining Plan approved by Assistant Director (Addl. Charge), Department of Geology and Mining with date	: Roc.No.96/2021/Mines, dated: 17.02.2021
16	Water requirement: 12. Drinking water & domestic purposes (in KLD) 13. Dust Suppression (in KLD) 14. Green Belt (in KLD)	: 3.5 KLD 1.0 KLD 1.5 KLD 1.0 KLD
17	Power requirement i. Domestic Purpose	: TNEB
18	Depth of quarrying	: 40m (10m agl + 30m bgl)
19	Depth of water table	: 70m below ground level
20	Whether any habitation within 300m distance	: No
21	Project Cost (including EMP cost)	: Rs.92.31.000/-
22	EMP cost	: Capital Cost - Rs. 16,28,000/- Recurring Cost - Rs. 7,93,000/-
23	CER cost	: Rs.1.84.620/-
24	Assistant Director, mines 500m cluster letter	: Roc. 96/2021/Mines, dated: 10.03.2022

25	VAO certificate regarding 300m radius cluster	: Letter dated 19.03.2021
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Based on the presentation and documents furnished by the project proponent and considering the safety aspects by reducing the last bench in XY-AB section, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the production quantity of 1784435 cu.m of Rough Stone to the depth of 30m (10m AGL+ 20m BCL) in a period of 5 years and not exceeding annual peak production of 41690 m³ of Rough stone as per the approved mining plan subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The Project Proponent (PP) shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region before obtaining the CTO and get the necessary statutory permission under the MMR 1961 pertaining to the quarry working operations.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
4. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Refresher' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy.
5. The Project Proponent shall furnish slope stability action plan to the concerned AD (Mines) for the planned working by maintaining appropriate benches


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incorporating the haul road with proper gradient as the depth of the proposed quarry is exceeding 30 m, before obtaining CTO from TNPCB.

6. However, the Project Proponent shall carry out the scientific studies to assess the slope stability of the benches of the proposed quarry (or) the benches made in all the quarries of this cluster site collectively if amalgamation is done and when the depth of the working touches 30 m (or) during the 3rd year whichever is earlier, by involving a reputed Research and Academic Institution such as NIRM, IIT-Chennai, NIT-Dept of Mining Engineering, Surathkal, Anna University Chennai-CEG Campus, and any CSIR Laboratories etc. 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.
7. Within six months of the commencement of mining operations, the Project Proponent shall carry out the scientific studies on 'Cumulative Impacts of the blasting operations carried out in the quarry on the surrounding prominent structures within 500 m from the mine lease such as blast-induced ground/air vibrations and fly rock', by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. 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.
8. The Project Proponent shall develop the Green belt activities (tree plantations) in the safety zone as stipulated in the Mining Plan around the periphery of the proposed quarry lease before obtaining the CTO from the TNPCB.
9. The Project Proponent shall not carry out the secondary rock breakage involving blasting operations and use only the non-explosive techniques such as rock breakers, etc.
10. The Project Proponent shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other

habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.

11. The Project Proponent 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.
12. The Project Proponent shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him as per the provisions of MMR 1961.
13. The Project Proponent shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
14. The Project Proponent shall also install necessary dust and noise extraction system around mineral handling area with proper enclosures before obtaining the CTO from TNPCB.
15. Since the quarry is located in the cluster, the Project Proponent shall ensure strict compliance of the provisions given under the Mines Rules, 1955 for the health and welfare of the persons employed therein.
16. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
17. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.


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18. 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.

19. As accepted by the Project proponent, CER cost is Rs. 5.0 lakh shall be spent for Panchayat Union Middle School, KA Nagar, Krishnagiri for the committed activities before obtaining CTO from TNPCB.

Agenda No: 359-21

(File No: 9378/2019)

Proposed earth quarry lease over an extent of 1.42.0 Ha at S.F.Nos 411/1A, 411/1B, 412/16 and 412/17A Potturam Villahge, Uthamapalaym Taluk, Theni District, Tamil Nadu by Thiru. K Kathiravan - For Environmental Clearance. (SIA/TN/MIN/281303/2022, dated: 7.7.2022)

The proposal was placed in this 359th meeting of SEAC held on 02.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Proponent, Thiru. K Kathiravan has applied for Environmental Clearance for the Proposed earth quarry lease over an extent of 1.42.0 Ha at S.F.Nos 411/1A, 411/1B, 412/16 and 412/17A Potturam Villahge, Uthamapalaym Taluk, Theni District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The mining plan is for 3 years and production for the three years states that the total quantity of recoverable as 16778 cu.m of Earth. The ultimate depth of mining is 2m BGL.

