## State Expert Appraisal Committee (SEAC)

Minutes of 420th meeting of the State Expert Appraisal Committee (SEAC) held on 02.11.2023 (Thursday) at SEIAA Conference Hall, 2nd Floor, Panagal Maligai, Saidapet, Chennai 600 015 for consideration of Building and Construction projects and Mining projects.

## **Confirmation of Earlier Minutes**

The minutes of the 419th SEAC meeting held on 01.11.2023 were circulated to the Members in advance and as there are no remarks, the Committee decided to confirm the minute.

Agenda No: 420-01

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(File No: 9811/2022)

Proposed Expansion of Existing Special Economic Zone in Bargur SIPCOT Industrial Park over an extent of 94.2 Ha at Plot Nos 3,4,5,18 to 37 bearing S.F.No. 1 Part, 2 Part, 3 Part, 4 Part, 4/3 Part, 4/4 Part, 5/1 Part, 5/2 Part, 5/3 Part, 5/4 Part, 6/1, 6/2, 6/3, 7 Part, 7/1 Part, 7/2 Part, 7/3 Part, 8/1, 9/1, 9/2, 9/3, 10/2 Part, 21 Part, 22 part, 23 Part, 24/1 Part, 25 Part, 25/2 B Part, 26, 27 Part, 28 Part, 29 Part, 30, 31 Part, 32/1 Part, 32/2 Part, 32/3 Part, 33 Part, 49 Part, 50 Part, 59 Part, 60 Part of Olaipatti Village, Uthangarai Taluk and S.F.No. 641 Part, 642 Part, 643 Part, 726 Part of Balethottam Village, Pochampalli Taluk, Krishnagiri District, Tamil Nadu by M/s. CHEYYAR SEZ DEVELOPERS PVT LTD- For Environmental Clearance under Violation Category. (SIA/TN/INFRA2/441712/2023 Dated:01.09.2023).

The proposal was placed in the 420th SEAC meeting held on 02.11.2023. The project proponent gave detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

# The SEAC noted the following:

1. The Proponent, M/s. CHEYYAR SEZ DEVELOPERS PVT LTD has applied for Environmental Clearance under Violation Category for the Proposed Expansion of Existing Special Economic Zone in Bargur SIPCOT Industrial Park over an extent of 94.2 Ha at Plot Nos 3.4,5,18 to 37 bearing S.F.No. 1 Part, 2 Part, 3

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Part, 4 Part, 4/3 Part, 4/4 Part, 5/1 Part, 5/2 Part, 5/3 Part, 5/4 Part, 6/1, 6/2, 6/3, 7 Part, 7/1 Part, 7/2 Part, 7/3 Part, 8/1, 9/1, 9/2, 9/3, 10/2 Part, 21 Part, 22 part, 23 Part, 24/1 Part, 25 Part, 25/2 Part, 26, 27 Part, 28 Part, 29 Part, 30, 31 Part, 32/1 Part, 32/2 Part, 32/3 Part, 33 Part, 49 Part, 50 Part, 59 Part, 60 Part of Olaipatti Village, Uthangarai Taluk and S.F.No. 641 Part, 642 Part, 643 Part, 726 Part of Balethottam Village, Pochampalli Taluk, Krishnagiri District, Tamil Nadu.

- 2. The project/activity is covered under Category "B1" of item 8(b) "Township and area Development" of the Schedule to the EIA Notification, 2006.
- 3. The proposal involves Expansion of Existing Special Economic Zone in Bargur SIPCOT Industrial Park with a total built up area of 2,25,680.24 Sq.m (Existing-142819.59 Sq.m + Additional- 82860.65 Sq.m) and plot/land area 94.20Ha.

During the meeting, the PP stated that as the stay ordered by the Hon'ble High Court of Madras in W.P (MD). No. 11757 of 2021 of 2021, against the SoP for regularizing violation cases is still in operation, they would implead in the case and move to the Court for vacating the stay. SEAC therefore decided to defer the proposal.

Agenda No:420-02

(File No: 10204/2022)

Proposed for Development of Industrial Park/SEZ over an extent of 489.04 Ha (1207.92 Acres) at S.F.Nos.463/1A1A, 463/1A1B etc., of Peruvalayam Village, S.F.Nos.302, 303, etc., of Nedumpuli Village, S.F.Nos.1/1, 4, etc., of Thuraiyur Village, S.F.Nos.2/1A, 2/1B, etc., of Agavalam Village (Annexure-II), Nemili Taluk, Ranipet District, Tamil Nadu by M/s. State Industries Promotion Corporation of Tamil Nadu Limited - For Environmental clearance (SIA/TN/INFRA2/447333/2023 Dated: 07.10.2023).

The proposal was placed in the 420<sup>th</sup> meeting of SEAC held on 02.11.2023. The project proponent gave detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in). The SEAC noted the following:

1. The Proponent, M/s. State Industries Promotion Corporation of Tamil Nadu Limited has applied for Environmental clearance for the Proposed for Development of Industrial Park/SEZ over an extent of 489.04 Ha (1207.92)

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Acres) at S.F.Nos.463/1A1A, 463/1A1B etc., of Peruvalayam Village, S.F.Nos.302, 303, etc., of Nedumpuli Village, S.F.Nos.1/1, 4, etc., of Thuraiyur Village, S.F.Nos.2/1A, 2/1B, etc., of Agavalam Village (Annexure-II), Nemili Taluk, Ranipet District, Tamil Nadu.

- 2. The project/activity is covered under Category "B1" of Item 8(b) "Townships and Area Development Projects" of the Schedule to the EIA Notification, 2006.
- 3. ToR issued vide Lr.No.SEIAA-TN/F.No.10204/SEAC/8(b)/ToR-1539/2023 dated:23.08.2023.
- 4. EIA report submitted on 07.10.2023.

Based on the documents submitted and presentation made by the project proponent along with the consultant, the following facts have emerged: -

	PROJECT SUMMARY						
SI. No.	SI. No. Description Total Quantity						
	GENERAL						
1	Plot Area	1207.92 acres (489.040 Ha)	Acres (Ha)				
2	Proposed Built Up Area	Not Applicable - It is infrastructure development project	SQMT				
3	Total no of Saleable DU's/Villas	Not applicable  Total developable area is1168.02 Acres (472.885 Ha) which includes the industrial plots (193 Plots & 1 SEZ),  Common amenities, Industrial housing, Commercial activities, greenbelt, SWM, Road, Storm water drain and OSR.	No.				
4	Max Height – (Height of tallest block)	Maximum height of the building will be ~18.2m (since it is development of Industrial park/SEZ)	М				

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17	Fresh water requirement		6406.50	KLD
16	Total Water Requirement		11076	KLD
	WATE	R	· · ·	
15	Proposed Total Built Up Area		26449.416 (for Industrial Housing Facility)	SQMT
14	Other Non FSI Areas - including basement area etc.		nt -	
13	Proposed FSI Area	-	-	
12	Permissible FSI Area	;	<u>-</u>	
11	Proposed Ground Coverage Area (%	)	4408.24 (for Industrial SC Housing Facility)	
10	Permissible Ground Coverage Area (9	%)	4408.24 (for Industrial Housing Facility)	SQMT
	AREAS	;		
7 8 9	Expected Population  Total Cost of Project  Project Activity:	Industrial Housing Facility - 6 Floors  Construction phase – 100. Operation phase - 42900 Nos  619.277  Development of Industrial Park/ SEZ over an extent of 489.04 Ha. (1207.92 Acres)" atAgavalam, Nedumpuli, Thuraiyur and Peruvalayam Villages, NemiliTaluk, Ranipet District by M/s. State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT)		
6	Max No of Floors	1	Industrial Park – Based on Industrial Units Industrial Housing Facility	No.
5	No of Building Blocks (Residential + Community facilities)	• 1	Industrial Park – Based on Industrial Units Industrial Housing Facility · 4 towers	No.

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18	Treated Water Requirement	4669.50	KLD
19	Wastewater Generation	4683.30 (Sewage- 1924.2&Effluent- 2759.10)	KLD
20	Proposed Capacity of STP & ETP	Will be treated by individual units For Housing, 300 KLD STP is proposed.	KLD
21	Treated Water Available for Reuse	1924.20 (for	KLD
22	Treated Water Recycled	Greenbelt) 2745.30 (for Process & utilities)	KLD
23	Surplus treated water to be discharged in Municipal Sewer with Prior permission, if any	0	KLD
	RAINWATER HARVES	TING	
24	Rainwater Harvesting - Recharge Pits	1683	No.
25	Rainwater Harvesting Sump Capacity	30200 (One existing water pond)	M³
	PARKING		
25	Total Parking Required as / Building Bye Laws	Will be provided by Individual unit within	ECS
26	Proposed Total Parking	the plot as per norms	ECS
27	Parking in Basements	Nil	
	GREEN AREA		<b></b>
28	Proposed Green Area (Minimum 15.0% of plot area)	f Overall GB 401.70 acres (162.63 Ha)	Acres (Ha)
	Total area	1168.02 Acres (472.885 Ha) – Developable area	Acres (Ha)
	Existing trees on plot	2723	Nos
	Number of trees to be planted	243945	Nos

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	Number of trees to be transplanted/cut	346 (Cut)	Nos
· -	SOLID WASTE MANAGEM	ENT	
29	Total Solid Waste Generation	19.305	TPD
30	Organic waste	11.583	TPD
31	Mode of Treatment & Disposal	Individual industries will segregate the waste and organic waste will be composted and used as manure. In organic will be send to recyclers For Housing, 700 KG/day OWC is proposed and compost is used as manure	TPD
32	Quantity of Sludge Generated from STP & Disposal	Will be done by Individual unit as per Norms For housing: 30 kg/day sludge from STP will be used as manure	KG/DA Y
33	Quantity of E-Waste Generation & Disposal	Will be done by Individual unit as per Norms	KG/DA Y
Quantity of Hazardous waste Generation& Individual un		Will be done by Individual unit as per Norms	LPD
	POWER / GREEN POWI	ER	
34	Total Power Requirement	50	MVA
35	DG set backup	Nil, Individual	KVA
36	No of DG Sets	industries will have	No.

