

## State Expert Appraisal Committee (SEAC)

Minutes of 367th meeting of the State Expert Appraisal Committee (SEAC) held on 31.03.2023 (Friday) at SEIAA Conference Hall, 2nd Floor, Panagal Maligai, Saidapet, Chennai 600 015 for consideration of Building Construction Projects & Mining Projects

Agenda No: 367 – 01. (File No: 8975/2022)

Proposed Earth quarry lease over an extent of 2,49.5 Ha at S.F.NO. 49/3 (P) of Thoppampatty Village, Andipatti Taluk, Theni District, Tamil Nadu by Thiru. R.Ramar-For Environmental Clearance. (SIA/TN/MIN/ 254512/2022 Dt. 02.02.2022).

Earlier, this proposal (File No. 7886 - online proposal No. 174010 Dt:18.09.2020) was placed for appraisal in the 196th meeting of SEAC held on 29.01.2021. The details of the project furnished by the Proponent as are available on the website (parivesh.nic.in).

SEAC noted the following:

- 1. The Project Proponent, Thiru.R.Ramar has applied seeking Environmental Clearance for the proposed Earth quarry lease over an extent of 2.05.0Ha at S.F'No. 49/3(Part) in Thoppampatty Village, Andipatti 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.

After detailed scrutiny of soil analysis report furnished by the Project proponent, the Committee held detailed discussions and decided not to recommend the project proposal to SEIAA for the issue of EC as the soil analysis report showed that the mineral proposed to be mined is actually sand and not earth as claimed by the Proponent. The proposal was placed before the 425th Authority meeting held on 15.02.2021 and after detailed discussion, the Authority unanimously accepted the recommendation of SEAC and communicated the minutes of the meeting to the proponent.

In the meantime, the proponent has made a representation for reconsideration vide

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his letter dated 17.03.2021, by enclosing a soil analysis certificate obtained from the Head of the Department, Department of Civil Engineering, University College of Engineering, Dindigul, dated 18.02.2021. In this connection, the proposal was again placed before the 435th Authority meeting held on 26.03.2021 and the Authority decided to refer back this proposal to SEAC along with request of project proponent with enclosure for further course of action.

The subject was once again placed in the 209th SEAC meeting held on 09.04.2021. After detailed discussions, the Committee noted the verdict of the Hon'ble Madurai Bench of Madras High Court order in WP (MD) No 20903 of 2016 in its order dated 12/02/2021 and decided that the proponent shall get the certificate from the Department of Geology and Mining that the proposal was in conformity with the above Court order.

The same proposal, under a new file File No. 8975 - online proposal No. 254512 Dt. 02.02.2022), was placed in 252<sup>nd</sup> SEAC meeting held on 10.03.2022, without disclosing the history. The Committee examined the proposal and directed the proponent to submit the following additional details for further processing the proposal.

- The composition/component of the minerals proposed to be quarried shall be tested in any of the laboratories authorized by the Dept of Geology & Mining as directed in the above Judgment.
- 2. The proponent should produce a letter from the Department of 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.

The project proponent furnished reply vide Lr. dt: 15.06.2022 received on 17.06.2022. The proposal was placed for appraisal in 298th meeting of SEAC held on 22.07.2022. It was noted that project proponent has submitted their request for withdrawal of the proposal on 17.07.2021 stating the following:

"I would like to withdraw the SIA/TN/MIN/254512/2022, dated 02.02/2022 proposal which was submitted to SEIAA. The File No. 8975 is an oversight application

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of the file which is already exist to previous File No. 7886 in the portal. I request once again to kindly consider this letter for withdrawal of above said proposals". Therefore, SEAC decided to remit back the proposal to SEIAA for taking further course of action.

Subsequently, the subject was placed in 543rd SEIAA meeting held on 24.08.2022. The Authority after detailed discussion has decided to accept the request for withdrawal of online proposal No. SIA/TN/MIN/254512/2022, dated 02.02.2022 considering the proponent request for withdrawal vide Lr. Dt: 17.07.2021. Further, the Authority noted that the EIA Coordinator has not disclosed the history of the case and suppressed the facts. Therefore, the SEIAA decided that Member Secretary, SEIAA may call for the explanation from the EIA Coordinator for not disclosing the history and suppression of facts.

In this Connection, the EIA Coordinator was called for explanation vide SEIAA-TN Dt:14.09.2022 & to till date no explanation was received in this office and the PP has not given request for withdraw for the online proposal No. SIA/TN/MIN/254512/2022, dated 02.02.2022 (Duplicate of File no.7886) to take further course of action as per 543<sup>rd</sup> SEIAA minutes Dt:24.08.2022.

In the meantime, the PP vide Ir. Dt:27.12.2022 has again informed that I would like to process the proposal (File No. 8975) and requested to reconsideration their proposal and issuance of Environmental Clearance at the earliest. The proposal was again placed for appraisal in 367<sup>th</sup> meeting of SEAC held on 31.03. 2023. SEAC noted that the EIA coordinator has not yet submitted the explanation called for by SEIAA.

In view of the above, the Committee decided that (1) the PP shall furnish the explanation called for by SEIAA, (2) the explanation as and when received shall be placed before Authority for its decision and (3) proposal bearing number 8975 shall be withdrawn by the PP as already committed.

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Agenda No: 367 – 02. (File No: 8989/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 4.52.0 Ha at S.F.No. 1547, 1548/2, 1548/3, 1550/1C, 1550/2A and 1550/2B of Melmangalam Bit-II Village, Periyakulam Taluk, Theni District, Tamil Nadu by Thiru.V.Aadimoolam for Environmental Clearance. (SIA/TN/MIN/ 255302/2022 dated 05.02.2022)

Earlier, this proposal was placed in this 283<sup>rd</sup> Meeting of SEAC held on 09.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

### The SEAC noted the following:

- The Project Proponent, Thiru.V.Aadimoolam has applied for Environmental Clearance for the proposed Rough stone & Gravel quarry lease over an extent of 4.52.0 Ha at S.F.No. 1547, 1548/2, 1548/3, 1550/1C, 1550/2A and 1550/2B of Melmangalam Bit-II Village, Periyakulam 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.

Based on the presentation and document furnished by the project proponent, SEAC noted that, SEIAA has not scrutinized the present application appropriately. The same project with file no.7427 (online No.142008 dated 10.02.2020) was already appraised in 209th SEAC meeting held on 09.04.2021 and 239th SEAC meeting held on 22.10.2021 and the project was not recommended by the SEAC. Further, it was also placed in 444th SEIAA meeting held on 07.05.2021 and the Authority unanimously accepted the recommendation of SEAC. Now the proponent has filed a new application with file no.8989 (online No.255302 dated 05.02.2022), thereby attempting to circumvent the earlier decision of SEAC and SEIAA. The EIA Coordinator ECO Tech has also not disclosed the history of the case and hidden the facts. SEAC, therefore, decided to send the proposal back to SEIAA with the following observations.

- 1. To examine the system of initial scrutiny at SEIAA office and streamline the procedures.
- 2. SEIAA may call for the explanation of the EIA coordinator for hiding the facts.

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Subsequently, the proposal was placed in the 528th Authority meeting held on 04.07.2022. The Authority after detailed discussion has noted & decided to request the Member Secretary, SEIAA to call for the explanation of the EIA coordinator for hiding the facts as per SEAC minutes held on 09.06.2022.

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In this connection, the EIA Coordinator & the EIA Consultant Organization was called for explanation vide SEIAA-TN Ir. Dt: 14.07.2022. In this regard, the EIA coordinator & the EIA Consultant Organization vide their Ir. Dt:01.08.2022 received vide Email on 04.08.2022 has furnished reply stating reasons and apology for the said incident and requested the SEIAA/SEAC-TN not to initiate any action against them. Further, SEIAA -TN issued warning Lr. Dt: 17.08.2022 to the EIA Coordinator & the EIA Consultant Organization in regard to the said incident.

To the latest, the Project proponent his representation vide Ir. Dt:08.03.2023 has submitted the reports in regard to the proposed activity such as i) Study on design of Controlled Blasting to reduce the ground vibrations by Department of Mining Engineering, College of Engineering, Guindy, Anna University, Chennai, NOC from PWD & Assessment of Hydrological Impact and requested for grant EC.

The proposal was again placed for appraisal in 367th meeting of SEAC held on 31.03. 2023. The Committee noted that this aforesaid project was already not recommended by the SEAC due to the environmental concerns & unanimously accepted by the SEIAA. In view of the above, the Committee noted that any representation against the decision of the Authority should be placed before the Authority and not before SEAC. The Committee also decided to request the Authority to look into the prevailing procedures and make suitable changes to avoid recurrence of such incidences in future.

Agenda No: 367 – 03. (File No. 9353/2022)

Proposed Gravel quarry lease over an extent of 4.17.66Ha at S.F.No.1438/IB, 1438/2B, 1438/3, 1438/1C, 1438/2C, 1486/1A and 1486/1B of Shanmugasundrapuram Village, Andipatti Taluk, Theni District, Tamil Nadu by Thiru.N.Gubendran for Environmental Clearance.(\$IA/TN/MIN/276517/2022, dt: 07.06.0222)

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Earlier, the proposal was placed in this 314th Meeting of SEAC held on 23.09.2022. 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.N.Gubendran has applied for Environmental Clearance for the proposed Gravel quarry lease over an extent of 4.17.66Ha at S.F.No.1438/1B, 1438/2B, 1438/3, 1438/1C, 1438/2C, 1486/1A and 1486/1B of Shanmugasundrapuram Village, Andipatti Taluk, Theni District, Tamil Nadu
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan, the lease period is 3 Year. The mining plan is for the period of 3year & the production should not exceed 66638 m³ of Gravel. The maximum depth of mining would be 2 metres below ground level.
- 4. The salient features of the proposed mining activity as follows

SI. No	Details of the Proposal	<b> </b> :	Data Furnished
1	Name of the Owner/Firm	;	Thiru.N.Gubendran S/o.S.Natarajan Pillayar Kovil Street B.Ammapatti Bodinaickanur Theni District - 625528
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Gravel
3	S.F No. Of the quarry site with area break- up	:	1438/1B, 1438/2B, 1438/3, 1438/1C, 1438/2C, 1486/1A and 1486/1B
4	Village in which situated	:	Shanmugasundrapuram
5	Taluk in which situated	:	Andipatti
6	District in which situated	:	Theni
7	Extent of quarry (in ha.)	:	4.17.66 Ha

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8	Latitude & Longitude of all corners of the quarry site	:	09°58'58.77"N to 09°59'05.49"N 77°32'09.69"E to 77°32'19.42"E
9	Topo Sheet No.	:	58 – G/09
10	Type of mining		Opencast Shallow Mining
11	Period of quarrying proposed	:	3 years
12	Production (Quantity in m³)	:	66,638m³ of Gravel
13	Depth of quarrying	:	2m
14	Depth of water table	:	33m BGL
15	Man Power requirement per day:		6Nos.
16	Source of Water Requirement		water vendors
17	Water requirement:	:	1.0 KLD
	<ol> <li>Drinking &amp; domestic purposes (in KLD)</li> <li>Dust suppression, Green Belt &amp;Wet Drilling (in KLD)</li> </ol>		0.3 KLD 0.4 KLD
			0.3 KLD
18	Power requirement		TNEB
19	Whether any habitation within 300m distance	:	No
20	Precise area communication approved by the, District Collector, with date	:	Rc.No.856/Kanimam/2021, dt:08.04.2022
21	Mining Plan approved by Assistant Director, Department of Geology and Mining with date	:	Rc.No.856/2021/Mines, dt:26.04.2022
22	Assistant Director, Department of Geology and Mining 500m cluster letter		Rc.No.856/2021/Mines, dt:06.05.2022

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23	VAO certificate regarding 300m radius cluster		Letter dt: 26.04.2022
24	Project Cost (excluding EMP cost)	:	Rs.24.26 Lakh
25	EMP cost	:	Rs.15.23 Lakhs/ 3 Years
26	CER cost		Rs.1.5 Lakhs as conservation measure for Srivilliputhur Megamalai Tiger Reserve to DFO, Theni.

Based on the presentation and document furnished by the project proponent, SEAC decided to ask for the following additional details from the Project Proponent.

- i) NBWL Clearance as the proposed site lies within the default 10 km distance from the Srivilliputhur, Megamalai Tiger Reserve.
- The proponent should produce a letter from the concerned Asst Director (Geology & Mines) stating that the location of quarry site does not lie adjoining to the rivers, streams, canals and also does not come under any notified/declared protected zones in terms of the above Judgment.

Subsequently, the subject was placed in 560th authority meeting held on 17.10.2022. The authority after detailed discussion decided to call for the following additional particulars from the project proponent as follows

- a) 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
- b) Top soil, Soil health, bio-diversity, Agriculture, Forestry & Traditional practices.
- c) Aquifer in the vicinity, Ground water potential and impact on surrounding wells and other surface water bodies.
- d) Climate change leading to Droughts, Floods etc.
- e) Aquatic & terrestrial vegetation in regard to pollution leading to release of Greenhouse gases (GHG), rise in Temperature, & Livelihood of the local people.
- f) Possibilities of water contamination and impact on aquatic ecosystem health and wetlands.
- g) Hydrothermal/Geothermal effect due to destruction in the Environment.
- h) Bio-geochemical processes and its foot prints including environmental stress
- i) rediment geochemistry in the surface streams & and water bodies.

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j) Erosion, Loss of habitat and land scape changes.

In this regard, the PP has furnished reply vide Ir Dt:27.02.2023 and submitted copy of PCCF& CWLW letter Dt:21.01.2023.

The proposal was again placed for appraisal in 367th meeting of SEAC held on 31.03. 2023. Based on the presentation & documents furnished and the Committee carefully examined the points raised by SEAC and the replies given by the PP and SEAC decided to recommend the proposal for the grant of Environmental Clearance for the period of 3 Years for the production quantity of 66,638m<sup>3</sup> of Gravel but annual peak production capacity of not exceeding 22212 m3 of gravel by maintaining the ultimate depth of mining of 2m BGL subject to the standard conditions & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- The proponent shall mandatorily appoint the statutory competent persons accordingly for the proposed quarry size to satisfy the provisions of Mines Act 1952.
- 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.
- 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. 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.
- 5. 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.

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- 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.
- 7. 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.
- 8. 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.
- 9. 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.
- 10. Noise and Vibration Related: (i) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs, (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
- 11. 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.
- 12. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
- 13. 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

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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.

- 14. 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.
- 15. 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
- 16. 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.
- 17. The project proponent shall ensure that the provisions of the MMDR Act, 1957, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are compiled by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.
- 18. 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.
- 19. 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.
- 20. 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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- 21. 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.
- 22. 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.
- 23. 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.
- 24. 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.
- 25.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.
- 26. As accepted by the Project proponent the CER amount of Rs. 1.5 Lakhs shall be spent for the conservation measures pertaining to the Srivilliputhur-Megamalai Tiger Reserve in consultation with the DFO, Theni, before obtaining CTO from TNPCB.

Agenda No: 367 – 04.

(File No. 9473/2022)

Proposed Rough stone & Gravel Quarry over an extent of 4.88.0Ha at SF.No.780, 781/1, 781/2, 782/1, 782/2(P), 783/1(P), 783/2(P), & 786 of Kumbikulam Village, Radhapuram Taluk, Tirunelveli District, Tamil Naduby Tvl.Mars Mining - for Environmental Clearance. (SIA/TN/MIN/291056/2022, Dt: 10.09.2022)

Earlier, the proposal was placed for appraisal in this 333<sup>rd</sup> meeting of SEAC held on 01.12.2022. The details of the project furnished by the proponent are available in the website (parivesh nic.in).  $\Lambda$ 

The SEAC noted the following:

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- Now, the Project Proponent, Tvl.Mars Mining has applied for Environmental Clearancefor the proposed Rough stone & Gravel Quarry over an extent of 4.88.0Ha at SF.No.780, 781/1, 781/2, 782/1, 782/2(P), 783/1(P), 783/2(P), & 786 of Kumbikulam Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B2" of Item I(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. The precise area communication/lease is issued for the period of 10 years. The approved mining plan is for the period of five years & production should not exceed 1098200m³ of Rough Stone & 128898m³ of Gravel & 200355m³ of Weathered Rock. The annual peak production shall not exceed 223300 m³ of Rough Stone (4th Year), 51558 m³ of Gravel (1th Year), & 73500 m³ of Weathered Rock (1th Year). The ultimate depth is 58m BGL.

The salient features of the proposed mining activity as follows

SI. No	Details of the Proposal		
1.	Name of the Owner/Firm	:	Tvl.Mars Mining, Old No.4/131, New No.2, 15th street, Sakthi nagar, Nerukundram., Chennai-600107.
2.	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough stone & Gravel
3.	S.F No. Of the quarry site with area break-up	:	780, 781/1, 781/2, 782/1, 782/2(P), 783/1(P), 783/2(P), & 786
4.	Village in which situated	-  :	Kumbikulam
5.	Taluk in which situated	:	Radhapuram
6.	District in which situated	:	Tirunelveli
7.	Extent of quarry (in ha.)	:	4.88.0Ha
8.	Latitude & Longitude of all corners of the quarry site	:	08°18'02.67"N to 08°18'11.50"N 77°43'04.47"E to 77°43'12.46"E
9.	Topo Sheet No.	:	58 – H/11
10.	Type of mining		Opencast Semi-Mechanized of Mining

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11.	Lease/precise area communication period of	:	5 years
	quarrying proposed		•
12.	Mineable reserve	:	1098200m³ of Rough Stone &
			128898m3 of Gravel &
			200355m³ of Weathered rock
13.	Ultimate pit depth & dimension upto life of	:	Depth - 58 m
	mine/mineable reserve		Dimension:
			A-A' & B-B' -
			216m (L) X 115m (W) X 58m (D)
			A-A' & C-C' -
			188m (L) X 42m (W) X 58m (D)
			A-A' & D-D' -
			110m (L) X 93m (W) X 53m (D)
14.	Lease Period of quarrying	:	5 years
15.	Production (Quantity in m³) as per mining plan	:	1098200m³ of Rough Stone &
			128898m3 of Gravel &
		L.	200355m³ of Weathered rock
16.	Proposed Depth of quarrying as per mining	:	58 m
	plan	_	
17.	Approved Ultimate Depth of quarrying as per	:	50m
- 4	SEAC recommendation		
18.	Pit dimension as per mining plan	:	
			216m (L) X 115m (W) X 58m (D)
			A-A' & C-C' -
			188m (L) X 42m (W) X 58m (D) A-A' & D-D' -
			110m (L) X 93m (W) X 53m (D)
19.	Revised Production (Quantity in m³) as per	T	1011162m³ of Rough Stone &
	SEAC recommendation upto 50m depth		128898m3 of Gravel &
		L	200355m³ of Weathered rock
20.	Depth of water table	:	
21.	Man Power requirement per day:		25 Nos.
22.	Source of Water Requirement		water vendors
23.	Water requirement:	:	
	1. Drinking & domestic purposes (in KLD)		1.0 KLD
	2. Dust suppression, Green Belt &Wet Drilling -		
	(in_KLD)		2.5 KLD
		L	2.5 KLD

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24.	Power requirement		TNEB
25.	Whether any habitation within 300m distance	:	No
26.	Precise area communication approved by the,	:	Rc.No.M2/38457/2021, dt:
	District Collector's, Department of Geology and		10.05.2022
	Mining with date		
27.	Mining Plan approved by Assistant Director,	:	Roc.No.M2/38457/2021, dt:
	Department of Geology and Mining with date		13.05.2022
28.	Assistant Director, Department of Geology and		Rc.No.M2/38457/2021, dt:
	Mining 500m cluster letter		13.05.2022
29.	VAO certificate regarding 300m radius cluster		Letter dt:18.07.2022
30.	Project Cost (excluding EMP cost)	:	Rs.346.46 Lakh
31.	EMP cost	:	Rs.206 Lakhs/5 Years including capital cost of Rs. 32.17 Lakhs & slope study cost of Rs. 4 Lakhs & Blast vibration study cost of Rs. 4 Lakhs
32.	CER cost		Rs.7.00 Lakhs

Based on the presentation and documents furnished by the project proponent, SEAC decided to call for certain additional particulars as follows.

- 1. The PP shall enumerate the permanent structures which are belongs to the PP & not belongs to the PP, situated within100m, 200m & 300m radius of the proposed mining area.
- 2. The PP shall furnish a report on the scientific studies carried out for the 'Impact of blast-induced ground and fly rock due to the proposed Quarrying on the Surrounding Structures including Wind Mills and Habitations located within 200 m from the quarry lease', from any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, National Institute of Rock Mechanics (NIRM)-Bangaluru, IIT (ISM)-Dhanbad, NIT-Dept of Mining Engg, Surathkal.
- 3. The Project proponent shall furnish revised EMP including mine closure plan.

4. The Project proponent shall furnish revised production quantity for ultimate depth of mining up to 50m.

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5. The project proponent shall photograph of barbered wire fencing and green belt provided.

Subsequently, the subject was placed in 578th SEIAA meeting held on 17.12.2022. In this regard, the PP has furnished reply vide Ir Dt:22.02.2023 and submitted copy of design of controlled blasting to reduce ground vibrations to eliminate fly rocks from proposed mining area by Dept. of Mining Engineering, CEG, Anna University Chennai.

The proposal was again placed for appraisal in 367<sup>th</sup> meeting of SEAC held on 31.03. 2023. During the meeting the PP presented the replies to thew queries raised in the 333<sup>rd</sup> meeting of SEAC held on 01.12.2022 & 578<sup>th</sup> SEIAA meeting held on 17.12.2022, which is as follows.

SL.NO	QUERY	REPLY
1	The PP shall enumerate the permanent structures which belongs to the PP ¬ belongs to the PP, situated within 100m, 200m & 300m radius of the proposed mining area.	1
2	The PP shall furnish a report on the scientific studies carried out for the "Impact of blast-induced gound and fly rock due to the proposed Quarrying on the Surrounding Structures including Wind Mills and Habitations located within 200 m from the quarry lease, from any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & FuelResearch (CIMFR) / Dhanbad, NarionalInstitute of Rock Mechanics (NIRM)-Bangaluru, IIT (ISM)-Dhanbad, NIT-Deptof Mining Engg, Surathkal.	vibrations and eliminate the fly rock from the proposed rough stone and gravel quarry is carried out through Department Of Mining Engineering College Of Engineering, Guindy Anna University, Chennai 600026. Study report is given vide Enclosure – 2. Study concludes that "It can be concluded that the controlled placting using NONEL mitiation system by limiting maximum explosive charge per delay, did not produce peak particle velocities (blast vibrations) greater than 2 mm/s at the locations of the interest, namely, windmill, villages and other buildings implying that they are safe".  All the suggestions and recommendations given in the report like drilling pattern, blasting pattern, initiating sequence, total charge to be used per blast,

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SL.NO	QUERY	REPLY
3	The Project proponent shall furnish revised EMP including mine closure plan.	The details of revised EMP cost is given in Enclosure No.3. During the mining it will be ensured that the entire lease periphery is properly fenced to prevent inadvertent entry of men and animals, Besides, good plantation will be carried out in the lease periphery. In the post mining stage, the entire mined out void will be left as water body which can be utilized locally. Progressive mine closure plan is given in approved mining plan.
4	The Project proponent shall furnish revised production quantity for ultimate depth of mining upto 50m.	The revised production quantity for ultimate depth of mining upto 50m is given in Enclosure – 4.
5	The project proponent shall photograph of barbered wire fencing and green bell provided.	,

Recommendations mentioned in the report on design of controlled blasting to reduce ground vibrations to eliminate fly rocks from proposed mining area by Dept. of Mining Engineering, CEG, Anna University Chennai as follows,

- i. In the proposed quarry of the project proponent, controlled blasting techniques like muffled blasting with conveyor belts & Tyres and line-drilling technique shall be followed to control the fly rock generation and ground vibration towards the windmill.
- ii. The proponent shall implement the trench to be formed around the boundary to reduce the ground vibrations propagate from the blasting operations as in the said report vide annexure VII.
- iii. It is strongly recommended to install the sheet fencing along the proposed quarry boundary to reduce the impact of flyrock on the nearest structures.
- iv. It is suggested that to propose the haul road towards northwest direction of the proposed quarry to reduce the propagation of ground vibrations induced from blasting operations towards the windmill as in the said report vide Annexure VII.
- v. It is strongly recommended to conduct blast vibration study immediately after the commencement of quarrying operation.

Based on the presentation & documents furnished and the Committee carefully examined the points raised by SEAC and the replies given by the PP and SEAC decided to recommend the proposal for the grant of Environmental Clearance for the production of 1011162m³ of Rough Stone & 128898m³ of Gravel & 200355m³ of Weathered rock and the annual peak production shall not exceed 219650 m³ of Rough.

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Stone, 73500 m³ of Weathered rock & 51558 m³ of Gravel and maintaining the ultimate depth of mining of 50m BGL 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:

- 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 strictly adhere to the recommendations mentioned in the report as provided by the Dept. of Mining Engineering, CEG, Anna University Chennai on design of controlled blasting to reduce ground vibrations and to eliminate fly rocks from proposed quarrying operation; without any deviations.
- 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 PP shall inform the 'Notice of Opening' of the quarry/mine to the Director of Mines Safety/Chennai Region and acknowledgement of the same shall be furnished to the AD(Mines) & the concerned DEE/TNPCB before obtaining the CTO from the TNPCB.
- 5. 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 DGMS approved Group Vocational Training Centre, Pandalgudi (or) Trichy.
- 6. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the development activities from west to east direction 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

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- (or) after the completion of 3 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. 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.
- 9. 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.
- 10. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
- 11. Since few structures including the wind mill and abandoned/unused sheds are situated within 300 m from the lease boundary, the PP shall carry out maximum of only one round of blast per day in accordance with the controlled blast design techniques & measures as recommended by Anna University Chennai, restricted to the maximum of 30 to 40 number of holes per round with maintaining maximum charge per delay in such a manner that the blastinduced 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
- 12. However, within six months from the commencement of mining operations, the PP shall carry out the scientific studies after obtaining the prior permission from the DMS/Chennai 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', in

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accordance with the DGMS Circular No. 7 of 1997 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.