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1	Name of the Owner/Firm : Thiru. K. Kathiravan, S/o. P. Kandasamy, No.1/279/2, Kalaimagal Nagar, Vallalar Street, Vennimalai Post, Kadapparai, Karur District - 639 006.
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite) : Earth
3	S.F No. of the quarry site with area break-up : 411/1A, 411/1B, 412/16 and 412/17A


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4	Village in which situated	: Pottipuram
5	Taluk in which situated	: Urthamapalayam
6	District in which situated	: Theni
7	Extent of quarry (in ha.)	: 1.42.0 Ha
8	Period of quarrying proposed	: 3 Years
9	Type of mining	: Opencast Semi Mechanized Mining
10	Production (Quantity in m ³)	: 16.778 m ³ of Earth
11	Latitude & Longitude of all corners of the quarry site	: 09°55'27.11"N to 09°55'33.96"N 77°18'30.81"E to 77°18'37.58"E
12	Topo Sheet No.	: 58-G/05
13	Man Power requirement per day:	: 7 Nos
14	Precise area communication approved by Assistant Director, Department of Geology and Mining with date	: Na.Ka.En.297/Kanimam/2020, dated:17.06.2020
15	Mining Plan approved by Assistant Director, Department of Geology and Mining with date	: Rc. No. 297/Mines/2020, dated:20.06.2022
16	Water requirement: 15. Drinking water & domestic purposes (in KLD) 16. Dust Suppression (in KLD) 17. Green Belt (in KLD)	: 1.0 KLD 0.3 KLD 0.4 KLD 0.3 KLD
17	Power requirement j. Domestic Purpose k. Industrial Purpose	: TNEB 2800 Liters of HSD
18	Depth of quarrying	: 2m bgl
19	Depth of water table	: 30m bgl
20	Whether any habitation within 300m distance	: No
21	Project Cost (including EMP cost)	: Rs. 10,24,000/-
22	EMP cost	: Capital Cost – Rs. 4.45 lakhs Recurring Cost – Rs. 1.43 lakhs per annum
23	CER cost	: Rs. 1,50,000/-
24	Assistant Director, mines 500m cluster letter	: Rc. No. 297/Mines/2020, dated:20.06.2022
25	VAO certificate regarding 300m radius cluster	: Letter furnished

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Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the production quantity of 16778 cu.m of Earth to the depth of 2m BGL in a period of 3 years subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The PP shall obtain necessary permission from the competent authority to operate the quarry in the name of 'Ordinary Earth' instead of 'Earth' as per the recent G.O while executing the lease.
3. The proponent shall mandatorily appoint the required number of statutory officials and the competent persons in relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
4. 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.
5. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
6. 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 i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope

of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not 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.

7. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
8. The proponent shall ensure that the slope of dumps is suitably vegetated in scientific manner with the native species to maintain the slope stability, prevent erosion and surface run off. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps.
9. 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 and submit the consolidated report to TNPCB once in six months.
10. 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. The report on the periodic monitoring shall be submitted to TNPCB once in 6 months.
11. 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.
12. The purpose of Green belt around the project is to capture the fugitive emissions and to attenuate the noise generated, in addition to the improvement in the aesthetics. A wide range of indigenous plants species


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should be planted in and around the premise in consultation with the DFO, District / State Agriculture University. The plants species should have thick canopy cover, perennial green nature, native origin and large leaf areas. Medium size trees and small trees alternating with shrubs shall be planted. Miyawaki method of planting i.e. planting different types of trees at very close intervals may be tried which will give a good green cover. Greenbelt needs to be developed in the periphery of the mines area so that at the closure time the trees would have grown well.

13. **Noise and Vibration Related:** 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.
14. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
15. 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.
16. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
17. The proponent shall ensure that the transportation of the quarried materials 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 rough stones: and transport of rough stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.

18. 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.
19. After mining operations are completed, the mine closure activities as indicated in the mine closure plan shall be strictly carried out by the Proponent fulfilling the necessary actions as assured in the Environmental Management Plan.
20. The Project proponent 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 that is fit for the growth of fodder, flora, fauna etc.
21. 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.
22. The project proponent shall ensure that the provisions of the MMRD, 1956, 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.
23. 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.
24. 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.
25. 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.


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26. 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.

27. As accepted by the Project proponent, CER cost is Rs. 1.5 lakh shall be spent for GOT Kallar Hr. Sec School Muthaiyanchettipatti Village for the committed activities before obtaining CTO from TNPCB.

Agenda No: 359-22
(File No: 9133/2022)

Proposed Rough Stone quarry Lease over an extent of 4.19.5 Ha at S.F.No. 385/1 & 385/2A in Villukuri Village, Kalkulam Taluk, Kanniyakumari District, Tamil Nadu by Thiru.R.George Antony - For Environmental Clearance (SIA/TN/MIN/263691/2022 dated 25.03.2022)

The proposal is placed in this 359th SEAC meeting held on 02.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

SEAC noted the following:

1. The Project Proponent, Thiru.R.George Antony has applied for Environmental Clearance for the Proposed Rough Stone quarry Lease over an extent of 4.19.5 Ha at S.F.No. 385/1 & 385/2A in Villukuri Village, Kalkulam Taluk, Kanniyakumari District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The salient features of the project are as follows:

Name of the Project		S. No. of the Project	
1	Name of the Owner/Firm	Thiru.R. George Antony, S/o, Rethinam, No.16/22-G2, Kallankadu, Chunkankadai (Po), Kanniyakumari District - 629 003.	