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		their own power back up	
		1x500 KVA DG will act as backup power for Housing	
37	Solar Panels – Roof Coverage	1) Solar panels will be proposed in the roof top of Project office. Solar power will be utilized for the IPinternal road lighting.  2) Apart from this, individual industries will be advised to provide roof top solar panels & solar lighting to reduce power consumption.	%
	Hot Water Requirement	-	
38	Of which met by Solar Panels	-	

Population details:

POPULATION								
Residential	DU'S	POP/DU	TOTAL POPULATION					
Total Saleable Du's		<u> </u>						
Total	384	6	2304					
Non-Residential			<del></del> -					
CLUB house (Employees etc.)	Area	<u> </u>						
Club/ Industrial Employees	42900	-	42900 Nos					
	Nos for		for IP/SEZ					
	IP/SEZ		including					
	including		2304 Nos in					

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	2304 Nos in Industrial Housing		Industrial Housing			
Commercial	-		~			
Facility Management Staff	-	•	_			
Total	42900		42900			
Visitors	-	•	-			
Residential	-	XX % of Residential Population	•			
Club/Community Hall	-	xx% of Residential Population	-			
Commercial	-	-	-			
Total Visitors	-	<u>-</u>	-			
Total Population	42900	<u>-</u>	42900			
EMP Cost		Capital Cost-17.98Crores Recurring Cost- 75 Lakhs				
CER Cost		Rs. 5.0 Crores				
Details of CER Activities	practices in f consultation	To improve Solid Waste Management practices in Ranipet Municipality in consultation with the District Collector, within the period of 1 year from date of issue of EC.				

# RECOMMENDATION OF THE COMMITTEE

The Committee discussed the matter and decided to recommend the grant of environmental clearance for the project proposal as above, subject to the standard conditions as per the Annexure II of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

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- The construction shall comply with Green Building norms and shall get IGBC Gold rating.
- 2. The Environmental Engineer to be engaged in Environmental Monitoring Cell.
- 3. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.
- 4. The project proponent shall provide entry and exit points for the OSR area, play area as per the norms for the public usage and as committed. The PP shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.
- Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag to prevent dust emissions at the time of loading/unloading.
- 6. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).
- 7. The proponent should provide the sufficient electric vehicle charging points as per the requirements at ground level and allocate the safe and suitable place in the premises for the same.
- 8. The project proponent should develop green belt in the township as per the plan submitted and also follow the guidelines of CPCB/Development authority for green belt as per the norms.
- Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.

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- 10. Proponent should submit the certified compliance report of previous/present EC along with action taken report to the Regional office MoEF Lko/Director of Environment and other concerning authority regularly.
- 11. Proponent shall provide the dual pipeline network in the project for utilization of treated water of STP for different purposes and also provide the monitoring mechanism for the same. STP treated water not to be discharged outside the premises without the permission of the concerned authority.
- 12. The project proponent shall provide a measuring device for monitoring the various sources of water supply namely fresh water, treated waste water and harvested rain water.
- 13. The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.

Agenda No: 420-03

(File No: 9221/2022)

Proposed Rough stone quarry lease over an extent of 2.93.0Ha at S.F.No. 391 of Belladhi Village, Mettupalayam Taluk, Coimbatore District, Tamil Nadu by Thiru. R.Raju - for Environmental Clearance. (SIA/TN/MIN/446546/2023, Dt 27.04.2022) The proposal was placed in the 420th Meeting of SEAC held on 02.11.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in). The SEAC noted the following:

- 1. The Project Proponent, Thiru R.Raju has applied for Environmental Clearance
  - for the proposed Rough stone quarry lease over an extent of 2.93.0Ha at S.F.No. 391, Belladhi Village, Mettupalayam Taluk, Coimbatore District, Tamil Nadu.
  - 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
  - 3. ToR was issued Vide Lr.No:SEIAA-TN/F.No.9221/SEAC/ToR-1193/2022 Dated:14.07.2022.
  - 4. Public hearing was conducted on 03.08.2023.
  - 5. There are no trees present in the target mining area and few trees present in the safety barrier.

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The SEAC has observed the following:

The concept of 'public hearing' in the Environmental Clearance, under the EIA Notification mandating 'obtaining of prior EC,' was first promulgated on 27th January, 1994 as amended in 1997, and underwent several amendments till 2004. The Legislature has given utmost importance to ascertain the public views in the entire EC procedure by making provision of public hearing and consultation before appraisal of specified development projects for grant of EC.

"...A public consultation in terms of the Notification dated 14 th September, 2006 consists of two parts. They are: - (a) A public hearing at the site or in its close proximity - district wise, to be carried out for ascertaining the concerns of local affected persons; and (b) Obtaining responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity...."

"...The 'public hearing'/consultation is undisputedly a legal right endowed by the EIA Notification, 2006 to the people in the project area and also public at large..."

The excerpts from the Judgement delivered on the Writ Petition (Civil) No. 9317 of 2009 Judgment reserved Samarth Trust and Another vs Union of India and Others on 28 May, 2010 in the HIGH COURT OF DELHI: NEW DELHI states that

"....A public hearing is a form of participatory justice giving a voice to the voiceless (particularly to those who have no immediate access to courts) and a place and occasion to them to express their views with regard to a project. Participatory justice is in the nature of a Jan Sunwai where the community is the jury....."

"....The advantage of a public hearing is that it brings about transparency in a proposed project and thereby gives information to the community about the project; there is consultation with the affected parties and they are not only taken into confidence about the nature of the project but are given an opportunity to express their informed opinion for or against the project. This form of a social audit, as it were, provides wherever necessary, social acceptability to a project and also gives an opportunity to the EAC to get information about a project that may not be disclosed to it or may be concealed by the project proponent....."

The SEAC have also taken note of the following key observations during the

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deliberations on the Public Hearing as stipulated below:

"Environmental Impact Assessment Guidance Manual for MINING OF MINERALS" published by the MoEF & CC in 2010 which states that

".....The study area for the mining projects should be defined as follows:

'Core zone' is the mining lease area.

'Buffer zone' in case of ML area up to 25 ha. is to be considered as 5 km all around the periphery of the core zone and for ML area above 25 ha. an area 10 km all around the periphery of the core zone....."

The NGT vide order dated 21.07.2020 in the case of M. Haridasan Vs State of Kerala & Ors. (Original Application No. 304/2019) indicates that

"....'Impact zone' as per the MMR 1961 stipulates for danger zone (500 m) by Directorate General of Mines Safety which have to be complied compulsorily and necessary measures should be taken to minimise the impact on environment when the blasting is involved..."

From the documents submitted and presentation made by the PP, the Committee noted the following.

- 1. The data regarding number of people residing in even 2 kms. area of influence zone, and that of agricultural practices, totally rely upon the secondary data collected from various Government Departments. It is expected that during preparation of EIA Report, the PP should have gathered some primary material with respect to the socio-economic data in the Project area. The EIA report has no details on the economic and agricultural activities carried out by the people living in the surrounding area so that appropriate environmental management plan is formulated.
- 2. A bare perusal of the records of public hearing and the minutes of meeting conducted on 03.08.2023 reveal that there was heavy opposition for the proposed mines from the participating public. They have pointed out the harmful effects they are forced to face from the mines already functioning in the area. Vibration damage to the buildings, dust pollution, respiratory diseases due to harmful dust pollution and adverse effects on agricultural activity are some of the objections raised by the public.

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- Few of the concerns expressed by the public in the public hearing conducted by the Tamil Nadu Pollution Control Board for the mines in the cluster including that of PP are extracted below.
  - Mr. E. Anandakumar, Mongampalayam "....For our village, stone quarries are not needed. Because of the quarry, well water is gone. In the quarries, explosion is not properly done. Because of the explosion, cracks develop on the walls of the buildings and dust spreads. Roads are damaged by heavy vehicles. Our area is depending on agriculture for many years...."
  - Mrs. S. Vinothini, Mongampalayam "...Walls in our house were cracked. Even, Underground Water Tank too is cracked. Even with repairs, again Water is wasted. There is huge noise due to quarries explosion and houses are vibrating. Hence, stone quarry is not needed..."
  - Mr.K.Balathandayutham, Mongampalayam ".... So far, none of the Officers or owners of the quarries spoke about Agriculture. They are taking about the public only......Here, the Public are farmers. Officer said that because of the quarry, there is no more impact. There is no more impact but a small impact is there. What is that? Our lungs damage. If you run the quarry after damaging the lungs, you may kill the people and run the quarry. If you say that you are subjected to power, where is the farmers Authority. Farmers are living like daily wages in the quarry and going for 100 days work under MGNREGA...."
  - Mr. Mukesh, Bellathy "...We are native farmers. Our earth is fertile earth. Paddy grows in this land. Earlies, the rainwater stand nearly a feet above the surface of land if it rains. Now, it is like a dry forest. Earlier, in our well, we can take water just by sitting down....Now, there is no water in the well. At the outset of the program, you have explained about the quarries. But already in the existing quarries, did you perform any inspection of how much permission is given and how much they dug? First of all, you check this. Then, ask for the new quarries permission. Stone quarry is not needed...."
  - Mr. Satish Kumar, Tamil Nadu Farmers Protection Association. "...Already, as our area quarries have crossed allowed size of cutting out stones, how the permission can be given for new quarries. They prepared false document hiding all the true information. That was read by one person and another publishes it as white report and another gives permission. They think that only four of these may live well and others can go elsewhere. We will severely resist this."

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- "...In field number 63, two houses are there. As per the 1959 Tamil Nadu Small Mineral Concession Rules, if there is any house within 300 meters, the permission will not be given. In field number 63, two houses are there and in 65, a house is there, and in 69, a stream is there. Also, in field number 71, a house is there. In 424th field number, there is natham land of Chinnapadiyanur. A town is there and the town itself is hidden. In 426, a stream is there. In 451, a house is there. 392 has two houses and 338 has a house, and field number 337 has two houses. There should be no house within 300 meters and also a home for differentially-abled persons is there. So, definitely permission should not be given."
- 4. Further, there are 10 to 12 mines already operating in the cluster. Addition of new mines in this area will lead to increase in the existing pollution levels thereby affecting the nearby people.
- 5. It is seen from the Google Map that urbanisation is increasing continuously in the proposed area and the number of structures is also increasing steadily.

Hence, considering the public concerns during the PH, health of the people living nearby and environment, and the existence of many operating quarries around the proposed mine lease, the committee decided not to recommend the project.

