## STATE EXPERT APPRAISAL COMMITTEE - TAMIL NADU

Minutes of 333<sup>rd</sup> meeting of the State Expert Appraisal Committee (SEAC) held on 1.12.2022 (Thursday) at SEIAA Conference Hall, 2<sup>rd</sup> Floor, Panagal Mailgai, Saidapet, Chennai 600 015 for consideration of Building Construction Projects & Mining Projects.

Agenda No: 333 - 01 (File No: 8558/2022)

1

Proposed Rough stone quarry lease over an extent of 3.52.0Ha at S.F.Nos. 314, 317/3 & 317/4 of Kothapulli Village, Dindigul West Taluk, Dindigul District, Tamil Nadu by Thiru. A. Jeyaraman — For Environmental Clearance.(SIA/TN/MIN/403687/2022, dated: 18.10.2022)

The proposal was placed in this 333<sup>rd</sup> meeting of SEAC held on 01.12.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The project proponent gave detailed presentation. SEAC noted the following:

- The Proponent, Thiru. A. Jeyaraman has applied seeking Environmental Clearance for the Proposed Rough stone quarry lease over an extent of 3.52.0Ha at S.F.Nos. 314, 317/3 & 317/4 of Kothapulli Village. Dindigu! West Taluk, Dindigul District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. ToR issued vide Lr No. SEIAA-TN/T.No.8558/SEAC/ToR-1078/2021 Dated: 08.03.2022.
- 4. Public Hearing conducted on 30.08.2022.
- 5. EIA Report submitted on 18.10.2022.

Based on the presentation made by the proponent, SEAC decided to call for additional details

- The PP shall submit Certified Compliance Report obtained from the office of the concerned DEE/TNPCB (or) IRO, MoEF & CC, Chennai and appropriate mitigating measures for the non-compliance items, if any.
- 2. Videography evidence showing the Greenbelt development incorporating tree plantation (minimum 2000).
- 3. Videography evidence showing the Complete Installation of fencing along the boundary with proper garland drainage and settling / precipitation pond.

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CHATRMÁN SEAC- TN 4. Revised Plan & Section indicating the revised bench configurations duly approved by the competent authority.

On receipt of the aforesaid details, the proposal will be considered for further deliberations.

Agenda No: 333-02 (File No: 9213/2022)

Proposed Multi Colour Granite quarry over an extent of 2.09.5 Ha at SF.No.1586/2, Sandanapalli Village, Denkanikottai Taiuk, Krishnagiri District by M/s. Sri Vijay Krishana Granites Co. - For Environmental Clearance. (No.SIA/TN/MIN/267460/2022, dt:25.04.2022)

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 given in the website (parivesh.nic.in).

## The SEAC noted the following:

- 1. The Project Proponent, M/s. Sri Vijay Krishana Granites Co. has applied for Environmental Clearance for the Proposed Multi Colour Granite quarry over an extent of 2.09.5 Ha at SF.No.1586/2, Sandanapalli Village, Denkanikottai Taluk, Krishnagiri 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 Nictification, 2006.
- 3. Precise area communication period is 20 years. The production & development plan is given for 5 Years as scheme of mining was approved by the competent authority stating that it should not exceed ROM 37613m³, 22568m³of Multi Colour Granite (Recovery 60%),15045m³ of Granite Waste (Reject 40%), & 19,488 m³ of Weathered rock & 15104 m³ of Top soil. The annual peak production shall not exceed 4695 Cu.m of Multicolour Granite (4th Year). The ultimate depth 40m (10m AGL & 30m BGL).

SI. No		Details of the Proposal	
1	Name of the Owner/Firm	: M/s. Sri Vijay Krishna Granites Co Thiyagarajan Vijayamurug (Authorised Signatory) D.No - 7/227, S.K. City Dasanaickenpatti, Krishnagiri-636201	

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2	Type of quarrying (Savudu/Rough	<b>—</b>	Multi Colour Granite
	Stone/Sand/Granite)	'	Wall Colour Graine
3	S.F No. Of the quarry site with area	<del>    :</del>	1586/2
	break-up		
4	Village in which situated	1:	Sandanapalli
5	Taluk in which situated	:	Denkanikottai
6	District in which situated	<b>†</b> :	Krishnagiri
7	Extent of quarry (in ha.)	:	2.09.5Ha
8	Latitude & Longitude of all corners of	:	12°27'56.5089"N to
	the quarry site		12°28'02.0847"N
			77°50'07.9149"E to
			77°50'13.0774"E
9	Topo Sheet No.	:	57 – H/15
10	Type of mining		Opencast Semi Mechanized of
			Mining
11	Lease of quarrying proposed	1:	20 years
12	Production (Quantity in m³)	:	For the first 5 year period of Mining
			Plan, Total ROM of 37613m³ which
		ĺ	includes 22568m³ of Multi Colour
İ			Granite (Recovery 60%) and
	·		15045m³ of Granite Waste (Reject
			40%), & 19,488 m³ of Weathered
			rock & 15104 m³ of Top soil. The
			annual peak production capacity
· .			shall not exceed 4695 Cu.m of
		i	Multicolour Granite and 19488
]	•	] ,	Cu.m of Weathered Rock.
13	Ultimate Depth of quarrying	<del>] :</del>	40m (10m AGL & 30m BGL)
14	Depth of water table	1:	64m BGL
15	Man Power requirement per day:	1-	34 Nos.
16	Source of Water Requirement		water vendors
17	Water requirement:	:	2.0 KLD
	<ol> <li>Drinking &amp; domestic purposes</li> </ol>		0.8 KLD
	(in KLD)		
	2. Dust suppression, Green Belt		0.5 KLD
	&Wet Drilling (in KLD)		0.7 KLD
18	Power requirement		TNEB
19	Whether any habitation within 300m	†:†	No
<b>!</b> 	distance		

20	Precise area communication approved by the, Industries (MME.2)  Department, with date	:	letter No.4810/MME.2/2021-1, dt: 18.10.2021
21	Mining Plan approved by Director.  Department of Geology and Mining with date	<del> </del>	Roc.No.1199/MM4/2021, dt: 07.01.2022
22	Deputy Director, Department of Geology and Mining 500m cluster letter	<b> </b>	Rc.No.981/2020/Mines, dt: 09.09.2022
23	VAO certificate regarding 300m radius cluster		Letter dt: 21.03.2022
24	Project Cost (excluding EMP cost)	:	Rs.251 Lakh
25	EMP cost	  - 	Rs.99.8 Lakhs including Capital Cost of Rs.26.63 Lakhs
26	CER cost		Rs.10 Lakhs & Rs. 5 Lakhs as Conservation measure for Cauvery Wild Life Sanctuary to DFO, Hosur.

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 annual peak production not to exceed 4695 Cu.m of Multicolour Granite and 19488 Cu.m of Weathered Rock 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 No.
  S.O. 1807(E) Dt. 12.4.2022.
- 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 send the notice of opening to the Director of Mines Safety, Chennai Region before obtaining the CTO from the TNPCB.

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- 4. The project proponent shall provide barbered wire fencing of adequate height and shall complete plantation of sapling of native species for developing green belt before obtaining the CTO from the TNPCB.
- 5. As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020, the proponent shall adhere the EMP as committed.
- 6. The proponent shall obtain a 'Star Rating' system awarded by Anna University. Chennai annually to the mining lease being operated for their efforts and shall contribute atleast Rs.1 Lakh every year towards the initiatives taken for successful implementation of the Sustainable Development Framework (SDF).
- 7. The proponent is requested to prepare Standard Operating Procedure for using Diamond Wire Saw Cutting method before obtaining CTO.
- 8. The proponent shall mandatorily appoint the statutory Mines Manager & other statutory competent persons and the Geologist in relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Granite Conservation & Development Rules, 1999 respectively.
- 9. The PP shall inform send the 'Notice of Opening' of the quarry to the Director of Mines Safety, Chennai Region before obtaining the CTO from the TNPCB.
- 10. The proponent shall construct the '\$3 (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.
- 11. 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.
- 12. The PP shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
- 13. 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.
- 14. The project proponent shall remit Rs. 5 Lakhs towards conservation measure for Cauvery Wild Life Sanctuary to DFO. Hosur before obtaining the CTO from the TNPCB, as the site lies within 10 km from the Sanctuary.
- 15. The proponent shall create a separate bank account and shall deposit the cost allocated for the committed EMP activities every year and the said expenditure details spent on the committed EMP activities shall be maintained & periodically submitted to TNPCB.
- 16. The PP shall carry out the scientific studies to assess the slope stability of the benches after the completion of 4 years of operation 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 Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, McEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 17. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
- 18. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e., quantum of Granite, waste, over burden, side burden and top soil etc. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the MoEF & CC, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form of Short Term Permit (STP), Query license or any other name.

- 19. The Proponent shall ensure that the overburden, waste rock and non-saleable granite generated during prospecting or mining operations of the granite quarry shall be stored separately in properly formed dumps on grounds earmarked. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps. Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- 20. Perennial sprinkling arrangement shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals and submit the consolidated report to TNPCB once in six months.
- 21. The Proponent shall ensure that the Noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures undertaken accordingly. The report on the periodic monitoring shall be submitted to TNPCB once in 6 months.
- 22. The PP shall also develop the Green belt around the office buildings, along the side of the roads and on backfill areas, if any, apart from along the mine lease boundary. The purpose of green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 23. Taller/one year old saplings raised in appropriate size of bags (preferably ecofriendly bags) should be planted in proper spacing
- 24. As per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt/area with GPS

- coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
- 25. Dust, Noise and Vibration Related: Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers should be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed. Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
- 26. The impact on fauna species in the mining area is mostly due to noise vibration and loss of vegetation cover. No working is proposed during night time, i.e., after 6 pm. No lighting is allowed to spread outside quarry lease area.
- 27. The proponent shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by the quarrying operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry as assured in the Environmental Management Plan& the approved Mine Closure Plan.
- 28. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
- 29. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.
- 30. The PP shall maintain the quarrying time between 7 am to 5 pm only.
- 31. The proponent shall ensure that the transportation of the quarried granite stones shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried granite stones; and transport of granite stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.

- 32. To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
- 33. The Project Proponent shall comply with the provisions of the Mines Act, 1952, MMR 1961 and Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
- 34. The project proponent shall ensure that the provisions of the MMDR Act, 1957, the Granite Conservation and Development Rules 1999, the MCDR 2017 and Tamil Nadu Minor Mineral Concession Rules 1959 are compiled by carrying out the quarrying operations in a skilful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.
- 35. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCB) and the Director of Mines Safety (DMS), Chennai Region by the proponent without fail.
- 36. The Project Proponent shall 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.
- 37. 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.
- 38. All the conditions imposed by the concerned Assistant/Deputy Director, Geology & Mining, in the mining plan approval letter and the Precise area communication letter issued by the concerned District Collector should be strictly followed.
- 39. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat / local representatives, if any, from whom any suggestion/representation has been received while processing the proposal.

- 40. 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.
- 41. As per the MoEF& CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere EMP furnished.

Agenda No. 333 – 03.

(File No. 9359/2022)

Proposed Gravel Quarry over an extent of 1.44.0Ha at SF.No. 705/2 Kosanam 'B' Village, Nambiyur Taluk, Erode District, Tamil Nadu by Tmt. S. Vijayalakshmi,- for Environmental Clearance.(SIA/TN/MIN/279824/2022)

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).

The SEAC noted the following:

- 1. The Project Proponent, Tmt. S. Vijayalakshmi has applied for Environmental Clearance for the proposed Gravel Quarry over an extent of 21.44.0Ha at SF.No. 705/2 Kosanam 'B' Village, Nambiyur Taluk, Erode 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.

SI. No	Details of the Proposal				
1	Name of the Owner/Firm		Tmt. S. Vijayalakshmi, W/o. Senthilkumar, No.6/11A. Semmaandampalayam Pudur, Sulur Taluk, Coimbatore - 641 668.		
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Gravel		
3	S.F No. of the quarry site with area break-up	:	705/2		
4	Village in which situated	1:	Kosanam 'B'		
5	Taluk in which situated	:	Nambiyur		
6	District_in which situated	:	Erode		
7	Extent of quarry (in ha.)	:	1.44.0 Ha		

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8	Period of quarrying proposed	T:	3 years
9	Type of mining	$\top$	Opencast method of shallow
<u></u>			mining
10	Production (Quantity in m³)	<u> </u>	38,704 m³ of Gravel
11	Latitude & Longitude of all corners of	:	11°21'22.97"N to 11°21'28.29"N
	the quarry site		77°22'20.87"E to 77°22'25.20"E
12	Topo Sheet No.	:	58-E/07
13	Man Power requirement per day:		8 Nos
14	Precise area communication approved	:	Na.Ka. 029/Kanimam/2019
	by Assistant Director, Department of		dated:10.03.2022
	Geology and Mining with date	<u> </u>	
15	Mining Plan approved by Assistant	:	R.c. No. 029/Mines/2019
	Director, Department of Geology and		dated:07.04.2022
	Mining with date	L	
16	Water requirement:	:	1.6 KLD
	3. Drinking & domestic purposes (in		0.2 KLD
	KLD)		
 	4. Dust suppression (in KLD)		1.0 KLD
1	5. Green Belt (in KLD)	<u> </u>	0.4 KLD
17	Power requirement	l ,	
ĺ	a. Domestic Purpose	:	TNEB
	b. Industrial Purpose	Ĺ.,	6450 Litres of HSD
18	Depth of quarrying	<u>:</u>	5m (3m AGL + 2m BGL)
19	Depth of water table	:	47m in summer and 42m in rainy
			season
20	Whether any habitation within 300m	:	No
	distance		
21	Project Cost (excluding EMP cost)	:	Rs. 22,52,000/-
22	EMP cost	:	Rs. 1,75,000/-
23	CER cost	:	Rs. 2,00,000/-
24	Assistant Director, mines 500m cluster	:	R.c. No. 029/Mines/2019
]	letter		dated:07.04.2022
25	VAO certificate regarding 300m radius	:	Letter dated: 22.04.2022
	cluster		

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

- 1. The PP shall furnish the DFO letter stating the proximity distance of nearest RF, WLS etc.,
- 2. The PP shall furnish a letter from AD mines stating the distance of nearby water bodies, Odai, canal etc., located adjoining to the proposed site.

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Agenda No. 333 - 04. (File No. 9413/2022)

Proposed Rough stone, Jeily & Gravel Quarry over an extent of 3.90.0Ha at SF.No. 882(P), 883/3B1, 883/3B2, 883/3B3, 960/3 & 961/13 Vadakku Ariyanayagipuram Village, Cheranmahadevi Taluk, Tirunelveli District, Tamil Nadu by Thiru. M. Joseph Antony - for Environmental Clearance.(SIA/TN/MIN/283295/2022)

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).

The SEAC noted the following:

- 1. The Project Proponent. Thiru. M. Joseph Antony has applied for Environmental Clearance for the proposed Rough stone, Jelly & Gravel Quarry over an extent of 3.90.0Ha at SF.No. 882(P), 883/3B1, 883/3B2, 883/3B3, 960/3 & 961/13 Vadakku Ariyanayagipuram Village, Cheranmahadevi 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.

SI. No	Details of the Proposit				
1	Name of the Owner/Firm	•	Thiru. M. Joseph Antony, S/o. M.V. Masilamani, No.9/250B, Ilanthaikulam Road, Singamparai, Cheranmahadevi, Tirunelveli - 627 601.		
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough Stone, Jelly and Gravel		
3	S.F No. of the quarry site with area break-up	:	882(P), 883/3B1, 883/3B2, 883/3B3, 960/3 & 961/13		
4	Village in which situated	:	Vadakku Ariyanayagipuram		
5	Taluk in which situated	1:	Cheranmahadevi		
6	District in which situated	;	Tirunelveli		
7	Extent of quarry (in ha.)	<del>-  </del> :	3.90.0 Ha		
8	Period of quarrying proposed	:	5 years		
9	Type of mining		Opencast Mechanized Mining		

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	In 1	т-	Table 1
10	Production (Quantity in m³)		6,28,963 m³ of Rough Stone, 36,832 m³ of Weathered Rock and 58,032 m³ of Gravel; Annual Peak Production capacity of 126925 m3 of Rough stone; 58032 m3 of Gravel, 36832 m3 of weathered rock.
11	Latitude & Longitude of all corners of the quarry site	:	08°45'47.56"N to 08°45'56.90"N 77°32'13.36"E to 77°32'20.85"E
12	Topo Sheet No.	:	58 H/09
13	Man Power requirement per day:		32 Nos
14	Precise area communication approved by Joint Director / Assistant Director (i/c), Department of Geology and Mining with date	:	Rc.No.M1/7905/2018 dated 07.06.2021
15	Mining Plan approved by Joint Director / Assistant Director (i/c), Department of Geology and Mining with date	:	Rc.No.M1/7905/2018, dated 10.06.2021
16	Water requirement:  1. Drinking & domestic purposes (in KLD)	:	2.5 KLD 1.5 KLD
	<ol> <li>Dust suppression (in KLD)</li> <li>Green Belt (in KLD)</li> </ol>		0.5 KLD 0.5 KLD
17	Power requirement	$\vdash$	
	a. Domestic Purpose	;	TNEB
	b. Industrial Purpose		512842 Litres of HSD
18	Depth of quarrying	:	40m bgl
19	Depth of water table	:	53m in summer and 50m in rainy season
20	Whether any habitation within 300m distance	† <del></del>	No
21	Project Cost (excluding EMP cost)	:	Rs. 99,40,000/-
22	EMP cost	:	Rs. 89,99,936/-
23	CER cost	:	Rs. 5,00,000/-
24	Assistant Director, mines 500m cluster letter	:	Rc.No.M1/7905/2018, dated 10.06.2021
25	VAO certificate regarding 300m radius cluster	:	Letter Furnished

 $(e^{-i\omega_0}\frac{\partial}{\partial z}e^{i\omega_0}) = (e^{-i\omega_0}\frac{\partial}{\partial z}e^{i\omega_0})$ 

Based on the presentation and documents furnished by the project proponent, SEAC

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decided to recommend the proposal for the grant of Environmental Clearance for total excavation quantity of 628963m³ of Rough Stone 58032 m³ of Gravel & 36832 m³ of Weathered Rock and not exceeding the annual peak production of 126925 m³ of Rough Stone, 58032m³ of Gravel & 36832 m³ of Weathered Rock with maintaining an ultimate pit depth of 40 m 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:

- 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 No.
  S.O. 1807(E) Dt12.4.2022.
- 2. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
- 3. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 pertaining to the mine working operations in the proposed quarry from the DMS. Chennai before obtaining the CTO.
- 4. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
- 5. The proponent shall construct the '\$3 (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 before obtaining the CTO from TNPCB.
- 6. The project proponent shall complete plantation of sapling of native species for developing green belt before obtaining the CTO from the TNPCB.
- 7. The PP shall carry out the controlled blasting using jack hammer drilled shallow holes (32-34 mm dia & 1.5 m length) only and NONEL shock tube initiation system with muffling techniques to ensure the environmentally acceptable blasting operation.