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2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	Rough Stone Quarry
3	S.F No. Of the quarry site with area break-up	385/1 & 385/2A
4	Village in which situated	Villukuri
5	Taluk in which situated	Kalkulam
6	District in which situated	Kanniyakumari
7	Extent of quarry (in ha.)	4.19.5Ha
8	Latitude & Longitude of all corners of the quarry site	08°13'05.80"N to 08°13'11.55"N 77°22'39.65"E to 77°22'50.06"E
9	Topo Sheet No.	58-H/08
10	Type of mining	Opencast Mechanized Mining
11	Period of quarrying proposed	5 years
12	Production (Quantity in m ³)	3,89,724m ³ Rough stone
13	Depth of quarrying	60m below from existing ground profile
14	Depth of water table	65m-60m
15	Man Power requirement per day:	34 Nos.
16	Water requirement:	3.6 KLD
	14. Drinking & domestic purposes	0.8 KLD
	15. Dust suppression	1.6 KLD
	16. Green Belt	1.2 KLD
17	Power requirement	3,11,776 litres of HSD for the entire project life
18	Precise area communication approved by the District Collector with date	Rc.No.362(A)/G&M/2015, date:11.12.2021.
19	Mining Plan approved by the Deputy Director, Dept. of Geology and Mining with date	Rc.No.362(A)/G&M/2015, date:04.01.2022.


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20	500m cluster letter issued by the Deputy Director, dept. of Geology and Mining with date	Rc.No.362(A)/G&M/2015, date:06.01.2022.
21	VAO certificate regarding habitations in 300m radius	04.01.2022.
22	Project Cost (excluding EMP)	Rs.1,55,53,000/-
23	EMP cost	Capital cost: Rs.36,54,650/- Recurring cost: Rs.22,66,576/-

1. Earlier, the proposal was placed in 289th meeting of SEAC held on 24.06.2022. Based on the presentation made by the proponent, SEAC decided call for the following details.

1. By considering safety point of view, the PP shall remove the last bench which having the width less than 12m & the depth is restricted to 50m AGL. Accordingly revise the production quantity.
2. The PP shall furnish the certified compliance report from the IRO-MoEF&CC, Chennai on the EC issued.
3. The Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry during the appraisal while presenting to obtain the EC.
4. The mitigation measures to be furnished after discussions with DFO, Kanyakumari at a cost of Rs. 10 lakhs, since KKWLS is at 3.65km.

Subsequently, the proposal was placed in 534th Authority meeting held on 20.07.2022. In addition to the details called by SEAC, SEIAA decided to obtain the following additional particulars from the project proponent with reference to project life (or) subject to a maximum of thirty years, whichever is earlier.

i. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area from reputed research institutions on the following:

- a) Soil health & bio-diversity.

- b) Climate change leading to Droughts, Floods etc.
- c) Pollution leading to release of Greenhouse gases (GHG), rise in Temperature, & Livelihood of the local people.
- d) Possibilities of water contamination and Impact on aquatic ecosystem health.
- e) Agriculture, Forestry & Traditional practices.
- f) Hydrothermal/Geothermal effect due to destruction in the Environment.
- g) Bio-geochemical processes and Its foot prints including environmental stress.
- h) Sediment geochemistry in the surface streams.

ii. Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the impacts on the nearby water bodies due to mining activity. Based on actual monitored data it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided, covering the project life (or) subject to a maximum of thirty years, whichever is earlier.

iii. To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazards & to cope with disaster/untoward accidents in & around the proposed mine lease area due to the proposed method of mining activity & its related activities.

iv. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.

v. Detailed Mine Closure Plan covering the project life (or) subject to a maximum of thirty years, whichever is earlier.


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vi. Detailed Environment Management plan including adaptation, mitigation & remedial strategies covering the project life (or) subject to a maximum of thirty years, whichever is earlier.

On receipt of the details from the proponent, the proposal is again placed in this 359th SEAC meeting.

Based on the presentation and documents furnished by the project proponent, after detailed deliberations, SEAC considering the safety aspects, decided to recommend the proposal for the grant of Environmental Clearance for the restricted quantity of 3,80,514 m³ of Rough Stone for an ultimate depth of 50m Above ground level with annual peak production of 85,370m³ of rough stone, subject to the standard conditions as per the Annexure-1 of this minutes & normal conditions stipulated by MOEF&CC, In addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 before obtaining the CTO.
3. The proponent shall strictly adhere to the conditions as recommended by Anna University, Chennai for ensuring the Slope Stability aspects of the proposed quarry and the points suggested in the Slope Stability Action Plan Report.
4. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961 before the obtaining the CTO from the DEE/TNPCB.
5. The proponent shall maintain 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.

6. Further, the PP shall maintain the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 / 10 m as it is designed to take care of run-off water (size, gradient and length) before obtaining the CTO from TNPCB.
7. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
8. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
9. 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.
10. 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.
11. 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.
12. Within one year from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of suitable blast parameters for reducing the cumulative impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarry by adopting appropriate controlled blasting techniques', by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.


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13. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
14. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
15. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
16. The PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 2 years of operation whichever is earlier, by involving a reputed Research and Academic Institution such as NIRM, IITs, NIT-Dept of Mining Engg. Surathkal, Anna University Chennai-CEG Campus, and any CSIR Laboratories etc. 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.
17. 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.
17. As accepted by the Project proponent in lieu of CER Rs. 10 lakhs shall be spent for the conservation measures in Kanyakumari wild life sanctuary in consultation with DFO, Kanyakumari before obtaining CTO from TNPCB.