Agenda No: 420-04

(File No: 9256/2023)

Proposed Rough Stone & Gravel quarry lease over an extent of 1.48.0 Ha at S.F. No.196/1 of Perumanadu Village, Illuppur Taluk, Pudukkottai District, Tamil Nadu by Thiru. V. Sekaran for Environmental Clearance. (SIA/TN/MIN/443521/2023, 10.10.2023).

The proposal was placed in the 420<sup>th</sup> Meeting of SEAC held on 02.11.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in). The SEAC noted the following:

- The Project Proponent, Thiru. V. Sekaran has applied for Environmental Clearance for the Rough Stone & Gravel quarry lease over an extent of 1.48.0 Ha at S.F. No.196/1 of Perumanadu Village, Illuppur Taluk, Pudukkottai District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

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3. As per the mining plan the lease period is 5 years. The mining plan is for the period of Five years & production should not exceed 1,71,015 m³ of Rough Stone

& 13,272 m³ of Gravel with ultimate depth of mining 38m BGL.

During the presentation, SEAC noted that from the KML file uploaded by the proponent in PARIVESH portal, it is construed that

(i) the proposed site has been quarried.

(ii) A pit has been observed on the western side of the proposed mine lease.

However, the precise area communication letter and mine plan approval letter have not mentioned about the aforesaid quarrying activity carried out.

Further, the SEAC is noted from the Reg. 111 (2) of MMR 1961 which stipulates that

"...No working shall be made within a distance of 7.5 metres of the boundary of any mine..."

(iii) The aforesaid 'Safety zone' of 7.5 m of the boundary of the mine is also mandatory for adjacent lands for constructing the protective works which includes fencing, bunds/embankments and garland drainage. Here, it appears that the proponent has mined out the safety barrier of 7.5 m which is also not mentioned in the approved Mining Plan.

Hence, the AD/mines shall visit the site and give his comments on the above aspects.

On receipt of the above details, the SEAC would further deliberate on this project and decide the further course of action. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVRESH portal.

Agenda No: 420 - 05

(File No: 6709/2022)

Existing Black granite and Granitic Gneiss quarry lease over an extent of 16.54.0 Ha at Survey No:287 (Panchappalli) & 19 (Namandahalli) Panchapalli & Namandahalli Village, Palacode Taluk, Dharmapuri District, Tamil Nadu by M/s.TAMIL NADU MINERALS LIMITED- For Environmental Clearance. (SIA/TN/MIN/443551/2023)

DATED 22.09.2023)

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The proposal was placed in this 420<sup>th</sup> meeting of SEAC held on 02.11.2023. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in). The Project Proponent made a detailed presentation before the Committee. The SEAC noted the following:

- The project proponent, M/s. TAMIL NADU MINERALS LIMITED has applied seeking Environmental Clearance for the Existing Black granite and Granitic Gneiss quarry lease over an extent of 16.54.0 Ha at Survey No:287 (Panchappalli) & 19 (Namandahalli), Panchapalli & Namandahalli Village, Palacode Taluk, Dharmapuri District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006, as amended.
- 3. Earlier EC SEIAA Lr. No. SEIAA-TN/F.No.778/EC/1(a)/25014/20143 dated 01.12.2015.
- 4. ToR issued vide SEIAA Lr. No. SEIAA-TN/F.No.6709/ /1(a)/ToR/1339/2022 dated 16.02.2023

Based on the presentation and documents furnished by the project proponent, SEAC directed the Project Proponent to furnish certified compliance report from the Competent Authority for the earlier EC and to submit status of compliance of all the specific conditions imposed in the ToR granted vide SEIAA Lr. No. SEIAA-TN/F.No.6709//1(a)/ToR/1339/2022 dated 16.02.2023. The proponent is advised to submit the above-mentioned details within a period of 30 days failing which the proposal will be automatically delisted from the PARIVESH Portal.

Agenda No: 420 - 06

(File No: 9812/2023)

Expansion of Existing Special Economic Zone without prior Environmental Clearance at S.F.No. 1918, 1948, 1978, 1998, 200, 201, 213, 214, 215, 216, 217,218, 220, 221(PT),387 and 194, 195, 377, 386, 387/4 of Mathur Village and SF.No. 5 (PT), 7 (PT), 8, 9, 10 (PT), 12 (PT), 14, 15,16(PT),17, 18, 19, 20, 21(PT), 22(PT), 48(PT), 49, 51,52, 53, 54, 55, 57, 59, 61, 62, 63, 64, 68, 69, 73, 222 PT, 223(PT),13, 56, 60,70, 71, 72,74(PT) of Mangal Village, SIPCOT Industrial Park, Cheyyar Phase-I Mathur and Manga Villages,

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Vembakkam Taluk Tiruvannamalai District by Ms/. CHEYYAR SEZ DEVELOPER PVT LTD For Environmental Clearance under violation category. (SIA/TN/INFRA2/441796/2023, Dated: 01/09/2023)

The proposal was placed in this 420th meeting of SEAC held on 2.11.2023.

During the meeting, the PP stated that as the stay ordered by the Hon'ble High Court of Madras in W.P (MD). No. 11757 of 2021 of 2021, against the SoP for regularizing violation cases is still in operation, they would implead in the case and move to the Court for vacating the stay. SEAC therefore decided to defer the proposal. Hence the SEAC decided to defer the appraisal of the subject to a later date.

Agenda No: 420 -07

(File No: 9033/2023)

Proposed Rough Stone and Gravel quarry over an extent of 1.53.5Hectare at Survey Nos. 425/6, 425/7 & 425/8 of Lembalakudi Village, Thirumayam Taluk, Pudukkottai District, Tamil Nadu by Thiru. S. Ravi - For Environment Clearance. (SIA/TN/MIN/444949/2023 dt 19/09/2023)

The proposal was placed in this 420th meeting of SEAC held on 02.11.2023. The Project Proponent made a detailed power point presentation about the proposed project. The details of the project furnished by the proponent are available on the PARIVESH website (parivesh.nic.in).

#### The SEAC noted the following:

- 1. The Project Proponent, Thiru. S. Ravi, has applied seeking Environment Clearance for the proposed Rough Stone over an extent of 1.53.5Hectare at Survey Nos. 425/6, 425/7 & 425/8 of Lembalakudi Village, Thirumayam Taluk, Pudukkottai District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification 2006, as amended.
- 3. ToR was issued vide SEIAA Lr. No. SEIAA-TN/F.No.9439/SEAC/ToR-1271/2022 dated 08.10.2022
- 4. The Village public have vehemently opposed setting up of \quarry at the proposed project site.

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During the presentation the SEAC noted that

(i) About 15 number of dwellings are located within the prohibited distance of 300m and another 10 number of houses are situated within a distance of 500 m from the proposed mine lease area on the northern and western sides.

The SEAC has noted that The Tamil Nadu Minor Mineral Concession Rules, 1959 indicates that

"....36 (1-A) (a) No lease shall be granted for quarrying stone within 300 metres (three hundred metres) from any inhabited site:...."

(ii) The public road is also existing close to the proposed mine lease. From the presentation made by the PP, the SEAC have observed that the PP have earlier operated a quarry which lies just adjacent to the proposed mine lease in an unsystematic manner and unscientifically in the contravention of the provisions of the Mines Act 1952 (or) of the regulations, rules, bye-laws or orders made thereunder.

The SEAC has noted from the provisions of the section 22 of the Mines Act, 1952 as it stipulates that

"....22. Powers of Inspectors when causes of danger not expressly provided against exist or when employment of persons is dangerous:- (1) If, in respect of any matter for which no express provision is made by or under this Act, it appears to the Chief Inspector or an Inspector that any mine or part thereof or any matter, thing or practice in or connected with the mine, or with the control, supervision, management or defective so as to threaten, or tend to, the bodily injury of any person, he may give notice, in writing thereof to the owner, agent or manager of the mine and shall state in the notice the particulars in respect of which he considers the mine or part thereof or the matter, thing or practice to be dangerous or defective and require the same to be remedied within such time and in such manner as he may specify in the notice....."

Further, the Reg. 109 (4) of MMR 1961 specifies that

"....Where the stability of such railway, road, works, buildings or structure has been endangered due to any mining operations, the Chief Inspector may, by an order, in

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CHAIRMAN SFAC- TN writing, require the owner to construct on the surface such protective works within such time as he may specify in the order...."

Therefore, based on the presentation made by the proponent, SEAC decided not to recommend the proposal for the above reasons of presence of many physical structures (habitants) and a public road.

Further, the SEIAA is requested to write to the Commissioner, Geology & Mining to instruct the concerned AD (Mines) to furnish a site-inspection report on the existence of unsafe conditions in the quarry operated earlier by the PP (in Govt Paromboke land) which is located adjacent to the above proposed mining lease, to the Director of Mines Safety, Chennai Region immediately for the prescription of protective measures in accordance with the aforesaid provisions of the MMR 1961 for ensuring the safety of the public.

Agenda No: 420 - 08

File No: 9160/2023

Proposed Rough Stone & Gravel quarry lease over an extent of 3.00.0 ha in S.F. No. 182/2 (P) of Thirukooranam Village, Gujiliamparai Taluk, Dindigul District, Tamil Nadu by Thiru. M. K. Kungumarajh - For Environmental Clearance. (SIA/TN/MIN/441764/2023, Dated: 25.08.2023)

The proposal was placed in this 420th SEAC meeting held on 08.11.2023. The project proponent has given a detailed presentation. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The project proponent gave detailed presentation. The SEAC noted the following:

- The Project Proponent, Thiru. M. K. Kungumarajh has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry lease over an extent of 3.00.0 ha in S.F. No. 182/2 (P) of Thirukooranam Village, Gujiliamparai 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. The proponent had obtained vide Lr.No.SEIAA-TN/F.No. 9160/SEAC/TOR-1185/2022, dated: 06.07.2022.

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Public bearing was conducted on 13.07.2023.