- 13. No 'Deep-hole large diameter drilling and blasting' shall be permitted in the proposed quarry in view of the wind mill structure is located within 300 m.
- 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 in accordance with 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 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.
- 17. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
- 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:

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21. As accepted by the Project proponent the CER cost is Rs. 7 lakhs and the amount shall be spent for the Government Higher Secondary School, Radhapuram as committed, before obtaining CTO from TNPCB.

Agenda No: 367 – 05. (File No. 9508/2022)

Proposed Rough Stone & Gravel Quarry over an extent of 2.50.0Ha at SF.No.488/1, 488/3A (P), 489/2 (P) and 491/1 (p) of Kasthurirengapuram part - 1 Village, Tisayanvilai Taluk, Tirunelveli District, Tamil Nadu by Thiru.R. Jagan- for Environmental Clearance. (SIA/TN/MIN/402407/2022, Dt: 07.10.2022)

Earlier, the proposal was placed for appraisal in this 333rdmeeting of SEAC held on 01.12.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

- 1. Now, the Project Proponent, Thiru.R.Jagan has applied for Environmental Clearancefor the proposed Rough Stone & Gravel Quarry over an extent of 2.50.0Ha at SF.No.488/1, 488/3A\*\*(P), 489/2 (P) and 491/1 (p) of Kasthurirengapuram part - 1 Village, Tisayanvilai Taluk, Tirunelveli 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. The precise area communication/lease is issued for the period of 5 years. The approved mining plan is for the period of five years & production should not exceed 373618m³ of Rough Stone & 36974m3 of Gravel. The annual peak production shall not exceed 75813 m³ of Rough Stone (3rd Year), & 16680 m³ of Gravel (1ª Year). The ultimate depth is 40m BGL.
- 4. The salient features of the proposed mining activity as follows

SI. No	Details of the Proposal				
1.	Name of the Owner/Firm	:	Thiru.R.Jagan, (Late), Kalluketty, Kanyakumari Nadu State - 62	Thuthiv Kuzł District,	•
2.	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough Stone &	Gravel	

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3.	CENo Of the guarantite with and	$\overline{}$	1007 1007 100 10 100 10
] 3.	S.F. No. Of the quarry site with area	:	488/1, 488/3A (P), 489/2 (P) and
4.	break-up Village in which situated	+	491/1
	Taluk in which situated	╀	Kasthurirengapuram part - 1
5.	Taluk in which situated	:	Tisayanvilai
6.	District in which situated	:	Tirunelveli
7.	Extent of quarry (in ha.)	:	2.50.0Ha
8.	Latitude & Longitude of all corners of	]:	08°18'32.05"N to 08°18'37.61"N
	the quarry site		77°43'29.12"E to 77°43'35.62"E
9.	Topo Sheet No.	:	58 – H/11
10.	Type of mining		Opencast Mechanized of Mining
11.	Lease/precise area communication	<del> </del>	5 years
	period of quarrying proposed		'
12.	Mineable reserve	1:	373618m³ of Rough Stone &
			36974m3 of Gravel
13.	Ultimate pit depth & dimension upto	:	Depth - 40 m
	life of mine/mineable reserve		Dimension:
			135m (L) X 141m (W) X 40m (D)
14.	Lease Period of quarrying	:	10 years
15.	Approved mining plan validity period	-	E vone
15.	Approved thining plant validity period		5 years
16.	Production (Quantity in m³) as per	:	373618m³ of Rough Stone &
	mining plan		36974m3 of Gravel
17.	Depth of quarrying as per mining plan	:	40 m
18.	Pit dimension as per mining plan	:	135m (L) X 141m (W) X 40m (D)
19.	Depth of quarrying	:	40m
20.	Depth of water table	:	62m – 58m BGL
21.	Man Power requirement per day:		37 Nos.
22.	Source of Water Requirement		water vendors
23.	Water requirement:	:	1.8 KLD
	1. Drinking & domestic purposes		0.5 KLD
	(in KLD)		
	2. Dust suppression, Green Belt		0.7 KLD
	&Wet Drilling (in KLD)		0.6 KLD 🛫
24.	Power requirement		TNEB
4 25.	Whether any habitation within 300m	:	No
	distance		(V <sub>1</sub>
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26.	Precise area communication approved	:	Rc.No.M2/28973/2021, dt:
	by the, District Collector, Department		10.05.2022
	of Geology and Mining with date		
27.	Mining Plan approved by Assistant	:	Roc.No.M2/28973/2021, dt:
	Director, Department of Geology and		13.05.2022
	Mining with date		
28.	Assistant Director, Department of		Roc.No.M2/28973/2021, dt:
	Geology and Mining 500m cluster		13.05.2022
	letter		
29.	VAO certificate regarding 300m radius		Letter dt: 15.07.2022.
	cluster		
30.	Project Cost (excluding EMP cost)	:	Rs.58.77 Lakh
31.	EMP cost	:	Rs.149.24 Lakhs/Year including
			capital cost Rs.29.15 Lakhs
32.	CER cost		Rs.5 Lakhs

Based on the presentation and documents furnished by the project proponent, SEAC decided to call for certain additional particulars as follows

- 1. The Project proponent to furnish letter from DFO, Thirunelveli indicating proximity of reserve forests, Pas, Sanctuaries, etc.
- 2. The PP shall furnish a report on the scientific studies carried out for the 'Impact of blast-induced ground and fly rock due to the proposed Quarrying on the Surrounding Structures including Wind Mills and Habitations located within 200 m from the quarry lease', from any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, National Institute of Rock Mechanics (NIRM)-Bangaluru, IIT (ISM)-Dhanbad, NIT-Dept of Mining Engg, Surathkal.
- 3. The Project proponent shall furnish revised EMP including mine closure plan.
- 4. The Project proponent shall furnish revised production quantity for ultimate depth of mining upto 40m.
- 5. The project proponent shall photograph of barbered wire fencing and green belt provided

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Subsequently, the subject was placed in 578th Authority meeting held on 17.12.2022. The Authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 01.12.2022

In this regard, the PP has furnished reply vide Ir Dt:06.02.2023 and submitted copy of DFO, Tirunelveli letter Dt:14.12.2022.

The proposal was again placed for appraisal in 367th meeting of SEAC held on 31.03. 2023. During committee meeting the PP has presented the reply and submitted the same to SEAC in regard to queries raised in the 333rd meeting of SEAC held on 01.12.2022 & 578th Authority meeting held on 15.12.2022 as follows

S.No	Query	Reply
1.	The Project proponent to furnish letter from DFO, Tirunelveli indicating proximity of reserve forests, pas, Sanctuaries, etc	The Nearest Reserved Forest is Mahendiragiri R.F – 18.30 km.
2.	The PP shall furnish a report on the scientific studies carried out for the 'Impact of blast induced ground and fly rock due to the proposed Quarrying on the Surrounding Structures including Wind Mills and Habitations located within 200m from the quarry lease', from any of the reputed Research and Academic Institution such as CSIR- Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, National institute of Rock Mechanics (NIRM) - Bangaluru, IIT (ISM) -	The project proponent had furnished the report on site investigation and design of blasting operations for proposed Rough stone and Gravel quarry a report from Department of Mining Engineering National Institute of Technology Karnataka, Surathkal (Government of India). Mangalore – 575025.

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Dhanbad, NIT-Dept of Mining Engg, Surathkal. SL. NO 333rd Meeting SEAC QUERY The Project proponent shall furnish revised EMP including mine closure plan. 3. REVISED EMP BUDGET Mitigation Measure Provision for Implementation Capital Recurring Acthities Rental Dozer & drainage construction on haul road @ Rs. 10.000/- per hectare; and Compaction, gradation and drainage 25000 25000 yearly maintenance @ Rs. 10,000/- per on both sides for Haulage Road hectare Fixed Sprinkler Installation and New Fixed Water Sprinkling Arrangements 800000 50000 + Water sprinkling by own water Water Tanker Cost for Capital: and Water tankers Sprinkling (thrice a day) Cost for recurring Blasting face will be covered with sand Muffle blasting – To control fly rocks bags / steel mesh / old tyres / used 0 5000 during blasting conveyor belts Wet drilling procedure / latest eco-Dust extractor @ Rs. 25,000'- per unit deployed as capital & @ Rs. 2500 per unit friendly drill machine with separate 20000 chest extractor unit recurring cost for maintenance - 8 Units Air Environment No overloading of Manual Monitoring through Security guard 5000 trucks tippers/tractors Stone carrying tracks will be covered Monitoring if trucks will be covered by 0 10000 by tarpaulin tarpaulin Installation of Speed Governors @ Rs. Enforcing speed limits of 20 km/hr 25000 1250 5000/- per Tipper/Dumper deployed - 5 within ML area Units Monitoring of Exhaust Fumes by Manual Regular monitoring of exhaust fumes 5000 as per RTO norms Labour Regular sweeping and maintenance of Provision for 2 labours @ approach roads for at least about 200 Rs 10.000 (labour (Contractual) per 0 50000 m from ML Area Hectare Installing wheel wash system near 50000 20000 Installation - Maintenance - Supervision

gate of quarry

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# REVISED EMP BUDGET

Activities	Mitigation Measure	Provision for Implementation	Capital	Recurrin
E	Source of noise will be during operation of transportation vehicles. HEMM for this proper maintenance will be done at regular intervals.	Provision made in Operating Cost	0	0
-	Oiling & greasing of Transport vehicles and HEMM at regular interval will be done	Provision made in Operating Cost	0	o
	Adequate silencers will be provided in all the diesel engines of vehicles.	Provision made in Operating Cost	0	0
	It will be ensured that all transportation vehicles carry a fitness certificate.	Provision made in Operating Cost	0	0
Nebe Environment	Safety tools and implements that are required will be kept adequately near blasting site at the time of charging.	Provision made in OHS part	0	0
	Line Drilling all along the boundary to reduce the PPV from blasting activity and implementing controlled blasting.	Provision made in Operating Cost	0	0
40	Proper warning system before blasting will be adopted and clearance of the area before blasting will be ensured.	Blowing Whistle by Mining Mate / Blaster / Compentent Person	0	0
	Provision for Portable blaster shed	Installation of Portable blasting shelter	50000	2000
<u> </u>	NONEL Blasting will be practiced to control Ground vibration and fly rocks	Rs. 30% per 6 Tonnes of Blasted Material	0	971407
Waste Management	Waste management (Spent Oil, Grease etc.,)	Provision for domestic waste collection and disposal through authorized agency	5000	20000
	<u> </u>	Installation of dust bins	5000	2000
	Bio toilets will be made available outside mine lense on the land of owner itself	Provision made in Operating Cost	0	0

# REVISED EMP BUDGET

Activities	Mitigation Measure	Provision for Implementation	Capital	Recutrin
	Size 6° X 5° with blue background and white letters as mentioned in MoM Appendix II by the SEAC TN	Entrance as permanent structure mentioning Environmental Conditions	10000	1000
	Air. Water, Noise and Soil Quality Sampling every 6 Months for Compliance Report of EC Conditions		0	50000
	Workers will be provided with Personal Protective Equipment's	Provision of PPE @ Rs. 4000'- per employee with recurring based on wear and tear (say, @ Rs. 1000'- per employee) - 37 Employees	148000	37000
	Health check up for workers will be provisioned	IME & PME Health check up @ Rs. 1000/- per employee	0	37000
Implementation of EC, Mining Plan & DGMS	First sid facility will be provided	Provision of 2 Kits per Hectare @ Rs. 2000/-	0	5000
Condition	Mine will have safety precaution signages, boards.	Provision for signages and boards made	10000	2000
	No parking will be provided on the transport routes. Separate provision on the south side of the hill will be made for vehicles // HEMMs. Flaggers will be deployed for traffic management.	Parking area with shelter and flags @ Rs. 50,000/- per hectare project and Rs. 10,000/- as maintenance cost	125000	00001
	Installation of CCTV cameras in the mines and mine entrance	Camera 4 Nos. DVR. Monitor with internet facility	30000	5000
	Implementation as per Mining Plan and ensure safe quarry working	Mines Manager (1" Class / 2nd Class / Mine Foreman) under regulation 34 / 34 (6) of MMR. 1961 and Mining Mate under regulation 116 of MMR. 1961 @ 40,000 for Manager & @ 25,000 for Foreman / Mate	0	780000

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	REVISED EMP	BUDGET			
Activities	Mitigation Measure	Provision	for Implementation	Capital	Recurring
	1. Progressive Closure Activity - Surface Runoff managent	per Hectare	rland drain @ Rs. 10,000/- vith maintenance of Rs. 00/- per annum	25000	5000
	Progressive Closure Activity Barbed     Wire Fencing to quarry area will be     provisioned.	1	ring Cost @ Rs. 2,00,000/- izance of Rs 10,000/- per annum	500000	10000
	Progressive Closure Activity Green belt development - 500 trees per one hectare - Proposal for 1500 Trees - (430 Inside)	trenches, soil an of saplings @ plantation insid	reparation of land, digging of pits / nendments, transplantation 200 per plant (capital) for le the lease area and @ 30 aintenance (recurring)	86000	12900
Mine Closure	Lease Area & 1070 Outside Lease Area)	Avenue Plan (capital) for pl area and @ 3	ntation @ 300 per plant antation outside the lease 0 per plant maintenance (recurring)	321000	32100
	Implementation of Final Mine Closure     Actity as per Approved Mining Plan on     Last Year	progressive clo- development, w *For Final Clo- proposed closu	ies already covered as sure activities as greenbelt vire fencing, garland drain, sure Activities 15% of the re cost will be spent during closure stage - Last Year	62850	0
-	5. Contribution towards Green Fund. As per TNMMCR 1959, Rule 35 A	The Contribution 10% of Seigning part of EMP B	on towards Green Funds @ orage fee are indicated as sudge and not necessarily ted in the Project Site	2204346	0
CER	As per MoEF &CC OM 22-65/2017-1A III Dated 25.02.2021	and Budget all	ription in following slides ocation is included as per EF & CC OM	500000	0
	TOTAL			2915000	2173657

4. The Project proponent shall furnish revised production quantity for ultimate depth of mining up to 40m.

The Mining Plan has been already prepared for the Ultimate depth of 40m BGL and it got approved by Department of Geology and Mining, Tirunelveli, vide Letter No: Rc.No. M2/28973/2021, dated: 13.05.2022

Production Details			
Rough Stone	3,73,618 m³		
Gravel	36,974 m³		
Depth	40m		

5. The project proponent shall photograph of barbered wire fencing and green belt provided.

Photographs furnished.

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Based on the presentation & documents furnished and the Committee carefully examined the points raised by SEAC and the replies given by the PP and SEAC decided to recommend the proposal for the grant of Environmental Clearance for the production of 373618m³ of Rough Stone & 36974m3 of Gravel and the annual peak production shall not exceed 75813 m³ of Rough Stone & 16680 m³ of Gravel by maintaining the ultimate depth of mining of 40m BGL and 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 as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961 before the obtaining the CTO from the DEE/TNPCB.
- 3. 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.
- 4. The PP shall inform the 'Notice of Opening' of the quarry to the Director of Mines Safety/Chennai Region before obtaining the CTO.
- 5. 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 DGMS approved Group Vocational Training Centre, Pandalgudi (or) Trichy.
- 6. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the development activities from west to east direction keeping

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- 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 3 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. 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.
- 9. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
- 10. The PP shall carry out maximum of TWO rounds of controlled blast per day, restricted to the maximum of 30 to 40 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 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.
- 11. 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

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- Campus. A copy of such scientific study report shall be submitted to the SEIAA, MOEF, TNPCB, AD/Mines-DGM and DMS, Chennal as a part of Environmental Compliance.
- 12. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
- 13. 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.
- 14. 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.
- 15. 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.
- 16. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
- 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-IA.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 Government School, nearby Village as committed, before obtaining CTO from TNPCB.

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Agenda No: 367 – 06.

(File No: 9789/2022)

Proposed Rough Stone and Gravel quarry lease over an extent of 1.56.5 Ha in S. F. No. 563/2D, 563/4A & 572/2 of Lembalakudi Village, Thiumayam Taluk, Pudukkottai District, Tamil Nadu by Thiru R. Vadivelu- for Environmental Clearance (SIA/TN/MIN/415455/2021 Dated 22.01.2023).

Earlier the proposal was placed in this 353rdSEAC meeting held on 09.02.2022. 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. Vadivelu has applied for Environmental Clearance for the proposed Rough Stone and Gravel quarry lease over an extent of 1.56.5Ha in S. F. No. 563/2D, 563/4A & 572/2 of Lembalakudi Village, Thiumayam Taluk, Pudukkottai 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 5 years and the mining plan for the period is five years. The quantum of mining for the entire five years period should not exceed - 1,73,370 cu.m of Rough Stone and 20,242 cu.m of Gravel. The Annual peak production is 46485cu.m of Rough stone(1st year) & 20,242 Cu.m of Gravel (1st year). The ultimate depth of mining- 37 metres below GL.
- 4. Earlier, this subject vide online appl No. SIA/TN/MIN/253690/2020 dt: 28.01.2022 (File No. 8948/2022) was appraised in the 279th Meeting of SEAC held on 28.05.2022. Based on the presentation and documents furnished by the project proponent, SEAC noted that in G.O(MS) No. 295 dated 03.11.2021 the Government in Industries Department has notified the following Rules specifying certain conditions for permitting mining activities near ecologically sensitive areas.

"... No quarrying or mining or crushing activities shall be carried out within one kilometer radial distance or the protective distance as notified by the Ministry of Environment, Forest and Climate Change, Government of India from time to time, whichever is more, from the boundaries of ecologically sensitive areas, environmentally and ecologically sensitive protected areas such as the National parks, Wild life Sanctuaries, Tiger Reserves, Elephant corridors and Reserve

The Committee noted that the Kulamangalam RF is located within a

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- distance of 1 km from this project site and the proposal is, therefore, hit by the above G.O. The Committee, therefore, decided not to recommend the proposal and same was accepted in 525th meeting of SEIAA held on 29.06.2022.
- 5. As per the G.O. (Ms.) No. 243 industries, Investment promotion and Commerce (MMC.1) Department dated 14.12.2022, Amendment to the Tamil Nadu Minor Mineral Concession Rules, 1959 as follows,
  - "...In the said rules, in rule 36, in Sub-rule (1-A), in Clause(e) for the expression "the National Parks, Wild Life Sanctuaries, Tiger Reserves, Elephant Corridors and Reserve Forests", the expression "National Parks, Wild Life Sanctuaries, Tiger Reserves, Elephant Corridors" shall be substituted..."
- 6. Now, the Proponent has resubmitted the same proposal vide online application No. SIA/TN/MIN/415455/2023 dt: 22.01.2023 (File No. 8948/2023) with all necessary supporting documents in order to obtain Environmental Clearance.

Description	Old File	New File
File No	8948	9789
Online	SIA/TN/MIN/253690/2020,	SIA/TN/MIN/415455/2023
Proposal No for EC	Dated: 28.01.2022.	Dated: 22.01.2023.

7. The salient features of the proposed mining activity as follows

SI. No	Details of the Proposal	:	Data Furnished
1.	Name of the Owner/Firm	:	Thiru.R.Vadivelu, \$/o.Ramaiah Devar, No.7/46, Mathakovil Street, Virachilai, Virachilai Bit, Pudukkottai District – 622412.
2.	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough Stone & Gravel
3.	S.F No. Of the quarry site with area break-up	:	563/2D, 563/4A & 572/2
4.	Village in which situated	:	Lembalakudi
5.	Taluk in which situated	:	Thirumayam
6.	District in which situated	:	Pudukkottai
7.	Extent of quarry (in ha.)	;	1.56.5Ha

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8.	Latitude & Longitude of all corners of the		10°17'58.3457"N to
	quarry site	'	10°17'57.3960"N
	400.17 5.112		78°44'16.8978"E to
			78°44'12.0393"E
9.	Topo Sheet No.	:	58- J/11
10.	Type of mining		Opencast Semi-Mechanized of
			Mining
11.	Lease/precise area communication period	:	5 years
	of quarrying proposed		
12.	Mineable reserve	:	173370m³ of Rough Stone &
			20242m3 of Gravel
13.	Ultimate pit depth & dimension upto life	:	Depth - 37 m
	of mine/mineable reserve		Dimension:
			150m (L) X 57m (W) X 37m
			(D)
14.	Period of quarrying proposed as per	:	5 years
	mining plan		
15.	Production (Quantity in m³) as per	:	
	mining plan		20242m3 of Gravel
16.	Depth of quarrying as per mining plan	:	37 m
17	Pit dimension as per mining plan		150m (L) X 57m (W) X 37m
'''	the difference of the differen	•	(D)
18.	Depth of water table	:	55m BGL
19.	Man Power requirement per day:	_	18 Nos.
20.	Source of Water Requirement		water vendors
21.	Water requirement:	:	1.81 KLD
	1. Drinking & domestic purposes (in		0.81 KLD
	KLD)		
	2. Dust suppression, Green Belt		0.5 KLD
	&Wet Drilling (in KLD)		0.5 KLD
22.	Power requirement		TNEB
23.	Whether any habitation within 300m	:	No
	distance		
24.	Precise area communication approved	:	Rc.No.406/2020(G&M), dt:
	by the, Assistant Director, Department of		03.01.2022
	Geology and Mining with date		
25.	Mining Plan approved by Assistant	:	Rc.No.406/2020(G&M), dt:
	Director, Department of Geology and		11.01.2022
	Mining with date		
. #1.			

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26.	Assistant Director, Department of Geology and Mining 500m cluster letter		Rc.No.406/2020(G&M), dt: 11.01.2022
27.	VAO certificate regarding 300m radius cluster		Letter dt: 07.01.2022
28.	Project Cost	:	Rs. 161.8 Lakhs
29.	EMP cost	:	Rs.116 Lakhs/Year including capital cost Rs.12.47 Lakhs
30.	CER cost		Rs.5 Lakhs

Hence, the proposal was placed in this 353rd Meeting of SEAC held on 09.02.2023. During the presentation, SEAC noted that there are many structures within 300m radius. Therefore, SEAC decided to call for certain additional particulars as follows.

- 1. The proponent shall enumerate on the details of the structures located within 50m, 100m, 200m, 300m radius from the proposed mine lease area indicating the following,
  - a. Type of structure/building,
  - b. Age of the building/structures Did it come later or came before the commencement of quarrying work?
  - c. usage/purposes of such building commercial/industrial/residential/farm house/Govt. building such as Sub-station,
  - d. No of occupants/family of such buildings/structures,
  - e. ownership of the buildings/structures whether it belongs to the PP (or) not, etc.
- 2. The proponent shall furnish registered lease document for all the survey numbers of the proposed mining area from the concern pattadhars.

Subsequently, the proposal was placed in the 599th Authority meeting held on 06.03.2023. The Authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 09.02.2023.

The proposal was again placed for appraisal in 367th meeting of SEAC held on 31.03. 2023. During the meeting the PP presented the replies to the queries raised in the 353rd Meeting of SEAC held on 09.02.2023.

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Based on the presentation & documents furnished and the Committee carefully examined the points raised by SEAC and the replies given by the PP, the SEAC noted that

- (i) There are not less than 52 number of the buildings/structures/sheds/houses are located within 300m radius from the proposed mine lease area.
- (ii) The proposed quarrying site is completely virgin and not quarried earlier.
- (iii) Besides, this proposal attracts the following legal implications under the provisions of Tamil Nadu Minor Mineral Concession Rules, 1959, Rule 36 (1-A) (a):

"....No lease shall be granted for quarrying stone within 300 meters (three hundred meters) from any inhabited site:...."

Considering the above reasons, the SEAC decided **not to recommend** the proposal for the grant of Environmental Clearance due to environmental concerns.

Agenda No: 367-7 (File No: 6407/2018)

Existing Limestone mine over an extent of 4.92.5Ha in S.F.Nos. 245/1A, 1B, 2A, 2B, 3, 4, 248/1, 2, 3, 4, 249/1(P), 2, 3A & 3B of Kallankurichi Village, Ariyalur Taluk, Ariyalur District, Tamil Nadu by M/s. Chettinad Cement Corporation (P) Limited -for Terms of Reference under Violation. (SIA/TN/MIN/25095/2018 Dated: 13.04.2018)

The proposal was placed in 266th meeting of SEAC hold on 30.03 2023. The details of

The proposal was placed in 366th meeting of SEAC held on 30.03.2023. 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, M/s. Chettinad Cement Corporation (P) Limited has applied for Terms of Reference under Violation for the Existing Limestone mine over an extent of 4.92.5Ha in S.F.Nos. 245/1A, 1B, 2A, 2B, 3, 4, 248/1, 2, 3, 4, 249/1(P), 2, 3A & 3B of Kallankurichi Village, Ariyalur Taluk, Ariyalur District, Tamil Nadu.
- 2. The project/activity is covered under Category "B" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. Mining Lease has been granted vide Rc. No. 9534/MMI/2010 dated 05.02.2013 for 20 Years.
- 4. As per the MMDR Amendment Act 2015, the period of mining lease is 50 years from the grant of mining lease (upto 2063).
- 5. The Mining Plan has been approved by the Regional Controller of Mines, IBM,

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Chennai vide Letter No. TN/ALR/MP/LST/1810.MDS dated 24.04.2012.