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8. Within one year of the commencement of mining operations, the PP shall carry out the scientific studies on controlled blasting for reducing the impact of blast-induced ground/air vibrations and fly rock, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-Dept of Mining Engg., 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.

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- 9. The Project Proponent (PP) shall submit an 'Action Plan' for carrying out the realignment of the benches in the existing quarry and shall also furnish a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease as the depth of the proposed quarry is exceeding 40 m to the office of concerned AD (Mines) before obtaining CTO from TNPCB.
- 10. 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 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 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.
- 11. 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.
- 12. The PP shall ensure that the blasting operations are carried out by only the statutory persons like Blaster/Mine Mate/Mine Foreman directly employed by him as per the provisions of MMR 1961 before 5 pm ensuring that the persons have taken proper shelter within the vicinity of 500 m from the place of firing and it shall not be carried out by the persons other than the above statutory personnel.

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- 13. The PP shall ensure that adequate measures are taken to control the propagation of dust at the source level along the haul-roads leading to the highways & village panchayat roads where the trucks are plying with loaded material.
- 14. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
- 15. The PP shall undertake suitable measures for the socio-economic development in the villages situated around the quarry.
- 16. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
- 17. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
- 18. The proponent shall create a separate bank account and shall deposit the amount demarcated for the committed EMP activities every year in advance and the said expenditure details spent on the committed EMP activities shall be maintained & submitted to TNPCB once in 6 months.
- 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 lakhs and the amount shall be spent for the Panchayat Primary School, IInthaikulan as committed, before obtaining CTO from TNPCB.
- 1. Tree Plantation, Fan in class room.
- 2. Repairing & renovation for Toilet.
- 3. Provision of tank for drinking water facility.
- 4. Rack & books for library.

Agenda No. 333 – 05.

(File No. 9436/2022)

Proposed Rough stone & Gravel Quarry over an extent of 3.42.7 at SF.No. 455/1(P), 455/2(P) & 456/1B(P) Kasthurirengapuram Part-1 Village, Tisayanvilai Taluk, Tirunelveli District, Tamil Nadu by Thiru. J. Dinesh Kumar- for Environmental Clearance.(SIA/TN/MIN/284059/2022)

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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).

The SEAC noted the following:

- The Project Proponent, Thiru. J. Dinesh Kumar has applied for Environmental Clearance for the proposed Rough stone & Gravel Quarry over an extent of 3.42.7 at SF.No. 455/1(P), 455/2(P) & 456/18(P) Kasthurirengapuram Part-I 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.

'3L' No	Details of	the P	roposal
1	Name of the Owner/Firm	•	Thiru. J. Dinesh Kumar, S/o. R. Jayamoorthi, No. 12, Vinayaga Road, Kammanahalli Main Road, Bangalore North, Karnataka State - 560 084.
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough Stone and Gravel
3	S.F No. of the quarry site with area break-up	:	455/1(P), 455/2(P) & 456/1B(P)
4	Village in which situated	:	Kasthurirengapuram Part-I
5	Taluk in which situated	:	Tisayanvilai
6	District in which situated	:	Tirunelveli
7	Extent of quarry (in ha.)	:	3.42.7 Ha
8	Period of quarrying proposed	:	5 years
9	Type of mining		Opencast Mechanized Mining
10	Production (Quantity in m³)	:	6,42,356 m³ of Rough Stone and 56,398 m³ of Gravel
11	Latitude & Longitude of all corners of the quarry site	:	08°17'45.27"N to 08°17'51.70"N 77°44'07.10"E to 77°44'15.31"E
12	Topo Sheet No.	1:	58 H/11
13	Man Power requirement per day:		56 Nos
14	Precise area communication approved by Assistant Director, Department of Geology and Mining with date	:	Rc.No.M2/1791/2022 dated 11.05.2022
15	Mining Plan approved by Assistant Director, Department of Geology and Mining with date		Rc.No.M2/1791/2022 dated 14.05.2022
16	Water requirement:	- :	2.2 KLD

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:	<ul><li>4. Drinking &amp; domestic purposes (in KLD)</li><li>5. Dust suppression (in KLD)</li></ul>		0.7 KLD 0.8 KLD
İ	6. Green Belt (in KLD)		0.7 KLD
17	Power requirement		
	c. Domestic Purpose	:	TNEB
	d. Industrial Purpose	! 	523288 Litres of HSD
18	Depth of quarrying	:	40m bgl (2m Gravel + 38m Rough Stone)
19	Depth of water table	:	62m in summer season and
			58m in rainy season
20	Whether any habitation within 300m distance	} : 	No
21	Project Cost (excluding EMP cost)	; :	Rs. 1,03,84,000/-
22	EMP cost	:	Rs. 3,80,000/-
23	CER cost	:	Rs. 5,00,000/-
24	Assistant Director, mines 500m cluster	:	Rc.No.M2/1791/2022 dated
	letter		14.05.2022
25	VAO certificate regarding 300m radius cluster	:	Letter Furnished

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 may belongs to the PP or not situated within 100m, 200m & 300m radius of the proposed mining area.
- 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 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.

Agenda No. 333 – 06. (File No. 9452/2022)

Proposed Rough Stone and Gravel Quarry over an extent of 2.73.0Ha at SF.No.156/1, 156/2A and 156/3A of Kodangipatty Village, Bodinaickkanur Taluk, Theni District, Tamil Nadu by Thiru. M.Thiyagarajan- for Environmental

Clearance.(\$IA/TN/MIN/289013/2022, Dt: 22.08.2022)

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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).

## The SEAC noted the following:

- 3. Now, the Project Proponent, Thiru. M.Thiyagarajan has applied for Environmental Clearance for the proposed Rough Stone and Gravel Quarry over an extent of 2.73.0Ha at SF.No.156/1, 156/2A and 156/3A of Kodangipatty Village, Bodinaickkanur Taluk, Theni District, Tamil Nadu.
- 4. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 5. 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 203835m³ of Rough Stone & 35046 m³ of Gravel & 17017 m³ of Weathered Rock. The annual peak production shall not exceed 41795 m³ of Rough Stone (2nd Year), 17990m³ of Gravel (2nd Year), & 8674m³ of Weathered Rock (2nd Year). The ultimate depth is 30m BGL.

	Details of the	?rc	posal
1	Name of the Owner/Firm		Thiru.M.Thiyagarajan, S/o.Muthirulan, No.5/308, Gokul Nagar, Madurai North Taluk, K.Pudur, Athikulam, Madurai District.
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough Stone, Weathered Rock and Gravel
3	S.F No. Of the quarry site with area break- up	:	156/1, 156/2A and 156/3A
4	Village in which situated	:	Kodangipatty
5	Taluk in which situated	;	Bodinaickkanur
6	District in which situated	:	Theni
7	Extent of quarry (in ha.)	:	2.73.0Ha
8	Latitude & Longitude of all corners of the quarry site	:	10°00'47.92"N to 10°00'54.09"N 77°25'04.89"E to 77°25'11.96"E
9	Topo Sheet No.	:	58 – F/08 & 58-G/05
10	Type of mining		Opencast Semi-Methanized of Mining

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11	Lease Period of quarrying proposed		10 years
12	Production (Quantity in m³)	:	203835m³ of Rough Stone &
			35046m³ of Gravel & 17017m³ of
			Weathered rock
13	Ultimate Depth of quarrying	:	30m BGL
14	Depth of water table	:	62m-59m BGL
15	Man Power requirement per day:		23 Nos.
16	Source of Water Requirement		water vendors
17	Water requirement:	:	2.5 KLD
	7. Drinking & domestic purposes (in		1.5 KLD
	KLD)		0.5 KLD
	8. Dust suppression, Green Belt &Wet		0.5 KLD
	Drilling (in KLD)		
18	Power requirement		TNEB
19	Whether any habitation within 300m	:	No
	distance		
20	Precise area communication approved by	:	Na.Ka.No.158/Kanimam/2022,
	the, Assistant Director, Department of		dt: 15.07.2022
	Geology and Mining with date		
21	Mining Plan approved by Assistant	:	Roc.No.158/2022-Mines, dt:
-	Director, Department of Geology and	]	22.07.2022.
	Mining with date		
22	Assistant Director, Department of Geology		Rc.No.158/2022-Mines, dt:
	and Mining 500m cluster letter		22.07.2022
23	VAO certificate regarding 300m radius		Letter dt: 19.07.2022
	cluster		
24	Project Cost (excluding EMP cost)	:	Rs.76.58Lakh
25	EMP cost	:	Capital Cost Rs.16.43 Lakhs
			Recurring Cost Rs. 16.86 Lakhs
26	CER cost		Rs.5.00 Lakhs
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Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the total excavation quantity of 203835m³ of Rough Stone & 35046 m³ of Gravel & 17017 m³ of Weathered Rock for a period of 5 years and not exceeding the annual peak production of 41795 m³ of Rough Stone, 17990m³ of Gravel, & 8674m³ of Weathered Rock with maintaining the ultimate depth of mining upto 30m BGL and 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:

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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 whichever is earlier, vide MoEF&CC
  notification No. S.O. 1807(E) Dt12.4.2022.
- The mine manager and other statutory competent persons such as blaster (or)
  mine mate shall be appointed before the commencement of mining operation as
  per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
- 3. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 pertaining to the mine working operations in the proposed quarry from the DMS, Chennai before obtaining the CTO.
- 4. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
- 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 before obtaining the CTO from TNPCB.
- 6. The project proponent shall complete plantation of sapling of native species for developing green belt before obtaining the CTO from the TNPCB.
- 7. The PP shall carry out the controlled blasting using jack hammer drilled shallow holes (32-34 mm dia & 1.5 m length) only and NONEL shock tube initiation system with muffling techniques to ensure the environmentally acceptable blasting operation.
- 8. Within one year of the commencement of mining operations, the PP shall carry out the scientific studies on controlled blasting for reducing the impact of blast-induced ground/air vibrations and fly rock, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-Dept of Mining Engg., 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.

- 9. The Project Proponent (PP) shall submit an 'Action Plan' for carrying out the realignment of the benches in the existing quarry and shall also furnish a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease as the depth of the proposed quarry is exceeding 40 m to the office of concerned AD (Mines) before obtaining CTO from TNPCB.
- 10. 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 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 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.
- 11. 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.
- 12. The PP shall ensure that the blasting operations are carried out by only the statutory persons like Blaster/Mine Mate/Mine Foreman directly employed by him as per the provisions of MMR 1961 before 5 pm ensuring that the persons have taken proper shelter within the vicinity of 500 m from the place of firing and it shall not be carried out by the persons other than the above statutory personnel.
- 13. The PP shall ensure that adequate measures are taken to control the propagation of dust at the source level along the haulroads leading to the highways & village panchayat roads where the trucks are plying with loaded material.
- 14. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
- 15. The PP shall undertake suitable measures for the socio-economic development in the villages situated around the quarry.
- 16. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be

diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.

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- 17. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
- 18. The proponent shall create a separate bank account and shall deposit the amount demarcated for the committed EMP activities every year in advance and the said expenditure details spent on the committed EMP activities shall be maintained & submitted to TNPCB once in 6 months.
- 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 Middle School, Valayapatty Village as committed, before obtaining CTO from TNPCB.

# Government Middle School, Valayapatty Village.

- 1. Tree Plantation (50 Nos.).
- 2. Repairing & renovation for both Girls & Boys Toilet.
- 3. Provision of tank for drinking water facility.
- 4. Fencing of school Compound Wall.
- 5. Rack for library with books.

Agenda No. 333 - 07.

(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 Nadu by Tvl.Mars Mining - for Environmental Clearance. (SIA/TN/MIN/291056/2022, Dt: 10.09.2022)

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).

The SEAC noted the following:

1. Now, the Project Proponent, Tvl.Mars Mining has applied for Environmental Clearance for 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.

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- 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 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 (1st Year), & 73500 m³ of Weathered Rock (1st Year). The ultimate depth is 58m BGL.

st. No	Details of the	Pro	opes <b>al</b>
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
11	Period of quarrying proposed	:	5 years
12	Production (Quantity in m³)	:	1098200m³ of Rough Stone & 128898m3 of Gravel & 200355m³ of Weathered rock
13	Depth of quarrying	:	58m-
14	Depth of water table	:	65m BGL
15	Man Power requirement per day:		25 Nos.
16~	Source of Water Requirement		water vendors

17	Water requirement:	T :	6.0 KLD
	1. Drinking & domestic purposes (in		1.0 KLD
	KLD)		
	2. Dust suppression, Green Belt &Wet		2.5 KLD
	Drilling (in KLD)		2.5 KLD
18	Power requirement		TNEB
19	Whether any habitation within 300m	:	No
	distance		
20	Precise area communication approved	:	Rc.No.M2/38457/2021, dt:
	by the, District Collector's, Department	i	10.05.2022
	of Geology and Mining with date		
21	Mining Plan approved by Assistant	:	Roc.No.M2/38457/2021, dt:
	Director, Department of Geology and		13.05.2022
	Mining with date		
22	Assistant Director, Department of		Rc.No.M2/38457/2021, dt:
	Geology and Mining 500m cluster letter		13.05.2022
23	VAO certificate regarding 300m radius		Letter dt:18.07.2022
	cluster	1	
24	Project Cost (excluding EMP cost)	:	Rs.346.46 Lakh
25	EMP cost	:	Rs.200 Lakhs/5 Years including
			capital cost of Rs. 32.17 Lakhs.
26	CER cost		Rs.7.00 Lakhs
	<u> </u>	1	1

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 within 100m, 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.

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- 4. The Project proponent shall furnish revised production quantity for ultimate depth of mining upto 50m.
- 5. The project proponent shall photograph of barbered wire fencing and green belt provided.

Agenda No. 333 – 08. (File No. 9487/2022)

Proposed Rough Stone & Gravel Quarry over an extent of 0.49.70Ha at SF.No.566/I (Part) of Panayampaili Village, Sathyamangalam Taluk, Erode District by Thiru.G.A.Venkatesan - for Environmental Clearance. (SIA/TN/MIN/401909/2022, Dt: 30.09.2022)

The proposal was placed for appraisal in this 333rd 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).

#### The SEAC noted the following:

- 1. Now, the Project Proponent, Thiru.G.A.Venkatesan has applied for Environmental Clearance for the proposed Rough Stone & Gravel Quarry over an extent of 0.49.70Ha at SF.No.566/1 (Part) of Panayampalli Village, Sathyamangalam Taluk, Erode District, Tamil Nadu.
- 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 33420m³ of Rough Stone & 3080 m³ of Gravel. The annual peak production shall not exceed 7875m³ of Rough Stone (3rd Year), & 1650m³ of Gravel (1r Year). The ultimate depth is 25m BGL.

SI. No	Details of	of the Pra	operside the second second second second second second second second second second second second second second
1	Name of the Owner/Firm	:	Thiru.G.A.Venkatesan, S/o.G.S.Appachi, 15, Sri Vari Aprtment, 644, V.K.K. Menan Road, New Sithaapudur, Coimbatore District – 641044, Tamil Nadu State.
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough stone & Grave

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3	S.F No. Of the quarry site with area	Τ:	566/1 (Part)
,	break-up	1	JOO/1 (Part)
4	Village in which situated	+-	Panayampalli
5	Taluk in which situated	:	Sathyamangalam
	·	<u> </u>	
6	District in which situated	:	Erode
7	Extent of quarry (in ha.)	:	0.49.70Ha
8	Latitude & Longitude of all corners of	:	11°24'14.86"N to 011°24'17.25"N
	the quarry site		77°9'48.22"E to 77°9'50.94"E
9	Topo Sheet No.	:	58 – E/03
10	Type of mining		Opencast Semi-Mechanized of
			Mining
11	Period of quarrying proposed	:	5 years
12	Production (Quantity in m³)	:	33420m³ of Rough Stone &
			3080m³ of Gravel; The annual
			peak production shall not exceed
			7875m³ of Rough Stone (3rd
			Year), & 1650m³ of Gravel (1ª
			Year).
13	Depth of quarrying	;	25m
14	Depth of water table	:	50m-45m BGL
15	Man Power requirement per day:		13 Nos.
16	Source of Water Requirement		water vendors
17	Water requirement:	:	2.7 KLD
	Drinking & domestic purposes		0.7 KLD
	(in KLD)		
	2. Dust suppression, Green Belt		1.5 KLD
	&Wet Drilling (in KLD)		0.5 KLD
18	Power requirement		
	a. Domestic Purpose		TNEB
	b. Industrial Purpose		27246 Liters of HSD
19	Whether any habitation within 300m	:	No
	distance		
20	Precise area communication approved	:	Rc.No.975/Kanimam/2021, dt:
	by the, District Collector's, Department		12.09.2022
	of Geology and Mining with date		
21	Mining Plan approved by Deputy	;	Roc.No.957/Mines/2021, dt:
	Director, Department of Geology and		16.09.2022
	Mining with date		$\sim$

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22	Assistant Director, Department of	·	Rc.No.957/Mines/2021, dt:
	Geology and Mining 500m cluster		20.09.2022
	letter		
23	VAO certificate regarding 300m radius cluster		Letter dt: 19.09.2022
24	Project Cost (excluding EMP cost)	:	Rs.35.781 Lakh
25	EMP cost	:	Rs.105 Lakhs/5 Years including
			Capital cost of Rs. 14.35 Lakhs.
26	CER cost		Rs.5.0 Lakhs

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 quantity of 33420m³ of Rough Stone & 3080 m³ of Gravel but not exceeding the annual peak production shall not exceed 7875m³ of Rough Stone, & 1650m³ of Gravel with maintaining the ultimate depth of mining upto 25m 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:

- 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 whichever is earlier, vide MoEF&CC
  notification No. S.O. 1807(E) Dt12.4.2022.
- 2. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
- 3. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 pertaining to the mine working operations in the proposed quarry from the DMS. Chennai before obtaining the CTO.
- 4. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
- 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 before-obtaining the CTO from TNPCB.