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File No		9160/2023		C-1	B1	
File N	o	441764/2023		Category	1(a)	
SI. No	Salient Features of the Proposal					
1.	Name of the	· Owner/Firm	Thiru.M.K.Kungumarajh S/o.Thiru.M.Kumaresan, : No.32. M.G.R. Nagar, Chinna Andan Kovil Street, Karur District – 639301.			
2.		rrying (Ordinary Granite/Limestone)	:	Rough Stone & Gra	evelQuarry	
3.	S.F Nos. of tarea break-u	he quarry site with p	;	182/2 (P)		
4.	Village in w	hich situated	:	Thirukooranam		
5.	5. Taluk in which situated : Gujiliamparai		_			
6.	District in w	hich situated	:	Dindigul		
7.	Extent of qu	arry (in ha.)	:	3.00.0Ha		
8.		ongitude of all ne quarry site	:	10°44'36.82"N to 10°44'41.38"N 77°57'17.33"E to 77°57'25.31"E		
9.	Topo Sheet		:	58 - F/14		
10	Type of min	ing	:	Opencast Mechani	zed Mining	
<u> </u>	Life of Proje	ct	:	10 years		
11.	Lease Period	<u> </u>		10 years	10 years	
	Mining Plan	Period	:	5 years		
	Mining Plan	Details	:	As per approved Mining Plan	As modified by SEAC	
	Geological I (RoM)	Resources m <sup>3</sup>	:	Rough Stone 4,19,040 m <sup>3</sup>	Rough Stone	
12	Minable Res	sources m³ (RoM)	;	Rough Stone 3,22,936m³ Gravel 33,360m³	Rough Stone Gravel	
	Annual Peal	c Production in m <sup>3</sup>	:	Rough Stone  33,810m³  Gravel  33,360m³	Rough Stone  Gravel	

CHAIRMAN-

	Maximum Depth in meters	:	20m BGL		<u>.</u>	
13	Depth of water table	:	30m BGL			
14	Man Power requirement per day:	:	20 Nos			
15	Water requirement:  1. Drinking & utilized water  2. Dust suppression  3. Green belt	:	3.5 KLD 1.0 KLD 1.5 KLD 1.0 KLD			
16	Power requirement	<b>:</b>	TNEB			
17	Precise area communication approved by the Assistant Director, Dept of G&M	:	Na.Ka.No.23/2022 18.03.2022	(Kanimam),	dated:	
18	Mining Plan approved by Assistant Director, Dept of Geology & Mining.	:	Rc.No.23/2022 (Mines), dated: 24.03.2022			
19	Department of G&M, Assistant Director, 500m Cluster Letter	:	Rc.No.23/2022 (Mines), dated: 01.04.2022			
20	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated: 24.03.2022			
21	Project Cost (excluding EMP cost)	:	Rs. 19,00,000			
		:	Validity	30 years sul the following upper limits Rough Stone	ng	
22	EC Recommendation	:	Max Total RoM in m <sup>3</sup>	1,60,296 m³	31,958 m³	
		:	Annual Max RoM in m <sup>3</sup>	33,810m³	31,958 m³	
		:	Max Depth in mtrs			
23	EMP cost (in Rs. Lakhs).	;	Capital Cost – Rs. 17,61,000 Recurring Cost – Rs. 6,89,118			
24	ToR issued Details	:	Lr.No. SEIAA- TN/F.No.9160/SEAC/TOR-1185/2022 dated 06.07.2022.			

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25 P	Public Hearing conducted on	:	13.07.2023.
2 <del>6</del> C	CER cost (in Rs. Lakhs).	:	Rs. 5,00,000

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 33,810 m³ of Rough stone & 31,958 m³ of Gravel by maintaining the ultimate depth of mining up to 20m 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, vide MoEF&CC Notification
  S.O, 1807(E) dated 12.04.2022.
- 2. Since the structures and a check dam are situated within a distance of 500 m, the PP shall carry out the scientific studies within a period of one year from the date of lease execution, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the proposed quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 3. The PP shall furnish an affidavit indicating the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.

MEMBER SECRETARY SEAC -TN CHAIŘMAN SEAC- TN 4. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.

5. As a part of monitoring the implementation of eco-friendly blasting operation, the PP shall regularly monitor the blast-induced ground & air vibration (noise) by installing the DGMS approved 'Vibration Monitoring System (VMS)' at a distance of 300m, and near the Check Dam through a statutory person appointed for the purposes. A copy of such post-monitoring report shall be submitted to the AD/Mines-DGM, Director of Mines Safety / Chennai Region, the SEIAA-TN, and the IRO/MoEF, as a part of Environmental Compliance without any deviation.

 The PP is not permitted to carry out the deep hole blasting operation during the life of the mine lease considering the existence of sensitive environmental settings.

7. The PP shall not install the crusher within 500 m radial distance from the periphery of the mine lease as a protective measure for the environment.

8. As accepted by the Project Proponent the CER cost of Rs. 5 Lakhs and the amount shall be spent for the activities as committed towards Government Middle School in Narasingapuram before obtaining CTO from TNPCB.

Agenda No: 420-09

(File No.8566/2023)

Proposed Rough Stone and Gravel Quarry lease over an extent of 1.54.0Ha at S.F.Nos. 211/1 & 211/2 of Kuppam Village, Pugalur Taluk, Karur District, Tamil Nadu by Thiru. S. Sadhasivam – For Environmental Clearance. (SIA/TN/MIN/440693/2023 dated 17.08.2023)

The proposal was placed in the 420th meeting of SEAC held on 02.11.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

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 The project proponent, Thiru. S. Sadhasivam has applied for Environmental Clearance for the Proposed Rough Stone and Gravel Quarry lease over an extent of 1.54.0Ha at S.F.Nos. 211/1 & 211/2 of Kuppam Village, Pugalur Taluk, Karur 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 was issued to the project proponent vide Lr.No.SEIAA-TN/F.No.8566/ToR-1280/2022 dated.08.10.2022.

4. Public hearing was conducted on 14.06.2023.

During the presentation, SEAC noted from the KML file that the applied mine lease area has been quarried after January 2020 without valid Environmental Clearance. Therefore, the SEAC decided that:

i) The concerned AD/Mines shall inspect the quarry site and provide his comments on the existing site condition and pit details.

On receipt of the same, further deliberations shall be carried out. Hence, the proponent is advised to submit the details within a period of 30 days failing which the proposal will be automatically delisted from the PARIVESH Portal.

Agenda No: 420-10

(File No.9383/2023)

Proposed Ordinary Earth Quarry lease over an extent of 1.53.5 Ha at S.F.Nos. 70/2, 70/3, 70/4, 70/5A & 71/3 of Kondalangkuppam Village, Vanur Taluk, Viluppuram District, Tamil Nadu by Thiru. B. Venkatakrishnan – For Environmental Clearance. (SIA/TN/MIN/442478/2023 dated 30.08.2023)

The proposal was placed in the 420<sup>th</sup> meeting of SEAC held on 02.11.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

1. The project proponent, Thiru. B. Venkatakrishnan has applied for Environmental Clearance for the Proposed Ordinary Earth Quarry lease over an extent of 1.53.5 Ha at S.F.Nos. 70/2, 70/3, 70/4, 70/5A & 71/3 of KondalangkuppamVillage, Vanur Taluk, Viluppuram District, Tamil Nadu.

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- 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.
- ToR was issued to the project proponent vide Lr.No.SEIAA-TN/F.No.9383/ToR-1279/2022 dated.08.10.2022.
- 4. Public hearing was conducted on 04.07.2023.
- 5. ElA report submitted on 31.08.2023.
- 6. DD of Mines Dept. vide letter Rc.No.A/G&M/442/2021, dt: 30.10.2023 stated that

"...the mineral name can be read as Ordinary Earth instead of Red earth mentioned in our letter Rc.No.A/G&M/442/2021 dated.06.06.2022 and in the Mining Plan.."

Further, he informed that there are no rivers, streams, canals, ponds etc within the radius of 50m from the periphery of lease applied area.

- 7. The proponent submitted a Soil Test Report obtained from Government College of Engineering, Dharmapuri vide Lr.No.GCE/DPI/CIVIL/SOIL/2022/C-070 Dt:02.06.2022. According to the report, the % of sand in the soil sample is 24.49%.
- 8. The other salient features of the proposal are as follows:

File No -		9383/2023	Cotogony		B1	
		442452/2023		Category	1(a)	
SI. No	Salient Features of the Proposal					
1.	Name of the Owner/Firm  Thiru. B. Venkatakrishnan, S/o. Balaram, No. 25,2nd Cross Street, Kurumbapet, Housing Board, Puducherry – 605 009.				et, g Board,	
2.	1 ''	e of quarrying (Ordinary : Ordinary Earth Quarry : : e/Sand/Granite/Limestone)		У		
3.	S.F Nos. of t	he quarry site	:	: 70/2, 70/3, 70/4, 70/5A & 71/3		
4.	Village in wi	nich situated	:	: Kondalangkuppam		

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5.	Taluk in which situated	:	Vanur		
6.	District in which situated	:	Villupuram		
7.	Extent of quarry (in ha.)	:	1.53.5Ha		
	Latitude & Longitude of all		12°2'19.41" N to 12°2'	'23.38" N	
8.	corners of the quarry site	:	79°41'16.53" E to 79°	41`23.40 <u>"</u> E	
9.	Topo Sheet No.	:	57 P/12		
10.	Type of mining	:	Open Cast Semi Mechanized Method		
	Life of Project	:	2 years		
11.	Lease Period	:	2 years		
	Mining Plan Period	:	2 years		
	Mining Plan Details	<b>:</b>	As per approved Mining Plan	As modified by SEAC	
	Geological Resources m³ (RoM)	:	Ordinary Earth - 30,712m3	-	
12.	Minable Resources m³ (RoM)	:	Ordinary Earth - 23,004m3	*	
	Annual Peak Production in m³	:	Ordinary Earth - 12,148m3	-	
	Maximum Depth in meters	:	2m (BGL)	-	
13.	Depth of water table	:	55m - 60m		
14.	Man Power requirement per day:	:	5 Nos.		
	Water requirement:	-	2.0 KLD		
	4. Dust Suppression		0.5 KLD		
15.	5. Green belt	:	0.5 KLD		
	Development				
	<ol><li>Drinking &amp; Domestic</li></ol>		1.0 KLD		
16.	Power requirement	:	80514 liters of HSD		
17.	Precise area communication approved by the Deputy Director, Dept of G&M	:	Rc.No.B/G&M/442/2021, Dated: 06.06.2022.		
18.	Mining Plan approved by Deputy Director, Dept of Geology & Mining.	:	Rc.No.A/G&M/442/2021, Dated: 13.06.2022.		