- 6. The Modified Mining Plan has been approved by the Regional Controller of Mines, IBM, Chennai vide Letter No. TN/ALR/MP/LST/1901.MDS dated 14.10.2013.
- 7. Modification of the earlier Modified Mining Plan vide Letter No. TN/ALR/MP/LST/1998.MDS dated 15.11.2016.
- 8. MoEF&CC notification Dt: 15.01.2016.
- 9. MoEF&CC notification vide S.O. 804 (E) Dt. 14.3.2017.
- 10. MoEF & CC Notification S.O.1030 (E) dated 08.03.2018.
- 11. MoEF&CC Office Memorandum No. F.No. Z-11013/22/2017-IA.II (M) dated 15.03.2018.
- 12. MoEF &CC OM F. No. 22-10/2019-1A.111 dated 09.09.2019.
- 13. Hon'ble NGT(SZ) order dated 30.06.2020 in O.A.No.136 of 2017.
- 14. MoEF&CC, Office Memorandum Dt:12.11.2020.

Earlier, this proposal was placed for appraisal in the 342<sup>nd</sup> Meeting of SEAC held on 30.12.2022. During the meeting the Committee noted that the project proponent is absent during the meeting. Hence the subject was not taken up for discussion and the project proponent shall furnish the reason for his absence.

Further, the Project Proponent vide ir. CCCPL /KLK-ARY/EC-02 Dt:28.12.2022 has informed that they have decided not to pursue further on process of obtaining EC and requested SEIAA to dispose of their application seeking EC. In view of the above, SEAC noted that the PP has informed that the last transport permit was issued Dt: 18.01.2016. Hence, the PP shall furnish documentary evidences so as to consider their request for withdrawal of said proposal seeking EC.

Subsequently, this proposal was placed for appraisal in the 587<sup>th</sup> Meeting of SEIAA held on 30.01.2023&31.01.2023. The authority after detailed discussions decided to request Member Secretary, SEIAA to communicate the minutes of 342<sup>nd</sup> Meeting of SEAC held on 30.12.2022.

The proposal was again placed for appraisal in 366th meeting of SEAC held on 30.03.2023. During committee meeting the PP has requested the committee to not to process their application seeking ToR under violation vide proposal no. 25095/2018 Dt:

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13.04.2018 and submitted the copy of last transport permit Dt:10.08.2016 in regard to queries raised by 342<sup>nd</sup> meeting of SEAC held on 30.12.2022.

Based on the presentation & documents furnished by PP, the SEAC noted that the last transport permit was issued for the period 10.08.2016 to 08.09.2016.

In view of the MoEF&CC Notification S.O. 141(E) Dt 15.01.2016, the SEAC has decided to grant of Terms of Reference (TOR) under Violation category, subject to the following TORs, in addition to the standard terms of reference for EIA study with the exemption of Public Hearing for non-coal mining projects as per MoEF & CC OM F.No. 22-4/2020-IA.III, dated. 16.02.2021 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 consultants accredited by the QCI and NABET as per the MoEF OM dated 2nd December, 2009.

- 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. 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.
- 3. Copy of valid mining lease approval obtained from the competent Authority.
- 4. Letter stating that the quarry lease deed has not been cancelled or terminated and is subsisting as on date.
- 5. Copy of request letter submitted for renewal of mining plan.
- 6. Copy of approved review of scheme of mining plan by the competent authority of the Dept of Geology and Mining.

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- Copy of total penalty levied by the concerned AD/DD. Dept of Geology and Mining, and copy of remittance of total penalty by PP.
- Details of habitations around the proposed mining area and latest VAO
  certificate regarding the location of habitations within 300m radius from the
  periphery of the site.
- 9. The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
- 10. 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 quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 11. 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.
- 12. 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, 11/1 Class mines manager appointed by the proponent.
- 13. 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.
- 14. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
- 15. 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,

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- 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.
- 17. 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).
- 18. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 19. 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.
- 20. 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.
- 21. 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.
- 22. 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 I km (radius) along with the collected water level data for

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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.

- 23. 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.
- 24. 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.
- 25. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 26. 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.
- 27. 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.
- 28. 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.

- 29. 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.
- 30. Impact on local transport infrastructure due to the Project should be indicated.
- 31. 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.
- 32.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 33. 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.
- 34. 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 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.
- 35. 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
- 36. 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.
- 37. A Risk Assessment and management Plan shall be prepared and included in the ETA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.

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- 38. 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.
- 39. 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.
- 40. 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.
- 41. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 45. 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.
- 46. 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.
- 47. 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.
- 48. 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.

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Agenda No: 367-8 (File No: 7954/2021)

Proposed Rough stone quarry lease area over an extent of 1.22.0Ha at S.F.Nos. 76 and 140 (Part-4), Nathathahalli Village, Nallampalli Taluk, Dharmapuri District, Tamil Nadu by Thiru. P.Periyannan -For Environmental Clearance (SIA/TN/MIN/174650/2020 Dt. 22.9.2020)

The proposal was placed for appraisal in this 367<sup>th</sup>meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

#### The SEAC noted the following:

- 1. The project proponent, Thiru. P.Periyannan has applied for Environmental Clearance for the Rough stone quarry lease over an extent of 1.22.0Ha at S.F.Nos. 76 and 140 (Part-4), Nathathahalli Village, Nallampalli Taluk, Dharmapuri 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. Earlier, this proposal was placed for appraisal in the 317th meeting of SEAC held on 06.10.2022. 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 total production quantity of 96154 m3 of Rough stone & 5904 Weathered Rock and not to exceed the Annual Peak Production capacity of 34265 m3 of Rough stone with restricting the ultimate pit depth of 20 m, subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the specific conditions stated therein.
- 4. Subsequently, this proposal was placed for appraisal in the 571nmeeting of SEIAA held on 21.11.2022& 22.11.2022 After detailed discussion, the Authority noted that a complaint letter has been received from the Member Secretary/TNPCB vide Lr. No.TNPCB/F.22649/DMP/Complaint section/2020 dated 17.12.2020 enclosing the copy of complaint received from the Public of the Nathathahalli Village against the proposed quarry. Hepcer the Authority decided that upon the receival of the action taken

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report by the Competent Authority, further course of action will be taken. Now, the Proponent has submitted an Affidavit of Nathathahalli village people on 07.11.2022 stating that they have no objection for quarrying Rough stone in the proposed mining area. In this connection, the Authority decided to request the Member Secretary SEIAA-TN to refer back the proposal to SEAC-TN stating the following reasons,

- i. The possible impacts of the quarry operation on the inhabitance and their assets like house, property & livelihoods shall be studied.
- ii. The impacts of the vibration, air pollution, water table, water resources may be examined.
- iii. Possible impacts of soil erosion, flood movements, loose boulders, land vulnerability, silting of pond on inhabitance and other instabilities to the infrastructure may be examined in the light of the following,
- As per the kml uploaded by the proponent in the online through the Parivesh portal, it is ascertained that there are many structures exist within 300m from the proposed mine lease area. A structure exists at 50m from the proposed area. Since the mining involves blasting, considering the safety point of view,

As per Tamil Nadu Minor Mineral Concession Rules, 1959 under section V – Miscellaneous in para 36. General restrictions in respect of quarrying operations; (c)

"No new layout, building plans falling within 300 metres from any quarry should be given approval by any agency unless prior clearance of the Director of Geology and Mining is obtained. On receipt of proposals for according clearance, the Director of Geology and Mining shall decide upon the continuance or closure, as the case may be of any quarry which is situated within 300 metres from the now layout, building sought for such "clearance".

Again, this proposal was placed for appraisal in the 348th meeting of SEAC held on 19.01.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to obtain following details from the PP.

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- 1. The PP shall enumerate the structures within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m with details such as dwelling houses with number of occupants, places of worship, industries, factories, sheds, etc.
- 2. The PP shall furnish a report on the scientific studies carried out for the 'Cumulative impact of blast-induced ground/air vibrations, fly rock and dust caused due to the proposed Quarrying operations on the Surrounding Structures including Wind Mills, Habitations and Water bodies located within 300 m from the guarry lease', from any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, National Institute of Rock Mechanics (NIRM)-Bangaluru, IIT (ISM)-Dhanbad, NIT-Dept of Mining Engg, Surathkal.

Now, the proposal was again placed for reappraisal in this 367th meeting of SEAC held on 31.03.2023. During the meeting the PP has requested for additional time to produce the said details pertaining to the existence of the structures. Therefore, SEAC decided to defer the proposal.

Agenda No: 367-09 (File No: 8430/2021)

Proposed Gravel quarry lease area over an extent 1.59.0Ha at S.F.Nos. 38/2 & 38/3A of Vaippadi Village, Perundurai Taluk, Erode District, Tamil Nadu by Tmt.A.Mainavathi-For Environmental Clearance. (SIA/TN/MIN/201329/2021, dated: 03.03.2021).

The proposal was placed for appraisal in this  $367^{th}$  meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

# The SEAC noted the following:

- 1. The project proponent, Tmt.A.Mainavathi, has applied for Environmental Clearance for the proposed Gravel quarry lease area over an extent of 1.59.0Ha at S.F.Nos. 38/2 & 38/3A of Vaippadi Village, Perundurai Taluk, Erode 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. As per the mining plan the lease period is 3 years. The mining plan is for the speriod of Three years & production should not exceed 34,293 m³ of Gravel. The annual peak production is 11,502 m³ of Gravel. The ultimate depth is 3m BGL.

Earlier, this proposal was placed for appraisal in the 229th meeting of SEAC held on 27.08.2021. The project proponent was absent for the meeting, and hence the project proposal is deferred. Further the SEAC instructs the SEIAA office to obtain the reason for not attending the meeting by the project proponent in writing and may place the same when the project comes again for appraisal.

Now, the proposal was placed for appraisal in this 367th meeting of SEAC held on 31.03.2023. The PP was not present during the meeting." Further, the proponent vide letter dated 29.03.2023 has communicated that they wish to withdraw the proposal submitted for Environmental Clearance. In view of this, SEAC decided to remit the proposal back to SEIAA.

Agenda No: 367-10 (File No: 9312/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 1.24.29 Ha (patta land) at S.F.No. 178/IA in Mannarkottai Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu by Tmt.S.Erakkammal -For Environmental Clearance (SIA/TN/MIN/276223/2022, 05.06.2022).

The proposal was placed in this 367th meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

### The SEAC noted the following:

- The Project Proponent, Tmf.S.Erakkammal has applied for Environmental Clearance for the proposed Rough Stone & gravel quarry lease over an area of 1.24.29 Ha (patta land) at S.F.No. 178/1A in Mannarkottai Village, Virudhunagar Taluk, Virudhunagar 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. 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 1,00,625 cu.m of rough stone & 54,000 cu.m of Gravel. The annual peak production is

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20,950cu.m of rough stone & 23,760 cu.m of Gravel. The ultimate depth is 46m BGL.

- 4. It is a fresh quarry project.
- 5. The salient features of the proposed project as follows

SI. No	Details of the Proposal						
1.	Name of the Owner/Firm	Tmt.S.Erakkammal,					
		W/o. Sounthirapandi,					
		No.1/171, West Street,					
		Sennelkudi,					
		Virudhunagar,					
		Virudhunagar – 626004.					
2.	Type of quarrying	Rough Stone & gravel quarry					
3.	S.F No. of the quarry site with area	178/1A					
	break-up						
4.	Village in which situated	Mannarkottai					
5.	Taluk in which situated	Virudhunagar					
6.	District in which situated	Virudhunagar					
7.	Extent of quarry (in ha.)	1.24.29 Ha					
8.	Latitude & Longitude of all corners	09°26'51.20"N to 09°26'55.20"N					
	of the quarry site	77° 58'34.12"E to 77°58'37.80"E					
9.	Top Sheet No.	58-G/15					
10.	Type of mining	Opencast Semi Mechanized method of mining					
11.	Lease Period of quarrying	5 Years					
12.	Mining Plan Period validity	5 Years					
13.	Production (Quantity in m3)	The total production should not exceed					
		1,00,625 cu.m of rough stone & 54,000 cu.m					
		of Gravel.					
14.	Depth of mining	46m BGL					
15.	Depth of water table	60mBGL					
16.	Man Power requirement per day:	10 Nos.					
17.	Water requirement:	2.5 KLD					
	I. Drinking & Domestic Water (in KLD)	0.5 KLD					

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	2. Dust suppression (in KLD)	1.0 KLD				
	Greenbelt (in KLD)	1.0 KLD				
18.	Power requirement	TNEB				
	Domestic Purpose	-				
19.	Precise area communication	NA.KA.No.KV1/96/2022- Kanimam,				
	approved by the Assistant Director	Dated:30.03.2022				
	& Geology and Mining with date					
20	Mining Plan approved by Assistant	Roc. No. KV1/96/2022,				
	Director & Geology and Mining	Dated:04.05.2022				
	with date					
21.	Assistant Director & Geology and	Roc. No. KV1/96/2022,				
	Mining, mines 500m cluster letter	Dated:04.05.2022				
22.	VAO certificate regarding	Letter dated: 05.05.2022				
	habitation in 300m radius.					
23.	Project Cost	Rs. 36,34,610/-				
24.	EMP cost	Capital cost: Rs.15.48 lakhs/-				
		Recurring cost: Rs.13.82 lakhs/- Annum				
25	CER cost	Rs.5,00,000/- as accepted by the PP				

Earlier, this proposal was placed for appraisal in the 324th meeting of SEAC held on 21.10.2022. The SEAC noted that the project proponent has not attended the meeting. On the receipt of proponent's request vide letter dated: 15.02.2023, it is again been placed in 367th meeting of SEAC held on 31.03.2023.

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for total excavation quantity exceed 1,00,625 cu.m of rough stone & 54,000 cu.m of Gravel with maintaining an ultimate depth of 46m BGL & annual peak production capacity of 20,950cu.m of rough stone & 23,760 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.

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- 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 Metalliferrous 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 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 conceptual '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 4 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

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- 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. Since few structures/habitations are located at a distance of 525m from the lease boundary, the PP shall carry out maximum of two rounds of controlled blast only per day, restricted to the maximum of 30 to 40 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 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, within one year from the commencement of mining operations, the PP shall carry out the scientific studies after obtaining prior permission from the DMS/Chennai 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', in accordance with the DGMS Circular No. 7 of 1997, 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.

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- 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.
- 16. The PP shall carry out the comprehensive hydrogeological studies during the 3rd year 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-IA.lll 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. 5.0 lakhs and the amount shall be spent for the Government Primary School, Mannarkottai Village as committed, before obtaining CTO from TNPCB.

Agenda No: 367-11 File No: 9509/2021)

Proposed Rough stone and Gravel quarry lease over an extent of 4.59.0 Ha of Patta land in S.F.Nos. 661/2C, 661/2D, 661/2E, 661/2F, 661/2G, 661/2H, 662/2B, 662/2C, 662/2D, 662/2E, 662/2F, 662/4D, 662/4E, 662/4F, 662/4G, 662/4H, 662/4I, 662/4J, 662/4K, 662/5A and 662/5B of Alividaithangi Village, Vembakkam Taluk, Tiruvannamalai District, Tamil Nadu by M/s. Rajiraj Minerals Private Limited- For Environmental Clearance. (SIA/TN/MIN/ 402513/2022 Dt.10.10.2022).

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The proposal was placed for appraisal in this 367th meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

## The SEAC noted the following:

- 1. The project proponent, M/s. Rajiraj Minerals Private Limited has applied for Environmental Clearance for the proposed Rough stone and Gravel quarry lease over an extent of 4.59.0 Ha of Patta land in S.F.Nos. 661/2C, 661/2D, 661/2E, 661/2F, 661/2G, 661/2H, 662/2B, 662/2C, 662/2D, 662/2E, 662/2F, 662/4D, 662/4E, 662/4F, 662/4G, 662/4H, 662/4I, 662/4J, 662/4K, 662/5A and 662/5B of Alividaithangi Village, Vembakkam Taluk, Tiruvannamalai District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan, the lease period is for 5 years. The total production for 5 years not to exceed 8,55,240 m³ of Rough stone, 77,954 m³ of Weathered Rock and 1,18,638 m<sup>3</sup> of Gravel. The annual peak production as per mining plan is 171840 m³ of Rough stone and 65814 m³ of Gravel with ultimate depth of 50m BGL.
- 4. The proposed mining area is situated between two waterbodies namely Tirupanamur Eri at 140m.
- 5. The salient features of the proposed project as follows

SI. No	Details of the Proposal							
1.	Name of the Owner/Firm	M/s. Rajiraj Minerals Pvt Ltd, Vellore Main Road, Arcot, Vellore District, Pincode-602 106.						
2.	Type of quarrying	Rough Stone & gravel quarry						
3.	S.F No. of the quarry site with area break-up	661/2C, 661/2D, 661/2E, 661/2F, 661/2G, 661/2H, 662/2B, 662/2C, 662/2D, 662/2E, 662/2F, 662/4D, 662/4E, 662/4F, 662/4G, 662/4H, 662/4I, 662/4J, 662/4K, 662/5A and 662/5B.						
4.	Village in which situated	Alividaithangi						
5.	Taluk in which situated	Vembakkam						

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6.	District in which situated	Tiruvannamalai
7.	Extent of quarry (in ha.)	4.59.0Ha (patta land)
8.	Type of mining	Opencast Semi Mechanized method of mining
9.	Lease Period of quarrying	5 Years
10.	Mining plan period Validity	5 Years
11.	Production (Quantity in m3)	The total production for 5 years not to
		exceed 8,55,240 m³ of Rough stone, 77,954
		m³ of Weathered Rock and 118638 m³ of
		Gravel.
12.	Ultimate pit Depth of mining	50m BGL
13.	Annual peak Production (Quantity in	The annual peak production as per mining plan
	m3)	is 171840 m³ of Rough stone and 65814 m³ of
		Gravel.
14.	Depth of water table	60m in Summer Season – 57m Rainy Season
15.	Latitude & Longitude of all corners of	12°46'23.33"N to 12°46'31.37"N
	the quarry site	79° 34'03.11"E to 79°34'10.31"E
16.	Top Sheet No.	57 P/09
17.	Man Power requirement per day:	33Nos.
18.	Precise area communication	Na.Ka.No. 145/Kanimam/2022,
	approved by the Assistant Director &	dated:07.09.2022
	Geology and Mining with date	
19.	Mining Plan approved by Deputy	Rc.No.145/Kanimam/2022,
	Director & Geology and Mining	dated:14.09.2022
	with date	
20.	Deputy Director & Geology and	Rc.No.145/Kanimam/2022,
	Mining, mines 500m cluster letter	dated:14.09.2022
21.	VAO certificate regarding 300m	Letter dated: 16.09.2022
	radius cluster	
22.	Water requirement:	10.0 KLD
	Drinking Water (in KLD)	1.0 KLD
	2. Dust suppression(in KLD)	8.0 KLD
	3. Greenbelt (in KLD)	1.0 KLD
23.	Power requirement	TNEB
	a. Domestic Purpose	-
24.	Project Cost	Rs. 1,08,84,000/-
25.	EMP cost	Capital cost: Rs.3006000/-
<u></u>		Recurring cost: Rs.2799000/- Annum
26.	CER cost	Rs.5,00,000/- as accepted by the PP

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Earlier, this proposal was placed for appraisal in the 333<sup>rd</sup> meeting of SEAC held on 01.12.2022. Based on the presentation made by the proponent, the SEAC called for the following details from the PP.

- 1. The PP shall carry out an Intensive Hydrogeological study around 5km radius from the mining lease by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, IIT-Madras, CSIR-National Environmental Engineering Research Institute (Madras Complex), Chennai and Anna University Chennai-Centre for Water Resources, CEG Campus, etc. as the proposed lease area is located between two major waterbodies. The report shall spell out the Implications of proposed quarrying activity on the water bodies and agricultural forms around the mining lease area.
- 2. The PP shall furnish the details of the tank, extent of the tank and Ownership of the tanks, ayacut, details of cultivation, distance from the site, etc, within 1 km radius around the proposed mining area from the Govt records.
- 3. Similar details for Tiruppanur Tank.

Subsequently, this proposal was placed for appraisal in the 578<sup>th</sup> meeting of SEIAA held on 17.12.2022. After detailed discussions, the Authority decided to obtain the following details from the PP in addition to the above.

- The PP shall carry out a study on Biodiversity in the proposed mining area.
- The impacts of mining on flora, fauna & soil microorganisms in the mining area shall be studied The PP shall furnish details of soil erosion management and soil conservation plan.
- Impacts of mining on the roads situated in the vicinity of the project area shall be studied.

On receipt of the above details, SEAC would further deliberate on this project and decide the further course of action.

Now, the PP has furnished the details as sought by the Committee and Authority vide letter dated: 15.03.2023. Hence the proposal was placed for appraisal in this 367<sup>th</sup> meeting of SEAC held on 31.03.2023.

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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 total excavation quantity exceed 8,55,240 m³ of Rough stone, 77,954 m³ of Weathered Rock and 1,18,638 m³ of Gravel with maintaining an ultimate depth of 50m BGL & annual peak production capacity of not exceeding 171840 m³ of Rough stone and 65814 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:

- 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 adhere to the conditions stipulated in (i) the NOC obtained from PWD vide letter dated. 23.01.2023, (ii) letter received from the Thasildar, and (iii) The recommendations proposed through the Scientific studies carried out by the University of Madras, without any deviation:
- 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 Metalliferrous Mines Regulations, 1961.
- 4. 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 Mines Act, 1952 and in accordance with the Reg. 3 of MMR 1961 before obtaining the CTO.
- 5. 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.
- 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

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- 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 conceptual '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.
- 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 3 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. 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 30 to 40 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 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. However, within one year from the commencement of mining operations, the PP shall carry out the scientific studies after obtaining prior permission from the DMS/Chennai on 'Design of Blast parameters for reducing the impact of blast;

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induced ground/air vibrations and fly rock caused due to operation of the quarry by adopting appropriate controlled blasting techniques', in accordance with the DGMS Circular No. 7 of 1997, 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.

- 13. 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.
- 14. 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.\*
- 15. 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.
- 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 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.

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- 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.lll 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. 5.0 lakhs and the amount shall be spent for the Government Higher Secondary School, Alividaithangi Village as committed, before obtaining CTO from TNPCB.

Agenda No: 367-12 (File No: 4049/2022)

Existing Colour Granite quarry lease over an extent of 10.12.0 Ha S.F.Nos.120(P) Naganur Village, Kulithalai Taluk, Karur District, Tamil Nadu by M/s Tamil Nadu Minerals Ltd.,. - For amendment to Environmental Clearance . (SIA/TN/MIN/276355/2022 Dt: 3.6.2022)

The proposal was earlier placed in the 291<sup>st</sup> meeting of SEAC held on 02.07.2022. The project proponent gave a detailed presentation. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

#### The SEAC noted the following:

• In the Mineral Concession Rules, 1960, (hereinafter referred to as the principal rules), in rule 2, in sub rule (1), after clause (vii), the following clause is inserted, namely:-

'(vii a) "run-of-mine" means the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area;'

he project proponent has issued with Environmental Clearance

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Lr.No.SEIAA-TN/F.No. 4049/1(a)/EC. No.3886/2016 Dt. 14.11.2016 for the production of 1211 m³/annum of Multi Coloured Granite & 10901 m³/annum of Granite rejects for the period of 20 Years from the date of Execution of mining lease.

Now, the project proponent has applied for amendment in the existing EC issued for the following.

Production quantity as per EC	Amendment Sought			
1211 m³/annum of Multi Coloured Granite &	121913m³ of RoM per Annum			
10901 m³/annum of Granite réjects for the				
period of 20 Years from the date of				
Execution of mining lease.				

#### The PP also furnished the following

- The TAMIN production targets are conservative and follow the government mining rules and regulations to quarry the Black granite, Dolerite at this location and sold to international and domestic markets.
- The PP is also demarcated a dedicated area within the leasehold area for dumping of the non-saleable granite waste.
- The waste rock (or) overburden rock (or) other rejects excavated in the quarry is also dumped within the leasehold area and it will be backfilled into the worked out granite quarry faces during the final closure plan, with a view to restore the land to its original use (or) desired alternate use.
- In case of non-feasibility of backfilling, the waste dumps will suitably terraced and stabilised by planting adequate vegetation as indicated by the SEAC, as a part of progressive mine closure plan.
- Long term & shorter ecological and environmental impacts such as air pollution due to dust, exhaust emissions or fumes, the discharge of toxic and objectionable effluents, noise arising out during the mining operations of granite and related activities are adequately mitigated in the EMP.
- It is submitted that the environmental impact is directly linked to ROM being mined out from the mineralised zone of quarry and not restricted to saleable production quantity (recovery alone).
- Since the EC limits saleable production quantity (recovery only), it is observed that our quarry managers tend to extricate a very miniscule quantity of absolutely defect free material.
- In many quarries the recovery falls down to very low value as 2% of RoM. This is neither in the interest of revenue generation for TAMIN (or)the State Government and also it is also not helping to protect the environment.

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- Mining recoverable reserves may vary subject to the quality of Granite mining method and Geological features such as structural, textural formations and the market demand for the Granite being mined.
- It is well known that without extracting the Run of Mine (ROM) the recoverable production (recovery) is not possible.