Agenda No: 359-23

(File No: 6726/2019)

Existing Limestone Mine lease over an extent of 31.092 Ha at S.F.Nos. 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790 & 791/2 in Ramayanpatti Village, Tirunelveli Taluk, Tirunelveli District, Tamil Nadu by M/s. Krishna Mines- For Extension of Validity of Environmental Clearance.(SIA/TN/MIN/295544/2022, dated:23.12.2022)

The proposal was placed in this 359th meeting of SEAC held on 02.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:


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1. The Proponent, M/s. Krishna Mines has applied for Extension of Validity of Environmental Clearance for the Existing Limestone Mining lease over an extent of 31.092 Ha at S.F.Nos. 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790 & 791/2 in Ramayanpatti Village, Tirunelveli Taluk, Tirunelveli District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item I(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. Mining operation in this lease was stopped on 16.04.2014 after receiving directions from MoEF&CC under Section-5 of Environment (Protection) Act, 1986, vide Lr. No. J-11015/06/2014-IA.II (M) dated 04.04.2014.
4. As directed by MoEF & CC, TNPCB had initiated credible action by way of filing a complaint vide CC No 280 of 2014 under section 200 of Cr.PC for offences U/s 15 tw, 16 & 19 (a) of the EPA act 1986 before Hon'ble Magistrate V court, Tirunelveli vide letter dated 10.09.2014.
5. In pursuance of the Supreme Court order dated 02.08.2017 in CWP no. 114/2014, the District Collector, Tirunelveli has levied a penalty of Rs.2,57,18,346 vide notice M3/10842/2019 dated 19.12.2019 for mining and transportation of 1,75,065MT excess quantity of Limestone from lease area from 2000-01 to 2014-15 without prior environmental clearance under Section 21(5) of MMDR Act 1957.
6. Krishna Mines had deposited Rs 2,57,18,346/- on 20.12.2019 and obtained NOC from Director of Geology and Mining, Chennai vide letter Re No.8480/MM3/2002 dated 10.01.2020.
7. Then environmental clearance under violation category on 03.03.2021 was issued by SELAA-Tamil Nadu vide Lr. No.SELAA-TN/E.No.6726/Violation/EC-4571/2020 dated:03.03.2021. The Environmental Clearance will be coterminous with the mine lease period or limited to a period up to 31.03.2023 with production of 13,47,114 tons of Limestone from the date of issue of EC whichever is earlier.


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8. Subsequently the supplementary lease order was obtained vide G.O (Ms) No 302 Industries (MMA.2) Department on 17.11.2021. The supplementary lease deed was executed on 01.12.2021 and the lease is valid up to 31-3-2030.
9. Consent to Operate (CTO) for Air (Prevention and Control of Pollution) Act 1981 and Water (Prevention and Control of Pollution) Act 1974 has been obtained on 24.08.2021. CTO is valid up to 31.03.2023.
10. After obtaining EC, executing supplementary lease deed & CTO mining was restarted on the lease area on 04.12.2021.
11. Permission has been obtained from Director of Mines Safety, under Regulation 106(2)(b) of Metalliferous Mines Regulations, 1961.
12. Mining operations in this lease area is carried out after obtaining all required statutory clearances and implementation of various control measures for environmental management such as water sprinkling, provision of garland drains, retaining wall plantation of about 33,000 trees inside and outside the lease area, etc.
13. Certified EC compliance report obtained from Integrated Regional office, MOEF & CC, Chennai, vide letter no EP/12.1.2022-23/SEIAA/194/TN/1336 dated 14/12/2022.
14. Penalty of Rs 2,50,000/- was imposed by J.M.Court V. Tirunelveli order dated 26.02.2022 for the credible action plan initiated by TNPCB vide CC No 280 of 2014 under section 200 of Cr.P.C for offences U/s 15 r/w, 16 & 19 (a) of the EPA act 1986 and the amount was also paid by Krishna Mines.
15. Towards conservation plan for flora & Fauna and annual monitoring of Bio diversity Rs 50 lakhs by way of DD no 397145 dated 17-11-2022 is paid to DFO & Wild life warden, Tirunelveli Division on 23-11-2022.
16. The amount prescribed for Ecological remediation (Rs15.546 lakhs), natural resource augmentation (Rs.18.66 lakhs) & community resource augmentation(Rs.23.319 lakhs) totalling Rs 57,525 lakhs remitted in the form of bank guarantee to TNPCB on July 26th, 2021 which is valid up to 31-3-2023.
17. As per this EC condition, as against Rs 57,525 lakhs, Rs 60, 22 lakhs spent for carrying out the following activities:

1.	Ecological Remediation	Rs.16,49,480/-
2.	Natural Resource Augmentation	Rs.19,41,600/-
3.	Community Resource Augmentation Plan	Rs.24,21,500/-
	Total cost for Remediation plan & NCRAP	Rs.60,22,580/-
	Say	Rs.60.22 Lakhs

18. Past production details have been certified by Joint Director/Assistant Director, Geology & Mining, Tirunelveli vide Rc.No.M3/10844/2019 dated 22.08.2022.