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19.	500m Cluster Letter issued by Deputy Director, Department of G&M	:	Rc.No.B/G&M/442/2 13.06.2022.	021, Dated:
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated: 15.06.2022.	
21.	Project Cost (excluding EMP cost)	:	Rs. 11,40,000/	
	EC Recommendation	•	Validity	2 years subject to the following upper limits.
				Ordinary Earth
22.		••	Max Total RoM in m <sup>3</sup>	23,004m³
		••	Annual Max RoM in m <sup>3</sup>	12,148m³
		:	Max Depth in mtrs	2m BGL
23.	EMP cost (in Rs. Lakhs).	:	Capital Cost – Rs. 3.29 Lakhs Recurring Cost – Rs. 1.02 Lakhs	
24.	CER cost (in Rs. Lakhs).		Rs. 3 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 annual peak production capacity not exceeding 12,148m3 of Ordinary earth by restricting the ultimate depth of mining up to 2m below ground level for a maximum period two years from the date of lease execution and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MoEF &CC, in addition to the following specific conditions:

- 1) Tree plantation & fencing and installation of garland drainage with siltation tank around the mine lease area shall be completed before obtaining the CTO from the TNPCB.
- 2) The PP shall install a temporary Rest Shelter and Bio-toilet for the persons employed in the mine before obtaining the CTO from the TNPQB/

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- The PP shall deploy a dedicated water sprinkler for controlling the dust along the public road.
- 4) As accepted by the Project Proponent the CER cost of Rs. 3 Lakhs shall be spent for the activities as committed towards the Govt Higher Secondary School-Karasanur Village before obtaining CTO from TNPCB.

Agenda No: 420-11 (File No.9901/2023)

Proposed Rough Stone and Gravel Quarry lease over an extent of 3.56.0 Ha at S.F.Nos. 52/8B2, 52/8B3, 53/10, 53/11, 53/12, 53/5B, 53/6, 53/7, 53/8, 53/9, 54/1B2 & 54/1C of Sundakottai Village, Aruppukkottai Taluk, Virudhunagar District, Tamil Nadu by Thiru. R. R. Senthilkumar Raju – For Environmental Clearance. (SIA/TN/MIN/444143/2023 dated 13.09.2023)

The proposal was placed in the 420th meeting of SEAC held on 02.11.2023. 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. R. R. Senthilkumar Raju has applied for Proposed Rough Stone and Gravel Quarry lease over an extent of 3.56.0 Ha at S.F.Nos. 52/8B2, 52/8B3, 53/10, 53/11, 53/12, 53/5B, 53/6, 53/7, 53/8, 53/9, 54/1B2 & 54/1C of Sundakottai Village, Aruppukkottai Taluk, Virudhunagar District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. ToR was issued to the project proponent vide Lr.No.SEIAA-TN/F.No.9901/ToR-1434/2023 dated.24.04.2023.
- 4. Public hearing was conducted on 10.08.2023.
- 5. EIA Report submitted on 22.09.2023.
- 6. The other salient features of the proposal are as follows:

File	No -	9901/2023 444143/2023	Category	B1 1(a)
SI. No		Salient Features of the Proposal		$\bigcap_{\Lambda}$
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1. Name of the Owner/Firm : 5/0. Raju. No. 33. Guru Illam. V.T. Pandian Nagar. Kariapatti taluk. Virudhunagar District – 626 106.  2. Type of quarrying (Ordinary Stone/Sand/Granite/Limestone) : 52/8B2, 52/8B3, 53/10, 53/11, 53/12, 53/5B, 53/6, 53/7, 53/8, 53/9, 54/1B2 & 54/1C  8. Village in which situated : Sundakottal : Aruppukkottal : Sundakottal : Aruppukkottal : Virudhunagar : Virudhunagar : Virudhunagar : Virudhunagar : Virudhunagar : Sextent of quarry (in ha.) : 3.56.0 Ha : O9°28'32.14"N : 78°11'14.34"E to 78°11'25.63"E : 58K/03  14. Type of mining : Opencast Mechanized Mining : Syears : Syears : Syears : Syears : As per approved Mining Plan Period : Syears : As per approved Mining Plan Details : Rough Stone - 8.36.460m³ : Weathered Rock - 52.857 m³ : Gravel - 35,238m³ : Rough Stone - 2.67.915 m³ : Weathered Rock - 29.634 m³ : Gravel - 23,120 m³ : - Rough Stone - 2.67.915 m³ : Gravel - 23,120 m³ : - Rough Stone - 70.350m³ : Ro			<u> </u>	Thirt D.D. Conthillum	nor Dain	
1. Name of the Owner/Firm : No. 33, Guru Illam, V.T. Pandian Nagar, Kariapatti taluk, Virudhunagar District – 626 106.  2. Type of quarrying (Ordinary Stone/Sand/Granite/Limestone) : 52/8B2, 52/8B3, 53/10, 53/11, 53/12, 53/5B, 53/6, 53/7, 53/8, 53/9, 54/1B2 & 54/1C  8. Village in which situated : Sundakottai : Aruppukkottai : Virudhunagar : 3.56.0 Ha :	1.	Name of the Owner/Firm	-	Thiru. R.R. Senthilkumar Raju.		
V.T. Pandian Nagar, Kariapatti taluk.   Virudhunagar District - 626 106.				,		
Virudhunagar District - 626 106.					/	
2.					•	
2. Stone/Sand/Granite/Limestone)  7. S.F. Nos. of the quarry site with area break-up  8. Village in which situated  9. Taluk in which situated  10. District in which situated  11. Extent of quarry (in ha.)  12. Latitude & Longitude of all corners of the quarry site  13. Topo Sheet No.  14. Type of mining  15. Lease Period  Mining Plan Period  Mining Plan Details  Mining Plan Details  16.  Minable Resources m³ (RoM)  Minable Resources m² (RoM)  Annual Peak Production in m³  S2/8B2, 52/8B3, 53/10, 53/11, 53/12, 53/12, 53/12, 53/16, 53/7, 53/8, 53/9, 54/1B2 & 53/5B, 53/6, 53/7, 53/8, 53/9, 54/1B2 & 53/	ļ <u>.</u>		_	<u> </u>		
7. S.F Nos. of the quarry site with area break-up  8. Village in which situated  9. Taluk in which situated  10. District in which situated  11. Extent of quarry (in ha.)  12. Latitude & Longitude of all corners of the quarry site  13. Topo Sheet No.  14. Type of mining  15. Lease Period  Mining Plan Details  Mining Plan Details  Geological Resources m³ (RoM)  16. Minable Resources m³ (RoM)  Annual Peak Production in m³  Selfage in which situated  Sundakottai  Aruppukkottai  Sundakottai  Aruppukkottai  Virudhunagar  Virudhunagar  Santa in	2.	'' ' ' '	:	Rough Stone & Grave		
7. S.F. Nos. of the quarry site with area break-up  8. Village in which situated  9. Taluk in which situated  10. District in which situated  11. Extent of quarry (in ha.)  12. Latitude & Longitude of all corners of the quarry site  13. Topo Sheet No.  14. Type of mining  15. Lease Period  Mining Plan Period  Mining Plan Details  Geological Resources m³ (RoM)  16. Minable Resources m³ (RoM)  Annual Peak Production in m³  Sindakottai  2. Sundakottai  2. Virudhunagar  2. Virudhunagar  3.56.0 Ha  99°28'24.15"N to 09°28'32.14"N  78°11'14.34"E to 78°11'25.63"E  5 988K/03  16. Opencast Mechanized Mining  17. Syears  18. Syears  19. As per approved As modified by Mining Plan SEAC  19. Rough Stone - 8.36.460m³  Weathered Rock - 52.857 m³  Gravel - 35,238m³  Rough Stone - 2.67,915 m³  Weathered Rock - 29,634 m³  Gravel - 23,120 m³  Rough Stone - 3. Roug		Stories surial Granites amestories		50/0D0 50/0D0 50	40 5241 5242	
Sundakottai		S.F Nos. of the quarry site				
8.       Village in which situated       : Sundakottai         9.       Taluk in which situated       : Aruppukkottai         10.       District in which situated       : Virudhunagar         11.       Extent of quarry (in ha.)       : 3.56.0 Ha         12.       Latitude & Longitude of all corners of the quarry site       : 09°28'24.15"N to 09°28'32.14"N         13.       Topo Sheet No.       : 58K/03         14.       Type of mining       : Opencast Mechanized Mining         15.       Lease Period       : 5 years         Lease Period       : 5 years         Mining Plan Period       : 5 years         As per approved Mining Plan       SEAC         Rough Stone - 8,36,460m³       : 8,36,460m³         Weathered Rock - 52,857 m³       Gravel - 35,238m³       -         Gravel - 35,238m³       -         Minable Resources m³ (RoM)       Weathered Rock - 29,634 m³       -         Meathered Rock - 29,634 m³       -       -         Gravel - 23,120 m³       -       -         Appual Peak Production in m³       -       -         Appual Peak Production in m³       -       -	/.	with area break-up	:		5/8, 33/9, 34/182 Q	
9. Taluk in which situated : Aruppukkottai  10. District in which situated : Virudhunagar  11. Extent of quarry (in ha.) : 3.56.0 Ha  12. Latitude & Longitude of all corners of the quarry site : 78°11'14.34"E to 78°11'25.63"E  13. Topo Sheet No. : 58K/03  14. Type of mining : Opencast Mechanized Mining  Life of Project : 5 years  15. Lease Period : 5 years  Mining Plan Period : 5 years  Mining Plan Details : As per approved As modified by SEAC  Geological Resources m³ (RoM) : Rough Stone - 2,857 m³ Cravel - 35,238m³ - Rough Stone - 2,67,915 m³  Minable Resources m³ (RoM) : Weathered Rock - 29,634 m³  Gravel - 23,120 m³ - Rough Stone 2,67,915 m³  Annual Peak Production in m³ Rough Stone	Q	Village in which cituated		*		
10. District in which situated : Virudhunagar  11. Extent of quarry (in ha.) : 3.56.0 Ha  12. Latitude & Longitude of all corners of the quarry site : 78°11'14.34"E to 78°11'25.63"E  13. Topo Sheet No. : 58K/03  14. Type of mining : Opencast Mechanized Mining    Life of Project : 5 years    Lease Period   5 years    Mining Plan Period : 5 years    Mining Plan Details   As per approved   As modified by SEAC    Geological Resources m³ (RoM)   Weathered Rock - 52,857 m³    Gravel - 35,238m³ -    Rough Stone - 2,67,915 m³    Weathered Rock - 29,634 m³    Gravel - 23,120 m³ -    Rough Stone						
11. Extent of quarry (in ha.)  12. Latitude & Longitude of all corners of the quarry site  13. Topo Sheet No.  14. Type of mining  15. Lease Period  Mining Plan Period  Geological Resources m³  (RoM)  16. Minable Resources m³ (RoM)  Extent of quarry (in ha.)  1			:	• •		
12. Latitude & Longitude of all corners of the quarry site  13. Topo Sheet No.  14. Type of mining  Life of Project  Lease Period  Mining Plan Period  Geological Resources m³ (RoM)  16.  Minable Resources m³ (RoM)  Latitude & Longitude of all corners of the quarry site  15. O9°28'24.15"N to 09°28'32.14"N  78°11'14.34"E to 78°11'25.63"E  Sek/03  Opencast Mechanized Mining  Sexources Mining Plan Period  Sears  As per approved As modified by SEAC  Rough Stone -  8,36,460m³  Weathered Rock -  52,857 m³  Gravel - 35,238m³  -  Rough Stone -  2,67,915 m³  Weathered Rock -  29,634 m³  Gravel - 23,120 m³  -  Rough Stone -  -  Rough Stone -  -  2,67,915 m³  Rough Stone -  -  Rough Stone -			:	<u> </u>		
12. corners of the quarry site : 78°11'14.34"E to 78°11'25.63"E  13. Topo Sheet No. : 58K/03  14. Type of mining : Opencast Mechanized Mining  Life of Project : 5 years  15. Lease Period : 5 years  Mining Plan Period : 5 years  Mining Plan Details : As per approved As modified by SEAC  Geological Resources m³ (RoM)	11.		:			
13.   Topo Sheet No.   14.   Type of mining   15.   Copencast Mechanized Mining   15.   Lease Period   16.   Lease Period   16.   Mining Plan Details   16.   Minable Resources m³ (RoM)   Meathered Rock - 2,67,915 m³   Meathered Rock - 2,67,915 m²   Meathered Rock -	12	_				
14. Type of mining : Opencast Mechanized Mining  Life of Project : 5 years  Lease Period : 5 years  Mining Plan Period : 5 years  Mining Plan Details : As per approved Mining Plan SEAC  Geological Resources m³ (RoM) : Rough Stone - 8,36,460m³ Weathered Rock - 52,857 m³ Gravel - 35,238m³ - Rough Stone - 2,67,915 m³ Weathered Rock - 29,634 m³ Gravel - 23,120 m³ - Rough Stone - 2,67,915 m³ Gravel - 23,120 m³ - Rough Stone - 2,67,915 m³ Weathered Rock - 29,634 m³ Gravel - 23,120 m³ - Rough Stone 2,67,915 m³ Rough Stone 2,67,915 m³ Weathered Rock - 29,634 m³ Gravel - 23,120 m³ - Rough Stone		corners of the quarry site	Ľ.			
Life of Project	13.	Topo Sheet No.	:	58K/03		
15.   Lease Period   5 years	14.	Type of mining	:	Opencast Mechanized Mining		
Mining Plan Period : 5 years  Mining Plan Details : As per approved Mining Plan SEAC  Geological Resources m³ (RoM) : Rough Stone - 8,36,460m³ Weathered Rock - 52,857 m³ Gravel - 35,238m³ Rough Stone - 2,67,915 m³ Weathered Rock - 29,634 m³ Gravel - 23,120 m³ Annual Peak Production in m³  Rough Stone		Life of Project	:	5 years		
Mining Plan Details  Geological Resources m³ (RoM)  Mining Plan  Rough Stone - 8,36,460m³  Weathered Rock - 52,857 m³  Gravel - 35,238m³  Rough Stone - 2,67,915 m³  Weathered Rock - 29,634 m³  Gravel - 23,120 m³  Appual Peak Production in m³  Rough Stone - 29,634 m³  Gravel - 23,120 m³  Rough Stone -	15.	Lease Period		5 years		
Mining Plan Details   Mining Plan   SEAC		Mining Plan Period	:	5 years		
Ceological Resources m³ (RoM)   Rough Stone -		Mining Plan Details		As per approved	• ]	
Geological Resources m³ (RoM)    16.		Mining Plati Details	Ŀ	Mining Plan	SEAC	
Geological Resources m³ (RoM)  Weathered Rock		_		Rough Stone -	,	
(RoM)  (RoM)  (RoM)  (RoM)  (RoM)  (Gravel - 35,238m³  (Rough Stone			Ľ	8,36,460m³		
16.				Weathered Rock -	-	
16. Rough Stone 2,67,915 m³ Weathered Rock 29,634 m³ Gravel - 23,120 m³ - Rough Stone				52,857 m³		
Minable Resources m³ (RoM)  Minable Resources m³ (RoM)  Weathered Rock 29,634 m³  Gravel - 23,120 m³ - Rough Stone	16			Gravel - 35,238m³	*	
Minable Resources m³ (RoM)  Weathered Rock 29,634 m³  Gravel - 23,120 m³ - Rough Stone	10.			Rough Stone -	-	
29,634 m³  Gravel - 23,120 m³ -  Rough Stone -			٠	2,67,915 m <sup>3</sup>		
Gravel - 23,120 m³ -  Appual Peak Production in m³ Rough Stone -		Minable Resources m³ (RoM)	Γ	Weathered Rock -	~	
Annual Peak Production in m <sup>3</sup> Rough Stone -				29,634 m³		
Appual Peak Production in m <sup>3</sup> 1 · 1				Gravel - 23,120 m <sup>3</sup>	•	
70,350m <sup>3</sup>		Annual Peak Production in m3		Rough Stone -	+	
		Annual Peak Production III III		70,350m³		