SEAC carefully considered the request of the PP based on the presentation made and the details furnished by the project proponent. SEAC noted the following.

1. Project proponent has requested the following amendment.

Production quantity as per EC	Amendment Sought
1211 m³/annum of Multi Coloured Granite & 10901 m³/annum of Granite rejects for the period of 20 Years from the date of Execution of mining lease.	•

- 2. The term RoM includes raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.
- 3. The quantity of 'saleable mineral' depends on many factors such as the geology of the site, technology, workmanship, etc. and, therefore, is difficult to estimate accurately, while RoM can easily be estimated at the time of preparation of mining plan.
- 4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM, mineral and mineral waste were mentioned.
- 5. EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'saleable mineral.'
- 6. SEAC noted that the project proponent has not asked for any change in the area, or in RoM, or in the peak annual RoM.

Considering all the above, the Committee recommends the following amendment to the EC subject to the certain conditions.

Production quantity as per EC	Amendment Recommended					
1211 m³/annum of Multi Coloured Granite & 10901	12113m³	of	peak	RoM	per	
m³/annum of Granite rejects for the period of 20	Annum					
Years from the date of Execution of mining lease.			°Ni iza			
	<u> </u>					

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Subsequently the subject was placed before SEIAA in its 536th meeting held on 26.07.2022. The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999,

- I. The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- 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.
- III. Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999,

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussions, decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- I. The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- II. The proponent shall submit revised progressive mine closure & rehabilitation plan.
- III. To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.

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- IV. Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- V. AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- VI. Can waste and such tailings be used for land back fills?
- VII. Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition?
- VIII. Action plan for protection of open and abandoned open spots as they are

  Hotspot for toxic water accumulation, contamination and accidents.
- IX. On impact due to transportation of the granite waste on the access road and the equipment, and social impacts.

Further the Proponent shall furnish the following additional particulars:

- 1. Certified compliance report for the existing quarry.
- 2. Valid scheme of mining stating the required product.

Hence the proposal was placed for reappraisal in this 304th meeting of SEAC held on 21.08.2022. The Project proponent furnished the clarifications for the points raised by SEIAA as given below:

- 1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
- 2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geomechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
- 3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration from the view point of economic viability of project during the approval of Mining Plan.

4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of Rom

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which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.

- 5. The EMP for the project has been finalized based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
- 6. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
- 7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
- 8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
- 9. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.
- 10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.
- 11. The PP has informed the entire quarrying operation will be carried out in accordance with the provisions of the Granite Conservation & Development Rules, 1999,

However, based on the additional particulars furnished by the Project proponent, SEAC noted that the PP has not furnished certified compliance report issued by MoEF&CC (or) TNPCB for its existing EC issued. Hence it is decided to call for the following details from the PP.

 The PP shall furnish the certified compliance report issued by MoEF&CC (or) TNPCB for its existing EC issued.

Subsequently the subject was placed in the 536th meeting of Authority held on 26.07.2022. The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999,

i) The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.

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- ii) 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.
- iii) Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999,

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussions, decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of RoM quantity instead of Production quantity after the receipt of following details from the project proponent.

- i) The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- ii) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- iii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- iv) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- v) AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- vi) Can waste and such tailings be used for land back fills?
- vii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition?
- viii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.

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Impact due to transportation of the granite waste on the access road and ix) the equipment, and social impacts.

Further the Proponent shall furnish the following additional particulars:

- 1. Certified compliance report for the existing quarry.
- 2. Valid scheme of mining stating the required product.

Now, the proposal was placed in this 367th meeting of SEAC held on 31.03.2023. The proponent requested the Committee to grant additional time to submit the certified compliance report. The SEAC accepted the request and decided to defer the subject to a later date.

Agenda No: 367-13 (File No: 7073/2022)

Proposed of Rough stone quarry lease over an extent of 2.00.0Ha at S.F.No. 301(Part-3) in Athi Village, Cheyyar Taluk, Tiruvannamalai District, Tamil Nadu by Tmt R. Latha (Legal heir Late Thiru.M.Ramachandran) For **Environmental** Clearance. (SIA/TN/MIN/41586/2019, dated 09.05.2022)

The proposal was earlier placed in the 336th meeting of SEAC held on 07.12.2022. The Project proponent appeared before the Committee and requested time for submission of mandatory documents for Environmental Clearance. The Committee accepted the request of the Proponent and decided to take up the subject for discussion on submission of the requisite documents by the proponent.

The proponent has furnished the details to SEIAA-TN on 23.01.2023. The proposal was placed in this 367th meeting of SEAC held on 31.03.2023.

#### The SEAC noted the following:

- 1. The project proponent, Tmt R. Latha (Legal heir of Late Thiru.M.Ramachandran) has applied for Environmental Clearance for the Proposed of Rough stone quarry lease over an extent of 2.00.0Ha at S.F.No. 301(Part-3) in Athi Village, Cheyyar Taluk, Tiruvannamalai District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006, as amended.
- 3. ToR issued vide Lr No.SEIAA-TN/F.No.7073/SEAC/ToR-753/2020 Dated: 15.09.2020.

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- 4. Public Hearing conducted on 30.10.2021
- Ela report submitted on: 01.08.2022.

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No.	De	etails of the Proposal				
1.	Name of the Owner / Firm	Tmt R. Latha (Legal heir of Late				
		Thiru.M.Ramachandran)				
		No. 15B, Mettu Theru,				
		Palaya Perungulathur,				
		Tambaram				
		Chennai - 600063				
2.	Type of quarrying (savudu /	Rough Stone				
	Rough stone / Sand / Granite)					
3.	S.F No. of the quarry site	S.F.Nos. 301(Part-3)- Government land				
4.	Village	Athi				
5.	Taluk	Cheyyar				
6.	District	Tiruvannamalai				
7.	Extent of Quarry (in ha.)	2.00.0 Ha				
8.	Mining Plan Period Validity:	5 Years				
	Lease Period:	10 years				
9.	Type of Mining	Opencast Mechanized Mining				
10.	Production (Quantity in m³)	As per the approved mining plan,				
	İ	Geological Resources:				
		Rough Stone ~ 4,43,415m³ to an ultimate depth				
		of 71m				
		5-Year production:				
		Rough Stone – 2,65,995 m <sup>3</sup>				
		The annual peak production as per mining plan is				
		56,500 m³ of Rough Stone				
11.	Proposed Depth of Mining in 5	31m (16m AGL + 15m BGL)				
	years					
		·				
	Ultimate Depth of Mining as per	71m (16m AGL+55m BGL)				
	mining plan					
	Permitted Ultimate depth	66m (16m ACL (50m PCL) **				
12.	Latitude &Longitude of all	66m (16m AGL+50m BGL) 12°38'41.84"N to 12°38'47.83"N				
12.	corners of the quarry site	79°36'03.39"E to 79°36'09.76"E				
13.	Topo sheet No.	57P/10				
14.	Man power requirement	33 Nos				
15.	Precise Area Communication	Na.Ka.No. 19/Kanimam/2019, dated: 16.05.2019				
•	Stomer	10.03.2019				

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16.	Mining plan approval letter	Rc.No. 19/Kanimam/2019 Dated: 06.08.2019					
17.	500m letter	Rc.No.19/Kanimam/2019, dated: 09.08.2019					
18.	Water requirement:	5.0 kLD					
l	<ol> <li>Drinking &amp; domestic</li> </ol>	1.0 kLD					
	purposed (in kLD)	40415					
	2. Dust Suppression (in kLD)	4.0 kLD					
	& Green Belt (in kLD)						
19.	Power requirement:						
	a. Domestic purpose	TNEB					
	b. Industrial Purpose	DG set					
20.	Depth of Water table	65m-70m					
21.	Whether any habitation within	Nil					
	300m distance						
22.	Project cost	Rs.4,36,24,500/-					
23.	EMP cost	Capital cost: Rs. 29,76,000/-					
		Recuring cost/Annum: Rs. 18,60,587/-					
24.	CER cost	Rs. 5.0 lakh					
25.	VAO letter dated	18.06.2019					

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for a production quantity of Rough Stone - 2,65,995 m³ to a depth of 31m BGL (16m AGL + 15m BGL) and the Ultimate depth shall not exceed 66m (16m AGL + 50m BGL). The annual peak production shall not exceed 92,100 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, in the name of Smt. R. Latha, the legal heir of late Shri. M. Ramachandran.

- 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 Metalliferrous Mines Regulations,

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- 3. The Project Proponent shall furnish the conceptual slope stability action plan to the concerned AD (Mines) for the planned working from top to downwards in the hilly terrain (above ground level) by maintaining appropriate benches incorporating the haul road with proper gradient and also to remove the boulder formations in a safe manner, before obtaining CTO from TNPCB.
- 4. 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 3<sup>rd</sup> 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.
- 5. Within one year 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 cluster mines on the surrounding villages and the prominent structures such as blast-induced ground/air vibrations and fly rock', by involving a reputed Research and Academic Institution such as NIRM, IIT(ISM), IIT-Madras, Anna University Chennai-Dept of Mining Engg, NIT Surathkal, 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.
- 6. 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.
- 7. 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.

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- 8. 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.
- 9. 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.
- 10. The PP shall carry out the comprehensive hydrogeological studies once in two years to monitor 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.
- 11. 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.
- 12. 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.
- 13. 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.
- 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.

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- 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. 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. 5.0 lakh** and to be spent for the activities committed during SEAC appraisal before obtaining CTO from TNPCB.
- 18. The Project Proponent shall address the needs of the local population such as adequate Air Pollution Control measures etc., as committed during public hearing.

Agenda Item. No.367-14

F.No.7857/2022

Proposed Rough stone and gravel quarry lease over an extent of 1.66.0 Ha at S.F.No. 367/2A (Part), Morattupalayam Village, Uthukuli Taluk, Tiruppur District, Tamil Nadu by Tmt.R.Chitra - For Environmental Clearance. (SIA/TN/MIN/56602/2021 dated 27.09.2021)

The proposal was earlier placed in the 303<sup>rd</sup> meeting of SEAC held on 18.08.2022. 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 Tmt.R.Chitra has applied seeking Environmental Clearance for the proposed Rough stone and gravel quarry lease over an extent of 1.66.0 Ha at S.F.No. 367/2A (Part), Morattupalayam Village, Uthukuli Taluk, Tiruppur District, Tamil Nadu, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006, as amended.
- 3. ToR Lr No.SEIAA-TN/F.No.7857/SEAC/ToR-861/2020 Dated: 12.03.2021.
- 4. Public hearing report dated: 23.08.2021
- 5. EIA report submitted on 01.10.2021
- 6. As per mining plan, the production for the five years states that the total quantity of recoverable should not exceed 2,19,325 cu.m of Rough stone and Gravel 7,980 m³ and to a depth of 42m BGL depth for a period of 5 years.
- 7. As per the ToR issued, restricted depth of mining is 37m ultimate depth and quantity to be mined is 2,10,680cu.m of Rough stone & 7,980cu.m of Gravel for

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five years with a bench height of 5m as per the approved mining plan considering the hydrogeological regime of the surrounding area.

Based on the presentation and documents furnished by the Proponent, the SEAC decided to call for the following additional particulars:

- 1. Certified compliance report for the existing quarry.
- 2. Revised EMP in the format prescribed by the Committee.

The subject was scheduled for discussion in this 367th meeting of SEAC held on 31.03.2023. The EIA coordinator informed the Committee that the Proponent is yet to comply with the non-compliances reported in the CCR. Hence the SEAC decided to defer the subject to a later date.

Agenda No: 367-(File No: 8438/2022)

Proposed Rough Stone Quarry lease over an extent of 1.65.5 Ha at S.F.Nos. 81/2A1 & 81/2A2 of Chettipillaiyarnatham Village, Thirumangalam Taluk, Madurai District, Tamil Nadu by Thiru. P. Rajmohan - For Environmental Clearance. (\$IA/TN/MIN/ 409724 /2022, dated 04.11.2022)

The proposal was placed in this 367th meeting of SEAC held on 31.03.2023. The Committee decided to defer the subject to a later date.

Agenda No. 367-16 (File No. 9926/2023)

Proposed Rough Stone and Gravel quarry over an extent of 4.32.10 Ha in S.F.No. 264/2(P), 264/3A(P), 267/1B, 267/2(P) & 267/3of Akkinampattu Village, Cheyyur Taluk, Chengalpattu District, Tamil Nadu by M/s. Naraj Blue MetalPvt Ltd for Terms of Reference. (SIA/TN/MIN/421650/2023,dated:16.03.2023)

The proposal was placed in this 367th Meeting of SEAC held on 31.03.2023. 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. Naraj Blue Metal Pvt Ltd has applied for Terms of Reference for the proposed Rough Stone and Gravel quarry over an extent of 4.32.10 Ha in S.F.No. 264/2(P), 264/3A(P), 267/1B, 267/2(P) & 267/3 of Akkipampattu Village, Cheyyur Taluk, Chengalpattu District, Tamil Nadu

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- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the approved mining plan, the lease period is 10 years. The mining plan is for 5 years & production should not exceed 4,14,325cu.m of Rough Stone for first five years and 4,52,175 m³ for remaining five years and 68,592 cu.m of Gravel for two years. The annual peak production 1,02,100cu.m of Rough Stone & 35,100 cu.m of Gravel. The maximum depth of mining would be 64m BGL.
- 4. The proponent had submitted online application in the name of Thiru. P. Naraj Rough stone and Gravel Quarry and the application number is \$IA/TN/MIN/418675/2023 and offline File No.9841/2023. Due to change in name of the project, the proponent tried to withdraw the application but the withdraw option was not available due to technical issues. Subsequently, the proponent had submitted new online application in the name of M/s. Naraj Blue Metals Private Limited Rough stone and Gravel Quarry and the application number is \$IA/TN/MIN/421650/2023 and offline File No.9926/2023 and requested before the committee to appraise the proposal pertaining to online proposal number \$IA/TN/MIN/421650/2023 and File No.9926/2023.
- 5. Based on the above facts, committee accepted the request of the proponent to appraise \$IA/TN/MIN/421650/2023 (offline File No.9926/2023) and accepts the proponent request to withdraw the online number vide \$IA/TN/MIN/418675/2023 (offline File No.9841/2023).

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal with following changes in its geometry of operation:

•	As per Approved Mining Plan (First Five Years)				Revised as per SEAC Meeting for recommendations of ToR					
Year	Section	Bench	Height (m)	Widt h (m)	Depth (m)	Sectio n	Bench	Height (m)	Width (m)	Depth (m)
1st		98-100	135	130	2	XY-AB	98- 100	135	130	2
year	XY-AB	96-98	135	130	2		96-98	135	130	2
`		• 91-96	130	122	5		91-96	130	122	5
2 <sup>nd</sup>	XY-AB	96-99	39	130	2	XŸ-AB	98- 100	39	130	2

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year		96-100	39	130	2		96-98	39	130	2
	XY-CD	96-99	84	139	2	XY-CD	98- 100	84	139	2
		96-100	84	139	2		96-98	84	139	2
	XY-AB	91-96	40	122	5	XY-AB	91-96	40	122	5
	XY-CD	91-96	80	131	5	XY-CD	91-96	80	131	5
	X1-CD	86-91	10	121	5		86-91	10	121	5
3 <sup>rd</sup>	XY-CD	86-91	65	121	5	XY-CD	86-91	65	121	5
year	XY-AB	86-92	80	112	5	XY-AB	86-91	80	112	5
4 <sup>th</sup>		86-91	85	112	5	XY-AB	86-91	85	112	5
year	XY-AB	81-86	73	102	5		81-86	73	102	5
5 <sup>th</sup>	XY-AB	81-86	87	102	5	XY-AB	81-86	87	102	5
year	AB-CD	81-86	70	111	5	AB-CD	81-86	70	111	5
	Total	<b>1</b> .	4,	14,325 n	n³	Tota I		4,14,3	25 m³	

						84 m				
	As per A	pproved	Mining Years)	Plan (Ne	ext Five	1 3.7	•	er SEAC	_	
Year	Section	Bençh	Height (m)	Width (m)	Depth (m)	<del> </del>	Bench	Height (m)	Width (m)	Depth (m)
6 <sup>th</sup>	XY-CD	76-81	65	101	5	XY-CD	76-81	65	101	5
year	XY-AB	76-81	115	92	5	XY-AB	76-81	115	92	5
7 <sup>th</sup>	XY-AB	76-81	40	92	5	XY-AB	76-81	40	92	5
year	XY-CD	71-76	60	91	5	XY-CD	71-76	60	91	5
year	XY-AB	71-76	106	82	5	XY-AB	71-76	106	82	5
8 <sup>th</sup>	XY-AB	71-76	44	82	5	XY-AB	71-76	44	82	5
year	AT-AD	66-71	145	72	5		66-71	145	72	5
year	XY-CD	_66-71	45	81	5	XY-CD	66-71	45	81	5
		66-71	10	81	5	XY-CD	66-71	10	81	5
9 <sup>ւհ</sup>	XY-CD	61-66	50	71	5	4.	61-66	50	71	5
year		56-61	45	61	5		56-61	45	61	5
year	XY-AB	61-66	140	62	_5	XY-AB	61-66	140	62	5
_	A1-Ab	56-61	30	52	5		56-61	30	52	5
		56-61	105	52	5	XY-AB	56-61	105	52	5
		51-56	130	42	5	XY-AB	51-56	130	42	5
10 <sup>th</sup>	XY-AB	46-51	120	32	5					
year		41-46	110	22	5					
ļ		36-41	100	12	5					
	XY-CD	51-56	40	51	5	XY-CD	51-56	40	51	5

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Total (VI-X Years)	4,52,175 m³	Total (VI-X Years)	4,14,875 m³
Grand Total (I-X Years)	8,66,500 m³	Grand Total (I-X Years)	8,29,200 m³
		(i A reary	

# 1. REVISED PRODUCTION DETAILS

		Ŗ	levise	d Year	ly Pro	oduc	tion (	(m³)		Annual Peak Production  Capacity (m³)						
YEA		-	er Ap lining	prove Plan	d	SE.	AC M	ed as po leeting nendati ToR	for		As per pprove	ed	Rev	rised as C Mee		
R	Sect ion	Ben ch	Rou gh Ston e (m³)	hered rock	Grav el (m³)	Ben ch		Weat hered rock (m³)	Gra vel (m³)	Sto	Wea ther ed rock (m³)	Gr av el (m	Ro ug h Sto ne (m	Wea ther ed rock (m3 )	Gr av el (m ")	
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		91- 96	793 00			91- 96	793 00			793 00			79 30 0			
	XY- AB	96- 99 96-		1014	1014 0	98- 100 96-		10140	1014 0					·		
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	XY-		244	233 52		96- 98 91-	244	2335 2		850	92	92	0	92	92	
	X Y- C	96 <b>9</b> 1- <b>9</b>	52 40 0	**		96 <b>91</b> - <b>9</b>	00 52 40				,		4	-	, , , , , , , , , , , , , , , , , , ,	

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	X Y-	8 6 9 1	47 60 0			8 6- 91	47 60 0			84,			84,		
וע	A B	8 1- 8 6	37 23 0			81 - 8 6	37 23 0		ì.	83 O			83 O		
	X Y- A B	8 I- 8 6	44 37 0			81 - 8 6	44 37 0		4	83,			83,	,	
V	A B- C D	8 1- 8 6	38 85 0			81 - 8 6	38 85 0			0			0		
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Based on the presentation made by the proponent SEAC recommended grant of Terms of Reference (TOR) with Public Hearing, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- The proponent is requested to submit the valid registered lease document during the EIA appraisal after the previous lease granted for the mining operations is legally surrendered (or) lapsed with the consent of the competent authority.
- The proponent must withdraw the duplicate application in Parivesh Portal vide
   Online proposal Number as follows
- 3. ToR SIA/TN/MIN/418675/2023 Dt: 17.02.2023.
- 4. The PP shall maintain the proposed quarrying operation restricted to an ultimate depth of 49 m only for securing safety of the persons employed and accordingly the revised production & development plan to be submitted during the EIA appraisal.
- 5. The proponent is requested to carry out a survey and enumerate on the structures located within 100m, 200m, 300m from the boundary of the mine lease area with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.

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- 6. Since there are many wells situated in and around the proposed mine lease area, the proponent shall furnish the details regarding the aquifer and the radius of influence of well which are situated within 1km radius.
- 7. 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.
- 8. 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. Necessary data and documentation in this regard may be provided.
- 9. The proponent shall submit the details regarding the nature of blasting activity which will be carried out.
- 10. The PP shall furnish DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.
- 11. The PP shall provide individual notice regarding the Public Hearing to the nearby house owners located in the vicinity of the project site.
- 12. In the case of proposed lease in an existing (or old) quarry where the benches are non-existent (or) partially formed critical of the bench geometry approved in the Mining Plan, the Project Proponent (PP) shall prepare and submit an 'Action Plan' for carrying out the realignment of the 'highwall' benches to ensure slope stability in the proposed quarry lease which shall be vetted by the concerned Asst. Director of Geology and Mining, during the time of appraisal for obtaining the EC.
- 13. The Project Proponent shall furnish the conceptual slope stability action plan for the planned working of the quarry by maintaining appropriate benches incorporating the haul road with proper gradient, along with the proposed

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- stabilizing measures during the appraisal while obtaining the EC, as the depth of the proposed working is extended beyond 30 m below ground level.
- 11. If the blasting operation is to be carried out, the PP shall present a conceptual design for carrying out the NONEL initiation based controlled blasting operation involving line drilling & muffle blasting and Simulation Model indicating the Blast-induced Ground Vibration levels predicted at a distance of 100m, 150m, 200m, 300m, 400m, and 500m from the boundary of the proposed quarry as per the conditions stipulated by the DGMS Circular No.7 of 1997, during trhe EIA Proposal.
- 12. Details of Green belt & fencing shall be included in the EIA Report.
- 13. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
- 14. 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.
- 15. 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).

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- 16. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 17. 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.
- 18. 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.
- 19. 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.
- 20. 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.
- 21. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 22. 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.
- 23. 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.

- 24. 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.
- 25. 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.
- 26. Impact on local transport infrastructure due to the Project should be indicated.
- 27. 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.
- 28. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 29. 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.
- 30. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 31. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 32. 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.
- 33. 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,

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- 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.
- 34. 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
- 35. 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.
- 36. 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.
- 37. 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.
- 38. 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.
- 39. 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.
- 40. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

41. Benefits of the Project if the Project is implemented should be spelt out. The

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- benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 42. 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.
- 43. 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.
- 44. 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. 367-17 (File No. 9828/2023)

Proposed Rough stone & Gravel quarry over an extent of 2.66.5 Ha at S.F.No. 200/1, 4A, 201/1, 2, 204/4, 6, 207/4A, 4B, 9 10, 11 & 12 in Udaiyalipatti Village, Kulathur Taluk, Pudukottai District, Tamil Nadu by Thiru.A.Urumaiya - for Terms of Reference (SIA/TN/MIN/417851/2023, Dated: 11.02.2023).

The proposal is placed in this 367th meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

## The SEAC noted the following

- 1. The Project Proponent, Thiru.A. Urumaiya has applied for Terms of Reference for the Proposed Rough stone & Gravel quarry over an extent of 2.66.5 Ha at S.F.No. 200/1, 4A, 201/1, 2, 204/4, 6, 207/4A, 4B, 9 10, 11 & 12 in Udaiyalipatti Village, Kulathur Taluk, Pudukottai District, Tamil Nadu.
- 2. The proposed quarry/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 for 10 years. The mining plan is for 10 years. The production for 10 years not to exceed 1,41,130m³ of rough stone, 33,44Zm³ of weathered rock & 26,990m³ of gravel.

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Based on the presentation made by the proponent, SEAC decided to recommend the proposal for Terms of Reference (TOR) with Public Hearing subject to the following additional TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- Keeping safety aspects under consideration, the proponent shall avoid quarrying
  in the small extent of land belonging to the survey numbers 200/1, 200/4A &
  207/4A. Hence the mining quantity shall be revised and submitted accordingly.
- 2. 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.
- 3. The structures within the radius of (i) 50 m. (ii) 100 m. (iii) 200 m and (iv) 300 m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, odai etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
- 4. The PP shall submit a detailed hydrogeological report indicating the impact of proposed quarrying operations on the waterbodies like lake, water tanks, etc are located within 1 km of the proposed quarry.
- 5. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.
- 6. 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 quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 7. 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

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- MMR 1961 such as blaster, mining mate, mine foreman, 11/1 Class mines manager appointed by the proponent.
- 8. 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.
- 9. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
- 10. 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?
  - 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.
- 11. 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).
- 12. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 13. The PP shall furnish the revised manpower including the statutory & competent persons as required under the provisions of the MMR 1961 for the prosed quarry based on the volume of rock handled & area of excavation.

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- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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.
- 19. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 20. 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 Blan of the mine lease area should be prepared to encompass preoperational,

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- operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 21. 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.
- 22. 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.
- 23. 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.
- 24. Impact on local transport infrastructure due to the Project should be indicated.
- 25. 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.
- 26.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 27. 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.
- 28. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 29. The PP shall produce/display the EIA report. Executive summary and other related information with respect to public hearing in Tamil Language also.
- 30. 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.

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- 31. 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 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.
- 32. 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
- 33.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.
- 34.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.
- 35. 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.
- 36. 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.
- 37. 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

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with time frames for implementation.