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- 6. The project proponent shall complete plantation of sapling of native species for developing green belt before obtaining the CTO from the TNPCB.
- 7. The PP shall carry out the controlled blasting using jack hammer drilled shallow holes (32-34 mm dia & 1.5 m length) only and NONEL shock tube initiation system with muffling techniques to ensure the environmentally acceptable blasting operation.
- 8. Within one year of the commencement of mining operations, the PP shall carry out the scientific studies on controlled blasting for reducing the impact of blast-induced ground/air vibrations and fly rock, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-Dept of Mining Engg., 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.
- 9. The Project Proponent (PP) shall submit an 'Action Plan' for carrying out the realignment of the benches in the existing quarry and shall also furnish a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease to the office of concerned AD (Mines) before obtaining CTO from TNPCB.
- 10. The PP shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.
- 11. The PP shall ensure that the blasting operations are carried out by only the statutory persons like Blaster/Mine Mate/Mine Foreman directly employed by him as per the provisions of MMR 1961 before 5 pm ensuring that the persons have taken proper shelter within the vicinity of 500 m from the place of firing and it shall not be carried out by the persons other than the above statutory personnel.
- 12. The PP shall ensure that adequate measures are taken to control the propagation of dust at the source level along the haulroads leading to the highways & village panchayat roads where the trucks are plying with loaded material.

13. The PP shall meticulously carry out the mitigation measures as spelt out in the

revised EMP.

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- 14. The PP shall undertake suitable measures for the socio-economic development in the villages situated around the quarry.
- 15. The PP shall maintain adequate benches with proper geometry to ensure that the future expansion programme can be undertaken without endangering the safety to the men employed in the quarry.
- 16. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
- 17. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
- 18. The proponent shall create a separate bank account and shall deposit the amount demarcated for the committed EMP activities every year in advance and the said expenditure details spent on the committed EMP activities shall be maintained & submitted to TNPCB once in 6 months.
- 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 Middle School, Kodapalayam Village as committed, before obtaining CTO from TNPCB.

## Government Middle School, Kodapalayam Village.

- 1. Ceiling Fan, Beero, & Chair.
- 2. Environmental related library Books & Rag.
- 3. Compound Wall & Smart Board.
- 4. Tree Plantation.
- 5. Painting for Buildings.

Agenda No: 333 - 09 File No: 9495/2021)

Proposed Rough stone quarry lease over an extent of 2.08.50 Ha in S.F.No: 278, Billanakuppam Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu by Thiru.C.Murugesan- For Environmental Clearance. (SIA/TN/MIN/402123/2022)

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Dt.03.10.2022)

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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 given in the website (parivesh.nic.in).

## The SEAC noted the following:

- 1. The project proponent, Thiru.C.Murugesan has applied for Environmental Clearance for the proposed Rough stone quarry lease over an extent of 2.08.50 Ha in S.F.No: 278, Billanakuppam Village, Krishnagiri Taluk, Krishnagiri 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 10 years. The total production for 5 years not to exceed 2,52,392 m³ of Rough stone and 33,810 m³ of Top Soil. The annual peak production as per mining plan is 50624 m³ of Rough stone (1" year) & 14950 m³ (1" year) of Top Soil with ultimate depth of 47m (22m AGL during the first five years and 25m BGL during the next five years) (2m Top soil + 45m Rough Stone).

SIN	Details	of the Proposal
1.	Name of the Owner / Firm	C.Murugesan
		S/o chinnappan
		D.No.3/132, Thippanapalli Village,
		Thippanapalli Post
		Krishnagiri Taluk,
		Krishnagiri District- 635 115
2.	Type of quarrying (savudu / Rough stone / Sand / Granite)	Rough Stone Quarry
3.	S.F No. of the quarry site with area	278
	break-up	
4.	Village in which situated	Billanakuppam
5.	Taluk in which situated	Krishnagiri
6.	District in which situated	Krishnagiri
7.	Extent of Quarry (in ha.)	2.08.50 Ha (Government Poramboke
		Land)
8.	Lease Period of Quarrying proposed	10 years
9.	Type of Mining	Opencast semi mechanized mining
10.	Production (Quantity in m³)	2,52,392 m³ of Rough stone and 33,810 m³ of Top Soil; The annual peak

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		production as per mining plan is 50624 m³ of Rough stone (1st year) & 14950 m³
•••	1	(1" year) of Top Soil.
11.	Annual peak Production (Quantity in	50624 m³ of Rough stone (1st year) &
	m³)	14950 m³ (1" year) of Top Soil
12.	Latitude & Longitude of all corners of	12° 36′ 00.0922″ N to 12° 35′ 55.8385″ N
. · .	the quarry site	78° 10' 05.6188" E to 78° 09' 59.9820" E
13.	Topo sheet No.	57-L/2
14.	Man power requirement per day:	18 Employees
15.	Precise Area Communication	Na. Ka. En. 531/2022/Kanimam dated
l •	approved by the Assistant Director,	06.05.2022
	Geology & Mining,,	
16.	Mining plan approved by the Deputy	Roc.No.531/2022/mines dated:18.07.2022
	Director, Geology & Mining	
17.	500mts letter approved by the	Roc.No.531/2022/mines
	Deputy Director, Geology & Mining	dated:18.07.2022
18.	Water requirement:	2.0 kLD
	1. Drinking (in KLD)	1.0 KLD
	2. Dust Suppression (in KLD)	0.5KLD
	3. Green Belt (in KLD)	0.5 KLD
19.	Power requirement:	
	a. Domestic purpose	TNEB
	b. Machinery works	3,70,264 liters of HSD for the entire
		period of project life.
20.	Ultimate Depth of Mining	47m (22m AGL during the first five years and 25m BGL during the next five years)
21.	Depth of Water table	85m in summer season -77m in rainy
		season
22.	Project cost	Rs. 2,51,50,000/-
23.	EMP cost	Capital cost- Rs. 19,62,000/-
		Recurring cost/annum- Rs. 12,36,000/-
24.	CER cost	Rs.5 lakhs
25.	VAO letter dated	24.08.2022
- n	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	furnished by the project proponent CEAC

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 reduced quantity of 2,12,320 cu.m of Rough Stone & 33,810 m³ of Top Soil restricting the ultimate depth of mining upto 22m (4m AGL + 18m BGL) (2m Top soil + 20m Rough Stone) considering the safety aspects with the annual peak production shall not exceed 50624 m³ of Rough stone (1st year) & 14950 m³ (1st year) of Top Soil subject

MEMBER SECRETARY SEAC -TN CHAIRMANT T SEAC TN 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:

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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.
- 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 inform the notice of opening of the quarry to the Director of Mines Safety/Chennai Region before obtaining the CTO.
- 4. The proponent shall construct the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
- 5. 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.
- 6. The PP shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
- 7. Further, the PP shall construct the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
- 8. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp for the proposed workings above ground level keeping the benches intact for the proposed quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.
- 9. However, the PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall after the completion of 3 years of operation

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whichever is earlier, 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 Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

- 10. As the habitations are located nearby, the PP shall carry out the controlled blasting using jack hammer drilled shallow holes (32-34 mm dia& 1.5 m length) only and NONEL shock tube initiation system with muffling techniques to ensure the environmentally acceptable blasting operation.
- 11. In case of carrying out the 'Deep-hole large diameter drilling and blasting' in the proposed quarries, the PP shall obtain prior permission from the Director of Mines Safety. Chennai Region after the commencement of mining operations under the provisions of Reg. 106 (2) (b) of MMR 1961.
- 12. The PP shall carry out maximum of two rounds of controlled blast only per day, restricted to the maximum of 50 to 60 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 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.
- 13. Since few habitations are situated at a distance range of 1 km from the mine lease boundary, within one year from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of Suitable blast parameters for reducing the cumulative impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarries by adopting appropriate controlled blasting techniques', by invoiving 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 Chennai-Dept of Mining Engg, etc. A copy of such scientific study report shall be

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submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance.

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- 14. Since the quarry lies in a cluster situation, the PP shall furnish a Standard Operating Procedure for carrying out the safe method of carrying out the blasting operation to the concerned DEE/TNPCB before obtaining the CTO from the TNPCB while considering the adjacent quarries lies in a radial distance of 500 m from their quarry.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
- 19. The PP shall remove the abandoned shed situated within 300 m from the lease boundary for the safety reasons before obtaining the CTO from the TNPCB.
- 20. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
- 21. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
- 22. As per the MoEF& CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere EMP furnished.

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- 23. The PP shall deposit the amount payable towards the mine closure cost in the DMF account maintained by the concerned District Magistrate after completion of 4th year (or) when the depth of mine reaches 35 m. A copy of such payment made to the DMF shall be sent to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance.
- 24. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Government Model Higher Secondary School, Billanakuppam village, Krishnagiri District as committed, before obtaining CTO from TNPCB.

Agenda No. 333 – 10. (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)

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).

The SEAC noted the following:

- 1. Now, the Project Proponent, Thiru.R.Jagan has applied for Environmental Clearance for 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 (1rd Year), . The ultimate depth is 40m BGL.

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SJ.	Details of the	- Prç	posal
1	Name of the Owner/Firm	•	Thiru.R.Jagan, S/o.R.Retnamony (Late), Thuthivillagam, Kalluketty, Kuzhithurai, Kanyakumari District, Tamil Nadu State - 629163
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough Stone & Gravel
3	S.F No. Of the quarry site with area break- up	:	488/1, 488/3A (P), 489/2 (P) and 491/1
4	Village 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 the quarry site	:	08°18'32.05"N to 08°18'37.61"N 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	Period of quarrying proposed	:	5 years
12	Production (Quantity in m³)	:	373618m³ of Rough Stone & 36974m3 of Gravel
13	Depth of quarrying	:	40m
14	Depth of water table	:	62m – 58m BGL
15	Man Power requirement per day:		37 Nos.
16	Source of Water Requirement		water vendors
17	Water requirement:	:	1.8 KLD
	<ol> <li>Drinking &amp; domestic purposes (in KLD)</li> </ol>		0.5 KLD
	2. Dust suppression, Green Belt &Wet		0.7 KLD
	Drilling (in KLD)		0.6 KLD
18	Power requirement		TNEB
19	Whether any habitation within 300m distance	:	No ·

100 miles (1995)

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20	Precise area communication approved by the, District Collector, Department of	: Rc.No.M2/28973/2021, dt: 10.05.2022
	Geology and Mining with date	10.000.2022
21	Mining Plan approved by Assistant Director, Department of Geology and Mining with date	: Roc.No.M2/28973/2021, dt: 13.05.2022
22	Assistant Director, Department of Geology and Mining 500m cluster letter	Roc.No.M2/28973/2021, dt: 13.05.2022
23	VAO certificate regarding 300m radius cluster	Letter dt: 15.07.2022.
24	Project Cost (excluding EMP cost)	: Rs.58.77 Lakh
25	EMP cost	: Rs.144 Lakhs/Year including capital cost Rs.24.15 Lakhs
26	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

Agenda No: 333 - 11 File No: 9509/2021)

Proposed Rough stone and Gravel quarry lease over an extent of Over an extent of 4.59.0hectares 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, Vembakkem Taluk,

MEMBER SECRETARY SEAC -TN

CHAIRMAN SEAC-TN Tiruvannamalai District; Tamil Nadu by M/s.Rajiraj Minerals Private Limited- For Environmental Clearance. (SIA/TN/MIN/ 402513/2022 Dt.10.10.2022)

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 given in the website (parivesh.nic.in).

#### The SEAC noted the following:

- 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 4.59.0hectares 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 118638 m³ of Gravel. The annual peak production as per mining plan is 171840 m³ of Rough stone (4th year) and 65814 m³ of Gravel (1th year) with ultimate depth of 50m BGL.
- 4. The proposed mining area is situated between two waterbodies namely Tirupanamur Eri at 140m.

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.

MEMBER SECRETARY SEAC -TN

CHAIRMAN SEAC- TN

- 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.

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

Agenda No: 333-12 (File No: 8819/2021)

Proposed rough stone & gravel quarry lease area over an extent of 4.19.0 Ha at S.F.Nos. 193/1, 193/2 & 193/3, Chennimalai Village, Perundurai Taluk, Erode District, Tamil Nadu by Thiru. P. Thamilarasu - For Environmental Clearance (SIA/TN/MIN/230858/2021 Dt: 23.09.2021)

Earlier, this proposal was placed in 271st SEAC Meeting held on 12.5.2022. 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. P. Thamilarasu has applied for the Environmental Clearance for proposed rough stone & gravel quarry lease area over an extent of 4.19.0 Ha at S.F.Nos. 193/1, 193/2 & 193/3, Chennimalai 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.

The proposal was placed in 271st SEAC Meeting held on 12.5.2022. During the meeting the Committee noted that the PP was not present, hence SEAC decided to defer the proposal.

Now the proposal was placed in this 333rd SEAC Meeting held on 01.12.2022. The committee noted that PP has requested to withdraw the proposal. Hence SEAC decided to remit back the proposal to SEIAA.

Agenda No: 333-13 (File No: 9537/2022)

Proposed Rough Stone and Gravel quarry lease over an extent of 1.24.0 Ha in S. F. No. 171/3 (P) and 172/7 B (P) of Irukkanthurai Part -11 Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu by Tvl. Venus Blue Metals - for Environmental Clearance. (SIA/TN/MIN/404923/2022 Dated 03.11.2022)

MEMBER SECRETARY SEAC -TN

CHAIRMAN SEAC- TN The proposal was placed in this 333rd Meeting of SEAC held on 01.12.2022. The details of the project furnished by the proponent are available in the website (www.parivesh.nic.in).

#### The SEAC noted the following:

- The Project Proponent, Tvl. Venus Blue Metals has applied for Environmental Clearance for the proposed Rough Stone and Gravel quarry lease over an extent of 1.24.0 Ha at S.F.No. 171/3(P) and 172/7B(P) of Irukkanthurai Part -II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per mining plan, the lease period is 5 years. The mining plan is for the period of five years & the production should not exceed 1,12,484 m³ of Rough Stone and 49345 m³ of Gravel with an ultimate depth of mining 33m Below Ground level. The annual peak production 23,446 m³ of Rough Stone (2nd year) 18,460m³ of Gravel (1nd year).
- 4. The entire production is meant for Koodankulam Power Plant.

	Details of the Proposal				
1.	Name of the Owner/Firm	Tvl. Venus Blue Metals No.26, Pulikaradu Periyar Nagar, West Tambaram,			
2.	Type of quarrying	Pin Code-600 045 Rough stone and Gravel Quarry			
3.	S.F No. Of the quarry site with area break-up	171/3 (P) and 172/7 B (P)			
4.	Village in which situated	Irukkanthurai Part -II Village			
5.	Taluk in which situated	Radhapuram Taluk			
6.	District in which situated	Tirunelveli District			
7.	Extent of quarry (in ha.)	1.24.0Ha			
8.	Latitude & Longitude of all corners of the quarry site	08°11'23.85"N to 08°11'29.08"N 77°40'35.96"E to 77°40'39.06"E			
9.	Topo Sheet No.	58 H/12			
10.	Type of mining	Opencast Semi-Mechanized of Mining			

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12. Production (Quantity in m³)  As per mining plan, the lease period is 5 The mining plan is for the period of fiv & the production should not exceed 1, m³ of Rough Stone and 49345 m³ of with an ultimate depth of mining plan is for the period of fiv & the production should not exceed 1, m³ of Rough Stone and 49345 m³ of with an ultimate depth of mining plan is for the period of fiv & the production should not exceed 1, m³ of Rough Stone and 49345 m³ of with an ultimate depth of mining plan is for the period of fiv & the production should not exceed 1, m³ of Rough Stone and 49345 m³ of with an ultimate depth of mining plan is for the period of fiv & the production should not exceed 1, m³ of Rough Stone and 49345 m³ of with an ultimate depth of mining plan is for the period of fiv & the production should not exceed 1, m³ of Rough Stone and 49345 m³ of with an ultimate depth of mining plan is for the period of fiv & the production should not exceed 1, m³ of Rough Stone and 49345 m³ of with an ultimate depth of mining plan is for the period of fiv & the production should not exceed 1, m³ of Rough Stone and 49345 m³ of with an ultimate depth of gand 18,460m³ of Gravel (lst year).  13. Depth of quarrying 33m Below Ground level 60m Below ground level 12 Employees.  14. O KLD  15. KLD  15. KLD  15. KLD  15. KLD  17. Power requirement  e. Domestic Purpose TNEB  Nil  18. Whether any habitation within 300m distance  19. Precise area communication approved by the Joint Director (l/c), Department of G&M  No  19. Precise area communication approved by Joint Director (l/c), Department of G&M  Mining Plan approved by Joint Director (l/c), Department of Geology and Mining with date	•
13. Depth of quarrying 14. Depth of water table 15. Man Power requirement per day: 16. Water requirement: 9. Drinking & domestic purposes (in KLD) 10. Dust suppression , 11. Green Belt (in KLD) 17. Power requirement  e. Domestic Purpose f. Industrial Purpose 18. Whether any habitation within 300m distance 19. Precise area communication approved by the Joint Director/ Assistant Director (i/c), Department of Geology and Mining with date 19. Department of Geology and Mining with date 19. Department of Geology and Mining with date	years 12,484 Gravel Below uction
14. Depth of water table 15. Man Power requirement per day: 16. Water requirement: 9. Drinking & domestic purposes (in KLD) 10. Dust suppression , 11. Green Belt (in KLD) 17. Power requirement 9. Domestic Purpose 18. Whether any habitation within 300m distance 19. Precise area communication approved by the Joint Director/ Assistant Director (i/c), Department of GeM 20. Mining Plan approved by Joint Director/ Assistant Director (Assistant Dire	
15. Man Power requirement per day:  16. Water requirement:  9. Drinking & domestic purposes (in KLD)  10. Dust suppression ,  11. Green Belt (in KLD)  17. Power requirement  e. Domestic Purpose f. Industrial Purpose  18. Whether any habitation within 300m distance  19. Precise area communication approved by the Joint Director/ Assistant Director (i/c), Department of G&M  20. Mining Plan approved by Joint Director/ Assistant Director (i/c), Department of Geology and Mining with date	
9. Drinking & domestic purposes (in KLD) 10. Dust suppression , 11. Green Belt (in KLD) 17. Power requirement  e. Domestic Purpose f. Industrial Purpose  TNEB Nil  18. Whether any habitation within 300m distance  19. Precise area communication approved by the Joint Director/ Assistant Director (i/c), Department of G&M  20. Mining Plan approved by Joint Director/ Assistant Director (i/c), Department of Geology and Mining with date	
(in KLD) 10. Dust suppression , 11. Green Belt (in KLD)  17. Power requirement  e. Domestic Purpose f. Industrial Purpose  Nil  18. Whether any habitation within 300m distance  19. Precise area communication approved by the Joint Director/ Assistant Director (i/c), Department of G&M  20. Mining Plan approved by Joint Director/ Assistant Director/ Assistant Director/ Assistant Director/ Assistant Director (i/c), Department of Geology and Mining with date  1.5 KLD  1.7 KEB  Nil  Rc.No.M2/36763/2019, dated:14.09.20  Rc.No.M2/36763/2019, dated:14.09.20  Rc.No.M2/36763/2019, dated:21.09.20	
10. Dust suppression , 11. Green Belt (in KLD)  17. Power requirement  e. Domestic Purpose f. Industrial Purpose Nil  18. Whether any habitation within 300m distance  19. Precise area communication approved by the Joint Director/ Assistant Director (i/c), Department of G&M  20. Mining Plan approved by Joint Director/ Assistant Director/ Assistant Director/ Assistant Director/ Assistant Director/ Assistant Director/ Geology and Mining with date  1.5 KLD  1.5	
17. Power requirement  e. Domestic Purpose f. Industrial Purpose  Nil  18. Whether any habitation within 300m distance  19. Precise area communication approved by the Joint Director/ Assistant Director (i/c), Department of G&M  20. Mining Plan approved by Joint Director/ Assistant Director/ Assistant Director/ Assistant Director (i/c), Department of Geology and Mining with date  17. REB  Nil  Rc.No.M2/36763/2019, dated:14.09.20	
e. Domestic Purpose f. Industrial Purpose Nil  18. Whether any habitation within 300m distance  19. Precise area communication approved by the Joint Director/ Assistant Director (i/c), Department of G&M  20. Mining Plan approved by Joint Director/ Assistant Director/ Assistant Director/ Assistant Director/ Geology and Mining with date  TNEB  Nil  Rc.No.M2/36763/2019, dated:14.09.20	
19. Precise area communication approved by the Joint Director/ Assistant Director (i/c), Department of G&M  20. Mining Plan approved by Joint Director/ Assistant Director/ Assistant Director (i/c), Department of Geology and Mining with date  Rc.No.M2/36763/2019, dated:14.09.20	
by the Joint Director/ Assistant Director (i/c), Department of G&M  20. Mining Plan approved by Joint Director/ Assistant Director (i/c), Department of Geology and Mining with date	
20. Mining Plan approved by Joint Rc.No.M2/36763/2019, dated:21.09.20 Director/ Assistant Director (i/c), Department of Geology and Mining with date	22
	22
21. mines 500m cluster letter by Joint Rc.No.M2/36763/2019, dated:29.09.20 Director/ Assistant Director (i/c), Department of Geology and Mining with date	)22
22. VAO certificate regarding 300m radius Letter Furnished dated Nil cluster	
23. Project Cost Rs.40.91,285	
24. EMP cost Rs.15.95 Lakhs (Capital cost) + Rs.13.60 per annum (Recurring cost).	Lakhs
25. CER cost Rs.5 Lakhs	<del></del>