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			Weathered Rock -		
			15,549m³		
			Gravel - 11,096m³		
	Maximum Depth in meters	;	40m BGL	<u>-</u>	
17.	Depth of water table	:	60-65m		
18.	Man Power requirement per day:	:	30 Nos.		
	Water requirement:	:	2.0 KLD		
	1. Dust Suppression		0.4 KLD		
19.	2.Green belt development		1.0 KLD		
	3.Domestic Purpose		0.6 KLD		
20.	Power requirement	:	2,23,126 Liters of HS project life	D for the entire	
21.	Precise area communication approved by the Assistant Director, Dept. of G&M	:	Roc.No.KV1/1554/2022/Kanimam, dated:24.01.2023		
22.	Mining Plan approved by Assistant Director, Dept. of Geology & Mining	:	Roc.No.KV1/1554/2022, dated:15.02.2023.		
23.	500m radius cluster letter issued by the Assistant Director, Dept. of Geology and Mining with date	:	Roc.No.KV1/1554/2022, dated:15.02.2023.		
24.	VAO Certificate Regarding Structures within 300m Radius	•	Letter Dated: 14.02.2023.		
25.	Project Cost (excluding EMP cost)	:	Rs. 66,68,000/~		
26.	EC Recommendation	**	Validity	30 years subject to the following upper limits.	
		:	Max Total RoM in	Rough Stone – 2,67,915m³ Weathered Rock – 29,634m³	

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				Gravel – 23,120m³
		:	Annual Max RoM in m³	Rough Stone – 70,350m³ Weathered Rock – 15,549m³ Gravel – 11,096m³
			Max Depth in mtrs	40m BGL
27.	EMP cost (in Rs. Lakhs).	:	Capital Cost – Rs. 35,32,200/- Recurring Cost – Rs. 19,79,949/-	
28.	CER cost (in Rs. Lakhs).	:	Rs. 5,00,000/-	

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity not exceeding 70,350m³ of Rough stone, 15,549m³ of weathered rock and 11,096m³ of gravel by restricting the ultimate depth of mining up to 40m below ground level 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:

- 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) Tree plantation & fencing and installation of garland drainage with siltation tank around the mine lease area shall be completed before obtaining the CTO from the TNPCB.
- 3) The PP shall furnish an affidavit indicating the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.

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- 4) The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.
- 5) Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation
- 6) For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall within a period of six months from the commencement of mining operations, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 7) The PP shall ensure that the haul road is constructed with bitumen to minimize dust generation but however the suppression/watering are being done to maintain the required moisture level in all active haul roads. A fleet of water

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trucks with adequate water spray systems are available and operational at all times.

- 8) As a part of Ground Water Management, the PP shall carry out the scientific studies to assess the existing hydrogeological condition and impacts of the quarrying operation on the ground water level present in the core zone, within 2 years from the commencement of mining operations, by involving any one of the reputed Research and Academic Institution CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras Centre for Environmental Studies, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 9) As accepted by the Project Proponent the CER cost of Rs. 5 Lakhs shall be spent for the activities as committed towards the Government Higher Secondary School, Muthuramlingapuram, Aruppukottai Taluk, Virudhunagar District before obtaining CTO from TNPCB.

Agenda No: 420-12

(File No: 9808/2023)

Proposed Expansion of Existing Special Economic Zone in Tindivanam Industrial Park (In SIPCOT Industrial park) with land area 67.75 Hectares at SF.No. 32/I, 32/2, 32/3, 33/1B1, 33/1B2, 33/3, 33/5A, 33/5B, 33/7A, 33/7B, 33/8A, 33/8B, 34/I, 34/2, 34/3, 34/4, 34/5, 34/6, 34/7, 34/8, 34/9A, 34/9B, 34/10, 34/11, 35, 36, 37/1, 37/2, 37/3, 37/4, 37/5, 37/6, 37/7, 38/1, 38/2, 38/3, 38/4A1, 38/4A2B, 38/5, 38/6, 8/7, 38/8, 38/9, 39/2, 40/2A, 40/2B, 40/3, 40/4, 40/5, 40/6, 40/7, 40/8, 40/9, 41/3, 42/3, 51/1, 51/2, 51/3, 51/4, 51/5, 51/6, 53/1, 53/2, 53/3, 53/4, 53/5, 53/6, 53/7A, 53/7B, 53/8, 54/1, 54/2, 54/3, 54/4, 54/5, 54/6, 54/7, 55/1, 55/2, 56/1A, 56/1B, 56/1C, 56/2, 57/1, 57/2, 57/3A, 57/3B, 57/3C, 57/4, 57/5A, 57/5B, 57/6, 57/7, 57/8, 57/9, 60/1, 60/2, 60/3, 61/1, 61/2, 62/1, 62/2, 62/3, 63/1, 63/2, 63/3, 63/4A, 63/4B, 64/1, 118/1, 120/1, 120/2, 121/1, 121/2, 121/3 of Pelakupparn Village, Tindivanam Taluk, Villapuram District,