- 38. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 39. 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.
- 40. 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.
- 41. The PP shall prepare the EMP for the entire life/lease of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
- 42. 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. 367-18 (File No. 9835/2023)

Proposed Rough stone & Gravel quarry lease over an extent of 3.66.0 Ha at S.F.No. 860/1, 860/2A (Part), 861/1 & 861/2 in Muthalipalayam Village, Kangayam Taluk, Tiruppur District, Tamil Nadu by Thiru.A.Selvaraj - for Terms of Reference (SIA/TN/MIN/417547/2023, Dated: 09.02.2023).

The proposal is placed in this 367th meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

## The SEAC noted the following

- The Project Proponent, Thiru.A.Selvaraj has applied for Terms of Reference for the Proposed Rough stone & Gravel quarry lease over an extent of 3.66.0 Ha at S.F.No. 860/1, 860/2A (Part), 861/1 & 861/2 in Muthalipalayam Village, Kangayam Taluk, Tiruppur District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

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3. As per the mining plan, the lease period is for 10 years. The mining plan is for 10 years. The production for 10 years not to exceed 6,14,600m³ of rough stone, 83,664m³ of weathered rock & 59,508m³ of gravel.

Based on the presentation made by the proponent. SEAC decided to recommend the proposal for Terms of Reference (TOR) with Public Hearing subject to the following additional TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. 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.
- 2. The structures within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
- The PP shall submit a detailed hydrological report indicating the impact of proposed quarrying operations on the waterbodies like lake, water tanks, etc are located within 1 km of the proposed quarry.
- 4. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.
- 5. 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 quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 6. 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

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- MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 7. 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.
- 8. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
- 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.
- 10. 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).
- 11. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 12. The PP shall furnish the revised manpower including the statutory & competent persons as required under the provisions of the MMR 1961 for the prosed quarry based on the volume of rock handled & area of excavation.

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- 13. 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.
- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 19. 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,

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- operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 20. 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. ...
- 21. 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.
- 22. 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.
- 23. Impact on local transport infrastructure due to the Project should be indicated.
- 24. 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.
- 25.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 26. 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.
- 27. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 28. The PP shall produce/display the EIA report, Executive summary and other related information with respect to public hearing in Tamil Language also.
- 29. 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.

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- 30. 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 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.
- 31. 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
- 32.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.
- 33.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.
- 34. 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.
- 35. 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.
- 36. 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

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with time frames for implementation.

37. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

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- 38. 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.
- 39.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.
- 40. The PP shall prepare the EMP for the entire life/lease of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
- 41. 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. 367-19 (File No. 9855/2023)

Proposed Multi Colour Granite lease over an extent of 3.12.0 Ha at S.F.No. 1/2B (Part) & 1/3B (Part) in Thangayur Village, Edappadi Taluk, Salem District, Tamil Nadu by Thiru.B.Venkatesh - for Terms of Reference (SIA/TN/MIN/418957/2023, Dated: 20.02.2023).

The proposal is placed in this 367<sup>th</sup> meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

#### The SEAC noted the following

- The Project Proponent, Thiru.B.Venkatesh has applied for Terms of Reference for the Proposed Multi Colour Granite lease over an extent of 3.12.0 Ha at S.F.No. 1/2B (Part) & 1/3B (Part) in Thangayur Village, Edappadi Taluk, Salem District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

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- 3. Earlier, EC was accorded to the project proponent vide Lr.No.SEIAA-TN/F.No. 3049/EC/1(a)/2662/2015 dated.04.01.2016.
- 4. Now the proponent has submitted an application seeking Terms of Reference for the 1<sup>st</sup> scheme of mining for the quantity of 9041m³ of top soil, 17,248m³ of weathered rock 1,88,330m³ of RoM which includes 75,332m³ of recovery (@40%) and 1,12,998m³ of granite waste (@60%).

Based on the presentation made by the proponent, SEAC decided to recommend the proposal for Terms of Reference (TOR) with Public Hearing subject to the following additional TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The project proponent shall submit a certified compliance report for the EC dated.04.01.2016 obtained earlier.
- 2. 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.
- 3. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
- 4. The PP shall explore the possibility of carrying out the amalgamation with adjacent mine and its consequences during the EIA appraisal.
- 5. The PP shall submit a detailed hydrological report indicating the impact of proposed quarrying operations on the waterbodies like lake, water tanks, etc are located within 1 km of the proposed quarry.
- 6. The Proponent shall carry out Bio diversity study through reputed Institution

and the same shall be included in EIA Report.

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- 7. 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 quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
  - 8. 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/I Class mines manager appointed by the proponent.
  - 9. 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.
  - 10. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
  - 11. 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

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- 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 PP shall furnish the revised manpower including the statutory & competent persons as required under the provisions of the MMR 1961 for the prosed quarry based on the volume of rock handled & area of excavation.
- 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.
- 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,

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- 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.
- 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.

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- 29. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular 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 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.
- 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

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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/lease 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. 367-20 (File No. 9901/2023)

Proposed Rough Stone & Gravel Quarry lease over an extent of 3.56.0 Ha at S.F.No. 52/8B2, 52/8B3, 53/10, 53/11, 53/12, 53/5B, 53/6, 53/7, 53/8, 53/9, 54/1B2 & 54/1C in Sundakottal Village, Aruppukkottal Taluk, Virudhunagar District, Tamil Nadu by Thiru.R.R.Senthilkumar Raju - for Terms of Reference (SIA/TN/MIN/421586/2023, Dated: 10.03.2023).

The proposal is placed in this 367th meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

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### The SEAC noted the following

- The Project Proponent, Thiru.R.R. Senthilkumar Raju has applied for Terms of Reference for the Proposed Rough Stone & Gravel Quarry lease over an extent of 3.56.0 Ha at S.F.No. 52/8B2, 52/8B3, 53/10, 53/11, 53/12, 53/5B, 53/6, 53/7, 53/8, 53/9, 54/1B2 & 54/1C in Sundakottai Village, Aruppukkottai Taluk, Virudhunagar District, Tamil Nadu.
- 2. The proposed quarry/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 for 5 years and the mining plan is for 5 years. The production for 5 years not to exceed 2,67,915m³ of rough stone, 29,634m³ of weathered rock & 23,120m³ of gravel.

Based on the presentation made by the proponent, SEAC decided to recommend the proposal for Terms of Reference (TOR) with Public Hearing subject to the following additional TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. 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.
- 2. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
- 3. The PP shall submit a detailed hydrological report indicating the impact of proposed quarrying operations on the waterbodies like lake, water tanks, etc are located within 1 km of the proposed quarry.
- 4. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.

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- 5. 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 a conceptual 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 6. 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/I Class mines manager appointed by the proponent.
- 7. 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.
- 8. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
- 9. 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.

10. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology

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- 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).
- The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 12. The PP shall furnish the revised manpower including the statutory & competent persons as required under the provisions of the MMR 1961 for the prosed quarry based on the volume of rock handled & area of excavation.
- 13. 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. §
- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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

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Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.

- 18. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 19. 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.
- 20. 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.
- 21. 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.
- 22. 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.
- 23. Impact on local transport infrastructure due to the Project should be indicated.
- 24. 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.
- 25.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 26. 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 EAYEMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.

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- 27. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 28. The PP shall produce/display the EIA report, Executive summary and other related information with respect to public hearing in Tamil Language also.
- 29. 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.
- 30. 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 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.
- 31. 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
- 32.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.
- 33.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.
- 34. 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

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measures with required facilities proposed in the mining area may be detailed.

35. 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.

36. 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.

37. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

38. 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.

39. 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.

40. The PP shall prepare the EMP for the entire life/lease of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.

41. 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: 367-21 (File No: 9731/2023)

Proposed Rough Stone & gravel quarry lease area over an extent of 2.25.5 Ha at SF. No. 209/1A (P), 209/1B (P) & 209/2 (P) of Morattupalayam Village, Uthukuli Taluk, Tiruppur District by Tmt. V Revathi - For Terms of Reference. (SIA/TN/MIN/414152/2023, dated:11.01.2023)

The proposal was placed in 367th SEAC meeting held on 31.03.2023. The details of the project family by the proponent are given in the website (parivesh.nic.in).

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## The SEAC noted the following:

- The project proponent, Tmt. V Revathi has applied for Terms of Reference for the Rough Stone & gravel quarry lease area over an extent of 2.25.5Ha at SF. No 209/1A (P), 209/1B (P) & 209/2 (P) of Morattupalayam Village, Uthukuli Taluk, Tiruppur 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.

The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the ownership of the building, nature of construction, age of the building, number of residents, their profession and income, etc.

Agenda No: 367-22 (File No: 9773/2023)

Proposed Rough Stone & gravel quarry lease area over an extent of 3.14.5 Ha at SF. No. 224/2, 224/4, 225/2, 225/3,225/4,225/5 & 225/6 of Thiruchunai Village, Melur Taluk, Madurai District by Thiru S. Sivakumar - For Terms of Reference. (SIA/TN/MIN/416168/2023, dated:28.01.2023)

The proposal was placed in 367th SEAC meeting held on 31.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in) and the SEAC decided to defer the proposal

Agenda No: 367-23 (File No: 9801/2023)

Proposed Rough Stone & gravel quarry lease area over an extent of 3.77.0 Ha at SF. No. 306/1, 3, 4A, 4B,5A & 306/5B of Akilandapuram Village, Kayathar Taluk, Thoothukudi District by Thiru. B.Aravinth - For Terms of Reference.(SIA/TN/MIN/416039/2023, dated:05.02.2023)

The proposal was placed in 367th SEAC meeting held on 31.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in)

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#### The SEAC noted the following:

- 1. The project proponent, Thiru. B.Aravinth has applied for Terms of Reference for the Rough Stone & gravel quarry lease area over an extent of 3.77.0 Ha at SF. No 306/1, 3, 4A, 4B, 5A & 306/5B of Akilandapuram Village, Kayathar Taluk, Thoothukudi 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. As per the mining plan, the lease period is for 5 years. Production for Five years is 8,16,887m3 of Rough stone & 1,64,190m3 of Topsoil with gravel with an ultimate depth of mining 49m BGL. The Annual peak production is 1,63,780m³ of rough stone (1st year) & 73,125m³ of gravel (1st year).

Based on the presentation made by the proponent, SEAC decided to recommend for grant of Terms of Reference (TOR) with Public Hearing, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
- 2. The proponent shall discuss the funds for mitigation measures to be included in the EMP.
- 3. The proponent shall adhere to the bench height 5m as stated in the approved mining plan.
- 4. The proponent shall obtain Anna University Star rating system.
- 5. 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, pends etc. within 1 km (radius) along with the collected water level data for

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- both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. Necessary data and documentation in this regard may be provided.
- 6. The proponent shall submit the details regarding the nature of blasting activity which will be carried out.
- 7. The PP shall furnish DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.
- 8. The PP shall provide individual notice regarding the Public Hearing to the nearby house owners located in the vicinity of the project site.
- 9. In the case of proposed lease in an existing (or old) quarry where the benches are non-existent (or) partially formed critical of the bench geometry approved in the Mining Plan, the Project Proponent (PP) shall prepare and submit an 'Action Plan' for carrying out the realignment of the 'highwall' benches to ensure slope stability in the proposed quarry lease which shall be vetted by the concerned Asst. Director of Geology and Mining, during the time of appraisal for obtaining the EC.
- 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/I Class mines manager appointed by the proponent.
- 11. Since the quarry lies in a cluster situation, the PP shall furnish a Standard Operating Procedure for carrying out the safe blasting operation while considering the adjacent quarries lies in a radial distance of 500 m from their quarry.
- 12. Details of Green belt & fencing shall be included in the EIA Report.
- 13. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
- 14. 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,

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What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?

Quantity of minerals mined out.

Highest production achieved in any one year

Detail of approved depth of mining.

Actual depth of the mining achieved earlier.

Name of the person already mined in that leases area.

If EC and CTO already obtained, the copy of the same shall be submitted.

Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.

- 15. 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).
- 16. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 17. 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.
- 18. 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.
- 19. 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.

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- 20. 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.
- 21. 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.
- 22. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 23. 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.
- 24. 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.
- 25. 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.
- 26. 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.

27.Impact on local transport infrastructure due to the Project should be indicated.

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- 28.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.
- 29.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 30. 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.
- 31. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 32. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 33. 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.
- 34. 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-1 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.
- 35. Taller/one year old Saplings raised in appropriate size of bags, preferably eco-friendly 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

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- 36. 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.
- 37.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.
- 38.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.
- 39. 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.
- 40. 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.
- 41. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 42. 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.
- 43. 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.

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- 44. 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.
- 45. 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: 367-24 (File No: 9734/2023)

Proposed Rough Stone & Gravel lease over an extent of 2.59.0Ha at S.F.No. 1167/9A, 1167/9B1 & 1167/9B2 in Kachaikatti Village, Vadipatti Taluk, Madurai District, Tamil Nadu by Thiru. K. Kumaravel -For Terms of Reference (SIA/TN/MIN/414211/2023 dated: 11.10.2023).

The proposal was placed in this 367th meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in). The SEAC noted the following:

- The Project Proponent, Thiru. K., Kumaravel has applied for Terms of Reference for the Proposed Rough Stone & Gravel lease over an extent of 2.59,0Ha at S.F.No. 1167/9A, 1167/9B1 & 1167/9B2 in Kachaikatti Village, Vadipatti Taluk, Madurai District, Tamil Nadu.
- 2. The proposed quarry/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 & production should not exceed 2,56,270 m³ of Rough Stone & 27,094 m³ of gravel. The annual peak production is 66,740 m³ of Rough Stone & 12,360 m³ of Gravel. The ultimate depth is 47.0m (2m Gravel+45m Rough Stone).
- 4. This proposed project site abutting to the Veguthumalai Reserve Forest.
- 5. The proposed quarry is also located at the toe of the hilly terrain between two Reserve forests.

Based on the documents and presentation made by the proponent, SEAC after detailed discussions decided not to recommend this project for issuing ToR, considering that the site is located in an ecologically rich area with thick vegetation and depletion of fertile topsoil will lead to environmental degradation to flora and fauna in and around the

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Agenda No: 367-25 (File No: 9776/2023)

Proposed Rough Stone & Gravel lease over an extent of 2.52.5Ha at S.F.No. 149/1A2, 149/IB2 & 149/2A in Udaiyalippatti Village, Kulathur Taluk, Pudukkottai District, Tamil Nadu by Thiru.G.Durai -For Terms of Reference. (\$1A/TN/MIN/416151/2023) dated:30.01.2023).

The proposal was placed in this 367th meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

### The SEAC noted the following:

- 1. The Project Proponent, Thiru.G.Durai has applied for Terms of Reference for the Proposed Rough Stone & Gravel lease over an extent of 2.52.5Ha at S.F.No. 149/1A2, 149/1B2 & 149/2A in Udaiyalippatti Village, Kulathur Taluk, Pudukkottai District, Tamil Nadu.
- 2. The proposed quarry/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 & production should not exceed 3,59,703 m³ of Rough Stone & 50,454 m³ of gravel. The annual peak production is 75,740 m³ of Rough Stone & 36,270 m³ of Gravel. The ultimate depth is 38.0m (3.0m Gravel + 35m Rough Stone) Below Ground Level.
- 4. Earlier, this subject was placed in the 284th SEAC meeting held on 10.06:2022. Based on the presentation and documents furnished by the project proponent, SEAC noted that in G.O(MS) No. 295 dated 03.11.2021 the Government in Industries Department has notified the following Rules specifying certain conditions for permitting mining activities near ecologically sensitive areas.
  - " ... No quarrying or mining or crushing activities shall be carried out within one kilometer radial distance or the protective distance as notified by the Ministry of Environment, Forest and Climate Change, Government of India from time to time, whichever is more, from the boundaries of ecologically sensitive areas, environmentally and ecologically sensitive protected areas such as the National parks, Wild life Sanctuaries, Tiger Reserves, Elephant corridors and Reserve Forests".

The Committee noted that the Keelaiyur RF is located within a distance of 1 km from this project site and the proposal is, therefore, hit by the above G.O. The Committee, therefore, decided not to recommend the proposal.

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Subsequently, the above rule has been amended vide GO No. 243 Industries, Investment Promotion and Commerce (MMC.1) Department, dated 14.12.2022, as below.

"In the said rules, in rule 36, in Sub-rule (1-A), in Clause(e) for the expression "the National Parks, Wild Life Sanctuaries, Tiger Reserves, Elephant Corridors and Reserve Forests", the expression "National Parks, Wild Life Sanctuaries, Tiger Reserves, Elephant Corridors" shall be substituted".

Based on the above said G.O. The Proponent has resubmitted the same proposal on 30.01.2023 with all necessary supporting documents in order to obtain Environmental Clearance.

Now the proposal was placed in the 367th meeting of SEAC held on 31.03.2023. The SEAC noted the following.

Description	Old File	-3	New File
File No	9152	÷	9776
Online Proposal No for ToR	SIA/TN/MIN/73854/2022 19.03.2022	Dt.	SIA/TN/MIN/416151/2023 Dated 30.01.2023

Based on the presentation made by the proponent, **SEAC** decided to recommend for grant of Terms of Reference (TOR) with Public Hearing, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The structures within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc.
- 2. The PP shall spell out the mitigation measures considering the existence of Reserved Forest at a distance of 500 m from the proposed quarry site.
- 3. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.
- 4. 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

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mining plan.

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- 5. 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 quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 6. 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/I Class mines manager appointed by the proponent.
- 7. 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.
- 8. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
- 9. 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.

10. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology

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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).

- 11. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 12. The PP shall furnish the revised manpower including the statutory & competent persons as required under the provisions of the MMR 1961 for the prosed quarry based on the volume of rock handled & area of excavation.
- 13. 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.
- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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.

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- 18. 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.
- 19. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 20. 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.
- 21. 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.
- 22. 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.
- 23. 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.
- 24. Impact on local transport infrastructure due to the Project should be indicated.
- 25.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.
- 26.A detailed mine closure plan for the proposed project shall be included in EIA/EMP\_report which should be site-specific.

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- 27. 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.
- 28. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 29. The PP shall 'produce/display the EIA report. Executive summary and other related information with respect to public hearing in Tamil Language also.
- 30. 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.
- 31. 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-1 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.
- 32. 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
- 33.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.
- 34.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

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the lease period.

- 35. 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.
- 36. 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.
- 37. 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. 🌁
- 38. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 39. 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.,
- 40. 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.
- 41. 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.
- 42. 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.

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Agenda No: 367-26 (File No: 9721/2023)

Proposed Rough stone quarry lease over an extent of 0.61.0 Ha in S.F.No: 543/3A of Thulaiyanur Village of Thirumayam Taluk of Pudukkottai District Tamil Nadu by Tmt.S.Azhagu - For Terms of Reference. (SIA/TN/MIN/ 413068 /2023, Dated: 03.01.2023)

The proposal was placed in this 367th meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

#### The SEAC noted the following:

- 1. The project proponent, Tmt.S.Azhagu has applied seeking Terms of Reference for EIA study for the Proposed Rough stone quarry lease over an extent of 0.61.0 Ha in S.F.No: 543/3A of Thulaiyanur Village of Thirumayam Taluk of Pudukkottai 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. The total production in the first 5 years not to exceed 25250 m³ of Rough stone & 11,118 m³ of Gravel for the proposed depth of 13m BGL.

Based on the presentation made by the proponent, SEAC recommended to grant of Terms of Reference (ToR) with Public Hearing subject to the following ToRs in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. Proponent shall furnish the letter received from DFO concerned stating the proximity details of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
- 2. Detailed study report on flora and fauna in and nearby the guarry site.
- 3. The Proponent shall develop greenbelt and garland drain around the boundary of the proposed quarry and the photographs indicating the same shall be shown during the EIA appraisal.
- 4. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.

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- 5. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc indicating the ownership of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
- 6. The Proponent shall submit a conceptual 'Slope Stability Assessment' for the proposed quarry during the appraisal while obtaining the EC.
- 7. The Proponent 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/I Class mines manager appointed by the proponent.
- 8. The Proponent shall present a conceptual design for carrying out only controlled blasting operation involving line drilling in the proposed quarry such that the blast-induced ground vibrations are controlled.
- 9. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
- 10. 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,
- 11. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
- 12. Quantity of minerals mined out.
  - a. Highest production achieved in any one year
  - b. Detail of approved depth of mining.
  - c. Actual depth of the mining achieved earlier.
  - d. Name of the person already mined in that leases area.
  - e. If EC and CTO already obtained, the copy of the same shall be submitted.
  - f. Whether the mining was carried out as per the approved mine plan (or EE if issued) with stipulated benches.

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- 13. 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).
- 14. The Proponent shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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.

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- 20. 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.
- 21. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 22. 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.
- 23. 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.
- 24. 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.
- 25. 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.
- 26. Impact on local transport infrastructure due to the Project should be indicated.
- 27.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.
- 28.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.

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- 29. 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.
- 30. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 31. The Proponent shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 32. 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.
- 33. The purpose of Greenbelt 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 Aappendix-I in consultation with the DFO, & Tamil Nadu 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.
- 34. 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
- 35.A Disaster management Plan shall be prepared and included in the ElA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 36.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.

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- 37. 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.
- 38. 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.
- 39. 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.
- 40. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 41. 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.
- 42. 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.
- 43. The Proponent 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.
- 44. 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: 367-27 (File No: 9742/2023)

Proposed Rough stone and Gravel quarry lease over an extent of 1.53.5 Ha in S.F.No: 210/7C1, 210/8A1B of Melur Village of Kulathur Taluk of Pudukkottai District Tamil Nadu by Thiru M. Nallaiyah - For Terms of Reference. (SIA/TN/MIN/414495/2023,

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Dated: 13,01:2023)

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The proposal was placed in this 367th meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

#### The SEAC noted the following:

- 1. The project proponent, Thiru M. Nallaiyah has applied seeking Terms of Reference for EIA study for the Proposed Rough stone and Gravel quarry lease over an extent of 1.53.5 Ha in S.F.No: 210/7C1, 210/8A1B of Melur Village of Kulathur Taluk of Pudukkottai 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. The total production for the first 5 years not to exceed 125720 m3 of Rough stone & 17278 m3 of Gravel to the proposed depth of 33m.

Based on the presentation made by the proponent, SEAC decided to call for the following additional details from the Proponent:

The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m. (ii) 100 m. (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc indicating the ownership of the building, nature of construction, age of the building, number of residents, their profession and income, etc. On receipt of the aforesaid details/documents, the Committee will further deliberate and decide on future course of action.

Agenda No: 367-28 (File No: 9880/2023)

Proposed Multi Colour Granite quarry lease over an extent of 1.00.0 Ha in S.F.No: 884/1B, 1326, 1333/1A, 1B, 2, 1334/1(P), 2(P), 3 and 1334/4 of Thiruthangal Village of Sivakasi Taluk of Virudhunagar District Tamil Nadu by Tvl. G.P.K. Granite Industry - For Terms of Reference. (\$IA/TN/MIN/414495/2023, Dated: 13.01.2023)

The proposal was placed in this 367th meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

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### The SEAC noted the following:

- The project proponent, Tvl. G.P.K. Granite Industry has applied seeking Terms
  of Reference for EIA study for the Proposed Multi Colour Granite quarry lease
  over an extent of 1.00.0 Ha in S.F.No: 884/1B, 1326, 1333/1A, IB, 2, 1334/1(P),
  2(P), 3 and 1334/4 of Thiruthangal Village of Sivakasi Taluk of Virudhunagar
  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. The total production for the first 5 years not to exceed RoM: 236196m³ of Multi Colour Granite, Recoverable reserve: 59049m³ of Multi Colour Granite and Granite Waste: 177147 m³ to the proposed depth of 32m.

Based on the presentation made by the proponent, the SEAC had noted that a structure belonging to the school is located abutting the boundary of the lease and many structures / houses are located within 300 m radius distance from the quarry boundary. Hence, the SEAC decided to call for the following additional details from the Proponent:

- 1. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project shall be furnished.
- 2. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc indicating the ownership of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
- 3. Proponent shall furnish the letter received from DFO concerned stating the proximity details of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
- 4. The EIA Coordinator shall obtain and furnish the details of quarry/quarries operated by the project proponent in the past, either in the same location or

elsewhere in the State with video and photographic evidences.

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- 5. 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.
- 6. The Proponent shall carry out Drone video survey covering the cluster of the mines. Green belt, fencing etc.,
- 7. The PP shall furnish the details indicating the Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, and wherever required, the statutory clearances from the Regulatory Authorities, such as the TNPCB, Dept. of Geology and Mining, the District Magistrate should be secured and furnished to the effect that the proposed quarry site is technically and environmentally safe place for carrying out the quarrying operations.
- 8. 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, Integrated Regional Office, Chennai (or) the concerned DEE/TNPCB.

On receipt of the aforesaid details/documents, the Committee will further deliberate and decide on future course of action.

Agenda No: 367-29 (File No: 9405/2022)

Proposed Rough Stone and Gravel quarry lease over an extent of 3.74.0 Ha at S.F.No. 289/IA(P), 289/2(P) and 161/IA(P), Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu by Tvl. Hi Tech Rock Products & Aggregates Limited - for Environmental Clearance. (SIA/TN/MIN/ 421375/2023, Dt: 08.03.2023).

The proposal was placed in 367th SEAC meeting held on 31.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

### The SEAC noted the following

1. The Project Proponent, Tvl. Hi Tech Rock Products & Aggregates Limited has applied for Environmental Clearance for the proposed Rough Stone and Gravel quarry lease over an extent of 3.74.0 Ha at 5.F.No. 289/1A(P), 289/2(P) and 161/1A(P) of Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District.

Tamil Nadu.