19. From the above, it is seen that an amount of 1.59,938.46T of limestone has only been mined up to 31-3-22 out as against the EC approved quantity of 13,47.114T. Hence it could be seen that only less quantity than the approved quantity has been achieved so far.

20. From the above table it could be seen that the present review of mining plan was prepared and approved for quantity not exceeding the quantity in the previous mining plan (i. e annual limestone production of 4.55 lakh TPA).

21. Salient details of the approved mining plan is as follows.

Balance available mineral reserve as on 1/9/2022	9.57 Mil.T
Proposed production during plan period (2023-24 to 2027-28)	2.28 Mil.T
Balance Reserves available after present period. (2023-24 to 2027-28)	7.29 Mil.T
Proposed limestone Production per year	0.455 Mil.T
Additional Years available after plan period	16.02 Say 16 years (up to 2043-44)


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22. Review of mining plan for the period 2023-24 to 2027-28 obtained and approved by IBM vide No TN/TNL/LST/ROMP-1694-MDS dated 02/12/2022.
23. MoEF&CC Notification S.O. 221(E), Dt:18.01.2021.
24. MoEF&CC Notification S.O. 1807(E), Dt: 12.04.2022.
25. MoEF&CC O.M. Dt: 13.12.2022.

During the meeting, the proponent stated that he had requested for an automatic extension as per the MoEF&CC notification dated 12.04.2022 and O.M dated 13.12.2022 and hence requested for the same.

SEAC noted that as per OM Dated 13.12.2022. Clarification on the amendment to EIA Notification 2006 Issued vide S.O. No. 1807(E) dated 12.04.2022 with regard to validity of Environment Clearance, para 2 (ii) states that...

"The Environment Clearances for which the project proponents have submitted the application for extension of validity as per the provisions of the EIA Notification 2006 as on the date of publication of Notification i.e., 12.04.2022 shall stand automatically extended to respective increased validity as mentioned at Para no. 1 column (C) above."


Based on the presentation made by the proponent, the SEAC noted that the PP has valid lease up to 31.03.2030 and hence decided to confirm that the PP is eligible for 'automatic extension' as per the aforementioned OM issued by the MoEF & CC.

As accepted by the Project proponent in lieu of the CER, Rs. 5.0 lakhs shall be spent for the conservation measures in Gangaikondan Wild Life sanctuary in consultation with DFO, Tirunelveli, before obtaining CTO from TNPCB.

Agenda No: 359 - TA
(File No: 9645/2022)

Proposed Karimbedu Sand Quarry Project for Restoring the Functional Efficiency of the Kosasthalalyar River over an Extent of 4.95.0Ha of Government land In S.F.No. 187 (Part) of Kosasthalalyar (Nagar) River in Karimbedu Village, Pallipattu Taluk, Tiruvallur District, Tamil Nadu by the Executive Engineer, PWD/WRD – For Environmental Clearance. (SIA/TN/MIN/409817/2022 Dt. 08.12.2022)

The proposal was placed for appraisal in this 340th SEAC Meeting held on 23.12.2022. The details of the project furnished by the proponent are given in the


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website (parivesh.nic.in).

The SEAC noted the following:

1. The Proponent, Executive Engineer, PWD/WRD, has applied for Environmental Clearance for the Proposed Karimbedu Sand Quarry Project for Restoring the Functional Efficiency of the Kosasthalaiyar River over an Extent of 4.95.0Ha of Government land in S.F.No. 187 (Part) of Kosasthalaiyar (Nagari) River in Karimbedu Village, Pallipattu Taluk, Tiruvallur District, Tamil Nadu.
2. The project/activity is covered under category "B2" of Item 1(a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. As per mining plan, the lease period is for one year and the mining plan is for the period of One year & mining quantity should not exceed 50,985 cum. of sand per annum. The ultimate depth - 2.06 metres (1.16m - Above River Bed (Shoal) & 0.90m - Below River Bed).
4. Earlier the proposal was placed in the 340th SEAC meeting held on 23.12.2022. Based on presentation & documents furnished by the PP, SEAC decided to carry out onsite inspection by the Sub Committee constituted by SEAC to assess the present Environmental Condition. Further, the PP shall furnish the following details during the site inspection.
 1. The Project Proponent shall study and report in detail on the "Replenishment Study" as per Sustainable Sand Mining Management Guidelines, 2016 and Enforcement & Monitoring Guidelines for Sand Mining 2020".
 2. Pillar stone shall be erected before the site inspection.

Based on the above, The State Expert Appraisal Committee (SEAC) Tamil Nadu constituted a sub-committee vide its Lr. No. SEAC-TN/9645/ Site Inspection/2022, dt. 23.12.2022 to inspect and study the field condition for the proposal seeking EC for a sand quarry proposed at Karimbedu Village in S.F.No. 187 (Part) Pallipattu Taluk, Tiruvallur District. The Committee comprises of Prof. Dr. Kurian Joseph., Member, SEAC.