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Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the ultimate depth of mining upto 33m BGL and the quantity of 1,12,484 cu.m of Rough Stone & 49,345 cu.m of Gravel and however not exceeding the annual peak production capacity of 23,446 m³ of Rough Stone ,18,460m³ of Gravel, for a period of 5 years, subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- 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.
- The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 pertaining to the mine working operations in the proposed quarry from the DMS, Chennai before obtaining the CTO.
- The mine manager and other statutory competent persons such as blaster (or)
  mine mate shall be appointed as per the provisions of Mines Act 1952 and
  Metalliferous Mines Regulations, 1961 before the obtaining the CTO from the
  DEE/TNPCB.
- 4. The proponent shall maintain the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs showing the same before obtaining the CTO from TNPCB.
- 5. Further, the PP shall maintain the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length) before obtaining the CTO from TNPCB.
- 6. The PP shall use the area of excavation shown in section along X1-Y1 & C-D in the 'Year wise Production Plan' of the Mining Plan for the continuction of ramp

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- accessibility in the proposed quarry following the DGMS Haul Road guidelines provided under MMR 1961 without deviation.
- 7. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
- 8. The PP shall carry out maximum of only one round of controlled blast per day, restricted to the maximum of 50 to 60 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 490 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.
- 9. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry without prior permission obtained from the Director of Mines Safety, Chennai Region, Chennai.
- 10. The PP shall carry out the scientific studies within a period of six months from the commencement of mining operations, for reducing the 'Cumulative impact of blast-induced ground/air vibrations, and fly rock due to proposed quarrying operations by adopting suitable Controlled Blasting Operations', by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM / Bangaluru 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 deviation.
- 11. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp keeping the existing benches properly aligned for the proposed quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.
- 12. 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

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CHAÍRMAN SEAC- TN involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, and NIT-Dept of Mining Engg, Surathkal, 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.

- 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 Primary School, Irukkanthurai Village as committed, before obtaining CTO from TNPCB.

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CHATRMAN SEAC- TN Agenda No: 333-14

(File No: 7589/2020)

Proposed Punganthurai Magnesite & Dunite Mine Project over an extent of 3.63.5 ha in S.F.No. 527/B1 at Punganthurai Village, Dharapuram Taluk, Tiruppur District, Tamil

Nadu by Er. A. S. Shankar Ganesan – For Terms of Reference.

(SIA/TN/MIN/53834/2018)

Earlier, this project has placed before 261st SEAC meeting held on 7.4.2022. The SEAC noted that, the mining project falls under Schedule 1 (a), Categorized as B2. The area is located in S.F.Nos. 527/B1, Punganthurai Village, Dharapuram Taluk and Tiruppur District. The entire mining lease area falls in the Patta land. The lease area is a small hillock. The general ground level of the lease area is RL.235.0m, the maximum altitude of the lease area is Rl..248.0m. The area is mentioned in GSI Topo sheet No. 58 -F/09. The Latitude between: 10°51'30.41"N to 10°51'36.03"N. The Longitude between: 77°34'30.01"E to 77°34'46.83"Eon WGS 1984 datum.

The opencast fully mechanized mining is proposed in the area for excavation of Magnesite & Dunite with 25m [1m topsoil + 24m Magnesite + Dunite (proved 111)] depth. The total area of the project = 3.63.5ha. and effective Mine area = 0.69.0ha. Average production per annum = 41,091Ts Magnesite & Dunite @ 44% recovery. Peak production per annum = 51,833Ts of Magnesite & Dunite@ 44% recovery. The mining lease for Magnesite and Dunite, both falling under the category of 'Major Mineral' category as it was then, was granted vide Proceedings Rc.No.16127/MM3/2008, Dated: 09.06.2009 for an area of 3.63.5ha for a period of 20 years. The lease deed was executed on 22.09.2009, commenced on 23.01.2010 and it is valid upto 21.09.2029. The Mining Plan (2009-10 to 2013-14) was approved by Indian Bureau of Mines vide Letter No.TN/ERD/MP/Mg-1719.MDS, Dated: 01.04.2009. The First Scheme of Mining [2014-15 to 2018-19] was prepared and got approved by IBM, Chennai vide letter no. TN/ERD/MG/MS-1109.MDS, Dated: 04.08.2014.

The proposal was placed in this 168th SEAC Meeting held on 05.08.2020. The proponent has not turned up for the appraisal meeting. Hence the SEAC decided to defer the proposal. Further, the project proponent shall furnish the reason for not attending the meeting to SEIAA.

The project proponent has furnished the reply vide letter dated 21.01.2022.

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CHAIŘMAN SEAC- TN The project proponent replied the application was submitted for EC Non-violation but the presentation was called for ToR.

Now, the proposal placed for appraisal in this 261st meeting of SEAC held on 07.04.2022. The Project proponent made a presentation. The PP insisted that his case will not come under violation category.

SEAC noted the following.

- Dunite was placed under the category of 'Major Mineral' when the proponent was granted vide Proceedings Rc.No.16127/MM3/2008, Dated: 09.06.2009. However, the MoM, Gol has declared 'Dunite' to be 'Minor Mineral' in addition to the minerals already declared by the Notification No: S.O.423(E), dated. 10.02.2015.
- 2. As per the EIA Notification No: 5.0.1533(E), dated. 14.09.2006, the requirement of clearance from Environment and Forest Department does not arise as the area applied for Mining Lease over an extent of 3.63.5 Ha only since clearance is required only when the area exceeded 5.00.0 Ha for both Major and Minor minerals.
- 3. In February 2012, in the matter of Deepak Kumar etc. vs State of Haryana & Ors, the Supreme Court ordered that "leases of minor minerals, including their renewal for an area of less than five hectares, be granted by the states or union territories only after getting environmental clearance from the MoEF". Since the mining of both Magnesite and Dunite came under the category of Major Minerals, the above Court Order was not applicable to the above mine.
- 4. In order to ensure compliance of the above referred order of the Hon'ble Supreme Court dated 27.2.2012, the MoEF OM No. L-11011/47/2011-IA.II(M), dated. 18.05.2012 recommends that all mining projects of minor minerals including their renewal, irrespective of the size of the lease would henceforth require prior environment clearance. Further it is added that the Mining projects with lease area up to less than 50 ha including projects of minor mineral with lease area less than 5 ha would be treated as category 'B' as defined in the EIA Notification, 2006 and it will be appraised by the respective SEIAAs notified by MoEF and following the procedure prescribed under EIA Notification, 2006.

Thus, the aforesaid OM also did not require that the Major Minerals with lease

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area less than 5 Ha needed Environmental Clearance.

- 6. Therefore, the question of getting the Environmental Clearance does not arise as long as 'Dunite' was classified as 'Major Minerals' until 10th February 2015, when it was classified as a 'minor mineral'.
- 7. Once 'dunite' became a minor mineral, PP should have applied for EC in terms of OM referred to in 4 above.
- 8. Further, all mining leases, either major or minor, even less than 5 hectares area, must apply and get Environment Clearance as per the amended EIA Notification dated 15.1.2016. The requirement applied to the existing mining leases as well.
- 9. Further, in terms of MoEF&CC office memorandum No. F.No.Z-11013/22/2017-IA.II(M) dated: 15.03.2018, only the proposals received up to 13th September, 2017 on the Ministry's portal, shall be considered by the SEAC / SEIAA. Further, in terms of MoEF&CC office memorandum No. F.No. 22-10/2019-IA.III dated: 09.09.2019, based on the orders on the Hon'ble High Court of Madras, another one-month window was given from 14.03.2018 to 14.03.2018 for receiving applications. It is seen from the Parivesh Portal that the PP has applied for EC only on 12/06/2020, which is beyond both the window period.
- 10. However, as per the letter No. R.C. No. 83/2020/Mines dated 10.03.2020, the PP is said to have filed online application (but not hard copy) to DEIAA on 27.10.2017.
- 11. PP should produce documentary evidence for filing his application without any defect in DEIAA if the above statement is correct.
- 12. Even if documents are produced for 8 above, the application can only be considered under violation category.

In view of the above, SEAC decided to defer the consideration of the proposal to give another opportunity to the PP to submit his responses, if any, on the above queries placed by the committee.

Based on the frequent representation by the PP, this proposal was placed in 333rd SEAC meeting held on 1.12.2022. During the meeting the PP has requested for additional time to furnish the point wise clarification asked by the SEAC. Therefore, SEAC decided to defer the proposal.

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Agenda No: 333 - 15 File No: 8717/2021)

Proposed Rough stone and Gravel quarry lease over an extent of 1.69.4 Ha inS.F.No: 140/1 (P), 140/2A(P), 140/3A(P), 141/1A(P), 141/2A(P) & 141/3A(P) Athipalayam Village, Pugalur Taluk, Karur District, Tamil Nadu by Thiru.K.Manisekaran- For Environmental Clearance. (SIA/TN/MIN/224537/2021 Dt.13.08.2021)

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 given in the website (parivesh.nic.in).

#### The SEAC noted the following:

- The project proponent, Thiru.K.Manisekaran has applied for Environmental Clearance for the proposed Rough stone and Gravel quarry lease over an extent of 1.69.4 Ha inS.F.No: 140/1 (P), 140/2A(P), 140/3A(P), 141/1A(P), 141/2A(P) & 141/3A(P) Athipalayam Village, Pugalur Taluk, Karur 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 mining plan is for the period of Five years. The total production for 5 years not to exceed 1,60,990 m<sup>3</sup> of Rough stone and 2,976 m<sup>3</sup> of Gravel. The annual peak production as per mining plan is 37030 m<sup>3</sup> of Rough stone (1<sup>st</sup> year) and 992 m<sup>3</sup> of Gravel with ultimate depth of 47m BGL (2m Gravel + 45m Roughstone) (Exiting Pit 17m)
- 4. The area has been quarrying operation earlier and EC issued vide SEIAA. Lr.No.SEIAA-TN/F.No.2353/EC/1(a)/1736/2014 dated: 13.03.2015 is valid upto 12.03.2020 for the production 53875 m³ of Rough stone and 11994 m³ of Topsoilto depth of 21m BGL for a period of 5 years.
- 5. The quantity of Rough stone mined till date 12.03.2022 is 53,875 cu.m. The Existing pit is 17m BGL.
- 6. Earlier, this proposal was placed in the 299th meeting of SEAC held on 23.07.2022. Based on the presentation made by the proponent, the SEAC called for the following details from the PP.

• The PP shall furnish the certified compliance report obtained from MoEF&CC/TNPCB on the existing EC issued.

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SI. No	Details of the Proposal		
1.	Name of the Owner / Firm	Thiru.K.Manisekaran	
		S/o.Krishnasamy	
		No.10/1, Ram Nagar	
		Gandhigramam South	
		Karur Taluk	
		Karur District-639004	
2.	Type of quarrying (savudu / Rough	Rough stone and Gravel quarry	
	stone / Sand / Granite)		
3.	S.F No. of the quarry site with area	140/1 (P), 140/2A(P), 140/3A(P), 141/1A(P),	
·	break-up	141/2A(P) & 141/3A(P)	
4.	Village in which situated	Athipalayam	
5.	Taluk in which situated	Pugalur	
6.	District in which situated	Karur	
7.	Extent of Quarry (in ha.)	1.69.4 Ha (patta land)	
8.	Period of Quarrying proposed	Five years	
9.	Type of Mining	Opencast Mechanized method of mining	
10.	Production (Quantity in m³)	1,58,750 cu.m of Rough Stone & 2,976	
		Cu.m of Gravel	
11.	Annual peak Production (Quantity in	37,030 m³ of Rough stone (1st year) and	
	m³)	992 m³of Gravel (1st year)	
12.	Latitude & Longitude of all corners of	11°01'24.65"N to 11°01'33.54"N	
	the quarry site	77°54'36.98"E to 77°54'41.32"E	
13.	Topo sheet No.	58 - E/16	
14.	Man power requirement per day:	21 Employees	
15.	Precise Area Communication	Rc.No.265/Mines/2020, Dated:	
	approved by the Deputy Director,	11.11.2020.	
	Department of G&M		
16.	Mining plan approved by the	Rc.No.265/Mines/2020,	
	Assistant Director, Geology &	Dated:19.02.2021.	
	Mining,		
17.	500mts letter approved by the	Rc.No.265/Mines/2020,	
	Assistant Director, Geology &	Dated:08.07.2020.	
	Mining,		
18.	Water requirement:	3.2 KLD	
	1. Drinking & Domestic Purpose	1.2 KLD,	
	(in KLD)	1.0 KLD	
	2. Dust Suppression (in KLD)	1.0 KLD	
1	3. Green Belt (in KLD)		
19.	Power requirement:		
	a. Domestic purpose	TNEB	
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	b. Machinery works	1,32,300 Liters of HSD for the entire period of life
20.	Depth of Mining	42m BGL (2m Gravel + 40m Rough stone)
21.	Depth of Water table	68 in summer season -63m in rainy season
22.	Project cost	Rs. 43,66,000/-
23.	EMP cost	Capital cost- Rs. 23,48,380/- Recurring cost/annum- Rs. 15,32,782/-
24.	CER cost	Rs.5 lakhs
25.	VAO letter dated	12.04.2021

Now, the PP had submitted the certified compliance report obtained from MoEF&CC vide E.P/12.1/2022-23/SEIAA/106/TN/1035 dated: 23.09.2022 on the existing EC issued. Hence, the proposal was placed for reappraisal in this 333rd meeting of SEAC held on 01.12.2022. 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 reduced quantity of 1,58,750 cu.m of Rough Stone &2,976Cu.m of Gravel restricting the ultimate depth of mining upto 42m BGL considering the safety aspects with the annual peak production capacity shall not exceed 37,030 cu.m of Rough Stone & 992 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:

- 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.
- 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 inform the notice of opening of the quarry to the Director of Mines Safety/Chennai Region before obtaining the CTO.

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- 4. The proponent shall construct the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
- 5. The 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.
- 6. The PP shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
- 7. Further, the PP shall construct the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
- 8. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.
- 9. As the habitations are located nearby, the PP shall carry out the controlled blasting using jack hammer drilled shallow holes (32-34 mm dia& 1.5 m length) only and NONEL shock tube initiation system with muffling techniques to ensure the environmentally acceptable blasting operation.
- 10. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarries.
- 11. The PP shall carry out maximum of two rounds of controlled blast only per day, restricted to the maximum of 50 to 60 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 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.

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- 12. Since few habitations are situated at a distance range of 1 km from the mine lease boundary, within one year from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of Suitable blast parameters for reducing the cumulative impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarries in the cluster 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 Chennai-Dept of Mining Engg, 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 deviation 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.
- 13. Since the quarry lies in a cluster situation, the PP shall furnish a Standard Operating Procedure for carrying out the safe method of carrying out the blasting operation to the concerned DEE/TNPCB before obtaining the CTO from the TNPCB while considering the adjacent quarries lies in a radial distance of 500 m from their quarry.
- 14. The PP shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.
- 15. The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him only as per the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
- 16. The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
- 17. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.

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- 18. The PP shall remove the abandoned shed situated within 300 m from the lease boundary for the safety reasons before obtaining the CTO from the TNPCB.
- 19. 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.
- 20. 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.
- 21. 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.
- 22. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Panchayat Union Middle School, Athipalayam village, Karur District as committed, before obtaining CTO from TNPCB.

Agenda No: 333-16 File No: 9179/2022)

Proposed Rough stone and Gravel quarry lease over an extent of 0.67.5 Ha in S.F.No: 839/IA2 of Thulaiyanur Village, Thirumayam Taluk, Pudukkottai District, Tamil Nadu by Thiru.S.Kalaiselvan- For Environmental Clearance. (SIA/TN/MIN/267648/2022 Dt.13.04.2022)

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 given in the website (parivesh.nic.in).