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- 2. The proposed quarry/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 for 5 years. Production for Five years 4,14,975m³ of rough stone, 2,74,250m³ of Weathered Rock & 63,384 m³ of Gravel. The annual peak production is 1,19,965 m³ of rough stone (3rd year), 2,74,250m³ of Weathered Rock (1rd year) & 63,384m³ of Gravel (1rd year). The ultimate depth is 47 m BGL.
- 4. ToR issued vide Lr No.SEIAA-TN/F.No.9405/ToR-1260/2022 Dated: 26.09.2022.
- 5. Public hearing conducted on 11.01.2023.

Based on the presentation, SEAC decided to defer the project and to take up the proposal in the forthcoming meeting.

Agenda No: 367-30 (File No: 9406/2022)

Proposed Rough Stone and Gravel quarry lease over an extent of 3.98.1 Ha at S.F.No. 282/3B(P), 283/2(P), 278/2(P), 277/1B(P), 284/1A1(P) & 284/2(P), Irukkandurai Part-Il Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu by Tvl. Hi Tech Rock Products & Aggregates Limited - for Environmental Clearance. (SIA/TN/MIN/421303/2023, Dt: 08.03.2023).

The proposal was placed in 367th SEAC meeting held on 31.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

#### The SEAC noted the following

- 1. The Project Proponent, Tvl. Hi Tech Rock Products & Aggregates Limited has applied for Environmental Clearance for the proposed Rough Stone and Gravel quarry lease over an extent of 3.98.1 Ha at S.F.No. 282/3B(P), 283/2(P), 278/2(P), 277/1B(P), 284/1A1(P) & 284/2(P), Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu.
- 2. The proposed quarry/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 for 5 years. Production for Five years 509875m³ of rough stone,295390m³ of Weathered Rock & 67550 m³ of Gravel. The annual peak production is 143375 m³ of rough stone (2nd year),295390m³ of Weathered Rock (1st year) & 67550m³ of Gravel (1st year). The ultimate depth is 57 m BCL.

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- 4. ToR issued vide Lr No.SEIAA-TN/F.No.9406/ToR-1262/2022 Dated: 26.09.2022.
- 5. Public hearing conducted on 11.01.2023.

Based on the presentation, SEAC decided to defer the project and to take up the proposal in the forthcoming meeting.

Agenda No: 367 - 31. (File No: 9407/2022)

Proposed Rough Stone and Gravel quarry lease over an extent of 4.71.40Ha at S.F.No.290/1B(P), 290/2(P), 291/2B(P), 287/3(P), 160/1A(P), 289/1A(P) & 289/2(P) Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu by Tvl. Products & Aggregates Rock Limited - for Environmental Clearance.(SIA/TN/MIN/421328/2023, Dt: 08.03.2023).

The proposal was placed in this 367th Meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

## The SEAC noted the following

- 1. The Project Proponent, Tvl. Hi Tech Rock Products & Aggregates Limited has applied for Environmental Clearance along with EIA/EMP report for the proposed Rough Stone and Gravel quarry lease over an extent of 4.71.40 Ha at S.F.No.290/1B(P), 290/2(P), 291/2B(P), 287/3(P), 160/1A(P), 289/1A(P) & 289/2(P) Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. The precise area communication/lease is issued for the period of 5 years. The approved mining plan is for the period of five years & production should not exceed 678900 culm of rough stone, 359325 Culm of Weathered Rock & 81618 Cu.m of Gravel. The annual peak production is 199740 cu.m of rough stone (3<sup>rd</sup> year), 359325 Cu.m of Weathered Rock (1<sup>st</sup> year) & 81618 Cu.m of Gravel (1st year). The ultimate depth is 57 m BGL.
- 4. Terms of Reference (ToR) along with public hearing issued vide Lr.No. SEIAA-TN/F.No.9407/ToR-1261/2022 Dated: 26.09.2022.

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- 5. Public Hearing meeting held on 10.01.2023.
- 6. As per ToR issued, revised production quantity for the period of five years should not exceed 6,25,475 cu.m of Rough Stone, & 81618 Cu.m of Gravel. The annual peak production is 199740 cu.m of rough stone (3<sup>rd</sup> year). & 81618 Cu.m of Gravel (1<sup>st</sup> year). The ultimate depth is 47m BGL.

Based on the presentation and documents furnished by the project proponent, SEAC decided to defer and to take up the proposal in the forthcoming Committee meeting.

Agenda No: 367 - 32

File No: 9560

Proposed Expansion of Industrial Park by M/s. Mahindra Industrial Park Chennai Limited at Survey Numbers: 65/1, 65/2, 65/3, 66/1, 66/2, 66/3, 66/4, 66/5, 66/6, 66/7, 67/1, 67/2, 68/1, 68/2, 68/3, 68/4, 69/2, 69/3, 69/4, 69/5, 69/7, 69/8, 70/1A, 70/2, 70/3, 70/4, 70/5, 70/6, 70/7, 70/8, 71/1, 71/2, 71/3, 71/4, 71/5, 72/1, 72/2, 72/3, 72/4, 72/5, 72/6, 72/7, 73/1, 73/2., 73/3, 73/4, 73/5, 73/6, 73/7, 73/8, 73/9, 74/1, 74/2, 75/1, 75/2A, 75/2B, 75/2C, 75/3A, 75/3B1, 75/3C, 75/3D, 76/2, 76/3, 76/4, 76/5, 77/2, 77/3, 77/4, 77/5, 77/6, 77/7, 78/1, 78/2, 78/3, 78/4, 78/5, 78/6, 78/7, 78/8, 79/1, 79/2, 79/3, 79/4, 79/5, 79/6, 79/8, 81/1, 82/2A, 82/2B, 83/1, 83/3, 84/1, 84/4, 84/5, 84/6, 84/7A, 84/7B, 84/8, 85/2, 85/5A, 85/5B, 86/1, 86/2, 86/3, 86/4, 87/2, 87/3, 87/4, 88/1, 88/2, 88/2, 88/3, 89/6A, 89/7, 90/1, 92/2, 92/3, 70/1B, 75/3B2, 76/1, 77/1, 84/2, 84/3, 85/1, 87/1 of Eliambedu Village & 119/8, 120/6, 120/7, 120/8A, 120/8B, 120/8C, 120/9, 120/10, 120/12, 120/13, 146/1, 146/2, 146/3, 146/4, 147/2, 147/4, 147/5A, 147/6, 147/7, 147/8, 147/9, 148/2B, 148/2C, 148/2D2A, 148/2D2B, 149/2, 150/2B, 150/2E, 150/2F, 151/2, 151/3A, 151/3B, 151/4, 152/2, 152/3, 152/5A, 152/58, 152/6, 152/9, 152/12, 152/16, 152/17, 153/2A, 153/2B, 153/2C1, 153/2C2, 153/4, 189/1, 189/2A, 189/2B, 189/3, 191/1B, 192/1, 193/1, 193/2, 194/1A1, 194/1A2, 194/1B, 194/2, 194/4, 194/5, 194/6, 194/7, 194/8A, 194/8B, 194/9, 194/10, 194/11, 194/13A, 194/13B, 195/4, 195/6, 195/8, 195/10, 195/11, 196/1, 196/2, 196/3, 196/4, 196/6, 196/8, 197/1, 197/2, 197/4, 197/5, 197/7, 198/1A2, 198/2A, 198/2B, 198/2C, 198/3, 198/4, 198/5, 198/6, 198/7, 198/8, 198/9, 199/1, 199/2, 199/3, 199/4, 199/5, 199/6, 199/7, 199/8, 200/1, 200/2, 200/3, 200/4, 200/5, 200/6, 200/7, 200/8, 200/10, 200/11, 200/13, 200/14, 201/1, 201/2, 201/3A1, 201/3A2, 201/3B, 201/5, 201/6, 201/7, 201/8, 201/10, 202/1, 202/3, 202/4, 202/5, 202/6, 202/7, 202/8, 202/9, 202/10, 202/11, 202/15, 202/17, 203/5A, 203/5B, 203/7A, 203/7B, 204/3, 205/1, 205/2, 205/3, 205/4, 205/5, 205/7A, 205/7B, 205/8, 205/9, 206/1, 206/2, 206/3, 206/4A, 206/4B, 206/4C, 206/5A, 206/5B, 206/6A, 206/6B, 206/6C, 206/7, 206/8, 207/1, 207/2, 207/3, 207/4, 207/5, 207/6, 208/2, 208/3, 209/1, 209/5, 210/1, 210/2B, 210/2F, 210/2G, 210/2H, 210/2I2, 218/2B, 218/8, 218/9, 218/70,

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218/11, 218/12, 218/13, 218/14, 224/2, 225/5, 226/3, 226/4, 226/5, 226/6, 226/6, 226/7, 226/8, 226/9, 226/10, 226/11, 226/12, 227/2, 227/3, 227/5, 227/6, 227/7, 227/8, 227/10, 227/11, 227/12, 227/13, 227/14, 228/1A, 228/1B, 228/3, 228/4, 228/6A, 228/6B, 228/6C, 228/7, 228/8, 228/9, 228/10B, 228/11, 228/12, 231/8, 120/1, 120/2, 120/3, 120/4, 120/5, 120/11, 147/1, 147/3, 147/5B, 148/1, 148/2A, 148/2D1, 148/2D3, 150/1, 150/2A, 150/2C, 150/2D, 150/2G, 150/3, 152/4, 152/7, 152/8, 152/10, 152/11, 152/13, 152/14, 152/15, 153/3, 190/1A, 190/1B, 190/2,190/3, 190/4, 190/5, 191/1A, 191/2, 192/2, 192/3A, 192/3B1, 192/3B2, 192/4, 194/3, 194/12, 195/1, 195/2, 195/3, 195/5, 195/9, 196/5, 196/7, 197/3, 197/6, 200/9, 201/9, 202/2, 208/1, 227/4, 227/9, 227/15, 227/16 of Puduvoyal Ponneri and Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu for Environmental Clearance. (SIA/TN/INFRA2/422349/2023, dated: 16.03.2023)

The proposal was placed in this 367th Meeting of SEAC held on 31.03.2023. 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. Mahindra Industrial Park Chennai Limited has applied for Environmental Clearance for the Proposed Expansion of Industrial Park at Survey Numbers: 65/1, 65/2, 65/3, 66/1, 66/2, 66/3, 66/4, 66/5, 66/6, 66/7, 67/1, 67/2, 68/1, 68/2, 68/3, 68/4, 69/2, 69/3, 69/4, 69/5, 69/7, 69/8, 70/1A, 70/2, 70/3, 70/4, 70/5, 70/6, 70/7, 70/8, 71/1, 71/2, 71/3, 71/4, 71/5, 72/1, 72/2, 72/3, 72/4, 72/5, 72/6, 72/7, 73/1, 73/2,, 73/3, 73/4, 73/5, 73/6, 73/7, 73/8, 73/9, 74/1, 74/2, **7**5/1, **7**5/2A, 75/2B, 75/2C, 75/3A, 75/3B1, 75/3C, 75/3D, 76/2, 76/3, 76/4, 76/5, 77/2, 77/3, 77/4, 77/5, 77/6, 77/7, 78/1, 78/2, 78/3, 78/4, 78/5, 78/6, 78/7, 78/8, 79/1, 79/2, 79/3, 79/4, 79/5, 79/6, 79/8, 81/1, 82/2A, 82/2B, 83/1, 83/3, 84/1, 84/4, 84/5, 84/6, 84/7A, 84/7B, 84/8, 85/2, 85/5A, 85/5B, 86/1, 86/2, 86/3, 86/4, 87/2, 87/3, 87/4, 88/1, 88/2, 88/2, 88/3, 89/6A, 89/7, 90/1, 92/2, 92/3, 70/1B, 75/3B2, 76/1, 77/1, 84/2, 84/3, 85/1, 87/1 of Eliambedu Village & 119/8, 120/6, 120/7, 120/8A, 120/8B, 120/8C, 120/9, 120/10, 120/12, 120/13, 146/1, 146/2, 146/3, 146/4, 147/2, 147/4, 147/5A, 147/6, 147/7, 147/8, 147/9, 148/2B, 148/2C, 148/2D2A, 148/2D2B, 149/2, 150/2B, 150/2E, 150/2F, 151/2, 151/3A, 151/3B, 151/4, 152/2, 152/3, 152/5A, 152/5B, 152/6, 152/9, 152/12, 152/16, 152/17, 153/2A, 153/2B, 153/2C1, 153/2C2, 153/4, 189/1, 189/2A, 189/2B, 189/3, 191/1B, 192/1,

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193/1, 193/2, 194/1A1, 194/1A2, 194/1B, 194/2, 194/4, 194/5, 194/6, 194/7. 194/8A, 194/8B, 194/9, 194/10, 194/11, 194/13A, 194/13B, 195/4, 195/6. 195/8, 195/10, 195/11, 196/1, 196/2, 196/3, 196/4, 196/6, 196/8, 197/1, I 97/2, 197/4, 197/5, 197/7, 198/IA2, 198/2A, 198/2B, 198/2C, 198/3, 198/4, 198/5, 198/6, 198/7, 198/8, 198/9, 199/1, 199/2, 199/3, 199/4, 199/5, 199/6, 199/7, 199/8, 200/1, 200/2, 200/3, 200/4, 200/5, 200/6, 200/7, 200/8, 200/10, 200/11, 200/13, 200/14, 201/1, 201/2, 201/3A1, 201/3A2, 201/3B. 201/5, 201/6, 201/7, 201/8, 201/10, 202/1, 202/3, 202/4, 202/5, 202/6, 202/7, 202/8, 202/9, 202/10, 202/11, 202/15, 202/17, 203/5A, 203/5B, 203/7A, 203/7B, 204/3, 205/1, 205/2, 205/3, 205/4, 205/5, 205/7A. 205/7B, 205/8, 205/9, 206/1, 206/2, 206/3, 206/4A, 206/4B, 206/4C, 206/5A, 206/5B, 206/6A, 206/6B, 206/6C, 206/7, 206/8, 207/1, 207/2, 207/3, 207/4, 207/5, 207/6, 208/2, 208/3, 209/1, 209/5, 210/1, 210/2A, 210/2B, 210/2F, 210/2G, 210/2H, 210/2I2, 218/2B, 218/8, 218/9, 218/10. 218/11, 218/12, 218/13, 218/14, 224/2, 225/5, 226/3, 226/4, 226/5, 226/6. 226/6, 226/7, 226/8, 226/9, 226/10, 226/11, 226/12, 227/2, 227/3, 227/5, 227/6, 227/7, 227/8, 227/10, 227/11, 227/12, 227/13, 227/14, 228/1A, 228/1B, 228/3, 228/4, 228/6A, 228/6B, 228/6C, 228/7, 228/8, 228/9, 228/10B, 228/11, 228/12, 231/8, 120/1, 120/2, 120/3, 120/4, 120/5, 120/11, 147/1, 147/3, 147/5B, 148/1, 148/2A, 148/2D1, 148/2D3, 150/1, 150/2A, 150/2C, 150/2D, 150/2G, 150/3, 152/4, 152/7, 152/8, 152/10, 152/11, 152/13, 152/14, 152/15, 153/3, 190/1A, 190/1B, 190/2, 190/3, 190/4, 190/5, 191/1A, 191/2, 192/2, 192/3A, 192/3B1, 192/3B2, 192/4, 194/3, 194/12, 195/1, 195/2, 195/3, 195/5, 195/9, 196/5, 196/7, 197/3, 197/6, 200/9. 201/9, 202/2, 208/1, 227/4, 227/9, 227/15, 227/16 of Puduvoyal Ponneri and Gummidipoondi Taluk, Thiruvallur District, Tamil Nadu

- 2. The project/activity is covered under Category "B1" of Item 8(b) "Township and Area development project" of the Schedule to the EIA Notification, 2006.
- 3. The new expansion proposal involves increase in land area from 263.875 Acres to 306.80 Acres.

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S. No	Description	Details				
ī.	Name of the Project	Proposed Expansion of Industrial Park				
2.	Location	Survey Numbers: 65/1, 65/2, 65/3, 65/4, 66/1, 66/2, 66/3, etc. 119/8, 120/1, 120/11, 120/2, 120/3, 120/4, 120/5, etc. of Eliambedu & Puduvoyal Village, Ponneri and Gummidipoondi Taluk, Thiruvallur District				
3.	Type of Project		Township and Area development project  Schedule 8 (b)			
4.	Latitude & Longitude		13°20'29.48"N 80°9'40.10"E			
5.	Total Area	S. No.	Details	Extent in Acres		
	(in sq. m)		Total land area	306.775		
<u> </u>		1.	Industrial Plots	218.02		
		2.	Residential Plot	1.29		
		3.	Commercial Plots	7.63		
		4.	TANGEDCO Plot	2.34		
		5.	Local Body Plot	1.535		
		6.	Utility – WTP, STP & SWM, Admin Office	3.005		
		7.	Road, Peripheral Drain & Borewell Utilities, Canal's 3.0m Setback	26.935		
		8.	Greenery Plot	30.765		
		9.	Green area – residential, commercial, utility, Road, Peripheral Drain & Borewell Utilities	15.255		
6.	Built up area					
7.	Cost of Project	Rs. 40.4	47 Crores			

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8.	a) Water	Total water requirement – 2724 KLD			
	requirement	Fresh water requirement – 2078 KLD			
	KLD	i. Domestic requirement – 478 KLD			
		ii. Process – 1600 KLD			
		Treated/Recycled water requirement – 646 KLD			
		i. Flushing – 250 KLD			
		Green Belt Development – 396 KLD			
	b) Source	Ground Water			
9.	Quantity of	Total Sewage Generation – 680 KLD			
	Sewage				
	Generation				
	KLD				
10.	Details of	Sewage Treatment Plant – 1200 KLD capacity			
	Sewage	Receiving Chamber			
	Treatment	Coarse Screen Chamber (Manual)			
	Plant /	Coarse Screen Chamber (Mechanical)			
	Effluent	Raw Sewage Sump with online flow meter			
	Treatment	Stilling Chamber			
	Plant	• Fine Screen (Manual)			
		Fine Screen (Mechanical)			
		Grit Chamber (Mechanical)			
		Grit Chamber(Manual)			
		Sequential Batch Reactor (SBR) Basins with Online D.O. (Dissolved)			
		Oxygen) Analyzer			
		Sludge Sump			
		DWPE(Dewatering Poly Electrolyte) Dosing Tank			
		Centrifuge Pump (First Floor)			
		Dry Sludge Collection Bay (Ground Floor)			
		DMF Feed Tank			
		Dual Media Filters & Pump Dual Media Filters & Pump			
		Treated Sewage Tank			

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		UV Filtration System with online flow meter				
11.	Mode of	Total Treated waste water – 646 KLD				
	Disposal of	i. Toilet Flushing – 250 KLD				
	treated	ii. Green Belt Development – 396 KLD				
	sewage with					
	quantity					
12.	Quantity of	CNI		Methods of Treatment /		
	Solid Waste	S.N	Description	(Tons/	· •	
	generated	0_		day)	Disposal	
	per day,	1	Non-		Sent to authorized recyclers	
	Mode of		Biodegradable	2.014	or local bodies for recycling	·
	treatment		Waste (60%)			
	and	2	Biodegradable		Biodegradable waste	
	Disposal of		Waste (40%)	1.343***	will be	
	Solid Waste			1.343	Composted using Organic	
					Waste Convertor.	
		3	STP Sludge	50	will be used as manure for	
				50	greenbelt development	
13.	Power	31.35 MVA , Source of power – TANGEDCO Grid				
	requirement	Construction Phase – 100 KVA				
14.	Details of	•	4 nos of 160 KVA		<del></del>	_
	D.G. set					
	with	•	All the DG sets will l	be provided	with Inbuilt Acoustic enclosures to	)
	Capacity	comply with the noise level standards prescribed by CPCB  Stacks with height will be provided in compliance with CPCB norms				
15.	Details of	15.255 Acres				
	Green Belt	j				
	Area		<b>\$</b> ·			
16.	Provision	Total	Runoff - 127608 Cur	n		
	for rain					
	/	Considering 50 rainy days per Annum, per day runoff will be 2550 cum				
		<u> </u>		L		

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	water	Rainwater	will be recharge into recharge well. Recharge pit: 150	382 cum		
	harvesting	Nos with Dia 0.9 m, depth 4m				
		Remaining rainwater to be let in the artificial pond within the 2170 cum				
		site and				
		excess water will be let into nearby lakes				
		100% of Rainwater is managed within the project site				
17.	EMP Cost	Construction Phase				
	(Rs.)	Capital Cost – 13.25 Lakhs				
		O & M Cost	(Per Annum) – 4.5 Lakhs			
		Operation P	Phase			
		Capital Cost – 284 Lakhs				
		Recurring Cost – 33.88 Lakhs				
18.	CER					
	activities					
	with the	S. No		Capital cost		
	specific	3. NO	CER Activity	Allocation (in Lakhs)		
	allocation	Improveme	nt of Health, Education, Sustainable Livelihood Develo			
	of funds					
		below				
		1.	List of Fishermen Panchayat areas in & around site:	-		
		Palaverkadu Panchayat				
	Kottaikuppam Panchayat					
		2 List of Panchayat areas adjacent to site:				
		Peruvoyal Panchayat				
	Eliambedu Panchayat					
Total Cost Allocation			100			

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31.3.2021

Now, the proposal is placed in the 361st SEAC meeting held on 08.03.2023. Based on the presentation and document furnished by the proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance subject to the following specific conditions in addition to normal conditions stipulated by MOEF&.CC,

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- I. All the water bodies within the industrial park shall be maintained properly.
- 2. The Proponent shall ensure that **no** schedule A & B industries as per EIA Notification 2006, shall be allowed in the Industrial Park.
- 3. Individual industries shall be advised to retain the trees if possible. If removable of trees becomes inevitable, as a compensation, the industrial unit shall plant 10 trees for every tree removed.
- Individual industries which are proposed to be housed shall obtain IGBC Gold rating for their industrial sheds.
- 5. Individual industries which are proposed to be housed shall ensure that minimum 50% of roof area shall be covered with solar panels.
- The proponent must obtain permanent water supply commitment from Metro Water/Local Panchayat before obtaining CTO from TNPCB.
- 7. The OSR area has to be developed immediately, in consultation with the local body.
- 8. The project proponent shall ensure that the individual industries to be housed in the SIPCOT to achieve ZLD.
- The project proponent shall submit structural stability certificate from reputed institutions like IIT, Anna University etc. to SEIAA.
- 10. The proponent shall provide Bio Methanation plant within project site for biodegradable waste and shall dispose the non- Biodegradable waste to authorized recyclers as committed.
- 11. PP shall ensure that minimum 50% of DG sets proposed to be set up are run on green energy sources instead of Diesel.
- 12. The proponent shall make proper arrangements for the full utilization of the treated water and no treated water shall be let out of the premise.
- 13. The height of the stacks of DG sets shall be provided as per the CPCB norms.
- 14. The project proponent shall allot necessary area for the collection of E waste and strictly follow the E-Waste Management Rules 2016, as amended for disposal of the E waste generation within the premise.
- 15. The sludge generated from the Sewage Treatment Plant shall be collected and dewatered using filter press and the same shall be utilized as manure for green

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elt development after composting.

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- 16. 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 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. 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 and the same shall be included in the layout out plan to be submitted for CMDA/DTCP approval. The total green belt area should be minimum 33% of the total area excluding OSR land.
- 17. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted with 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.
- 18. The unit shall ensure the compliance of land use classification fit for construction.
- 19. The project proponent shall provide entry and exit points for the OSR area as per the norms for the pubic usage and as committed.
- 20. The PP shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.
- 21. The Proponent shall provide rain water harvesting sump of adequate capacity for collecting the runoff from rooftops, paved and unpaved roads ras

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committed.

- 22. The project proponent shall obtain the necessary authorization from TNPCB and strictly follow the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016, as amended for the generation of Hazardous waste within the premises.
- 23. No waste of any type to be disposed off in any other way other than the approved one.
- 24. The Proponent shall provide the dispenser for the disposal of Sanitary Napkins.
- 25. All the mitigation measures committed by the proponent for the flood management, to avoid pollution in Air, Noise, Solid waste disposal, Sewage treatment & disposal etc., shall be followed strictly.
- 26. The project proponent shall furnish commitment for post-COVID health management for construction workers as per ICMR and MHA or the State Government guidelines as committed for during SEAC meeting.
- 27. The project proponent shall provide a medical facility, possibly with a medical officer in the project site for continuous monitoring the health of construction workers during COVID and Post - COVID period.
- 28. Solar energy should be at least 25% of total energy utilization. Application of solar energy should be utilized maximum for illumination of common areas, street lighting etc.
- 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, an amount of Rs. 100 Lakhs shall be spent towards CER for the activities committed by the Proponent.

Agenda No: 367-33 (File No: 9909/2023)

Proposed Rough Stone & Gravel quarry lease over an extent of 3.44.0 Ha at S.F.No. 164/1B, 164/2, 164/3, 164/4A, 164/4B, 164/4D, 164/5B, 165/1A, 165/1B, 165/4, 165/5, 165/6, 165/7A, 165/7B, 165/7C, 165/7D, 165/8 & 165/9 of Perumbakkam Village, Cheyyur Taluk, Chengalpattu District, Tamil Nadu by Thiru J. Sekar -For Environmental Clearance (SIA/TN/MIN/422376/2023, Dt. 16.3.2023).