As per the above letter the sub-committee visited the site on 31.12.2022. The observations made in the field and recommendation derived on the basis of the field


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visit are as below:

The following officials of WRD/PWD and the EIA Consultant participated and facilitated the field inspection:

1. Er. G.R.Suganthi EE/Mining & Monitoring Division/Chennai
2. Er. B.Rajasekaran., AEE/Mining & Monitoring Sub division/Tiruvallur
3. Er.N.Muzugason, A.E.E .W.R.D. Mining and monitoring DIVISION Chennai
4. Er. S. Sampath AEE Mining and Monitoring Sub Division Thiruvallur
5. Er.S.Praveenraj Asst.Engineer Mining and Monitoring sub Division Vellore
6. M.Kishore Dev - FE, EIA Co Ordinator GEMS Team

Salient Details of Karimbedu Sand Quarry:

1	SEAC File number	9645/2022
2	Proponent	Executive Engineer, WRD., Mining and Monitoring Division. Chennai
3	Project Activity	1 a. Mining of minerals
4	Category	B2
5	Project Type	Fresh EC
6	River	Kosasthalaiyar
7	Location	Survey No. 187 (P) of Karimbedu Village
9	Area	4.95 Ha
10	Sand Mining Quantity & Duration	50.985 m ³ / 1 year
11	Proposed Depth	2.06 m (1.16 m above bed level+0.90 m below bed level)
12	Method & Mining	Open cast - Machinery Excavation
13	Location of the proposed area latitude and longitude	
	N13° 19' 24.0331"	E79° 30' 45.5771"
	N13° 19' 21.6807"	E79° 31' 01.8499"
	N13° 19' 18.4614"	E79° 31' 01.3646"
	N13° 19' 20.8138"	E79° 30' 45.0919"

Observations:


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- Proposed sand quarry is located in the river bed of Kosathalaiyar (Nagari) River at a distance of about 1200 m N/W of Andhra Pradesh State Boundary.
- The dimension of the proposed sand quarry is 495m in length and 50m in width and 2.06 m depth.
- NH-716 B (Chittoor-Thatchur) is located at about 160 m North.
- Nedyam Reserve Forest boundary is at a distance of 210 m from the project site.
- Nearest habitation is at a distance of about 320 m North East.
- Karimbedu Government School is located at about 720m N/E of Proposed quarry site
- Nearest drinking water well is located at about 1000m downstream side of proposed sand quarry site.
- The sand mining is proposed to restore the functional efficiency of the Kosathalaiyar River, which is observed to have sand deposits above the river bed level affecting the river flow. (River bed level is +138.80m).
- WRD officials informed that a temporary (Katcha) road will be formed along the banks of river with locally available biodegradable materials to transport the sand to the yard.
- As boundary locations and local reference bench marks were not available at the time of site visit, the WRD officials were requested to establish the same. It has been done later. Photographs of the site during the site visit and after establishment of local reference bench marks are presented in Figure 1 and Figure 2 respectively.
- WRD officials were also requested to reassess the availability of sand in the proposed mining area as some part of the sand was seen to have washed away during the recent flood flows in the river. WRD officials confirmed the availability of the proposed quantity of sand after resurvey.

Recommendations:


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- Mining of sand at the proposed sand quarry in Survey No. 187 (P) of Karimbedu Village, Pallipattu Taluk, Tiruvallur District as per the mining plan is recommended for Environmental Clearance.
- Safety distance of 50 m to be left from the bank of the river.
- Quarrying shall be done without causing any hindrance to the local public and nearby forest land.
- Enforcement & Monitoring Guidelines for Sand Mining, 2020 of the MoEFCC, Government of India (Annexure VIII Salient provision for sand mining in the state of Tamil Nadu) to be implemented.
- PWD, WRD shall take the needful actions immediately to study the sand replenishment in the Kosathalalar River and establish the basis for sustainable sand mining.
- As per Rule 36 of the Tamil Nadu Minor Mineral Concession Rules 1956, no sand quarry should be allowed within 500m radial distance from the location of any bridge, water supply system, infiltration well or pumping installation.
- Recommendations of the Environmental Management Plan shall be strictly implemented.
- Project Proponent may consider providing the needful support to repair the access road to the nearby habitat across the River at upstream of the Project site (Figure 3) as the Road was observed to be damaged during the recent flood flow occurred in the river.

The proposal was again placed in 359th SEAC meeting held on 02.03.2023. Based on the recommendations of the sub-committee and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance subject to the normal conditions stipulated by MOEF&CC, in addition to the following specific conditions:

1. The Project Proponent shall conduct "Replenishment Study" as per Sustainable Sand Mining Management Guidelines, 2016 and Enforcement & Monitoring

Guidelines for Sand Mining 2020, through a reputed institution having expertise in the field and shall submit the study to SEIAA within 6 months.