## The SEAC noted the following:

- The project proponent, Thiru.S. Kalaiselvan has applied for Environmental Clearance for the proposed Rough and Gravel stone quarry lease over an extent of 0.67.5 Ha in S.F.No: 839/1A2 of Thulaiyanur Village, Thirumayam Taluk, Pudukkottai 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 mining plan is for the period of Five years. The total production for 5 years not to exceed 32,600 m<sup>3</sup> of Rough stone. The annual peak production as per mining plan is 1 020 m<sup>3</sup> of

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Rough stone (1" year) with ultimate depth of 25m BGL.

4. The area has been quarrying operation earlier and EC issued vide SEIAA. Lr.No.SEIAA-TN/F.No.1690/EC/1(a)/1779/2013 dated: 27.03.2015 for the production 10237 m<sup>3</sup> of Rough stone to depth of 15m BGL for a period of 2 years. The existing pit is 12.5m BGL.

- 5. Earlier, this proposal was placed for appraisal in the 293<sup>rd</sup> meeting of SEAC held on 23.06.2022. Based on the presentation made by the proponent, the SEAC decided to call for the following details from the PP.
  - The PP shall furnish the certified compliance report obtained from MoEF&CC/TNPCB on the existing EC issued.
  - Videography evidence showing the Greenbelt development incorporating at least 500 tree plantation along the periphery of the lease and safety barrier of the quarry.
  - 3. Videography evidence showing the Complete Installation of fencing along the boundary with proper garland drainage and settling / precipitation pond.
  - 4. Revised Plan & Section indicating the revised bench configurations duly approved by the competent authority.

During the meeting the PP has requested for additional time to produce the said details. Therefore SEAC decided to defer the proposal.

Agenda No: 333 - 17 (File No: 8838/2021)

Proposed Gravel quarry lease area over an extent of 0.56.50 Ha at S.F. No. 522/2 Karungal Village, Killioor Taluk, Kanniyakumari District, Tamil Nadu by Thiru K. Siva - For Environmental Clearance. (SIA/TN/MIN/233607/2021 Dt.12.10.2021)

The proposal was placed in 333<sup>rd</sup> SEAC Meeting held on 01.12.2022. 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 K. Siva has applied for Environmental Clearance for the proposed Gravel quarry lease area over an extent of 0.56.50Ha at S.F. No. 522/2 Karungal Village, Killioor Taluk, Kanniyakumari District, Tamik Nadu

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- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan, lease period is for 1 year. The production as per mining plan not to exceed 25.656 m³ of gravel with ultimate depth of 9m (7m AGL + 2m BGL).
- 4. Earlier this proposal was placed in 272<sup>nd</sup> SEAC meeting held on 13.05.2022. Based on the presentation and documents furnished by the project proponent. SEAC decided to recommend the proposal for the grant of Environmental Clearance. Subsequently it was placed in 517<sup>th</sup> SEIAA Meeting held on 06.06.2022 and decided to refer back the proposal to SEAC for obtaining the following additional particulars from the project proponent.
  - i. Vast area of green patch seen in and around the mine lease area. Furnish the details of vegetation.
  - ii. Biodiversity study in the vicinity shall be carried out and to submit the report.
  - iii. A test on soil analysis from a competent authority.
- 5. Subsequently, the proposal was again placed in 296th SEAC meeting held on 16.07.2022 for appraisal. The project proponent, during presentation furnished details sought by SEIAA. During the representation SEAC observed that some of the structures are shown in the Videograph, hence SEAC decided to call for the following details.
  - 1. The PP shall enumerate all the structures located within 500m radius from the proposed site, with details such as nature of structure, use, occupation, etc.
- 6. Based on the reply furnished by the proponent, the proposal was again placed in the 316th SEAC meeting held on 30.09.2022. Based on the presentation made by the proponent, SEAC noted that the enumeration has not been done and therefore decided to direct the PP to undertake a detailed enumeration of all structures within 500 m of the proposed site and submit the report.

On receipt of the aforesaid details, the subject will be taken up for further deliberations.

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Based on the reply furnished by the proponent, the proposal was again placed in the 333<sup>rd</sup> SEAC meeting held on 01.12.2022. Based on the presentation made by the proponent,

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SEAC had noted the following during the presentation made by the PP:

- 1. SEAC noted that there are many structures as below.
  - 3 Houses within 50m radius.
  - In 50 100m radius 5 Houses, 3 Tank, 1 Open Well, 1 Shed and 1 Temple.
  - In 100 150m Radius 1 House, 1 Shed and 1 Vivekananda Hall.
  - In 150 200m Radius 7 Houses and 1 Odai.
  - In 200 300m Radius 26 Houses, 2 Tank, 2 Tiled Roof House.
- 2. The proposed quarry site is important or sensitive for ecological reasons wet lands, water sources or other water bodies, coastal zone, biospheres, mountains, flora & fauna, etc.
- 3. There are considerable number of structures located nearby may be disturbed due to the proposed quarrying activities in terms of dust, noise and water pollutions.
- 4. Further, the Reg. 109 of Metalliferrous Mines Regulations 1961 (MMR 1961) states that

"..... Workings under railways and roads, etc. – (1) No workings shall be made and no work of extraction or reduction of pillars shall be conducted at, or extended to, any point within 45 metres of any railway, or of any public works in respect of which this regulation is applicable by reason of any general or special order of the Central Government, or of any public road or building, or of other permanent structure not belonging to the owner of the mine, without the prior permission in writing of the Chief Inspector and subject to such conditions as he may specify therein......"

From the presentation made and documents submitted by the PP, the SEAC after having the detailed discussions and in view of the additional information now made available, decided to reverse its earlier decision and not to recommend the proposal for Environmental Clearance.

Agenda No: 333 - TA-1 (File No: 9297/2022)

Proposed Sand quarry over an extent of 4.98.0 Ha in Agniyaru & Nariyur river located at S.F.Nos-1/4 (P), Echanviduthui Village, Karambakudi Taluk, Pudukkotlai District Tamil

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Nadu by the Executive Engineer, PWD/WRD- Amendment for Environmental Clearance. (\$!A/TN/MIN/293932/2022, dt:12.11.2022)

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 given in the website (parivesh.nic.in).

#### The SEAC noted the following:

1. The project proponent, The Executive Engineer, PWD/WRD has obtained Environmental Clearance vide Lr.No. SEIAA-TN/F.No.9297/EC No.5256/2022, dt: 30.08.2022 for the proposed sand quarry over an extent of 4.98.0Ha in Agniyaru & Nariyur River located at S.F.Nos.1/4 (P), Echanviduthui Village, Karambakudi Taluk, Pudukkottai District for the period of One year & mining quantity should not exceed 100801 cu.m. of sand. The ultimate depth 1 metres below bed level and the latitude and longitude coordinates of all corners of the proposed sand quarry site as follows

Pillar No.	Latitude		Longitud	
1	N 10°03'	17.8185"	E 79°11'5	4.8318"
2	N 10°03"	19.0725"	E 79°11'5	
3	N 10°03'	23.2864"	E 79°11'5	9.1525"
4	N 10°03'2	26.8263"	E 79°12'0	8.9260"
5	N 10°03'2	25.6975"	E 79°12'0	9.4009"
6	N 10°03'2	23.2351"	E 79°12'C	1.8241"
7	N 10°03'1	7.8998"	E 79°11'5	7.0992"
8	N 10°03'1	7.1691"	E 79°11'5	5.1273"

- 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. Now, the project Proponent, Executive Engineer, PWD/WRD, has applied Amendment for Environmental Clearance for the proposed Sand quarry over an extent of 4.98.0 Ha in Agniyaru & Nariyur River located at S.F.Nos. 1/4 (P), Echanviduthui Village, Karambakudi Taluk, Pudukkottai District Tamil Nadu.
- 4. The project proponent vide covering Lr. DB/DO.1/F.23 /330-M/ Dt: 18.10.2022 has requested for Amendment of the latitude and longitude coordinates of all corners of the proposed sand quarry site as per mining plan submitted as follows instead of already inadvertently issued vide EC. Lr.No. SEIAA-TN/F.No.9297/EC No.5256/2022, dt: 30.08.2022.

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1	10°24'14.5900"	79° 08'47.1199"
2	10°24'18.1557"	79° 08'49.5016"
3	10°2 <u>4'17</u> .3585"	79°08'50.9136"
4	10°24'15.5682"	79° 08'49.8465"
5	10°24'12.7487"	79° 08'51.6474"
6	10°24'06.0601"	79° 08'59.4329"
7	10°24'12.4911"	79°08'01.4906"
8	10°24'11.5051"	79°08'04.4051"
9	10°24'03.3071"	79°08'01.5918"
10	10°24'07.8500"	79°08'54.8826"

Based on the presentation made and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Amendment for Environmental Clearance issued vide EC. Lr.No. SEIAA-TN/F.No.9297/EC No.5256/2022, dt: 30.08.2022 for the following latitude and longitude coordinates of all corners of the proposed sand quarry site as per mining plan submitted and subject to all the conditions stipulated vide EC Lr.No. SEIAA-TN/F.No.9297/EC No.5256/2022, dt: 30.08.2022 remains unchanged & unaltered.

Agenda No: 333- TA2 (File No: 9553/2022)

Proposed Sand quarry over an extent of 4.90.0 Ha located at S.F.No: 333 (Part), Echambadi Village, Pallipattu Taluk, Tiruvallur District, Tamil Nadu by the Executive Engineer, PWD/WRD— For Environmental Clearance. (SIA/TN/MIN/ 405373/2022 Dt. 24.11.2022)

Earlier, this proposal was placed for appraisal in this 332<sup>nd</sup> SEAC Meeting held on 25.11.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

### The SEAC noted the following:

- The Proponent, The Executive Engineer, PWD/WRD, has applied for Environmental Clearance proposed Sand quarry over an extent of 4.90.0 Ha located at S.F.No: 333 (Part), Echambadi Village, Pallipattu Taluk, Tiruvallur District, Tamil Nadu.
- 2. The project/activity is covered under category "B2" of Item 1(a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.

3. As per mining plan, the lease period is 1 year and the mining plan for the period

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1 year & mining quantity should not exceed 71050 m³ of sand. The ultimate depth 1m (0.45 Above Bed Level + 1m Below Bed Level) for a period of one year. Based on presentation & documents furnished by the PP, SEAC decided to carry out onsite inspection by the Sub Committee constituted by SEAC to assess the present Environmental Condition. Further, the PP shall furnish the following details during the site inspection.

- 1. The Project Proponent shall study and report in detail on the "Replenishment Study" as per Sustainable Sand Mining Management Guidelines, 2016 and Enforcement & Monitoring Guidelines for Sand Mining 2020".
- 2. Pillar stone shall be erected before the site inspection.
- 3. Details of existing mining activities carried out in 1 Km either upstream & downstream direction.

On receipt of the Sub Committee report further deliberation will be done.

The Sub Committee report has placed in 333rd SEAC meeting held on 1.12.2022 and the same is as follows.

#### 1.0 Sub Committee:

The State Expert Appraisal Committee (SEAC) TamilNadu constituted a subcommittee vide its Lr.No.SEAC/TN/Site Inspection/2022, dt.25.11.2022 to inspect and study the field condition for the proposal seeking EC for a sand quarry proposed at Echambadi Village in SF No. 333(P) Pallipattu Taluk, Tiruvallur District. The Committee comprises of Thiru D.Velazhagan, member SEAC.

As per the above letter the sub-committee visited the site on 26.11.2022. The observations made in the field and recommendation derived on the basis of the field visit are as below:

#### 1.1 Proponent team:

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

- 1. Er. G.R. Suganthi EE/Mining & Monitoring Division/Chennai
- 2. Er. P.Sampath, AEE/Mining & Monitoring Sub division/Tiruvallur
- 3. Er. R.Devaraj, AE/ Mining & Monitoring sec-l/Tiruvallur

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#### 2.0 Echambadi Sand Quarry:

	Sessiption :	Petalls.
1	Proposal number	SIA/TN/MIN/405373/2022,
		DT.25.11.2022
2	File number	9553/2022
3	Proponent	Executive Engineer, WRD., Mining and
		Monitoring Division, Chennai
4	Major Project Activity	1 a. Mining of minerals
5	Category	B2
6	Project Type	Fresh EC
7	River	Kosasthalaiyar
8	Location	SF. No. 333(P) of Echambadi Village
9	Area	4.90 Ha
10	Quantity& Duration	71,050 m³ / 1 year
11	Depth	1.45m (1m below bed level+0.45 m above
		bed level)
12	Method & Mining	Open cast - Machinery Excavation
	Location of the prop	posed area latitude and longitude
<del></del>	N13° 19' 10.6476"	E79° 27' 22.4145"
<del> </del>	N13° 19' 13.6165"	E79° 27' 38.4121"
	N13° 19' 10.4192"	E79° 27' 39.0308"
 	N13° 19' 07.4504''	E79° 27' 23.0332"

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#### 3.0 Observations:

- Proposed sand quarry is located on the northern side of the Echambadi
   Village in SF. No.333(P) in the river bed of Kosasthalaiyar. It is close to the right bank of Kosasthalaiyar river.
- The dimension of the proposed sand quarry is 490m in length and 100m in width.
- SH 106 (Mottuer- Podaturpet) is located about 1.4km on Southern side of applied area.

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- One number of infiltration wells is located @18766 m downstream of Proposed quarry site
- Bay of Bengal Sea lies 95 km East of proposed sand quarry site.
- The sand at the proposed site is replenished well and sand is deposited above the bed level (Theoretical bed level is +147.10m).
- It was informed by the WRD officials that a temporary road with biodegradable material will be formed along the banks of river to transport the sand to the yard.
- The Echambadi sand quarry site is proposed on Left side (deposition side) bed of Kosasthalaiyar river. It helps to regulate the flood water to flow freely to avoid further meandering on Right side (erosion side).

#### 4.0 Recommendations:

 The following recommendations of the Enforcement & Monitoring Guidelines for Sand Mining, 2020 of the MoEFCC, Government of India (Annexure VIII Salient provision for sand mining in the state of Tamil Nadu) can be implemented.

"To monitor the groundwater level during sand quarrying operations, a network of existing wells may be established around the sand quarrying area and new piezometers must be installed at all sand quarry sites. Monitoring of Ground Water Quality in the vicinity (one Km radius from the sand quarrying site) shall be carried out once in two months".

- In this endeavor, Groundwater Wing of the Water Resources Department of the PWD may be engaged.
- As per Rule 36 of the Tamil Nadu Minor Mineral Concession Rules 1956, no sand quarry should be allowed with in 500m radial distance from the location of any bridge, water supply system, infiltration well or pumping installation.
- In as much as within 500 m on either side no such structures or installation are available, the mining of sand at the proposed sand quarry in SF No.333 (P) of Echambadi village, Pallipattu Taluk, Tiruvallur District as per the mining plan is recommended for Environmental Clearance.

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CHAIRMAN SEAC- TN Based on the Inspection report, presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for 71,050 m<sup>3</sup> of Sand for period of 1 Year, subject to the following specific conditions, in addition to normal conditions stipulated by MOEF &CC:

- 1. The proponent shall fix flag posts at boundaries for the proposed mining area covering an extent of 4.90.0 Ha. There should be no deviation/ violation with respect to the area demarcated for quarrying.
- 2. The depth of sand quarrying shall be 1.45m (Im below bed level+0.45 m above bed level).
- 3. A study shall be carried out on sustainable sand mining in regard to how sustainable is the proposed sand mining along with continuous collection of replenishment data for all the seasons of every year as per Enforcement & Monitoring Guidelines for Sand Mining, 2020 considering impact of sand mining on replishment of sand and impact of sand mining on ground water table/infilteration wells around the proposed mining lease area by the reputed academic institutions like Anna University, Chennai and IIT, Madras.
- 4. The project proponent shall monitor the groundwater level during sand quarrying operations, a network of existing wells may be established around the sand quarrying area and new piezometers must be installed at all sand quarry sites. Monitoring of Ground Water Quality in the vicinity (one Km radius from the sand quarrying site) shall be carried out once in two months by engaging Groundwater Wing of the Water Resources Department.
- 5. To prevent dust pollution, suitable working methodology needs to be adopted taking wind direction into consideration.
- 6. At no cost the impact of sand mining should interfere with the habitation and cultivation in the nearby area along the river bed.
- 7. The mining area must be demarcated leaving at least 50m from the river embankment on either side.
- 8. Contouring of the river bed has to be taken to ascertain the relative levels of sand in the river and also to suggest the depth of sand mining.

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

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CHAIRMAN SEAC-PN Agenda No: 333-TA-3 (File No: 6230/2022)

Proposed Limestone Mine Lease over an extent of 4.67.0 Ha at S.F.No S.F. Nos. 6/4, 8/3, 8/4A, 8/4B, 8/5A, 8/5B, 8/5C, 8/5E, 8/6A, 8/6B, 8/6C, 8/7 & 8/8 Karuppursenapathy Village, Ariyalur Taluk & District, Tamil Nadu by Thiru. S.Saravanan — For Environmental Clearance (SIA/TN/MIN/78958/2018 dated 24.6.2022)- under violation category.

Earlier, this proposal was placed in 323rd meeting of SEAC held on 20.10.2022. The details of the project are available in the website (parivesh.nic.in).