The proposal was placed in this 367th meeting of SEAC held on 31.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

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# The SEAC noted the following:

- 1. The Project Proponent, Thiru J.Sekar has applied for Environmental Clearance for the proposed Rough Rough Stone & Gravel quarry lease over an extent of 3.44.0 Ha at S.F.No. 164/1B, 164/2, 164/3, 164/4A, 164/4B, 164/4D, 164/5B, 165/1A, 165/1B, 165/4, 165/5, 165/6, 165/7A, 165/7B, 165/7C, 165/7D, 165/8 & 165/9 of Perumbakkam Village, Cheyyur Taluk, Chengalpattu 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. 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 476775 cu.m of rough stone, Weather rock - 40623 cu.m & 29320 cu.m of Gravel. The annual peak production is 120700 cu.m of rough stone (4th year) & 16644 cu.m of Gravel (2nd year) & 11552 cu.m (2nd year). The ultimate depth is 45m BGL.
- 4. It is a fresh quarry project.

SI.	Details of the Proposal	:	Data Furnished				
No			2010 1 0111131100				
Ī	Name of the Owner/Firm	:	Thiru. J. Sekar,				
			S/o. Jagannathan,				
			No.4, 10A, East Cross Street,				
			Gandhi Nagar, Vellore District - 632				
	<u> </u>		006.				
2	Type of quarrying (Savudu/Rough	1:	Rough Stone and Gravel				
	Stone/Sand/Granite)						
3	S.F No. of the quarry site with area	:	164/1B, 164/2, 164/3, 164/4A, 164/4B,				
	break-up		164/4D, 164/5B, 165/1A, 165/1B, 165/4,				
			165/5, 165/6, 165/7A, 165/7B, 165/7C,				
	<u> </u>		165/7D, 165/8 & 165/9				
4	Village in which situated	:	Perumbakkam				
5	Taluk in which situated	:	Cheyyur				
6	District in which situated	1:	Chengalpattu				
7	Extent of quarry (in ha.)	1:	3.44.0 Ha				
8	Lease Period of quarrying proposed	:	5 Years				
9	Type of mining	:	Opencast Mechanized Mining				
10	Production (Quantity in m³) -	:	4,76,775 m³ of Rough Stone and				
			29,320 m³ of Gravel				

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11	Latitude & Longitude of all corners of	:	12°24'50.84"N to 12°24'58.69"N
	the quarry site		80°01'41.90"E to 80°01'49.99"E
12	Topo Sheet No.	:	66-D/03
13	Man Power requirement per day:	:	56 Nos
14	Precise area communication approved	:	Na.Ka.No.1943/Kanimam/2022,
	by Assistant Director (i/c), Department		dated:17.02.2023
	of Geology and Mining with date		
15	Mining Plan approved by Assistant	:	Rc.No.1943/Mines/2018, dated:
	Director (i/c), Department of Geology		01.03.2023
	and Mining with date		
16	Water requirement:	:	2.0 KLD
	4. Drinking water & domestic		0.6 KLD
	purposes (in KLD)		
	5. Dust Suppression (in KLD)		1.0 KLD
	6. Green Belt (in KLD)		0.4 KLD
17	Power requirement		
	b. Domestic Purpose	:	TNEB
	c. Industrial <sup>1</sup> Purpose		393084 Liters of HSD
18	Depth of quarrying	:	45m bgl
19	Depth of water table	:	55m-50m bgl
20	Whether any habitation within 300m	:	No
	distance		
21	Project Cost (excluding EMP cost)	:	Rs. 85,48,000/-
22	EMP cost	:	Capital Cost - Rs.35,03,800/-
			Recurring Cost - Rs.25,32,045/-
23	CER cost	:	Rs. 5,00,000/-
24	Assistant Director, mines 500m cluster	:	Rc.No.1943/Mines/2022, dated:
	letter		01.03.2023
25	VAO certificate regarding 300m radius	:	Letter dated 06.03.2023
	cluster		
		_	

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 not exceed 476775 cu.m of rough stone, Weather rock – 40623 cu.m & 29320 cu.m of Gravel and the annual peak production shall not exceed 120700 cu.m of rough stone & 16644 cu.m of Gravel & 11552 cu.m with maintaining an ultimate depth of 45m BGL, 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:

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- 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 Metalliferrous Mines Regulations, 1961.
- 3. The PP shall submit the 'Notice of Opening' of the quarry to the Regional Inspector/Director of Mines Safety, Chennal Region under the section 16 of the 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 conceptual '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 3 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

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- 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 30 to 40 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 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, within one year from the commencement of mining operations, the PP shall carry out the scientific studies after obtaining prior permission from the DMS/Chennai 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', in accordance with the DGMS Circular No. 7 of 1997, 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.

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- 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.
- 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-IA.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. 15 lakhs and the amount shall be spent for the Government School, Perumbakkam and other Govt School in the vicinity of the project site as committed, before obtaining

CTO from TNPCB.

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Agenda No: 367 – TA1. (File No: 1107/2022)

Existing Black Granite quarry lease over an extent of 35.99.0 Ha at S.F.No: 412 (P) at Sinjalanatham Village, Pennagaram Taluk, Dharmapuri District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited- For Environmental Clearance.(SIA/TN/MIN/74005/2018 Dated:23.03.2022)

Earlier, this proposal was placed in 291st SEAC meeting held on 1.7.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

#### The SEAC noted the following:

- The project proponent, M/s. Tamil Nadu Minerals Limited has applied for Environmental Clearance for the proposed Black Granite quarry lease over an extent of 35.99.0 Ha at S.F.No: 412 (P) at Sinjalanatham Village, Pennagaram Taluk, Dharmapuri District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006.
- 3. ToR was issued vide Lr No. SEIAA-TN/F.No.1102/2013/TOR-820/2020 Dt.17.11.2020 under violation category.
- 4. Public hearing was conducted on 21.01.2022
- 5. As per the mining plan, the lease period is for 30 years. The mining plan is for the period of 5 years. The total production for 5 years not to exceed ROM-296347 m<sup>3</sup> & 29634 m<sup>3</sup> of Granite with ultimate depth of 28m.

This proposal was placed in 291st SEAC meeting held on 1.7.2022. The Committee decided to defer the proposal since the PP requested for time to furnish certain details to the Committee. Also the Committee called for the following details from the PP.

1. The PP shall furnish a letter from DFO on the proximity details of nearest RF with respect to the proposed project site.

Subsequently, this proposal was placed in the 536th Authority meeting held on 21.10.2020 & 22.10.2020. The authority after detailed discussion decided to refer back the proposal to SEAC for appraisal on the receipt of following details from the project proponent.

The authority noted that as per the approved mining plan/mine closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999

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- iv) The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- v) 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.
- wi) Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussion decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- i) The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- ii) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- iii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry-pits till the life of the quarry period.

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- iv) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- AD/Competent authority of Geology & Mining Dept. justification for according permission interms of ROM quantity instead of production quantity.
- vi) Can waste and such tailings be used for land back fills.
- vii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- viii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- ix) On impact due to transportation of the granite waste on the access road and the equipment, and social impacts.
- x) EC has been issued & mentioned with the quantity of ROM, Products & Waste etc., as per mining plan. If any revision is required, the PP shall obtain necessary revision/amendment in the approved mining plan from the competent authority.
- xi) The PP shall furnish the revised/detailed mine closure plan by considering ROM/total excavation from the competent authority.

This proposal was again placed in 335th SEAC meeting held on 06.12.2022. The Committee decided to defer the proposal since the project proponent requested time to furnish certain details sought by the Committee vide minutes of 291th SEAC meeting held on 1.7.2022 & the vide minutes of 536th Authority meeting held on 21.10.2020 & 22.10.2020.

This proposal was again placed in 347th SEAC meeting held on 13.01.2023. Based on the presentation & documents furnished, the Committee after detailed discussion decided to defer the proposal since the project proponent has again requested additional time to furnish certain details sought by the Committee vide minutes of 291th SEAC meeting held on 1.7.2022 & the vide minutes of 536th Authority meeting held on 21.10.2020 & 22.10.2020.

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Subsequently, the proposal was placed in the 592<sup>nd</sup> Authority meeting held on 16.02.2023. The authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 13.01.2023.

The sub-committee constituted by the SEAC submitted its inspection report before the SEAC on 31.03.2023. Hence the proposal was placed again for appraisal in this 367<sup>th</sup> Meeting of SEAC held on 31.03.2023.

The extract from the report of revised assessment of Ecological damage, Remediation plan and Natural & Community resource augmentation plan due to violation prepared by the NABET consultant as per the guidelines mentioned in the MoEF&CC Notifications dated 14.03.2017 and 08.03.2018 furnished by the proponent is as follows:

Ecological Damage due to mining Activities & Remediation Plan and Cost

S. No	Paramet er	Activity / Source	Impact	Cause	Remediation Plan	Cost/ year in INR
	Air Enviro nment	i) Drilling ii) Blasting  Movement of Machineri es  Transport ation	Dust generation	Particulate matter smallerthan 10 microns, can settle in the bronchi and lungs and cause health problems like Bronchitis, Emphysema, Bronchial Asthma, Irritation of mucus  Membranes of eyes, etc.  Particles smaller than  2.5 micrometers (PM2.5), tend to penetrate into the lungs and very Small particles	Using inbuilt dust collector system  Usage of sharp drill bits for drilling of holes.  Provision of dust filters / mask to workers working at highly dust prone and affected areas.  Proper maintenance of machineries which avoids excessive noise and vibration.  Sufficient training to operators on safety and environmental parameters.	7,49 8

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	<del></del>			1		,
				(< 100 nanometers)	Regular wetting of	
				may pass through the	transport road using	Ì
				lungs to affect other	water tanker.	
				organs.	Avoiding overloading	
				Vehide emission can also	of tippers	
				create various health problems on human	Covering of loaded tippers with	
				being.	tarpaulins during	
		¥.			transportation.	
					i di aportationi,	
					Development of green	
					belt / barriers	
					whereverpossible.	
2	Water Enviro	Water usage	Generation domestic	The direct impact on human beings due to	Rain water harvesting ponds will develop.	
	nment	Quarry	Effluents.	poor water quality can	Clear supernatant	7,49
		working	Soil erosion,	lead to various	water after settling can	8
		faces and	siltation !	waterborne	be letout of this pond	
		dumps	due to	diseaseslikediarrhoea,	after passing through	
			runoff /	jaundice,	settling traps.	
			StormWater.	dysenteryetc.	Most of the mine	
			Reduction in	Polluted water may not	water will be used for	
			ground	be useful for human or	greenbelt, dust	
•			water	animalconsumption	suppression, etc.	
-			Siltation on	etc., if not treated to	Plantation will be	
			rainwater	standards.	carried out in the	
!			drainage		safety zone area, all	
			channel		possible area within	
			near		the lease area	
			the mine lease		Mine sump water can	
<u> </u>					also be utilized.	
3	Soil	Quarrying	Loss of top soil	Affecting	The top soil will be	649
	Enviro	and	Loss of soil	biotiœnvironment	used for afforestation	8
	nment	dumping of	fertility & soil		&Redamation purpose.	
		waste	quality		Application of manure	
					to retain its fertility.	
					Spreading over	
					redaimed areas for	
			<u>.</u>		plantation.	

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5	e Envir onme nt	a)Drilling b)Movement ofvehicles Drilling in Quarry		Rebellious attitude Annoyance Carelessness Hearing impairment	Providing in-built mechanism for reducing soundemissions Providing earplugs/earmuffs to workers exposed to high noisy areas. Proper and regular maintenance of equipment. Planting of trees where ever possible to act as acoustic barriers. Conducting regular healthcheckup of workers Induding audiometric test for the workersengaged in noise prone area. Controlling Blasting methods	
6	gical	Quarrying and allied operation	Clearance of vegetation Dust generation	technology and control measures are not adopted	Water sprinkling to arrest clust generation Creation of green belt in all possible vacant places within the lease area. Local species in consultation with the state forest department can be chosen for this purpose.	6998

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7	Occupati	Quarryin	Dust	Dust related pneumonia	Water sprinkling on haul roads. 7,4	198
	onal health	g and allied operation	generation. Noise and vibration effect	Tuberculosis Rheumatic arthritis Segmental vibration Miner"sNystagamus Loss of life/machinery	Green belt creation wherever possible to arrest dust and reduce noise propagation.  Good control measures for reducing air pollution & Control	
		3			of noise levels.  Conducting Initial Medical examination (IME) at pre-entry level stage of workers by qualified doctors, as per DGMS draulars.  Providing Health report to	
					employees regularly after health checkups.  Provided Personnel Protective	
					Equipments (PPE) to all staff and workers to guard against excess noise levels, dust	:
					generation and inhalation, etc., as per standards prescribed by DGMS.	
		1			Imparting Vocational training to all workers/ staff.	
To	tal cost pr	oposed unde	er Ecological F	Remediation plan is Rs. 4998	35/-	'

Natural & Community Resource Augmentation Plan & Mitigation measures for quarry operations for the damages caused are as below:

S. No	Description	Augmentation Plan
	\$B	Plantation along the haul roadside to reduce effects of air/noise pollution as part of landscape development.
1	Air Management	

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		A row of trees to be planted along the Quarry boundary periphery to
		screen the site from air/noise pollution.
		Regular maintenance and upkeep of the internal roads within project
-		site will help to reduce air pollution.
		The entry/exit to the site to be with adequate curvature so that
	1	vehides coming out/entering the quarry do not impinge on road
		traffic directly.
		There is no effluent generation in existing quarry.
		Storm water drainage system laid considering natural gradient of the
		site and sufficient number of recharge pits will be provided at
2	Water Management	appropriate locations to recharge ground water table.
		Existing sewage disposed in to Septic tank followed by Soak pit.
		Proper provision for maintenance of sewage disposal.
		During quarry operations important to maintain the noise levels within
	Noise & Vibration	the site for the safety and better health of residents in the nearby
	Management	area.
3	, idinageriietik	The various precautions to be taken to maintain acceptable noise level
		within the project area are as under smooth flow of traffic to be
		ensured on the internal roads to avoid idling of vehicles while
	·	transportation.
4	Solid Waste	Collection of waste, segregation, and disposal in a manner so as to
	Management	cause minimal environment impact.
		Non-degradable waste will be disposed to municipal garbage collection
		site.
-		In order to keep a check on noise levels, particulate matter dispersion
		and concentration of polluting agents, a green belt is provided as
		part of the landscaping and it shall be maintained.
5	Green Area	There shall be monitory provision made for development of green
	Development	belt.
	Management	
		A horticulture officer and gardener shall be appointed for the same.
	<del></del>	·

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	Maintenance shall include watering and manuring plants at appropriate time, weeding out unwanted plants, deaning, replacing wilted/died plants etc.
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### Natural Augmentation Plan

S. No	Activity	Year wise Implementation and Budgetary provision (Rs.) 2022- 2023
l —	Development of Greenery in the surrounding area and maintaining them	15994
2	Rain water harvesting and water shed programmes in the nearby village	4000
	Sub Total	19994
	Grand Total	19994

Community Augmentation Plan

S. No	Description	Year wise Implementation and Budgetary provision (Rs.) 2023-2024
1.	Providing Masks & Sanitizers to the nearby Sunjainatham government school	5000
2.	Providing Note books& Stationaryfor the Sunjalnatham government school.	24991
	Sub Total	29991

## Total Budget proposed based on EIA Model:

S. No	Name of the area	Budget (Rs)
1	Estimation cost for remediation plan based on the Damage Assessment due to violation	49,985
2	Natural Resource Augmentation Plan	19,994
3	Community Resource Augmentation Plan	29,991
	Grand total	99,970

CER Budget-Proposed by PP based on EIA model:-

Name of the-Village Particulars CER Amount

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Sunjalnatham Govt School. Sunjalnatham village	As per MoEF&CC 20.10.2020.	Notification	dated	Rs.2.00 Lakhs
	Total			Rs.2.00 Lakhs

The following are the observations by the Sub-Committee Team during field visit on 21.02.2023 to the project site.

# OBSERVATIONS OF THE SEAC SUB-COMMITTEE DURING THE PROJECT SITE INSPECTION

- 1. Sub Committee has visited Sunjalnatham Granite Quarry during the Inspection to have over all mining scenario in the Region.
- 2. The Lease over an extent of 35.99.0 Ha is being operated in the Sunjalnatham. It is wire fenced in all sides.
- 3. The settlements/habitations are observed in 200 m from Lease boundary in eastern sides.
- 4. There was no mining activities in the quarry during the site visit
- 5. Rain water accumulated in the Quarry and atleast two bottom most benches are covered in water, as noticed.
- 6. During Violation Period, Environmental friendly Mining activities, involving the Drilling & highly mild controlled Blasting to cause hairline fracturing and Diamond Wire Saw cutting, were carried out in the Lease.
- 7. There was no Top Soil and Over Burden generation during the Period and thus only the Granite Rejects produced from the quarry are formed as waste dump within the Lease area.
- 8. No Ground Water-table intersection as noticed in the existing benches of the quarry.
- 9. Dedicated Haul Roads from Quarry to Panchayat/village road and from Panchayat Road to the SH exists and very minimal transportation through village road (during the Violation Period) was carried out (maximum of 2 load trucks).
- 10. Green Belt, was developed along the periphery of quarry pit including in Safety Barriers.
- 11. The Water tanker trucks possessing the water sprinklers were deployed along the Haul Road during the violation period and is in the working condition.
- 12. Garland Drains are partially provided along the periphery but its maintenance has to be improved.
- 13. Green belt developed along the boundaries is infested with Procopius Juliflora which are to be eradicated and additional green belt shall be developed. To far

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the PP has raised around 100 plantation and further hundred sapling is available for plantation

14. M/s. TAMIN is carrying out various CSR activities in the Region as per CSR Policy of the Company, as reported.

#### STATUS OF MINING OPERATION

The mining activities were stopped on 28.04.2017 and there was no production from this Mine since then.

#### MINING PLAN APPROVALS

The Director, DGM, Chennai has accorded the latest Scheme of mining for the period from form 2022-2027 Lr.No.1125/MM4/2022, dt. 01.03.2022

## PRESENT CONDITION OF THE MINES PIT AND DUMP (Incorporate your data)

> The physical nature of the Black Granite deposit:

Strike length (m)

988 m

Width (m)

25m

Strike direction

SW-SE

• Dip

Almost vertical

• Depth proved (m) :

More than 30 m as it Dolerite rock

formation

#### > Pit Dimension

	Length	Width	Depth
Description	(m)	(m)	(m)
Present pit -1	220	56	9
Present pit -II	251	62	19

Waste Dump details: The dumps have been maintained at an average height of 5m and the angle of slope of dumps at 45° from horizontal. The waste dump has been earmarked in the Scheme of Mining plate Nos 4 & 5.

### STATUTORY MANPOWER (during the violation period)

SI. No.	Name of the Post Occupied	Statutory Requirement as per MMR 1961	Manpower available during the Mining Operations
1.	Manager (Second Class Competency Certificate)	1	1
2.	Mines Foreman	11	1
3.	Mine Mate (Will act as Blaster)	1	1

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#### GREEN BELT DEVELOPMENT AND PLANTATION

Since the lease area is Granite terrain TAMIN has propsed to plant predomenetly 100 native species during the Third Scheme of mining period.

#### PENALTY FOR VIOLATION

TAMIN has remitted the amount Rs.3,17,19,289/- to the Department of Geology and Mining towards 100% cost value of the mined mineral against the permitted EC quantity.

Accordingly, the Director of Geology and Mining has issued 'No Objection Certificate' to TAMIN for getting EC vide Letter Rc. No.265/MM4/2020, dt. 08.07.2020.

Tamil Nadu Pollution Control Board has filed the case under Section 19 of Environment (Protection) Act, 1986 in Hon'ble Judicial Magistrate No.1 Dharmapuri vide Calendar Case No.305/2022. Judgment pronounced.

Based on the inspection of the project site and other documents furnished by project proponent, M/s. TAMIN, SEAC Sub-Committee recommends the following Estimation made towards the Ecological remediation cost, Natural resources augmentation cost and Community resources augmentation cost under violation category for the concerned lease of Perumbakkam Black Granite Mine of TAMIN, Sunjalnatham, Pennagaram Taluk, Dharmapuri District following the SEAC Guidelines after discussing the following related legal provisions made from time to time by various agencies/courts.

# 1. Extracts of the Supreme Court of India Common Cause vs Union Of India . on 2 August, 2017 WRIT PETITION (CIVIL) NO. 114 of 2014

".....In our opinion, as far as the first question is concerned, a reading of EIA 1994 read with the 1st Note implies that the base year would need to be the immediately preceding year that is 1993-94. This is obvious from the opening sentence of the 1st Note, that is, "A project proponent is required to seek environmental clearance for a proposed expansion/modernization activity if the resultant pollution load is to exceed the existing levels." (Emphasis supplied). In its report, the CEC has taken 1993-94 as the base year and we see no error in this. Even the MoEF in its circular dated 28th October, 2004 stated with regard to the expansion in production: "If the annual production of any year from 1994-95 onwards exceeds the annual production of 1993-94 or its preceding years (even if approved by IBM), it would constitute expansion." If that

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expansion results in an increase in the pollution load over the existing levels, then an EC is mandated...."

"....The contention of learned counsel for the mining lease holders that EIA 1994 was rather vague, uncertain and ambiguous cannot be accepted. In our opinion, on a composite reading of EIA 1994, it is clear that: (i) A no objection certificate from the SPCB was necessary for continuing mining operations; (ii) An expansion or modernization activity required an EC unless the pollution load was not exceeded beyond the existing levels; (iii) The base year for determining the pollution load and therefore the proposed expansion would be with reference to 1993-94; (iv) Whether an expansion or modernization would lead to exceeding the existing pollution load or not would require a certificate from the SPCB which could be reviewed by the IAA; (v) New projects require an EC; and (vi) Existing projects do not require an EC unless there is an expansion or modernization for the duration (if any) of the validity of the certificate from the SPCB. We need not say anything more on this subject since the CEC has proceeded to discuss the issue of mining in excess of the EC or in excess of the mining plan only W.P. (C) Nos. 114/2014 etc. from the year 2000-01 onwards. The prior period may, therefore, be ignored and it is the period from 2000-01 onwards which is actually relevant for the present discussion....."

"....All that we need to say on this subject is that there is no confusion, vagueness or uncertainty in the application of EIA 1994 and EIA 2006 insofar as mining operations were commenced on mining leases before 27th January, 1994 (or even thereafter). Post EIA 2006, every mining lease holder having a lease area of 5 hectares or more and undertaking mining operations in respect of major minerals (with which we are concerned) was obliged to get an EC in terms of EIA 2006...."

".....In a subsequent letter dated 12th December, 2011 addressed to the Chief Secretary in the Government of Orissa the said Ministry of Mines noted that there were violations of the actual production limit laid down in the mining plan and that the State Government had finally taken steps to curb illegal mining in respect of over-production of minerals. There was a reference to suggest (and we take it to be so) that 20% deviation from the mining plan (in terms of over-production) would be reasonable and permissible. However, it appears from a reading of the communication that illegal mining was going on beyond the 20% deviation limit and that appropriate steps were needed to curb these violations. Learned counsel for the petitioners submitted that such egregious violations must be firmly dealt with by cancellation or termination of the mining lease and a soft approach is not called for...."

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"....In this context, it is worth noting that a High Level Committee (called the Hoda Committee) on the National Mineral Policy noted in its Report dated 22nd December, 2006 in paragraph 3.47 as follows:

"3.47 An EMP [Environment Management Plan] has to be prepared under the MCDR and got approved by IBM. However, this EMP is not acceptable to the MoEF. The miner has to prepare two EMPs separately—one for IBM and another for MoEF. The Committee suggests that IBM and MoEF should prepare guidelines for a composite EMP so that IBM can approve the same in consultation with MoEF's field offices. This will eliminate anomalous situations where increase of even a few tonnes in production requires project authorities to get a fresh EMP approved from the MoEF although the IBM allows a grace of +10% per cent, keeping in view the fluctuations in the market situation and process complexities. If a single EMP is accepted in principle such anomalies can be resolved in advance. The Committee feels the MoEF should also have a cushion of +10% per cent in production while giving EIA clearance."

"....The above passage indicates that the permissible variation in production as per the Indian Bureau of Mines is +10% but according to the letter dated 12th December, 2011 issued by the Ministry of Mines, the reasonable variation limit could be +20%...."

"....In terms of Rule 22(5) of the MCR a mining plan shall incorporate a tentative scheme of mining and annual program and plan for excavation from year to year for five years. At best, there could be a variation in extraction of 20% in each given year but this would be subject to the overall mining plan limit of a variation of 20% over five years. What this means is that a mining lease holder cannot extract the five year quantity (with a variation of 20%) in one or two years only. The extraction has to be staggered and continued over a period of five years. If any other interpretation is given, it would lead to an absurd situation where a mining lease holder could extract the entire permissible quantity under the mining plan plus 20% in one year and extract miniscule amounts over the remaining four years, and this could be done without any reference to the EC. The submission of learned counsel in this regard simply cannot be accepted...."

".....A submission made by the mining lease holders was that the maximum production in any year up to 1993-94 should be considered as the base for making the calculations. Such a contention was also urged before the CEC and was rejected. We have examined this contention independently and are of the view that the base year of 1993-94 is most appropriate—we have already given our reasons for this. Some lessees might lose in the

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process while some of them might benefit but that cannot be avoided. In any event, each mining lease holder is being given the benefit of calculations only from 2000-01 and is not being 'penalized' for the period prior thereto. We think the mining lease holders should be grateful for this since it was submitted by learned counsel for the petitioners and the learned Amicus that the penalty should be levied from the date of EIA 1994. In our opinion, the cut-off from 2000-2001 (without interest) is undoubtedly reasonable and there can be hardly be any grievance in this regard...."