2. 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 the EMP as committed.
3. The proponent shall fix flag posts at boundaries for the proposed mining area covering an extent of 4.95.0 Ha. There should be no deviation/ violation with respect to the area demarcated for quarrying.
4. The depth of sand quarrying shall be restricted to 1 m from the theoretical bed level.
5. The project proponent shall monitor the groundwater level during sand quarrying operations, a network of existing wells may be established around the sand quarrying area and new piezometers must be installed at all sand quarry sites. Monitoring of Ground Water Quality in the vicinity (one Km radius from the sand quarrying site) shall be carried out once in two months by engaging Groundwater Wing of the Water Resources Department.
6. An interdisciplinary team consisting of hydrogeologists, soil scientists, PWD engineers, TWAD Board engineers, and officials may be formed. It can conduct a scientific study to decide the distance or a range of distance that should be maintained between a sand quarry and infiltration and collection wells.
7. To prevent dust pollution, suitable working methodology needs to be adopted taking wind direction into consideration.
8. At no cost the impact of sand mining should interfere with the habitation and cultivation in the nearby area along the river bed.
9. The mining area must be demarcated leaving at least 50m from the river embankment on either side.
10. Contouring of the river bed has to be taken to ascertain the relative levels of sand in the river and also to suggest the depth of sand mining.
11. To ensure safety measures along the boundary of the quarry site, security guards are to be engaged during the entire period of mining operation.


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12. Wherever irrigation channels take off from the river within the boundary of the mining project, the mining operation should not affect the flow of water in the Irrigation channels.
13. The entire sand mining operation should be as per the guidelines for sustainable sand mining issued in 2016 by the MoEF & CC, GOI, New Delhi.
14. If the agricultural activities (or) thick greeneries are being carried out around all the sand mining projects, the mining operation should not affect the greeneries (or) agricultural activities as well as it should not lead to depletion of water in the open wells located nearby.
15. The approach road and loading of the sand in the vehicles, movement of the vehicle should be planned and implemented in such a way that there is no noise and dust pollution in the nearby habitation. We recommend that PWD should maintain at least a safe distance of 300m from the habitations while planning the approach road and the loading operation. Wherever necessary and near the habitation in particular dust suppression measures to be adopted. While the loaded vehicle move on the road that should be fully covered with tarpaulin.
16. The pathway used by all machineries should be properly constructed and maintained by the PWD in order to avoid pollution.
17. The mining operation should be above the ground water table.
18. Adequate statutory manpower to be deployed for complying with the provisions to use heavy machineries as per Mines Safety Regulations (MCDR, 2017 & MMR, 1961).
19. The Proponent shall provide Provision of bio-toilet to be ensured and confirmed.
20. During the sand mining work, appropriate progressive mine closure activities must be implemented to restore the river bed to its original status for ensuring the free flow.
21. CER – As committed the PP shall supply sand to nearby Government schools to fill up children's play area.


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ANNEXURE-I

1. The proponent shall mandatorily appoint the required number of statutory officials and the competent persons in relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
2. 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.
3. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
4. 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 i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not 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.
5. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
6. The proponent shall ensure that the slope of dumps is suitably vegetated in scientific manner with the native species to maintain the slope stability, prevent erosion and surface run off. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps.


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7. 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 and submit the consolidated report to TNPCB once in six months.
8. The Project Proponent shall carry out slope stability study by a reputed academic/research institution such as NIRM, IIT, Anna University for evaluating the safe slope angle if the proposed dump height is more than 30 meters. The slope stability report shall be submitted to concerned Regional office of MoEF&CC, Govt. of India, Chennai as well as SEIAA, Tamilnadu.
9. 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. The report on the periodic monitoring shall be submitted to TNPCB once in 6 months.
10. 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.
11. 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 Indlgenous plant species should be planted as given in the appendix in consultation with the DFO, State Agriculture University and local school/college authorities. 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.
12. Taller/one year old Saplings raised in appropriate size of bags, preferably eco-friendly bags should be planted in proper escapements 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.


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13. **Noise and Vibration Related:** (i) The Proponent shall carry out only the Controlled Blasting operation using NONEL shock tube Initiation system during daytime. Usage of other initiation systems such as detonating cord/fuse, safety fuse, ordinary detonators, cord relays, should be avoided in the blasting operation. The mitigation measures for control of ground vibrations and to arrest fly rocks should be implemented meticulously under the supervision of statutory competent persons possessing the I / II Class Mines Manager / Foreman / Blaster certificate issued by the DGMS under MMR 1961, appointed in the quarry. No secondary blasting of boulders shall be carried out in any occasions and only the Rock Breakers (or) other suitable non-explosive techniques shall be adopted if such secondary breakage is required. The Project Proponent shall provide required number of the security sentries for guarding the danger zone of 500 m radius from the site of blasting to ensure that no human/animal is present within this danger zone and also no person is allowed to enter into (or) stay in the danger zone during the blasting. (ii) 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.
14. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
15. 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.
16. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.


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17. The proponent shall ensure that the transportation of the quarried materials 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 rough stones; and transport of rough stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
18. 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.
19. After mining operations are completed, the mine closure activities as indicated in the mine closure plan shall be strictly carried out by the Proponent fulfilling the necessary actions as assured in the Environmental Management Plan.
20. The Project proponent 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 that is fit for the growth of fodder, flora, fauna etc.
21. 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.
22. The project proponent shall ensure that the provisions of the MMRD, 1956, 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.
23. 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.

24. 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.
25. 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.
26. 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.
27. 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.
28. The Project proponent shall install a Display Board at the entrance of the mining lease area/abutting the public Road, about the project information as shown in the Appendix-11 of this minute.