#### The SEAC noted the following:

- 1. The project proponent, Thiru. S.Saravanan has applied for Environmental Clearance for the proposed Limestone Mine Lease over an extent of 4.67.0 Ha at S.F.No S.F. Nos. 6/4, 8/3, 8/4A, 8/4B, 8/5A, 8/5B, 8/5C, 8/5E, 8/6A, 8/6B, 8/6C, 8/7 & 8/8 Karuppursenapathy Village, Ariyalur Taluk & District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. TOR issued under violation category vide SEIAA-TN/F.No.6230/TOR-535/2018 dated 30.07.2018.
- 4. Public hearing conducted on 17.05.2022.
- 5. ML GO 14720/MM1/04 dated 21.12.2005 for 20 Years (07.02.2006 to 06.02.2026)
- 6. ML Validity as per MMDR Amendment Act from 07.02.2006 to 06.02.2056
- 7. Review of Mining Plan & Progressive Mine Closure Plan Approval vide IBM, Chennai Letter No. TN/ALR/LST/ROMP-1599.MDS dated 21/22.09.2020 (ROMP Period 2021-22 to 2025-26)

## Basic Features of Quarry mined out during Violation and Under Proposal

1.	Type of quarrying	Limestone Quarry
2.	Extent of Quarry (in ha.)	4.67.0 ha
3.	Validity of Mining Plan Period of Quarrying proposed	upto 06.02.2056
4.	Review of Mining Plan/Scheme for the period	2021-2022 to 2025-2026
5.	Violation Period	15.01.2016 to 31.07.2016
6.	Type of Mining	Opencast Method - fully mechanized

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1		As per mining plan, the lease period is
		20 years (07.02.2006 to 06.02.2026).
		However, the mining plan is valid for
		the period of 50 years under the recent
		MMDR Amendment Act 2017.
		According to the Mining Plan, the mine
		was operated in producing 2,75,701
		tonnes of ROM against the Mineable
7.	Production (Quantity in tonnes)	reserves quantity of 6,47,392 tonnes of
	Details	ROM (Production achievement of
		42.59%) as on date. As per the Review
1		of Mining Plan, the proposed
1	) 	production should not exceed the
		annual peak production capacity of
		47.013 tonnes of Limestone with 1196
		tonnes of Kankar with an ultimate
		depth of mining 18 m below ground
ļ	 	level.
:		Mineral/OB Bench Bench Bench
	· · ·	Height Width Slope Limestone 4 m 6 m 600
		Kankar 1 m 2 m 450
		Stripping ratio: 1:0
8.	Status on Quarrying Operations	No Drilling & Blasting; Only Rock
		Breakers/Rippers will be used for rock breakage.
İ		
		Conventional Equipment system with Excavators (Back hoe/FEL) & trucks.
		No Overburden dumps.
9.	Statutory Man power	20 Employees
10.	Fencing installation	Fixed as per the DGMS requirements.
11.	Provision of Garland drainage	Provided.
12.	Green belt development	Moderately developed.
13.	Depth of Mining	Present depth: 13 m bgl
	Depth of winning	Ultimate depth: 18 m bgi
14.	Depth of Ground Water table	35m depth below ground level.
15.	Whether any habitation within	There are no approved habitations
10	300m distance	within the radius of 300m.
16.	Nearest village	1.5 km
17. 18.	Nearest Waterbodies	Riever: 2.6 km; Odai: 1.0 km.
10.	Nearest Highways/roads	National highway: 750 m
19.	EMP cost	Capital cost - 5,00,000/-
	ot	Recurring cost - 15,32,000/
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CHAIRMAN SEACLEN Based on the aforesaid presentation and documents on Ecological Damage cost & Augmentation Plans furnished by the project proponent, after detailed deliberations, SEAC decided to make on site inspection by the sub-committee to be constituted by SEAC for assessing the ecological damage and to suggest the cost of remedial measures to be imposed as per the MoEF & CC Notification – S.O.804(E), dated. 14.03.2017. On the receipt of the same further deliberations will carried out.

2. Chronology

SI. No	Sequence of events	Date
1	Date of TOR Application with Online Proposal No. SIA/TN/MIN/24097/2018 (within Window Period) – Considered under Violation Category	11.04.2018
2	TOR Meeting - 114th SEAC Meeting	20.06.2018
3	Awarded TOR: SEIAA-TN/F.No.6230/TOR-535/2018	30.07.2018
4	Public Hearing Conducted	17.05.2022
5	EC Application vide Online Proposal No. SIA/TN/MIN/78958/2018	24.06.2022
6	Deliberation in 323 <sup>rd</sup> SEAC Meeting	20.10.2022
7	Recommended for Site Visit by Sub Committee	20.10.2022

#### 3. Salient Features of the Project

Particulars	Details				
Name of Project	Karuppur Senapathy Limestone Mining Lease (4.67.0 Ha)				
Project Proponent	Mr.S.Saravanan, Director-Dhandapani Cement Pvt. Ltd.				
Location of mine	SF Nos. 6/4, 8/3, 4A, 4B, 5A, 5B, 5C, 5E, 6A, 6B, 6C, 7 & 8 of Karuppur Senapathy Village, Ariyalur Taluk & District of Tamil Nadu				
Category of Project	B1				
Proposed Production Capacity	47,013 Tonnes per Annum @ 260 TPD (2024-25)				
Mine Lease Area	4.670 Ha				
Balance Life of Mine	10 years				
Total Working Day/Year	300 days				
Total Number of workers employed	6				
Total Water Requirement &	5 KLD & Source – Mine Pit Seepage water				
Source	,				
Latitude & Longitude	11°03'20.80"- 11°03'30.00" N Latitude &				
	79°04'37.00"-79°04'48.30" E Longitude				
Topo-Speet number	58 M/4				

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Particulars	Details
Eco Sensitivity	
	Karaivetti Bird Sanctuary, Notified Eco Sensitive Area
	(ESA) vide S.O. 1909(E) dated 31.05.2019, is located
	at a distance of 7.8 km in SSW direction from the
1	Lease. There are no other Eco Sensitive Areas like
	National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife Corridors Ramor Sites
·	Tiger/Elephant Reserves, Reserved Forests, etc.
	(existing as well as proposed) within 10 km from the Lease.
Type of Land	Own Patta land
Method of Mining	<b></b>
	Non - Conventional Opencast Method of Mining
Bench parameters	without Drilling & Blasting using Rock Breakers  Bench Height : 4 m
, and a second	Daniel Lance for
	Panch Clans
	horizontal) : 60° (from
	( norizontal)
Depth of Mining	Pit Limit-Existing : 13 m (BGL): Top RI 80 m 6
	Pit Limit-Existing : 13 m (BGL): Top RL 80 m & Bottom RL 67 m
	Ultimate Pit Limit-Conceptual: 18 m (BGL); Top RL 80 m & Bottom RL 62 m
	C maximus 3VI as a sea to
	(Postmonsoon) & 38 m (Premonsoon)
· · · · · · · · · · · · · · · · · · ·	Mining will not intersect the ground water-table.
Dimension of the Pit	18 m (BGL): Top RL 80 m & Bottorn RL 62 m
-Ultimate	W (0 02). TOP ICE OF IT & BOTTOTT RE 62 M
Nearest railway station	Ariyalur at 10.0 km in NNW direction
Nearest Highway	NH-136 runs at a distance of 0.75 km west and NH-
	81 at 0.75 km in south.
Nearest air port	Trich Airport at 50 km in southwest
Seismic zone	Zone-III
Cost of the project	Rs.25.00 Lakhs

# 4. Mining Lease Details

SI.	ML Grant Reference	ML Grant Reference Date Extens		Validity		
140.	<u>                                     </u>	. Ha	Years	From-To	Remarks	
-	Director of Geology & Mining, Chennai Proceeding Rc. No. 14720/ MM1/04	21.12.2005	4.670	20	07.02.2006 to 06.02.2026	-
2	MMDR (Amend) Act, 2015	-			06.02.2056	50 years

## 5. Mining Plan Details

SI. No. Mining Plan/Scheme	Plan Period	Approval vide IBM Letter
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1	First Mining Plan & Progressive Mine Closure Plan	2005-06 to 2009-10	TN/PBR/MP/LST-1626- MDS dated 14.12.2005
2	First Scheme of Mining & PMCP	2011-12 to 2015-16	TN/ALR/LST/MS- 1228.MDS dated 08.05.2015
3	Second Scheme of Mining	2016-17 to 2020-21	TN/ALR/LST/MS1330. MDS dated 02.03.2016
4	Review of Mining Plan (ROMP) & Progressive Mine	2021-22 to 2025-26	TN/ALR/LST/ROMP- 1599.MDS dt. 21/22.09.2020
	Closure Plan	# <b>†</b> 3	

#### 6. Details of Mining

SI. No.	Particulars	Details			
1	Method of mining	Non- Conventional Opencast Method of Mining using Rock breakers without adopting the Drilling & Blasting operations			
2	Geological reserve	9,19,813 Tonnes			
3	Mineable reserve available	3,71,691 Tonnes			
4	Proposed production	47,013 Tonnes/Annum (2024-25)			
5	Elevation range of the mine site	60-70 m aMSL			
- 6	Bench height	4 m			
7	Bench width	6 m			
8	Bench slope	60°			
9	Proposed Depth of mining	18 m BGL			
10	Life of mine	10 years			

#### 7. Past Production Details

Mine has been commissioned in March 2006. The Mine is now in Temporary Discontinuance from 20.02.2017 for want of EC. Assessed Total Mineable Reserves from this Mine is 6,47,392 Tonnes. ROM production from this Mine so far was 2,75,701 Tonnes (42.59%). Dispatched quantity is 2,75,553.74 Tonnes and balance 147.26 Tonnes is in the Pit. The maximum quantity mined out was 47,360 Tonnes per Annum during 2015-16. The Planned and Actual Development & Production Quantities are given below:

## Past Production Table (as per Proceedings)

Period	Top Soil,	Over Burden,	ROM Pro	-	Despatched Quantity,	Balance Quantity,
	Tons	cu.m	Planned	Actual	Tonnes	Tonnes
2005-06	16,660	0	2700	1420	1206.75	213.25
2006-07	0	0	2700	42180	42194.04	199.21
2007-08	0	0	2700	26850	26808.48	240.73
2008-08	0	0	2700	27180	27245.68	∕175.05

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Period	Top Soil,	Over Burden,	ı	oduction,	Despatched Quantity,	Balance Quantify
	Tons	CU.M	Piarined	Actual	Tonnes	Tonnes
2009-10	0	0	2700	23450	23464.84	160.21
2010-11	0	0	2700	9460	9456.34	163.87
2011-12	0	0	44100	35280	35274.55	169.32
2012-13	0	0	5489	4391	4376.06	184.26
2013-14	! 0	0	46825	37460	37478.65	165.61
2014-15	0	0	6100	4880	4892.41	153.2
2015-16	0	0	70346	47360	47391.61	
2016-17*	0	0	80371	15790	15764.33	121.59
2017-18	0	0	80662	0	0	147.26
2018-19	0	O	80371	0	1 0	147.26
2019-20	0	0	82347	0	<del>                                     </del>	147.26
2020-21	0	0	77958	0	0	147.26
2021-22	<u> </u>	<del></del>	1 11770	<del> </del>	0	147.26
Total	16,660		5.00.760	0	0	147.26
- I Oldi	T10'000'T	0	5,90,769	2,75,701	2,75,553.74	147.26

A total of 26,520 Tonnes Limestone was produced during Violation Period of 6.5 months:

Month	ROM Production, Tonnes
15-31.01.2016	1450
Feb. 2016	4970
Mar. 2016	4310
Apr. 2017	5190
May 2017	3890
Jun. 2017	5530
Jul. 2017	1180
Total	26,520

## 11. Violation Category

The PP has operated Karuppur Senapathy Limestone Mine after 15.01.2016 till 31.07.2016 and produced 26.520 Tonnes of Limestone. Operating the Lease after 15.01.2016 without EC is the Violation. Violation Period is 6.5 months. Lease is not in operation since 20.02.2017.

SI, No.	Statute Requirement	Yes/ No	Violation Status	Remarks
1	Valid EC	х	Operating the Lease after 15.01.2016 for a Production of 26.520 Tonnes Limestone leads to Violation. Applied for EC on 07.04.2018.	required for this
2	Valid CTO	X	No CTOs were obtained	Violation
3 (	Valid Mining Plans/Schemes	V	IBM has accorded the periodic Approvals for	There is No Violation in this regard.

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Si. No	Statute Requirement	Ves./ No	Violation Status	Remarks
:			Mining Plans/Schemes of the Mine.	
4	Forest Clearance	-	No Forest Land involved.	Not Applicable
5	Transport Permits	√	PP has obtained the required Transport Permits.	There is No Violation in this regard.
6	Any other Violation		Nil	Nil

#### 12. Land Use Pattern

As per the Review of Mining Plan approved, at Conceptual Stage, out of 4.670 Ha Mine Area, 3.550 Ha will be the mine pit which will be left as Water Reservoir for harvesting the Rain Water. About 0.010 Ha will be for Office & Infrastructures, 0.030 Ha will be under Roads. About 0.270 Ha (5.8% coverage) will be covered under Green Belt.

SI.		Land Use, Ha			
No.	Particulars	Existing	End of ROMP Period	Conceptual Stage	
1	Area under Mining	3.55.0	3.55.0	3.55.0	
2	Waste dumps	-	-		
3	Office & infrastructures	-	0.01.0	0.01.0	
4	Processing plant	. =	•	-	
- 5	Mineral stack processing yard	-	-	-	
6	Sub grade mineral stacks	-	-	-	
7	Mine roads	0.03.0	0.03.0	0.03.0	
8	Areas under plantation	0.12.0	0.27.0	0.27.0	
9	Unutilized area : Safety Zone, etc.	0.97.0	0.81.0	0.81.0	
	Total	4.670	4.670	4.670	

#### 13. Ecological Damage Assessment

During the Violation Period from 15.01.2016 to 31.07.2016, the Lessee has operated the Mining Lease for a Production of 26,520 Tonnes of Limestone. During the Period of 6.5 months, the impacts on the Environmental Components viz. Air, Water, Land, Biological and Socio-economics Environment are assessed as below:

SI. No.	Environmental Component	Mine Activity	Impact on the Environment	Damage	Damage Cost
1	Land Use	Production of 26,520 Tonnes Limestone over an extent of 3.55 Ha by Opencast Mechanized Non-	Mining was carried out in already excavated Pit. No Drilling & Blasting. No Ground Vibration. No Waste Dumps. No loss of vegetation.	Land Use/ Land Cover	No damage cost

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SI. No.	Environmental Component	Mine Activity	impact on the Environment	Damage	Damage Cost
<del></del>	7 - 18 <sub>12</sub> -	conventional method			
2	Air Quality & Ecology	Production for 175 Mine Working Days on 1-Shift was	(Cumulative)	damage. Ambient air	
•		160 Tonnes.	the NAAQ Norms and adequate Buffer was there. Good Quality Index was	damage is part of indirect damages	Rs.2,21,035
			prevailing in the ML vicinity.	biological environment as well as to	
3	Noise &		! !	public health.	
	Vibration	Blasting and thus, no vibration.	Mine workers were provided with ear plugs and ear muffs.	No Damage due to the Activity	
4	Dewatering for Consumption	No Surface or Ground Water drawl for Mine	Rain Water collected and Mine Seepage water accumulated in	٠-٠٠	
		water demand. No Ground Water-table Intersection	the Mine Pit was utilised @ 5 KLD	Rs.15 per KLD. Mine utilized 5 KLD for 175	Rs.13,125/-
5	Wastewaters	No Effluent and no mine Pit Discharge	Domestic sewage generation is 0.9 KLD and is biologically treated in a Septic Tank followed by a Dispersion Trench.	days  No Damage due to the Activity	No damage cost
6	Solid Wastes	No Top Soil or OB Generation	No Backfilling and Reclamation	No Damage due to the Activity	No damage
7	Socio-economics	20 persons and indirect	As per MoEF&CC Norms, 3% of total economic benefit derived to be contributed.	Economic Benefit due to the Production was Rs.1,21.69,560	Rs.3,65,087
8	Occupational Health and Risk	Mining and allied activities	Occupational health & Safety Standards were adopted	No Damage due to the Activity	No damage cost
9	Public Health	Mining and	Periodical Medical Camps	Covered in CSR	No damage cost
	Rs.5,99,247/-				

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CHAIRMAN SEAC- TN The total Ecological/Environmental Damage Cost is Rs.5,99,247/-, say Rs.6.00 Lakhs. An amount of Rs.6.00 Lakhs toward Remediation Plan and Natural & Community Resource Augmentation Plans is allotted for approval.

# 14. Environment Remediation Plan, Cost and Time Schedule (as Proposed)

SI. No.	Environmental Component	Remediation Plan / Activity Description		tary Pro Rs. Lakh	Total,	
70.	Component	Activity Description	.1	. 11	111	Rs. Lakhs
1	Air Quality & Ecology	Additional Green Belt by Planting 300 Trees in Mine Area @ Rs.400 per Tree including its maintenance-100 Trees every year	0.40	0.40	0.40	1.20
2	Water Environment	Channelization & Utilisation of Surface Runoffs through Garland Drains towards water demand	0.10	0.10	0.10	0.30
3	Socio- economics & Public Health	Community/Public Buildings Maintenance and Conducting Medical Camps	0.30	0.30	0.30	0.90
	Total		0.80	0.80	0.80	2.40

# 15. Natural and Community Resource Augmentation Plan (Proposed)

#### Natural Resource Augmentation Plan

SI. No.	Activity Proposed		tary Pro Rs. Lakh	Total,	
			11	151	Rs. Lakhs
1	Providing Solar Street Lights to nearby Villages @ Rs.20,000/- per Light, 1 per village, 3 villages	0.20	0.20	0.20	0.60
	Total	0.20	0.20	0.20	0.60

### Community Resource Augmentation Plan

SI. No.					Total,
			n	111	Rs. Lakhs
!	Providing Furnitures to Kilapaluvur School	0.50	0.50	0.50	1.50
2	Providing Medical Equipments to Govt. Sub- Primary Health Centre, Kilapaluvur	0.50	0.50	0.50	1.50

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Total		1 00	1.00	7 /5 -	
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# 16. CER Budget-Proposed

Project Cost is Rs.25.00 Lakhs. About Rs.3.00 Lakhs has to be allotted as Corporate Environmental Responsibility (CER) Budget in compliance with MoEF&CC OM dated 01.05.2018 for execution within 2 years period. As directed by the Committee. PP has identified 2 Schools viz. Govt. High School at Maramadakki Village and Govt. High School at Poovaimanagar village in Puthukottai District and agreed to construct 2 Toilets for Girls and Roof for Boys Toilet as per their request letters dated 23.11.2022 (appended) and allotted Rs.5.00 Lakhs for the same.

# 17. Summary of Budget Allocation proposed for Remediation, Natural Resource Augmentation & Community Resource Augmentation plan (Proposed)

Sì. No.	Activity Proposed		Budgetary Provision, Rs. Lakhs		
140.		1	- 11	111	Rs. Lakhs
1	Cost of Damage Remediation Plan	0.80	0.80	0.80	2.40
2	Natural Resource Augmentation Plan	0.20	0.20	0.20	0.60
3	Community Resource Augmentation Plan	1.00	1.00	1.00	3.00
	Total	2.00	2.00	2.00	6.00

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

- 1. The Limestone Mining Lease of Mr.S. Saravanan over an extent of 4.670 Ha is located in Karuppur Senapathy village near Kilapaluvur.
- 2. As submitted and verified, the Lease is granted by the Director of Geology & Mining, Chennai vide Proceeding Rc. No. 14720/ MM1/04 dated 21.12.2005 for 20 years with validity from 07.02.2006 to 06.02.2026. As per Amended MMDR Act 2015, validity of the Lease is upto 06.02.2056.
- 3. A copy of the present ROMP approved by IBM vide Letter TN/ALR/LST/ROMP-1599 MDS dt. 21/22.09.2020 is provided for verification of the facts.
- 4. No consent from TNPCB was obtained for the Mine.
- 5. The Lease is accessible from National Highway-136 which runs at a distance of 0.75 km from the Lease.
- 6. No habitation is located within 300 m from the Lease.
- 7. There are few limestone Mines belong to Chettinad Cement and Vijay Cement located in the vicinity along with Chettinad Cement Plant at Kilapaluvur.
- 8. The Lease is fenced with barbed wire in all sides and boundary piliars marked are noticed with geo Coordinates.