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HAIRMAN SEAC TN Tamil Nadu by M/s. Cheyyar SEZ Developers Private limited - For Environmental Clearance under Violation. (SIA/TN/INFRA2/441612/2023, Dated: 02.09.2023)

The proposal was placed in 420<sup>th</sup> meeting of SEAC held on 02.11.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

- The Project Proponent, M/s. Cheyyar SEZ Developers Private limited has applied for Environmental Clearance under Violation for the Proposed Expansion of Existing Special Economic Zone in Tindivanam Industrial Park (In SIPCOT Industrial park) with land area 67.75Hectares at SF.No. 32/1, 32/2, 32/3, 33/181, 33/182, 33/3, 33/5A, 33/5B, 33/7A, 33/7B, 33/8A, 33/8B, 34/1, 34/2, 34/3, 34/4, 34/5, 34/6, 34/7, 34/8, 34/9A, 34/9B, 34/10, 34/11, 35, 36, 37/1, 37/2, 37/3, 37/4, 37/5, 37/6, 37/7, 38/1, 38/2, 38/3, 38/4A1, 38/4A2B, 38/5, 38/6, 8/7, 38/8, 38/9, 39/2, 40/2A, 40/2B, 40/3, 40/4, 40/5, 40/6, 40/7, 40/8, 40/9, 41/3, 42/3, 51/1, 51/2, 51/3, 51/4, 51/5, 51/6, 53/1, 53/2, 53/3, 53/4, 53/5, 53/6, 53/7A, 53/7B, 53/8, 54/1, 54/2, 54/3, 54/4, 54/5, 54/6, 54/7, 55/1, 55/2, 56/1A, 56/1B, 56/1C, 56/2, 57/1, 57/2, 57/3A, 57/3B, 57/3C, 57/4, 57/5A, 57/5B, 57/6, 57/7, 57/8, 57/9, 60/1, 60/2, 60/3, 61/1, 61/2, 62/1, 62/2, 62/3, 63/1, 63/2, 63/3, 63/4A, 63/4B, 64/1, 118/1, 120/1, 120/2, 121/1, 121/2, 121/3 of Pelakuppam Village, Tindivanam Taluk Villupuram District, Tamil Nadu.
- 2. The project/activity is covered under Category "B" of item 8(b) "Township and Area development project" of the Schedule to the EIA Notification, 2006.
- 3. ToR Issued under Violation category vide Letter No. SEIAA-TN/F.No.9808/Violation/ToR-1422/2023 dated: 03.04.2023.
- 4. EC obtained for SIPCOT land vide Lr.No.SEIAA-Tn/F.6497/EC/8(b)/681/2019 dated 27.11.2019 under B2 category and in Schedule S.No.8(b).

During presentation the PP stated that since SIPCOT has obtained EC for the entire land, the activity proposed to be undertaken by the PP did not attract prior EC and as only the construction work was undertaken, their proposal may not be treated as violation case. The PP also stated that he wanted additional time to obtain legal opinion to support his claim. Hence, SEAC therefore decided to defer the proposal.

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Agenda No: 420-13

(File No: 9281/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 2.56.5Ha at SF.No.191/5 & 191/6 of Perumanadu Village, Illuppur Taluk, Pudukkottai District, Tamil Nadu by Thiru.B.Kajamaideen - for Environmental Clearance. (SIA/TN/MIN/445756/2023, Dated:25.09.2023)

The proposal was placed in 420th meeting of SEAC held on 02.11.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

## The SEAC noted the following

- The Project Proponent, Thiru.B.Kajamaideen has applied for Environmental Clearance for the proposed Rough Stone & Gravel quarry lease over an extent of 2.56.5Ha at SF.No. 191/5 & 191/6 of Perumanadu Village, Illuppur Taluk, Pudukkottai District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. ToR issued vide Lr.No:SEIAA-TN/F.No.9281/SEAC/ToR-1210/2022, Dated: 14.07.2022.
- 4. Public hearing conducted on Dated:09.03.2023.
- 5. The PP has furnished the revised plan & sections duly prepared by the Qualified Person for a depth of 39 m accommodating the slope stability measures for the existing highwall.
- 6. As per the direction of SEAC, the PP has furnished revised Annual Excavation Quantity with Modified Mining Plan for ensuring the stability of slopes & the safety of the persons employed in the mine as given below:

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Reserves as per ToR	Revised Reserves	
Geological Resources: Rough stone - 799440 m <sup>3</sup>	Revised Geological Resources: Rough stone - 670440 m <sup>3</sup>	
Weathered rock $-9020 \text{ m}^3$	Weathered rock - 9020 m <sup>3</sup>	
Gravel - 3452 m <sup>3</sup>	Gravel – 3452 m³	
Mineable Reserves: Rough stone - 231050 m <sup>3</sup>	Revised Mineable Reserves: Rough stone - 107300 m	
Weathered rock - 948 m <sup>3</sup>	Weathered rock ~ 948 m <sup>3</sup>	
Gravel - 1184 m <sup>3</sup>	Gravel – 1184 m'	
Recoverable Reserves: Rough stone – 231050 m <sup>3</sup>	Revised Recoverable Reserves: Rough stone - 107300 m	
Weathered rock - 948 m <sup>3</sup>	Weathered rock - 948 m <sup>3</sup>	
Gravel – 1184 m³	Gravel – 1184 m³	
Depth - 44.0 m	Depth – 39.0 m	

File	9281/2022					
No	SIA/TN/MIN/445756/2023,	Category	B1			
INO	Dated:25.09.2023					
SI.No	Salient Features of the Proposal					
1.	Name of the Owner/Firm	:	Thiru.B.Kajamaide S/o. Bahurudeen No. 215,Kallar str Thiruvapoor Pudukkottai - 622	eet		
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough Stone & G	ravel quarry		
3.	S.F Nos. of the quarry site with area break-up	;	191/5 & 191/6			
4.	Village in which situated	<del> </del>	Perumanadu			
5.	Taluk in which situated	:	illuppur			
6.	District in which situated	†;	Pudukkottai			
7.	Extent of quarry (in ha.)	1:	2.56.5Ha			
8.	Latitude & Longitude of all corners of the quarry site	:	10°22' 56.6270"N to 10°22'46.1527"N 78°43'57.0758"E to 78°43'51.5080"E			
9.	Topo Sheet No.	<u> </u> :	58-J/11			
10.	Type of mining	<u> </u> :	Opencast semi me	echanized mining		

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	Life of Project	:	10 years					
11.	Lease Period	i	5 years		,			
	Mining Plan Period	:	5 years					
		:	As per a	oproved Minir	ng Plan			
	Mining Plan Details		Rough	Weathered	Gravel			
			Stone	Rock				
12.	Geological Resources m <sup>3</sup>	:	6,70,440m³	9,020m³	3,452m³			
	Minable Resources m <sup>3</sup>	:	1,23,675 m <sup>3</sup>	948m³	1184m³			
	Annual Peak Production in m <sup>3</sup>	:	34,250m <sup>3</sup>	948m³	1184m³			
	Ultimate Depth in meters	:	44m					
13.	Depth of water table	:	64m BGL	···				
14.	Man Power requirement per day:	:	18 Employees					
-	Water requirement:		2.0 KLD					
15.	1. Drinking water		1.0 KLD					
15.	2. Dust suppression	•	0.5 KLD					
	3. Green belt		0.5 KLD					
-	-	:	TNEB					
16.	Power requirement		2,04,093 liters of HSD for the Entire					
			Period of life					
	Precise area communication		Rc.No. 633/2	021(G&M),				
17.	approved by the Assistant director,	:	dated:15.03.2	022.				
	Department of G&M.				_			
18.	Mining Plan approved by Assistant		Rc.No. 633/2	021(G&M).				
10.	director, Department of G&M.		dated:19.04.2	022.				
	500m Cluster Letter approved by		Rc.No. 633/2	021(G&M),				
19.	Assistant director, Department of	:	dated:19.04.2					
	G&M,							
20.	VAO Certificate Regarding		Letter Dated:	30.03.2022				
20.	Structures within 300m Radius	] .	: Letter Dated: 30.03.2022.					
		_		/- / A				

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		•	\	30 years subject to the following upper limits.		
			Validity	Rough Stone	Weather ed Rock	Gravel
22.	EC Recommendation	:	Max Total in m³	1,07,3 00 m³	948m³	1184m³
		:	Annual Max in m <sup>3</sup>	34,25 Om³	948m³	1184m³
		:	Ultimat e Depth in mtrs	39m		
23.	EMP cost (in Rs. Lakh).	:	Rs.67,95,	807		
24.	CER cost (in Rs. Lakh).	:	Rs.5 Lakh	s		
25.	EIA report submitted on	:	Dated:29.	09.2023		
26.	ToR details	:	Lr.No:SEIAA-TN/F.No.9281/SEAC/ToR- 1210/2022, Dated: 14.07.2022.			
27.	Public hearing details	:	Public Dated:09.	hearing 03.2023.	conduct	ed on

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 capacity not exceeding 34,250m³ of Rough stone, 948m³ of weathered rock and 1184m³ of gravel by restricting the ultimate depth of mining up to 39m below ground level and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MoEF &CC, in addition to the following specific conditions:

1) The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan

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- approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.
- 2) The PP shall ensure that the Modified Mining Plan incorporating the above quantity (total volume of excavation of 1,07,300 cu.m of rough stone, 984 cu.m of weathered rock and 1184 cu.m of Gravel) shall be duly approved by the concerned AD (Mines) at the time of lease execution. A copy of the such approved Mining Plan shall be sent to the DEE/TNPCB, IRO/MoEF, DMS/Chennai and SEIAA within one month from the date of lease execution.
- 3) Tree plantation & fencing and installation of garland drainage with siltation tank around the mine lease area shall be completed before obtaining the CTO from the TNPCB.
- 4) The PP shall furnish an affidavit indicating the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.
- 5) The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.
- 6) Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG

- Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation
- 7) For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall within a period of six months from the commencement of mining operations, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 8) The PP shall ensure that the haul road is constructed with bitumen to minimize dust generation but however the suppression/watering are being done to maintain the required moisture level in all active haul roads. A fleet of water trucks with adequate water spray systems are available and operational at all times.
- 9) As a part of Ground Water Management, the PP shall carry out the scientific studies to assess the existing hydrogeological condition and impacts of the quarrying operation on the ground water level present in the core zone, within 2 years from the commencement of mining operations, by involving any one of the reputed Research and Academic Institution CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras Centre for Environmental Studies, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

Agenda No: 420-14

(File No: 9309/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 4.90.0Ha at SF.No. 340(Part) and 341/3 (Part) of Bellathi Village, Mettupalayam Taluk, Coimbatore District, Tamil Nadu by Thiru. R.K. Palanisamy - for Environmental Clearance. (SIA/TN/MIN/446239/2023, Dated:28.09.2023)

The proposal was placed in 420<sup>th</sup> meeting of SEAC held on 02.11.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

## The SEAC noted the following

- The Project Proponent, Thiru. R.K. Palanisamy has applied for Environmental Clearance for the proposed Rough Stone & Gravel quarry lease over an extent of 4.90.0Ha at SF.No. 340(Part) and 341/3 (Part) of Bellathi Village, Mettupalayam Taluk, Coimbatore District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. ToR was issued Vide Lr.No:SEIAA-TN/F.No.9309/SEAC/ToR-1242/2022 Dated: 30.08.2022.
- 4. Public hearing was conducted on Dated:03.08.2023.
- 5. The PP has obtained CCR vide CCR letter No.E.P/12.1/2022-23/SEIAA/109/TN/1039 dated 23.09.2022.