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Appendix - I
List of Native Trees Suggested for Planting

No	Scientific Name	Tamil Name	Tamil Name
1	<i>Aegle marmelos</i>	Vilvam	விவம்
2	<i>Adiantum punctatum</i>	Manjadi	மஞ்சடி, மஞ்சடிகாம்பி
3	<i>Albizia lebbek</i>	Vaagai	வாகை
4	<i>Albizia amara</i>	Uai	உ.அி
5	<i>Bauhinia purpurea</i>	Mantharai	மந்தரை
6	<i>Bauhinia racemosa</i>	Anthi	அந்தி
7	<i>Bauhinia tomentosa</i>	Iruvathi	இருவாதி
8	<i>Buchanania axillaris</i>	Kattuna	கட்டுநா
9	<i>Borassus flabellifer</i>	Pennai	பனை
10	<i>Butea monosperma</i>	Merukkamaram	மெருக்கமரம்
11	<i>Boerhaavia</i>	Ilavu, Sevvilavu	இலவு
12	<i>Calophyllum inophyllum</i>	Pannai	பனை
13	<i>Cassia fistula</i>	Sarakandru	சரகாண்ட்ரு
14	<i>Cassia roxburghii</i>	Sengondrai	செங்காண்ட்ரை
15	<i>Chloroxylon swietenia</i>	Purasamaram	புரசாமரம்
16	<i>Cochlospermum religiosum</i>	Kongu, Manjallavu	காங்கு, மஞ்சல்லவு
17	<i>Cordia dichotoma</i>	Naruvai	நரவாயி
18	<i>Crataeva alindora</i>	Mavalangum	மாவலாங்கும
19	<i>Dillenia indica</i>	Uva, Uzha	உ.வ
20	<i>Dillenia pentagyna</i>	SiruUva, Sitruzha	சீரு.உ.வ
21	<i>Diospyros subumum</i>	Karungali	காருங்கலி
22	<i>Diospyros schloroxylon</i>	Vagunai	வாகுநாயி
23	<i>Ficus amplicoma</i>	Kalluchi	கால்சூசி
24	<i>Hibiscus tiliaceus</i>	Astrupovarasu	அஸ்த்ரூபவாரசு
25	<i>Hardwickia binata</i>	Acha	அ.சா
26	<i>Holoptelia integrifolia</i>	Aayili	அ.யை.இ.அ.யை.இ.
27	<i>Laurus coromandelica</i>	Odhiam	ஒடியம்
28	<i>Lagerstroemia speciosa</i>	Poo Marudhu	பூ மரூது
29	<i>Lepisanthus tetraphylla</i>	Nelkottaimaram	நெல்காட்டைமரம்
30	<i>Limonia acidissima</i>	Vila maram	வில்லாமரம்
31	<i>Litsea glutinosa</i>	Painpattai	பைன்பட்டை
32	<i>Madhaca longifolia</i>	Iluppai	இலுப்பை
33	<i>Marsilea hexandra</i>	UlakkaiPuzai	உலக்கைபுழை
34	<i>Mimusops elengi</i>	Magzhamaram	மகழ்ஜாமரம்
35	<i>Mitragyna parvifolia</i>	Kadambu	கடம்பு
36	<i>Morinda pubescens</i>	Nura	நூர்
37	<i>Morinda citrifolia</i>	Vellai Nura	வெலை நூர்
38	<i>Phoenix cytherea</i>	Echet	ஏசை
39	<i>Pongamia pinnat</i>	Pungam	புங்கம்

40	<i>Fremna mollissima</i>	Murcvi	முல்லை
41	<i>Fremna serratifolia</i>	Narazkunnai	நாரைக்குண்டை
42	<i>Fremna tomentosa</i>	Malipoovarasu	மலைப்பூவரசு
43	<i>Prosopis cinerea</i>	Vanni maran	வாணி மாலை
44	<i>Pterocarpus marsipium</i>	Vengai	வேங்கை
45	<i>Pterospermum canescens</i>	Vennangu, Tada	வேண்டாங்கு
46	<i>Pterospermum xylocarpum</i>	Polavu	பொலவு
47	<i>Putranjiva roxburghii</i>	Karipala	கரிபலா
48	<i>Salvadora persica</i>	Uga Maran	உகை மாலை
49	<i>Sapindus emarginatus</i>	Mandungan, Soopukai	மண்டுகாண்ட சோப்புகை
50	<i>Samoa toota</i>	Asoa	அசோ
51	<i>Strobilos asper</i>	Piray maran	பிரை மாலை
52	<i>Stychnos racemosa</i>	Yetti	யெட்டி
53	<i>Stychnos potatorum</i>	Therthang Kottai	தேர்தாங்கு கோட்டை
54	<i>Syzygium cumini</i>	Naval	நாவல்
55	<i>Terminalia belleric</i>	Thandi	தாண்டி
56	<i>Terminalia arjuna</i>	Yen marudhu	யென் மாருது
57	<i>Toona ciliata</i>	Sandhana vembu	சாந்தாணா வெம்பு
58	<i>Thespesia populnea</i>	Puvaresu	புவரசு
59	<i>Walsuratrifoliate</i>	valsura	வால்சுரா
60	<i>Wrightia tinctoria</i>	Veppalai	வேப்பலை
61	<i>Pithecolobium dulce</i>	Kodakkapuli	கொடக்காப்பூ


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