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- 9. Mine is not in operation and about half volume of the Mine Pit is covered with rain water and benches submerged.
- 10. As reported, the mine is not in operation since Feb. 2017.
- 11. At present, there is no Mine Office, Rest Shelter, First Aid facility, Tyre/Wheel Cleaning facility, etc. exists in the Lease and it will be made available before commencement of mining operation as reported by the PP.
- 12. Garland drains were developed around the Pit are covered with soil.
- 13. No Top Soil or Over Burden dump is noticed in the Lease.
- 14. Developed Green belt is noticed in patches around the Pit. However, PP has now planted new saplings along the peripheries of the Lease.
- 15. The Project has a Qualified First Class Mines Manager, Second Class Mines Manager, Mine Mate and Geologist who were present for discussions during the Inspection.
- 16. As informed, environmentally friendly Mining activity, through Non-conventional method without adopting the Drilling & Blasting operations, were carried out in the Lease during the Violation Period upto a depth of 13 m BGL and no ground water-table was encountered.
- 17. Mineral transportation route exists to reach NH-81 and further to the Cement Plant located at Mannachanallur.
- 18. The PP had already paid the penalty amount as indicated by the competent authority for the mining of mineral during the violation period.

#### 19. Status of Mining Operation

The Mining activities were stopped from 01.08.2016 and there was no production from this Mine since then. The Regional Controller of Mines, Indian Bureau of Mines (IBM), Chennai has accorded its Approval periodically for Mining Plans/Schemes. For present Review of Mining Plan (ROMP) for the Period 2021-22 to 2025-26 has been given approval vide Letter No. TN/ALR/LST/ROMP-1599.MDS dated 21/22.09.2020. Consents to Operate from Tamil Nadu Pollution Control Board (TNPCB) are to be obtained.

### 20. Present Condition of the Mine Pit and Dump

The physical nature of the limestone deposit:

Strike length (m)

- 220 m

Width (m)

- 150 m

Strike direction

- Northeast-Southwest

Dip

- Vertical

Depth proved (m)

- 18 m

Existing Pit Dimension :-

<b>Descri</b> ption	Length, m	Width, m	Depth, m	
Present pit size	220	150	13	

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#### Waste Dump details : No Waste Dump in the Lease

#### 21. Statutory Manpower

SI. No.	Name of the Post Occupied	Statutory Requirement as per MMR 1961	Manpower available during Violation Period	
1.	Mines Manager (First Class Competency Certificate)	1	1	
2.	Mining Engineer (Second Class Competency Certificate)	1	1	
3.	Geologist '	1	1 (Part Time)	
4.	Mines Foreman	1	1	
5.	Operators & Drivers	4	4	
6.	Unskilled Labours	8	2	
7.	Mine Office Staff	2	100	
8.	Mine Surveyor (Part time)	1	3.	
9.	Blaster	Not applicable	Not applicable	
	Total	19	10	

### 22. Green Belt Development and Plantation

With the guidance of DFO, about 120 Trees in an extent of 0.12 Ha (@ 1,000 Trees/Ha). predominantly local species like Neem, Pungan, Teak, etc. are planted with local DFO guidance and maintained with about 90.0% Survival Rate. At the end of ROMP Period, about 300 Trees over an extent of 0.27 Ha @ 1,111 Trees/Ha is planned. Out of which 272 Trees are expected to be survived with 90.67% Survival Rate.

# Proposed Green Belt Development

Year	Name of the Tree Species	Extent, Ha	No. of Trees	Expected Nos. to be Survived	Survival Rate, %
Till 2020-21	Neem, Pungan & Teak	0.120	120	108	90.00
2021-22	Neem & Pungan	0.003	35	32	91.43
2022-23	Neem & Pungan	0.003	35	32	90.43
2023-24	Neem & Teak	0.003	35	32	90.43
2024-25	Neem & Pungan	0.003	35	32	90.43
2025-26	Neem & Pungan	0.003	40	36	90.00
	Total	0.270	300	272	90.67

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#### 23. Violation

PP has operated Karuppur Senapathy Limestone Mine after 15.01.2016 till 31.07.2016 and produced 26,520 Tonnes of Limestone. Operating the Lease after 15.01.2016 without EC is the Violation. Violation Period is 6.5 months.

#### 24. Penalty for Violation

The PP has received the Demand Notice vide Rc. No. 132/G&M/2019 dated 20.08.2019 for Rs.1,21,69,560/-, 100% cost of Mineral for 26,520 Tonnes of Limestone excavated during the period 15.01.2016 to 10.01.2017 without EC. Accordingly, PP has remitted Rs.1,21,69,560/- on 26/27.08.2021 vide TNTC9 Chalan through State Bank of India, Valajanagaram Branch, Ariyalur.

Based on the inspection of the project site and other documents furnished by project proponent, 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 Karuppur Senapathy Limestone Mine 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 28 th 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 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

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CHAIRMAN SEAC- TN 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...."

".....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

MEMBER SECRETARY SEAC -TN CHAIRNAAN' SEAC-TN 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 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.

MEMBER SECRETARY SEAC -TN CHAIRMAN SEAC. TN 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 ail 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 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,

MEMBER SECRETARY SEAC -TN CHAIRMAN' SEAC-TN 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.

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

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

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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 above Table-1, if a minimum of 6 criteria becomes applicable for a classification, then the project is classified under the concerned type of classification (low/high).

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 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	0.25	0.30	0.40	0.25	1.20
High level Ecological damage	0.50	0.60	0.75	0.50	2.35

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

<u>STEP - 1:</u>
Classification of Mining Projects according to the Violation level

SI. No	Criteria	Response	Level of Damage	Concluding Remarks	Final Classification
1.	Year wise Mined Mineral output	The mining operation was carried out as per the approved Mining Plan but	Not carried out the mining without prior EC as 26,520	Out of 11 criteria, 9 criteria have been scored	Low Level Ecological Damage

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		without prior EC in the following period of 15.01.2016 to 10.01.2017 producing 26,520 Tonnes of Limestone produced during the above period.	Tonnes were produced during the violation period - High Level damage	for Low Level of Damage.	
2.	Benches formation	Formed as per the specifications given in the approved Mining Plan. BH = 4.0 m & BW not less than BH (i.e., 6.0 m); Bench Slope = 60° (from horizontal).	Benches formed as per the Approved Mining Plan – Low level damage		
3.	Drilling, Blasting and Heavy Machineries use	No Drilling & Blasting operations were carried out. Instead, the HEMM fitted with rock breaker deployed for primary rock breakage.	Drilling & Blasting operations are not adopted but the HEMM were used- Low Level damage	·	
4.	Adequate and qualified statutory personnel	Required: 19  Sanctioned & Available:10	3 number of statutory personnel employed and 7 number of statutory personnel were employed on 'Part-Time'. – High level damage.		
5.	Waste dumps location	No waste produced due to negligible stripping ratio.	No waste dump placed in the mine due to non- availability of waste formation Low Level damage		
6.	Habitations/Forest location	Kilapaluvur & Karuppur Senapathy Villages located are located at a distance of	Habitations are not located within 500 m. Similarly, the	•	Λ°Ω
	Komo	beyond 500 m	Lease area is		Ш

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.		Notified Eco	within the ESZ of any Forests	
		***	Low level	
7.	Ground water intersection	Not intersecting the Ground Water Table.	Mining operations are not intersecting the Ground Water Table - Low level damage	
8.	Green belt development in safety zone and as per norms in terms of species & numbers	Yes, provided. About 120 Trees in an extent of 0.12 Ha (@ 1,000 Trees/Ha), predominantly local species like Neem, Pungan, Teak, etc. are planted with local DFO guidance and maintained with about 90.0% Survival Rate. Developed Green belt is noticed in patches around the Pit. Further, New saplings are also planted along the peripheries of the Lease.	around the safety zone — Low level damage	
9.	Mined Mineral storage	Not stored in the mine currently. If i is required, it i being stored temporarily within the mine lease area	t Ore Stock is being maintained in the mine lease area - Low level damage	
10	). Surface Drainage	Constructed as pethe specifications.	er Garland drains are constructed on the surface - Low level damage	

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11.	Mined Material transport route	Not Passing through the village	carrying the Limestone ore are NOT passing through the	
			villages to reach the Plant - Low level damage	

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 / Ha	Rs. in lakhs	Rs. in lakhs
ľ	Ha	Ha		/ Ha	/ Ha
SEAC	0.25	0.30	0.40	0.25	1.20
Scale	1				
Actual	25000 ×	30000 ×	40000 × 4.670	25000 ×	120000 ×
Amount	4.670	4.670		4.670	4.670
	116750	140100	186800	116750	5,60,400/=

#### 25. <u>Damage Cost Evaluation</u>

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

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The Proposal falls in Low Level Ecological Damage Category.

# Step 2: (i) Application of CPCB Guidelines by Proponent

During the Violation Period, impacts on the Environmental Components viz. Air, Water, Land, Biological and Socio-economics Environment are assessed based on the Norms specified by the Central Pollution Control Board (CPCB) to implement "Polluter Pays" Principle and to levy Environmental Compensation for Restoration of Environmental Damages ('Report of the CPCB In-house Committee on Methodology for Assessing Environmental Compensation and Action Plan to utilize the Fund' based on the Agenda Note of 63rd Conference of Chairman and Member Secretary of PCBs/Committees held on 18.03.2019).

The Environmental Compensation shall be based on the following formula:

 $EC = PI \times N \times R \times S \times LF$ 

where,

EC is Environmental Compensation in Rupees

PI = Pollution Index of Industrial Sector

N = Number of days of violation took place

R = A factor in Rupees for EC

S = Factor for Scale of Operation

LF = Location Factor.

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#### Note:

- a. The industrial sectors have been categorized into Red, Orange and Green, based on their Pollution Index in the range of 60 to 100, 41 to 59 and 21 to 40, respectively. It was suggested that the average pollution index of 80, 50 and 30 may be taken for calculating the Environmental Compensation for Red, Orange and Green categories of industries, respectively.
- b. N, number of days for which violation took place is the period between the day of violation observed/due date of direction's compliance and the day of compliance verified by CPCB/SPCB/PCC.
- c. R is a factor in Rupees, which may be a minimum of 100 and maximum of 500. It is suggested to consider R as 250, as the Environmental Compensation in cases of violation.
- d. S could be based on small/medium/large industry categorization, which may be
   0.5 for micro or small, 1.0 for medium and 1.5 for large units.
- e. LF, could be based on population of the city/town and location of the industrial unit. For the industrial unit located within municipal boundary or up to 10 km distance from the municipal boundary of the city/town, following factors (LF) may be used:

S. No.	Population* (million)	Location Factor <sup>t</sup> (LF)
1	Less than 1	1.0
Z	1 to <5	1.25
3	5 to <10	1.5
4	10 and above	2.0

\*Population of the city/town as per the latest Census of India ILE will be 1.0 in case unit is located >10km from municipal boundary

For critically polluted areas / Ecologically Sensitive areas, the scope of LF may be examined further.

f. In any case, minimum Environmental Compensation shall be ₹ 5000/day.

With applicable values of PI-80 (Red Category Industry), N-195 days (of violation period), R-Rs.100 (based on nature of violation; Min. Rs. 100 & Max. Rs.250-), S-0.5 (cumulatively Micro/Small Scale Unit), LF-1.0 (Karuppur Population is less than one million), Environmental Compensation is computed as follows:

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= Rs.7,80,000/- (Maximum)

However, as per CPCB Guidelines, the Maximum Environmental Compensation shall be for 195 days of Violation will be Rs.7.80,000/.

Accordingly, the Environmental Compensation for 195 days of Violation will be Rs.7,80,000/-, which has to be compensated as follows:

Activity Proposed	Total, Rs.
Cost of Ecological Damage Remediation Plan	3,80,000
	2,00,000
Community Parousse Augmentation Plan	2,00,000
Grand Total	7,80,000
	Activity Proposed  Cost of Ecological Damage Remediation Plan Natural Resource Augmentation Plan Community Resource Augmentation Plan Grand Total

The Project Cost is Rs.25 Lakhs. CER Budget is arrived as 2% of the Project Cost i.e. Rs.50,000/-.

Step 2: (ii) Application of SEAC Methodology

Level of	Ecological Remediation Cost	Natural Resource Augmentation Cost	Community Resource Augmentation Cost	CER	Total
Damage	Rs. in lakhs / Ha	Rs. in lakhs / Ha		Rs. in iakhs / Ha	Rs. in lakhs / Ha
SEAC Scale	0.25	0.30	0.40	0.25	1.20
Actual Amount	25000 × 4.670	30000 × 4.670	40000 × 4.670	25000 × 4.670	120000 × 4.670
	116750	140100	186800	116750	5,60,400/=

**CER Budget-Committed** 

The PP had committed to provide the following budget towards the Corporate Environmental Responsibility (CER) during the SEAC appraisal.

Name of the School(s)	Particulars	CER Amount
Govt. High School, Maramadakki Village	Repairs and Maintenance & Upliftment of Toilet facilities for Girls Students.	5.00

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&	Water Supply to the Toilets	
Govt. High School at Poovaimanagar village	Roof for Boy's Toilets	
Total		Rs. 5.00 Lakhs

#### 26. Conclusions:

As the Proposal falls in Low Level Ecological Damage and EMP measures were in place during the Violation Period, the Sub-Committee is of the opinion that the Environmental Compensation of Rs.7,80,000/- arrived based on CPCB Violation Norms is higher than the other two estimations - (i) Rs.6,00,000/- based on the EIA Model arrived by the EIA Coordinator and (ii) Rs.4.44 Lakhs arrived on SEAC-TN Model. Hence, it is concluded that the aforesaid value of Rs.7,80,000/- must be compensated for Ecological Damage Remediation and Natural & Community Resource Augmentation Plan as given below:

SI. No.	Activity Proposed	Total, Rs.
1	Cost of Ecological Damage Remediation Plan	3,00,000
2	Natural Resource Augmentation Plan	2,40,000
3	Community Resource Augmentation Plan	2,40,000
	Grand Total	7,80,000

Project Cost is Rs.25.00 Lakhs. CER Budget can be 2% of the Project Cost i.e. Rs.50,000/-. However, PP had committed to provide the following budget towards the Corporate Environmental Responsibility (CER) during the SEAC appraisal.

Name of the School(s)	Particulars	CER Amount
Govt. High School, Maramadakki Village	Repairs and Maintenance & Upliftment of Toilet facilities for Girls Students.	5.00 (Rs. 2.50 lakhs each to the school)
&	Water Supply to the Toilets	
Govt. High School at Poovaimanagar village	Roof for Boy's Toilets	
	Total	Rs. 5.00 Lakhs

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# STATUTORY PROCEDURES TO BE FOLLOWED:

The SEAC Sub-Committee observed that the Mining of Limestone over an extent of 4.68 Ha in SF Nos. 6/4, 8/3, 8/4A, 8/4B, 8/5A, 8/5B, 8/5C, 8/5E, 8/6A, 8/6B, 8/6C, 8/7 & 8/8 at Karuppur Senapathy village in Ariyalur District for Environmental Clearance under Violation comes under Low Level Ecological Damage Category as per Violation Norms. Hence, the Sub-Committee opines the grant of Environmental Clearance for Mining of Limestone over an extent of 4.68 Ha in SF Nos. 6/4, 8/3, 8/4A, 8/4B, 8/5A, 8/5B, 8/5C, 8/5E, 8/6A, 8/6B, 8/6C, 8/7 & 8/8 at Karuppur Senapathy village may be considered subject to the following conditions:

- 1. The Bank Guarantee for Rs. 7,80,000/- has to be given to TNPCB for successful implementation of the Schemes in 1 year period. The Bank Guarantee will be released after successful implementation of the Ecological Remediation Plan and Natural & Community Resource Augmentation Plan.
- 2. CER fund of Rs.5,00,000/- must be spent by PP directly 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.

#### 27. RECOMMENDATIONS

The SEAC Sub-Committee observed that the Mining of Limestone over an extent of 4.68 Ha in SF Nos. 6/4, 8/3, 8/4A, 8/4B, 8/5A, 8/5B, 8/5C, 8/5E, 8/6A, 8/6B, 8/6C, 8/7 & 8/8 at Karuppur Senapathy village in Ariyalur District 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 Limestone over an extent of 4.68 Ha in SF Nos. 6/4, 8/3, 8/4A, 8/4B, 8/5A, 3/5B, 8/5C, 8/5E, 8/6A, 8/6B, 8/6C, 8/7 & 8/8 of Mir. 5. Saravanan, M/s. Dhandapani Cements Private Limited may be considered subject to the following conditions in addition to the normal conditions:

1. The amount prescribed for Ecological remediation (Rs.3.00 Lakhs), natural resource augmentation (Rs.2.40 lakhs) & community resource augmentation (Rs.2.40 Lakhs), totaling Rs. 7.80 Lakhs. Hence the SEAC decided to direct the project proponent to remit the amount of Rs. 7.80 Lakhs 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.

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- 2. The project proponent shall carry out the works assigned under ecological damage, natural resource augmentation and community resource augmentation within a period of six months. If not, the bank guarantee will be forfeited to TNPCB without further notice.
- 3. The amount committed by the Project proponent for CER (Rs. 5.00 Lakhs) shall be remitted in the form of DD to the beneficiaries (Rs. 2.50 lakhs each to the school) for the activities committed by the proponent. A copy of receipt from the beneficiary shall be submitted to SEIAA-TN.
- 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 if it is not already obtained and submit the same to SEAC before grant of EC.
- 5. The proposed action plan for green belt development shall be maintained around the pheriperhy of the overall project area and accordingly the plantation shall be carried out.
- 6. The PP shall install the Environmental Management Cell headed by the statutory 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.
- 7. 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.