".....To avoid any misunderstanding, confusion or ambiguity, we make the following very clear:

- (1) A mining project that has commenced prior to 27th January, 1994 and has obtained a No Objection Certificate from the SPCB prior to that date is permitted to continue its mining operations without obtaining an EC from the Impact Assessment Agency. However, this is subject to any expansion (including an increase in the lease area) or modernization activity after 27th January, 1994 which would result in an increase in the pollution load. In that event, a prior EC is required. However, if the pollution load is not expected to increase despite the proposed expansion (including an increase in the lease area) or modernization activity, a certificate to this effect is absolutely necessary from the SPCB, which would be reviewed by the Impact Assessment Agency.
- (2) The renewal of a mining lease after 27th January, 1994 will require an EC even if there is no expansion or modernization activity or any increase in the pollution load.
- (3) For considering the pollution load the base year would be 1993-94, which is to say that if the annual production after 27th January, 1994 exceeds the annual production of 1993-94, it would be treated as an expansion requiring an EC.
- (4) There is no doubt that a new mining project after 27th January, 1994 would require a prior EC.
- (5) Any iron ore or manganese ore extracted contrary to EIA 1994 or EIA 2006 would constitute illegal or unlawful mining (as understood and interpreted by us) and compensation at 100% of the price of the mineral should be recovered from 2000-2001 onwards in terms of Section 21(5) of the MMDR Act, if the extracted mineral has been disposed of. In addition, any rent, royalty or tax for the period that such mining activity was W.P. (C) Nos. 114/2014 etc. carried out outside the mining lease area should be recovered.
- (6) With effect from 14th September, 2006 all mining projects having a lease area of 5 hectares or more are required to have an EC. The extraction of any mineral in such a

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case without an EC would amount to illegal or unlawful mining attracting the provisions of Section 21(5) of the MMDR Act.

Further, based on the inspection report and the violation notifications issued by the MoEF&CC dated 14.03.2017 & 08.03.2018, SEAC Sub-committee classified the level of damages caused by the Project Proponent on the environment based on the following criteria:

As per the above Notifications, the estimation of Ecological Remediation cost, Natural Resources Augmentation cost and Community Resources Augmentation cost are part of the appraisal of mining projects under violation category.

#### 2. Damage Assessment and Evaluation of Costs

Each mining project has its own characteristics such as mineral mined, mining lease area, mining lease period, method of mining, mined mineral output, mined material storage, waste material storage, transportation of mined material, formation of benches, green belt development, proximity to the habitations, water body and forest, market value of mined ore, pollution potential of mining project, human safety and health issues and ecological damage. Hence, the SEAC has arrived the following methodology based on major and important factors, field inspection and data collected and expertise of the members of SEAC.

In the step 1, the objective is to classify the mining project taken up for the study into either low level ecological damage category (or) high level ecological damage category. In this exercise, 11 characteristics attributed to the mining projects in general are used as criteria. Depending upon the applicability of the each of the criteria to the mining project, the mining project will become classified into either low level ecological damage category or high level ecological damage category. In the below-mentioned Table, if a minimum of 6 criteria becomes applicable for a classification, then the project is classified under the concerned type of classification (low/high).

Table 1: Classification of Mining Projects for Violation Category

SI. No	Criteria	Low	High
1.	Year wise Mined Mineral Output	As per approved Mining Plan	Not as per approved Mining Plan
2.	Benches formation	Formed and as per specifications	Not formed

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	Drilling, Blasting and Heavy		Drilling, Blasting
3.	Machineries use	Not used	and Heavy
			Machineries used
			Inadequate and
4.	Adequate and qualified	Employed	unqualified
<b>7</b> .	statutory personnel	Employed	personnel
			employed
		Within the lease hold	Outside the lease
5.	Waste dumps location	area *	hold area
	Unhitations/Forest location	Away from the site by	Located within
6.	Habitations/Forest location	500 m or more	500m
7.	Ground water table	Not intersected	Intersected
	intersection		
	Green belt development in		Green belt formed
8.	safety zone and as per	Developed in safety	outside the safety
0.	norms of species & numbers	zone and as per norms	zone and also not
			as per norms
	Mined Mineral storage	Scientific and within the	Unscientific and
9.	(Ore)	lease area	outside the lease
	,,		area
10.	Surface Drainage	Constructed and as per	Not constructed
		specifications	
11.	Mined material transport	Away from habitations	Passing through
	route	atleast by 500 m	the habitations

In view of the above and based on the inspection report & the Ecological damage, remediation plan and natural & community resource augmentation plan furnished by the project proponent, the SEAC decided the fund allocation for Ecological remediation, natural resource augmentation & community resource augmentation and penalty by following the below mentioned criteria given in Table 2.

Table 2: Damage Assessment Classification of Granite Mining Projects

Level of damages	Ecological remediation cost	Natural resource augmentation cost	Community resource augmentation cost	CER	Total
	Rs in lakhs / Ha	Rs in lakhs / Ha	Rs in lakhs / Ha	Rs in lakhs / Ha	Rs in lakhs / Ha
Low level Ecological damage	0.40	0.50	0.70	0.40	2.00

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High level					
Ecological	0.75	1.00	1.25	0.75	3.75
damage					,

In the step 2, the objective is to estimate the Ecological Remediation cost, Natural Resources Augmentation cost and Community Resources Augmentation cost. In this exercise, data related to the select mining projects from project proposals and field conditions have been used to calculate the damage assessment from the above Table 2.

ESTIMATION OF ECOLOGICAL REMEDIATION COST, NATURAL RESOURCES AUGMENTATION COST AND COMMUNITY RESOURCES AUGMENTATION COST UNDER VIOLATION CATEGORY - M/s. TAMIN Limited, Sunjalnatham.

**STEP - 1:** Classification of Mining Projects according to the Violation level

SI.	Criteria	Response	Level of	Concludin g Remarks	Final Classificatio
0			Damage	g Kemarks	n
1.	Year wise Mined Mineral output	The mining operation was carried out within the quantity as stipulated in the approved Mining Plan but without Prior EC from 16.02.2012*.	Quarrying was carried out in accordance without prior Environmenta I Clearance as per the MoEF Notification S.O 1533(E) dated, 14.09.2006- High Level damage	Out of 11 criteria, 7 criteria have been scored for	Low Level Ecological
2.	Benches formation	Partially Formed as per the specifications given in the approved Mining Plan. BH = 6.0 m & BW not less than BH (i.e., 6.0 to 12.0 m); Bench	Benches are fully formed as per the Approved Mining Plan using Diamond Wire Saw cutting technique – Low Level damage	Low Level of Damage.	Damage

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		\$lope = 60°			
		to vertical.			
;		No Heavy Blasting operations	Very mild and		
3.	Drilling, Blasting and Heavy Machineries use	were carried out. Instead, the mild blasting operations to cause fracturing carried out at some areas but however Diamond wire saw cutting (non-	Controlled Drilling & Blasting operations were adopted along with the Diamond Wire Saw Cutting for the Extraction of Dimension Stones but the HEMM were		
		explosive) technique has been adopted.	used- <b>Low</b> <b>Level damage</b>	i	
4.	Adequate and qualified	Required: 3	Three number of statutory personnel employed —		
4.	statutory personnel	Sanctioned & Available:3	Low Level damage		
5.	Waste dumps location	Low quantity of waste produced due to low stripping ratio. However, the mineral rejects were produced also stored in the mine lease	The waste dump placed within the mine lease hold area in the nonmineralized zone Low Level damage		
6.		holed area.  Sonchalnatta  m village			
	Habitations/Fores t location	located in the Northern Part at a distance of 320 m	– High level		
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		range where about 9548 persons are living.			
7.	Ground water intersection	Not intersecting the Ground Water Table.	Mining operations are not intersecting the Ground Water Table – Low level damage	æt.	
8.	Green belt development in safety zone and as per norms in terms of species & numbers	Yes, provided. About 100 Trees in an extent of 0.09 Ha (@ 10 Trees/Ha), predominantl y local species like Neem, Pungan, etc. are planted and maintained with about 90.0% Survival Rate in this Lease.	Green belt developed around the safety zone – Low level damage		
9.	Mined Mineral storage	It is being stored in the mine lease	Further, Reserve Ore Stock is being maintained in the mine lease area – Low level damage		
10.	Surface Drainage	Not Constructed as per the specifications.	Garland drains are not constructed due to hilly deposit— High level damage		

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11.	Mined Material transport route	Necessarily Passing through the village	Trucks carrying the Granite blocks are necessarily pass through the villages for a stretch of atleast 500 m distance as the alternative route is not available.  High level damage		
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<sup>\*(</sup>mention the actual date of commencement of quarrying operation as per the records)

### Step 2: (i) Application of SEAC Methodology

Level of Damage	Ecological Remediation Cost	Natural Resource Augmentation Cost	Community Resource Augmentation Cost	CER	Total
	Rs. in lakhs /	Rs. in lakhs /	Rs. in lakhs /	Rs. in	Rs. in lakhs /
	Ha	Ha	: Ha	lakhs / Ha	Ha
SEAC	0.40	0.50	0.70	0.40	2.00
Scale					
Actual	40000 ×	50000 ×	70000 ×	40000 ×	200000 ×
Amount	35.99	35.99	35.99	35.99	35.99
	14,39,600	17,99,500	25,19,300	14,39,600	71,98,000/=

#### **DAMAGE COST CALCULATION**

SEAC Sub-committee inspected the project site and the documents of project cost details were verified.

The level of damages are assessed by the following criteria:

- 1. Low level Ecological damage: Only procedural violation work/operation at site without obtaining EC.
- 2. Medium level Ecological damage:
  - a. Procedural violation started the construction at site or operation without obtaining EC.
  - b. infrastructural violation such as deviation from awarded EC, CTO & Mining Plan approvals.
  - c. Non operation of the project.

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- 3. High level Ecological damage: a. Procedural violation (started the construction or operation at site without obtaining EC).
  - b. infrastructural violation such as deviation from awarded EC, CTO & Mining Plan approvals.
  - c. Under Operation (occupied) without Statutory Approvals.

Thus, the Proposal falls in Low Level Ecological Damage as the operations were carried out without obtaining prior EC but however the quantity excavated as per the approved Mining Plan.

#### **CONCLUSIONS:**

As the Proposal falls in Low Level Ecological Damage during the Violation Period, the Sub-Committee is of the opinion that the higher Environmental Compensation value has been arrived based on the SEAC-TN model is Rs. 57,58,400/- which is higher than the other estimation - Environmental Compensation values of Rs. 99,970/- based on the EIA model prepared by the EIA coordinator. Therefore, the aforesaid value of Rs. 57,58,400/- must be compensated for Remediation, Natural Resource Augmentation and Community Resource Augmentation plan as follows:

SI. No.	Activity Proposed	Total, Rs.
1	Ecological Damage Remediation Plan	14,39,600
2	Natural Resource Augmentation Plan	17,99,500
3	Community Resource Augmentation Plan	25,19,300
	Grand Total	57,58,400

Based on the SEAC-TN model for the violation cases, the CER value is estimated as Rs. 14.39,600/-. However, the PP had committed to provide the following budget towards the Corporate Environmental Responsibility (CER) during the SEAC appraisal meeting.

Name of the Village	Particulars	CER Amount
Sunjalnatham Govt School. Sunjalnatham village	Education & Repairs and Maintenance of School buildings, Upliftment of Toilet facilities for the Students & Teachers, Tree Plantation and Environmental related Books for the Library etc.	Rs. 14,39,600
	Rs. 14,39,600	

#### STATUTORY PROCEDURES TO BE FOLLOWED:

1. The Bank Guarantee for Rs. 57,58,400/- must be given to TNPCB for successful implementation of the Schemes in ONE year period. The Bank Guarantee will be released after successful implementation of the Remediation Plan and Natural and Community Resource Augmentation Plan.

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- 2. CER fund of Rs. 14,39,600 must be spent by M/s. TAMIN as committed during the appraisal and receipt has to be produced to SEAC/SEIAA-TN for awarding the EC.
- 3. Credible Action under Section 19 of the E(P) Act shall also be complied for awarding the EC.

#### **RECOMMENDATIONS of SUB-COMMITTEE:**

The SEAC Sub-Committee observed that the Mining of Black Granite in an extent of 35.99.0 Ha SF No. 412 (Part) for Environmental Clearance under violation comes under the "Low level Ecological damage category" as per the SEAC Violation norms. Hence, the subcommittee opines the **grant of Environmental Clearance** for Mining of Black Granite in an extent of 35.99.0 Ha SF No. 412 (Part) of M/s Tamil Nadu Minerals Limited **may be considered** subject to the following conditions in addition to the normal conditions:

- 1. The amount prescribed for Ecological remediation (Rs. 14,39,600), natural resource augmentation (Rs. 17,99,500) & community resource augmentation (Rs. 25,19,300), totaling Rs. 57,58,400. Hence the SEAC decided to direct the project proponent to remit the amount of Rs. 57,58,400 in the form of bank guarantee to Tamil Nadu Pollution Control Board and submit the acknowledgement of the same to SEIAA-TN. The funds shall be utilized for the remediation plan, Natural resource augmentation plan & Community resource augmentation plan as indicated in the EIA/EMP report.
- 2. The project proponent shall carry out the works assigned under ecological damage, natural resource augmentation and community resource augmentation within a period of one year. If not, the bank guarantee will be forfeited to TNPCB without further notice.
- 3. The amount committed by the Project proponent for CER (Rs. 14,39,600) shall be remitted in the form of DD to the beneficiary for the activities committed by the proponent. A copy of receipt from the beneficiary shall be submitted to SEIAA-TN. However, the PP shall supervise the work and submit the status of the work complied pertaining to the CER within a period of one year to the DEE/TNPCB and the SEIAA.
- 4. The project proponent shall submit the proof for the action taken by the state Government/TNPCB against project proponent under the provisions of Section 19 of the Environment (Protection) Ac, 1986 as per the EIA Notification dated: 14.03.2017 and amended 08.03.2018.
- 5. The company shall obtain 'No Dues Certificate' from State Government i.e. Department of Geology & Mining within a period of two weeks and submit the same to SEAC before grant of EC, if not produced earlier.
- 6. The PP shall ensure that the plantation shall be carried out in 2.00 Ha in a phase manner as a part of mine closure activities.

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- 7. The PP shall install the Environmental Management Cell headed by the statutory (I/II Class) Mines Manager of the concerned mine under violation category and the cell shall include a dedicated full-time Environmental Engineer exclusively to look into the effective implementation of Environmental Management Plan besides the reviewing the compliance reports with the regulatory authorities.
- 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 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.
- 10. The mining lease holders shall, after ceasing mining operations, undertake regrassing 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.
- 11. The proponent shall obtain a 'Star Rating' system awarded by Anna University, Chennai annually to the mining lease being operated for their efforts and initiatives taken for successful implementation of the Sustainable Development Framework (SDF).
- 12. 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.

However, since the project proponent has requested additional time to furnish certain details sought by the Committee vide minutes of 291st SEAC meeting held on 1.7.2022 & the vide minutes of 536th Authority meeting held on 21.10.2020 & 22.10.2020 as per Minutes of 347th SEAC meeting held on 13.01.2023.

In view of the above, SEAC has decided to defer and to take up in the proposal in the ensuing meeting after the receipt of additional particulars.

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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 Metalliferrous Mines Regulations, 1961.
- 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.
- 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 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.
- 12. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly 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.
- 13. Noise and Vibration Related: (i) The Proponent shall carry out only the Controlled Blasting operation using NONEL shock tube initiation system during daytifhe.

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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 1 / 11 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.

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- 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

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

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- 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 regrassing 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 —II of this minute.

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# Appendix -I List of Native Trees Suggested for Planting

No	Scientific Name	Tamil Name	Tamil Name
1	Aegle marmelos	Vilvam	வில்வம்
2	Adenaanthera pavonina	Manjadi	முத்சாழ்,
	<u> </u>		ஆனைக்குன்றிமணி.
3	Albizia lebbeck	Vaagai	வாகை
4	Albizia amara	Usil	உசில்
5	Baultinia purpurea	Mantharai	மந் <b>தாரை</b>
6	Bauhinia racemosa	Aathi	- ಇ.ಕ.ಕ
7	Bauhinia tomentos	Iruvathi	<u>இருவாத்தி</u>
8	Buchanania axillaris	Kattuma	<b>காட்டுமா</b>
9	Borassus flabellifer	Panai	⊔തെ
10	Butea monosperma	Murukkamaram	முருக்கமரம்
11	Bobax ceiba	Bayu, Sevvilavu	<u> </u>
12	Calophyllum inophyllum	Punnai	புன்னன
13	Cassia fistula	Sarakondrai	சரக்கொன்றை
14	Cassia roxburghii	Sengondrai	செங்கொள்றை
15	Chloroxylon sweitenia	Purasamaram	The Dio
16	Cochlospermum religiosum	Kongu, Manjalliavu	கோங்கு, மஞ்சள் இலவு
17	Cordia dichotoma	Naruvuli	தருவுளி.
18	Creteva adansoni	Mavalingum	மாவிலங்கம்
19	Dillenia indica	Uva, Uzha	_ சர
20	Dillenia pentagyna	SiruUva, Sitruzha	சிறு உசா
21	Diospyro sebenum	Karımgali	<b>கருங்காலி</b>
22	Diospyro schloroxylon	Vaganai	வாகணை
23	Ficus amplissima	Kalltchi	கல் இச்சி
24	Hibiscus tiliaceou	Aatrupoovarasu .	ஆற்றுப்புவரசு
25	Hardwickia binata	Aacha	ஆச்சா
26	Holoptelia integrifolia	Aavili	ஆயா மரம், ஆயிலி
27	Lannea coronandelica	Odhiam	<b>ு</b> ஆயம்
28	Lagerstroemia speciosa	Poo Marudhu	பு மருது
29	Lepisanthus tetraphylla	Neikottaimaram	் தெய் கொட்டடை மரம்
30	Limonia acidissima	Vila maram	விலா மரம்
31	Litsen glutinos	Pisinpattai	அரம்பா. பிசின்பட்டை
32	Madhuca longifolia	Illuppai	இலுப்பை
33	Manilkara hexandra	UlakkaiPaalai	உலக்கை பாலை
34	Mimusops elengi	Magizhamaram	<b>ு</b> நூ <b>ற்று</b> ந
35	Mitragyna parvifolia	Kadambu	கடம்பூ
36	Morinda pubescens	Nuna	ыя
37	Morinda citrifolia	Vellai Nuna	வெள்ளன நுண் -
38	Phoenix sylvestre	Eachai	#ச்சமரம்
39	Pongamia pinnat	Pungam	ria ≠rç

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40	Premna mollissima	Munnai	முன்னன
41	Premna serratifolia	Narumunnai	ந்று முன்னை
42	Prenna tomentosa	Malaipoovarasu	மலை பூவரசு
43	Prosopis cinerea	Vanni maram	ស្រាល់ ខ្មែរ ខ្មាំ ខ្មែរ ខ្មារ ខ្មែរ ខ្មារ ខ្មែរ
44	Pterocarpus marsupium	Vengai	வேங்கை
45	Pterospermum canescens	Vennangu, Tada	வெண்ணாங்கு
46	Pterospermum xylocarpum	Polavu	ଧ୍ୟରଣ
47	Puthranjiva roxburghi	Karipala	<b>கறிபாலா</b>
48	Salvadora persica	Ugaa Maram	ஊகா மரம்
49	Sapindus emarginatus	Manipungan,	மணிப்புங்கள் கோர்முக்காப்
		Soapukai	சோப்புக்காய்
50	Saraca ásoca	Asoca	அசோகா
51	Streblus asper	Piray maram	பீராய் மரம்
52	Strychnos nuxvoniic	Yetti	थान्ते
53	Strychnos potatorum	Therthang Kottai	<b>ிதத்தான் கொட்டை</b>
54	Syzygium cumini	Naval	நாவல்
55	Terminalia belleric	Thandri	தான்றி -
56	Terminalia arjuna	Ven marudhu	வென் மருது
57	Toona ciliate	Sandhana vembu	சந்தன வேம்பு
58	Thespesia populnea	Puvarasu	<b>ते</b> अधस
59	Walsuratrifoliata	valsura	வால்கரா
60	Wrightia tinctoria	Veppalai	வெப்பாலை
61	Pithecellobium dulce	Kodukkapuli	கொடுக்காப்புளி

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# Appendix -II

# Display Board (Size 6' x5' with Blue Background and White Letters)

கரங்கங்களில் குவாரி செயல்ப	ாடுகளுக்கான சுற்றுச்துமல் அறுமதி கீழ்களூட நிடந்தனைகளுக்கு உட்பட்டு			
வமங்கப் சட்டுள்ளது முடித்த	தியிடப்பட்டு, கற்றுச்சூழல் அனுமதிதேதி வரை செல்லத்தக்கதாக உள்ளது.			
வழங்கப்பட்டுள்ளது seuw/,தேதியிடப்பட்டு, சுற்றுச்சூழல் அனுமதிதேதி வரை செல்லத்தக்கதாக உள்ளது.				
பகமை பகுதி வளர்ச்சி	குவாரியின் எல்லையைச் சுற்றி வேலி அமைக்க வேண்டும்			
மேம்பாட்டுக்கான கரங்கத் திட்டம்	சரங்கப்பாதையின் ஆழம் தரைமட்டத்திலிருந்து மீட்டர்க்கு மிகாமல் இருக்க வேண்டும்.			
	காற்றில் மாக ஏற்படாதவாறு கரங்க பளிகளை மேற்கொள்ள வேண்டும்.			
1	வாகளங்கள் செல்லும் பானதயில் மாக ஏற்படாத அளவிற்கு தண்ணீரை முறையாக			
<u> நடப்பட்டு</u>	கண்ணீர் லாரிகளின் மூலமாக அவ்வப்போது கெளிக்க வேண்டும்.			
பராமரிக்கப்படவேண்டிய மரங்கள்	இரைச்சல் அளவையும் தூசி மாகபாட்டையும் குறைப்பதற்காக குவாரியின் எல்லையை			
वसंस्क्रीकंकक:	சுற்றி அடர்த்தியான பசுமை பகுதியை ஏற்படுத்த வேண்டும்.			
கரங்கத்தில் வெடி வைக்கும்பொழுது நிலஅதிர்வுகள் ஏற்படாதவாறும் மற்றும் கற்கள் பறக்காதவாரும் பாதுகாப்பு				
நடவடிக்கைகளை உள்ளிப்பாக செயல்படுத்தப்பட வேண்டும்.				
சுரங்கத்தில் இருந்து ஏற்படும் இரைச்சல் அளவு B5 டெசிபல்ஸ் (dBA) அளவிற்கு மேல் ஏற்படாதவாறு தகுந்த கட்டுப்பாடுகளை				
மேற் கொள்ள வேண்டும்.				
கரங்க சட்ட விதிகள் 1955ன் கீழ் கரங்கத்தில் உள்ள பணியார்களுக்கு தகுந்த பாதுகாப்பு கருவிகள் வழங்கவதோடு ககாதாரமுள்ள கழிப்பறை வசதிகளை செய்து தர வேண்டும்.				
திராமம் அல்லது பஞ்சாபத்து வழியாக வாணங்கள் செல்லும் சாலையை தொடர்ந்து நன்கு பராமரிக்க வேண்டும்.				
கரங்கப்பணிகளால் அருகில் உள்ள விவசாயப் பணிகள் மற்றும் நீர்நிலைகள் பாதிக்கப்படக் கூடாது.				
தீர்திலைகள் பாதிக்கப்படமைல் இருப்ப	தை உறுதி செய்யும் வகையில் நிலத்தடி நீரின் தரத்தினை தொடர்ந்து கண்காணிக்க வேண்டும்.			
சரங்கத்திலிருந்து களிம் பொருட்களை எடுத்துச் செல்வது <b>பி</b> ராம மக்களுக்கு எந்தத் சிரமத்தினையும் ஏற்படுத்தாதவாறு				
பாதுகாப்போடும் மற்றும் சுற்று நழல் பாதிக்கவாத வண்ணம் வாகளங்களை இயக்க வேண்டும்.				
கரங்கப்பணிகள் முடிக்கப்பட்டவுடன் கரங்கமூடல் திட்டத்தில் உள்ளவாறு கரங்கத்தினை மூட வேண்டும்.				
கரங்க நடவடிக்கைகளை முடித்தபின்னர் கரங்கப் பகுதி மற்றும் கரங்க நடவடிக்கைகளால் இடையூறு ஏற்படக்கூடிய				
வேறு எந்தப் பகுதியையும் மறுகட்டுமானம் செய்து தாவரங்கள் விலங்குகள் ஆகியவற்றின் வளர்ச்சிக்கு ஏற்ற வகையில்				
பகமைப்பகுதியை உருவாக்க வேண்டும்.				
முழுமையான நிபந்தனைகளை அறிய பாரிவேஷ் (http://panvesh.nc.in) என்கிற <b>இ</b> ணையதளத்தைப் பார்வையிடவும். மேலும் எந்தவித				
சற்றுதழுல் சாந்த்த புகார்களுக்கு சென்னையில் உள்ள சுற்றுச்தமுல் மற்றும் வன அமைச்சகத்தின் ஒருங்கினைந்த வட்டார				
அலுவலகம்: 044 – 28222325 (அல்லது) தமிழ்தாடு மாக கட்டுப்பாடு வாரியத்தின் மாவட்ட சுற்றுக்குழல் பொறியாளரை அணுகவும்				

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