With the above recommendation the proposal was placed before 333<sup>rd</sup> SEAC meeting held on 1.12.2022 and SEAC accept the recommendations of Sub Committee and SEAC decided to recommend the proposal for the grant of Environmental Clearance under violation category for 3.71,691 Tonnes of ROM with the annual peak production shall not exceed 47013 T with an ultimate depth of mining is maintained at 18 m below ground level subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific

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conditions:

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- 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 amount prescribed for Ecological remediation (Rs.3.00 Lakhs), natural resource augmentation (Rs.2.40 lakhs) & community resource augmentation (Rs.2.40 Lakhs), totaling Rs. 7.80 Lakhs. Hence the SEAC decided to direct the project proponent to remit the amount of Rs. 7.80 Lakhs 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.
  - 3. The project proponent shall carry out the works assigned under ecological damage, natural resource augmentation and community resource augmentation within a period of six months. If not, the bank guarantee will be forfeited to TNPCB without further notice.
  - 4. The amount committed by the Project proponent for CER (Rs. 5.00 Lakhs) shall be remitted in the form of DD to the beneficiaries (Rs. 2.50 lakhs each to the school) for the activities committed by the proponent. A copy of receipt from the beneficiary shall be submitted to SEIAA-TN.
  - 5. 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 ElA Notification dated: 14.03.2017 and amended 08.03.2018.
  - 6. The company shall obtain 'No Dues Certificate' from State Government i.e. Department of Geology & Mining within a period of two weeks if it is not already obtained and submit the same to SEAC before grant of EC.

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- 7. The proposed action plan for green belt development shall be maintained around the pheriperhy of the overall project area and accordingly the plantation shall be carried out.
- 8. The PP shall install the Environmental Management Cell headed by the statutory 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.
- 9. 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.

Agenda Item No.-333 TA-04

File.No.9503/2022

Proposed Rough stone quarry over an extent of in S.F.No. 245/2(part) of Irukkandurai Part – II Village, Radhapuram Taluk, Tiruneiveli District, Tamil Nadu by M/s.Hi-Tech Rock Products & Aggregates Limited -For Environmental Clearance.(SIA/TN/MIN/402892/2022 dated 12.10.2022).

The proposal was earlier placed in the 324th meeting of SEAC held on 21.10.2022. 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 M/s.Hi-Tech Rock Products & Aggregates Limited has applied seeking Environmental Clearance for the proposed Rough stone quarry over an extent of 2.26.0Hectares in S.F.No. 245/2(part) of Irukkandurai Part II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item (a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006, as amended.

MEMBER SECRETARY SEAC -TN CHAIRMAN SEAC- TN Based on the presentation and documents furnished by the proponent, the SEAC observed that the copy of the following documents are not submitted (or) are not available at the time of appraisal:

- 1. KML file
- 2. Precise Area Communication / Letter of Indent
- 3. Approved Mining Plan
- 4. Form-I & PFR
- 5. Copy of Approved letter
- Copy of 500 m Cluster Certificate from State Geology & Mining Department
- 7. EIA & EMP Report
- 8. Copy of Green Belt Plan
- 9. 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.
- 10. Certified Compliance report for the prior EC obtained for the existing quarry, from the IRO/MoEF & CC, Chennai (or) Concerned DEE/TNPCB.
- 11. Video footage of the existing pit showing the present conditions.

Due to non-availability of above documents, the SEAC decided to not consider the above proposal for the appraisal. On receipt of the aforesaid documents, the subject will be taken up for further deliberations.

Proponent has now uploaded the requisite documents on PARIVESH and hence the subject was placed in this 333<sup>rd</sup> meeting of SEAC held on 01.12.2022.

SI. No.	Details of the Proposal		
1.	Name of the Owner / Firm	M/s. Hi-Tech Rock Products & Aggregate Limited  Mount Poonamalee Road  Manapakkam, P.B.No.979,  Chennai-600 089	
2.	Type of quarrying (Savudu / Rough stone / Sand / Granite)	Rough stone	
3.	S.F No. of the quarry site	245/2(part)	
4.	Village	Irukkandurai Part – II	
5.	Taluk	Radhapuram	
6.	District	Tirunelveli	
7.	Extent of Quarry (in ha.)	2.26.0Hectare	

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8.	Period of Quarrying proposed	5 years
9.	Type of Mining	Opencast Mechanized Method
10.	Production (Quantity in m³)	Geological Resource: 9,51,750m³ of Rough
		stone to an ultimate depth of 49 m BGL.
		5-year Production is estimated to be
	· 	1.34,532m³ of Rough Stone. Annual peak
		production is 50,247m³ of Rough Stone (1st
		year)
11.	Depth of Mining proposed	49m BGL
12.	Latitude &Longitude of all	08°11'09.89" N to 08°11'15.51" N
	corners of the quarry site	77°39'40.06"E to 77°39'47.52"E
13.	Topo sheet No.	58 – H/I2
14.	Man power requirement per	30 Employees
	day:	
15.	Precise Area Communication	Roc.No.M2/37294/2022 dated 30.08.2022
16.	Mining plan approval letter	Roc.No.M2/37294/2022 dated 19.09.2022
17.	500m cluster letter	Roc.No.M2/37294/2022 dated 29.09.2022
18.	Water requirement:	3.0 kLD
	Drinking & domestic	1.5 kLD
	purposed (in KLD)	
	2. Dust Suppression (in KLD)	1.50 kLD
	3. Green Belt (in KLD)	
19.	Power requirement:	
	a. Domestic purpose	TNEB
	b. Industrial Purpose	DG set
20.	Depth of Water table	60m
21.	Whether any habitation within	No .
	300m distance	
22.	Project cost (Excluding EMP cost)	Rs. 68,06,000/-
23.	EMP cost	Capital Cost- Rs. 20,30,000/-
		Recurring Cost/Annum- Rs. 11,98,500/-
24.	CER cost	Rs. 5,00,000/-
25.	VAO letter dated	Letter Dated: 23.09.2022

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 excavation quantity of 1,34,532m³ of rough stone for a period of five years but not exceeding annual peak production capacity of 50,247m³ of Rough Stone for an ultimate pit depth not exceeding 49 m subject to the standard conditions as

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per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- 1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.
- 2. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferrous Mines Regulations, 1961.
- 3. The Project Proponent shall furnish slope stability action plan to the concerned AD (Mines) for the planned working by maintaining appropriate benches incorporating the haul road with proper gradient as the depth of the proposed quarry is exceeding 30 m, before obtaining CTO from TNPCB.
- 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 40 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 six months from the commencement of quarrying operations, the PP shall carry out 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 1 km from the quarry lease', from any of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, National Institute of Rock Mechanics (NIRM)-Bangaluru, IIT (ISM)-Dhanbad. 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.

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- 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.
- 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. In case of carrying out the 'Deep-hole large diameter drilling and blasting' in the proposed quarries, the PP shall obtain prior permission from the Director of Mines Safety, Chennai Region after the commencement of mining operations under the provisions of Reg. 106 (2) (b) of MMR 1961.
- 10. 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.
- 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. 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.

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

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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

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- erosion and surface run off. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps.
- 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

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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 daytime. Usage of other initiation systems such as detonating cord/fuse, safety fuse, ordinary detonators, cord relays, should be avoided in the blasting operation. The mitigation measures for control of ground vibrations and to arrest fly rocks should be implemented meticulously under the supervision of statutory competent persons possessing the I / II Class Mines Manager / Foreman / Blaster certificate issued by the DGMS under MMR 1961, appointed in the quarry. No secondary blasting of boulders shall be carried out in any occasions and only the Rock Breakers (or) other suitable non-explosive techniques shall be adopted if such secondary breakage is required. The Project Proponent shall provide required number of the security sentries for guarding the danger zone of 500 m radius from the site of blasting to ensure that no human/animal is present within this danger zone and also no person is allowed to enter into (or) stay in the danger zone during the blasting. (ii) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs, (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
- 14. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
- 15. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50 m safety distance from water body should be maintained without carrying any activity. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.

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- 16. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
- 17. The proponent shall ensure that the transportation of the quarried materials shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried rough stones; and transport of rough stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
- 18. To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
- 19. After mining operations are completed, the mine closure activities as indicated in the mine closure plan shall be strictly carried out by the Proponent fulfilling the necessary actions as assured in the Environmental Management Plan.
- 20. The Project proponent shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition that is fit for the growth of fodder, flora, fauna etc.
- 21. The Project Proponent shall comply with the provisions of the Mines Act, 1952, MMR 1961 and Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
- 22. The project proponent shall ensure that the provisions of the MMRD, 1956, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are 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

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- Environmental Engineer (TNPCB) and the Director of Mines Safety (DMS), Chennai Region by the proponent without fail.
- 24. The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
- 25. Prior clearance from Forestry & Wild Life including clearance from committee of the National Board for Wildlife as applicable shall be obtained before starting the quarrying operation, if the project site attracts the NBWL clearance, as per the existing law from time to time.
- 26. All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the Precise area communication letter issued by concerned District Collector should be strictly followed.
- 27. The mining lease holders shall, after ceasing mining operations, undertake 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	Tamii Name
1	Aegle marmelos	Vilvam	ஷ்ஸ்வம்
2	Adenaanthera pavonina	Manjadi	் மஞ்சாடி. ஆணைக்குன்றிமணி
3	Albizia lebbeck	Vaagai	ଆୟେ:
4	Albizia amara	Usil	<b>∟</b> £€
5	Baulunia purpurea	Mantharas	மந் <b>தாரை</b>
6	Baulunia racemosa	Aathi	<b>ஆக்கி</b>
7	Baulinnia tomentos	Iruvathi	இருஷாத்தி
8	Buchanania axillaris	Kattuma	<b>காட்டுமா</b>
9	Borassus flabellifer	Panai	LIGN-997
10	Butea monosperma	Murukkamaram	ருகுக்கமரம்
11	Bobax ceiba	Ilavu, Sevvilavu	୍କ ଅନ୍ୟ
12	Calophyllum inophyllum	Punnai	Lysin poer
13	Cassia fistula	Sarakondrai	சரக் <b>கோள்</b> றை
14	Cassia roxburghii	Sengondrai	செ <b>ச்கொள்</b> றை
15	Chloroxylon sweitenia	Purasamaram	புரசு மரம்
16	Cochlospermum religiosum	Kongu, Manjalllavu	கோங்கு, மஞ்சள் இலவு
17	Cordia dichotoma	Naruvuli	தருஷன்.
18	Creteva adansoni	Mavalingum	. <b>ഗ്രത്തിലേക്</b>
19	Dillenia indica	Uva, Uzha	o_ft
20	Dillenia pentagyna	SiruUva, Sitruzha	ச்டு உசா
21	<b>Diospyro sebenum</b>	Karungali	<b>கருங்காலி</b>
22	Diospyro schloroxylon	Vaganai	வாக <b>ளன</b>
23	Ficus amplissima	Kalltchi	. <b>கல் இ</b> ச்சி
24	Hibiscus tiliaceou	Aatrupoovarasu	ஆற் <b>றப்புவரக</b>
25	Hardwickia binata	Aacha	ஆச்சா
26	Holoptelia integrifolia	Aayili	ஆயா மும், ஆயிலி
27	Lannea coromandelica	Odhiam	<del>≨தியம்</del>
28	Lagerstroennia speciosa	Poo Marudhu	ர் நம்இ
_29	Lepisanthus tetraphylla	Neikottaimaram	தெய் <b>கொ</b> ட்டடை மரம்
30	Limonia acidissima	Vila maram	அலா மும்
31	Litsea glutinos	Pisinpattai	அரம்பா. பிசின்பட்டை
32	Madhuca longifolia	Illuppai	இலுப்பை
_33	Manilkara hexandra	<u>UlakkaiPaalai</u>	2_80E495 UT49980
34	Minusops elengi	Magizhamaram	<b>ា</b> កាម្យាកិ <b>ល៤</b> ក្
35	Mitragyna parvifolia	Kadambu	≆riņĀ
36	Morinda pubescens	Nuna	Penn
37	Morinda citrifolia	Vellas Nuna	வெள்ளை நுணா
38	Phoenix sylvestre	Eachai	ர <b>்ச்சமரம்</b>
39	Pongamia pinnat	Pungam	Lighter

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40	Premna mollissima	Murunai	முன்னை
41	Premna serratifolia	Narumunnai	ந்ற முன்னை
42	Premna tomentosa	Malaipoovarasu	மகை பூசை
43	Prosopis cinerea	Vanni maram	வன்னி மரம்
44	Pterocarpus marsupium	Vengai	General R
45	Pterospermum canescens	Vennangu, Tada	வென்னாங்கு
46	Pterospermum xylocarpum	Polavu	ଧ୍ୟର
47	Puthranjiva roxburghi	Karipala	क्रमीधक्रम
48	Salvadora persica	Ugaa Maram	क्षास्य क्षेक्
49	Sapindus emarginatus	Manipungan,	மனிட்டிங்கள்
<u>.</u>		Soapukai	சோப்புக்காய்
50	Saraca asoca	Asoca	अक्षिमद्भा
51	Streblus asper	Piray maram	ក្សាក្រ ចេវិច្ច
52	Strychnos nuxvomic	Yetti	<b>வ</b> ்டி
53	Strychnos potatorum	Therthang Kottai	தேத்தான் கொட்டை
54	Syzygium cumini	Naval	5100
55	Terminalia belleric	Thandri	தான்றி
56	Terminalia arjuna	Ven marudhu	வெண் மருது
57	Toona ciliate	Sandhana vembu	சந்தன் வேம்பு
58	Thespesia populnea	Puvarasu	पुभाक
59	Walsuratrifoliata	valsura	வால்கரா
60	Wrightia tinctoria	Veppalai	<b>ചെ</b> പ് <b>പന്ത</b> ര
61	Pithecellobium dulce	Kodukkapuli	OSTGSSALLIAN

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### Appendix -II

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

கரங்கங்களில் குவாரி செயல்ட வழங்கப்பட்டுள்ளது seiaa/ தே	ாடுகளுக்கான சுற்றுச்சூழல் அனுமதி கீழ்கள்ட நிபந்தனைகளுக்கு உட்பட்டு தியிடப்பட்டு கற்றுச்சூழல் அனுமதிதேதி வரை செல்லத்தக்கதாக உள்ளது.			
பசுமை ப <u>ருதி</u> வளர்ச்சி	குவாரியின் எல்லையைச் சுற்றி வேலி அமைக்க வேண்டும்			
மேம்பாட்டுக்கான சுரங்கத் திட்டம்	காங்கப்பாதையின் ஆழம் தரை <b>ம</b> ்டத் <b>திலிருந்து</b> மீட்டர்க்கு விகாமல் இருக்க வேண்டும்.			
	காற்றில் மாக ஏற்படாதவாறு கரங்க பணிகளை மேற்கோள்ள வேண்டும்.			
நடப்பட்டு	வாகனங்கள் செல்லும் பாதையில் மாக ஏற்படாத அளவிற்கு தண்ணிரை முறையாக தண்ணி; லாரிகளின் மூலமாக அவ்வப்போது தெளிக்க வேண்டும்.			
பராமரிக்கப்படவேள்கடிய மரங்கள் எண்ணிக்கை:	இரைச்சல் அளவையும் தூசி மாகபாட்டையும் குறைப்பதற்காக குவாரியின் எல்லையை கற்றி அடர்த்தியான பகமை பகுதியை ஏற்படுத்த வேண்டும்.			
சுரங்கத்தில் வேடி வைக்கும்பொழுது நிலஅதிர்வுகள் ஏற்படாதவாறும் மற்றும் கற்கள் பறக்காதவாரும் பாதுகாப்பு நடவடிக்கைகளை உள்ளிப்பாக செயல்படுத்தப்பட வேண்டும்				
கரங்கத்தில் இருந்து ஏற்படும் இரை. மேற் கொள்ள வேண்டும்.	சல் அளவு 85 டெசிபல்ஸ் (dBA) அள <b>விற்கு மே</b> ல் ஏற்படாதவாறு <u>தகுந்த</u> கட்டுப்பாடுகளை			
கரங்க சட்ட விதிகள் 1955ன் கீழ் கரங்கந்தில் உள்ள ப <b>ணியார்களுக்கு தகுந்த பாதுகா</b> ட்பு கருவிகள் வழங்கவதோடு				
கள்தாரமுள்ள கழிப்பறை வசதிகளை செய்து தர வேண்டும்.				
கிராமம் அல்லது பஞ்சாபத்து வழியாக வாகனங்கள் செல்லும் சாலையை தொடர் <b>ந்து நன்கு</b> பராமரிக்க வேண்டும்.				
கரங்கப்பணிகளால் அருகில் உள்ள விவசாயப் பணிகள் மற்றும் நீர்தினலகள் பாதிக்கப்படக் கூடாது.				
நீர்நிலைகள் பாதிக்கப்படாமல் இருப்பதை உறுதி செய்யும் வகையில் நிலத்தடி நீரின் தரத்தினை தொடர்ந்து கண்காணிக்க வேண்டும்.				
சுரங்கத்திலிருந்து கணிம் பொருட்களை ஈடுத்துச் செல்வது கிராம் மக்களுக்கு எந்தத் சிரமத்திணையும் ஏற்படுத்தாதவாறு				
பாதுகாப்போடும் மற்றும் சுற்றுதழல் பாதிக்கவாத வண்ணம் வாகனங்களை இயக்க வேண்டும்.				
கரங்கப்ப <b>ணி</b> கள் முடிக்கப்பட்டவுடன் கூங்க மூடல் திட்டத்தில் உள்ள <b>வாறு கரங்கத்தினை மூட வேண்டும்</b> .				
கரங்க நடவடிக்கைகளை முடித்துகள்ளர் கரங்கப் பத்தி மற்றும் கரங்க நடவடிக்கைகளால் இடையூறு ஏற்படக்கூடிய				
வேறு எந்தப் பகுதிமையும் மறுகட்டுமானம் செய்து நாவரங்கள் விலங்குகள் ஆகியவற்றின் வளர்ச்சிக்கு ஏற்ற வகையில்				
பசுமைப்பகுதியை உருவாக்க வேன்	rடும்			
முழுமையான திபந்தனைகளை அறிங	பாரிவேஷ் (http://purivesh.nic.in) என்றே இணையதாத்தைப் பார்வையிடவும். மேலும் எந்தவித			
சற்றுதழல் சாந்த புகார்களுக்கு சென்னனயில் உள்ள கற்றுச்தழல் மற்றும் வன அமைச்சகத்தின் ஒருங்கிணைந்த வட்டார				
அலு வலகம்: 044 – 33222325 (அல்லது) தமிழ்நாடு மாசு கட்டுப்பாடு வாரியத்தின் மாவட்ட சுற்றுச்சூழல் பொறியாளரை அணுகவும்.				

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