The SEAC has observed the following:

The concept of 'public hearing' in the Environmental Clearance, under the ElA Notification mandating 'obtaining of prior EC,' was first promulgated on 27th January, 1994 as amended in 1997, and underwent several amendments till 2004. The Legislature has given utmost importance to ascertain the public views in the entire EC procedure by making provision of public hearing and consultation before appraisal of specified development projects for grant of EC.

"...A public consultation in terms of the Notification dated 14 th September, 2006 consists of two parts. They are: - (a) A public hearing at the site or in its close proximity - district wise, to be carried out for ascertaining the concerns of local affected persons; and (b) Obtaining responses in writing from other

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concerned persons having a plausible stake in the environmental aspects of the project or activity...."

"...The 'public hearing'/consultation is undisputedly a legal right endowed by the EIA Notification, 2006 to the people in the project area and also public at large..."

The excerpts from the Judgement delivered on the Writ Petition (Civil) No. 9317 of 2009 Judgment reserved Samarth Trust And Another vs Union Of India And Others on 28 May, 2010 in the HIGH COURT OF DELHI: NEW DELHI states that

"....A public hearing is a form of participatory justice giving a voice to the voiceless (particularly to those who have no immediate access to courts) and a place and occasion to them to express their views with regard to a project. Participatory justice is in the nature of a Jan Sunwai where the community is the jury....."

"....The advantage of a public hearing is that it brings about transparency in a proposed project and thereby gives information to the community about the project; there is consultation with the affected parties and they are not only taken into confidence about the nature of the project but are given an opportunity to express their informed opinion for or against the project. This form of a social audit, as it were, provides wherever necessary, social acceptability to a project and also gives an opportunity to the EAC to get information about a project that may not be disclosed to it or may be concealed by the project proponent....."

The SEAC have also taken note of the following key observations during the deliberations on the Public Hearing as stipulated below:

"Environmental Impact Assessment Guidance Manual for MINING OF MINERALS" published by the MoEF & CC in 2010 which states that

".....The study area for the mining projects should be defined as follows: 'Core zone' is the mining lease area.

'Buffer zone' in case of ML area up to 25 ha. is to be considered as 5 km all around the periphery of the core zone and for ML area above 25 ha. an area 10 km all around the periphery of the core zone....."

The NGT vide order dated 21.07.2020 in the case of M. Haridasan Vs State of Kerala

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& Ors. (Original Application No. 304/2019) indicates that

"....'Impact zone' as per the MMR 1961 stipulates for danger zone (500 m) by Directorate General of Mines Safety which have to be complied compulsorily and necessary measures should be taken to minimise the impact on environment when the blasting is involved..."

From the documents submitted and presentation made by the PP, the Committee noted the following.

- 1. The data regarding number of people residing in even 2 kms, area of influence zone, and that of agricultural practices, totally rely upon the secondary data collected from various Government Departments. It is expected that during preparation of EIA Report, the PP should have gathered some primary material with respect to the socio-economic data in the Project area. The EIA report has no details on the economic and agricultural activities carried out by the people living in the surrounding area so that appropriate environmental management plan is formulated.
- 2. A bare perusal of the records of public hearing and the minutes of meeting conducted on 03.08.2023 reveal that there was heavy opposition for the proposed mines from the participating public. They have pointed out the harmful effects they are forced to face from the mines already functioning in the area. Vibration damage to the buildings, dust pollution, respiratory diseases due to harmful dust pollution and adverse effects on agricultural activity are some of the objections raised by the public.
- 3. Few of the concerns expressed by the public in the public hearing conducted by the Tamil Nadu Pollution Control Board for the mines in the cluster including that of PP are extracted below.
  - Mr. E. Anandakumar, Mongampalayam ".... For our village, stone quarries are not needed. Because of the quarry, well water is gone. In the quarries, explosion is not properly done. Because of the explosion, cracks develop on the walls of the buildings and dust spreads. Roads are damaged by heavy vehicles. Our area is depending on agriculture for many years...."

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- Mrs. S. Vinothini, Mongampalayam "... Walls in our house were cracked. Even, Underground Water Tank too is cracked. Even with repairs, again Water is wasted. There is huge noise due to quarries explosion and houses are vibrating. Hence, stone quarry is not needed...."
- Mr.K.Balathandayutham, Mongampalayam ".... So far, none of the Officers or owners of the quarries spoke about Agriculture. They are taking about the public only......Here, the Public are farmers. Officer said that because of the quarry, there is no more impact. There is no more impact but a small impact is there. What is that? Our lungs damage. If you run the quarry after damaging the lungs, you may kill the people and run the quarry. If you say that you are subjected to power, where is the farmers Authority. Farmers are living like daily wages in the quarry and going for 100 days work under MGNREGA...."
- Mr. Mukesh, Bellathy "...We are native farmers. Our earth is fertile earth. Paddy grows in this land. Earlies, the rainwater stand nearly a feet above the surface of land if it rains. Now, it is like a dry forest. Earlier, in our well, we can take water just by sitting down.... Now, there is no water in the well. At the outset of the program, you have explained about the quarries. But already in the existing quarries, did you perform any inspection of how much permission is given and how much they dug? First of all, you check this. Then, ask for the new quarries permission. Stone quarry is not needed....."
- Mr. Satish Kumar, Tamil Nadu Farmers Protection Association. "...Already, as our area quarries have crossed allowed size of cutting out stones, how the permission can be given for new quarries. They prepared false document hiding all the true information. That was read by one person and another publishes it as white report and another gives permission. They think that only four of these may live well and others can go elsewhere. We will severely resist this."
  - "...In field number 63, two houses are there. As per the 1959 Tamil Nadu Small Mineral Concession Rules, if there is any house within 300 meters, the permission will not be given. In field number 63, two houses are there and in 65, a house is there, and in 69, a stream is there. Also, in field number 71, a house is there. In 424th field number, there is natham land of Chinnapadiyanur. A town is there and the town itself is hidden. In 426, a stream is there. In 451, a house is there. 392 has two houses and 338 has a house, and field number 337 has two houses. There should be no house within 300 meters and also a home for differentially abled persons is there. So, definitely permission should not be given."

4. Further, there are 10 to 12 mines already operating in the cluster. Addition of new mines in this area will lead to increase in the existing pollution levels thereby affecting the nearby people.

5. It is seen from the Google Map that urbanisation is increasing continuously in the proposed area and the number of structures is also increasing steadily.

Hence, considering the public concerns during the PH, health of the people living nearby and environment, and the existence of many operating quarries around the proposed mine lease, the committee decided not to recommend the project.

Agenda No: 420-15

(File No: 845/2018)

Proposed Black Granite & Quartzo-Feldspathic Gneiss quarry lease area over an extent of 40.13.05 Ha (Government Poramboke land) at S.F.Nos. 58/1 (Pothuvai Village 10.44.0 Ha) & 135/1 (Pazhavalam Village 29.69.05 Ha) of Gingee Taluk, Villupuram District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited - For Environmental Clearance. (SIA/TN/MIN/444029/2023, Dated: 21.09.2023)

The proposal was placed for appraisal in this 420th meeting of SEAC held on 02.11.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

- The project proponent, M/s. Tamil Nadu Minerals Limited has applied for Environmental Clearance for the Proposed Black Granite & Quartzo-Feldspathic Gneiss quarry lease area over an extent of 40.13.05 Ha (Government Poramboke land) at S.F.Nos. 58/1 (Pothuvai Village 10.44.0 Ha) & 135/1 (Pazhavalam Village 29.69.05 Ha) of Gingee Taluk, Villupuram District, Tamil Nadu.
- 2. The project/activity is covered under category "B" of Item 1(a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
- 3. As per the precise area communication letter, the lease period is 30 years and mine plan period is 5 years. As per the approved mine plan, the annual peak production shall not exceed 18,108 m³ ROM which includes 1811 m³ of Black Granite Recovery (@10%) & 16,297 m³ of Granite Rejects (@90%) and 7,52,124 m³ of Quartzo-Feldspathic Gneiss for an ultimate depth of 30m.

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- 4. Earlier, EC was accorded to the proponent vide Lr. No. SEIAA-TN/F.No. 845/EC/ 1(a)/1970/2014 dated: 30.03.2015 for the quantity of 1826.94 cu.m of Black Granite up to a depth of 30m.
- 5. CCR obtained from Regional Office (SEZ), MoEF&CC. Chennai vide EP/12.1/SEIAA/2018-19/35/TN/1986 Dated: 18.12.2018
- 6. ToR along with Public Hearing issued vide Lr No. SEIAA-TN/F.No.845/SEAC/TOR-1328/2023 Dated: 09.02.2023.
- 7. Public hearing was conducted on 13.07.2023.
- 8. EIA Report was submitted on 21.09.2023.
- 9. The salient features of the proposal are as follows:

	File No 845 / 2018			Category	B / 1(a)
SI. No		Salient Fo	eat	ures of the Proposal	
1	1 Name of the Owner/Firm		:	M/s. Tamil Nadu M No.31, Kamarajar S Chepauk, Post Box Chennai - 600 005	alai, TWAD House, No.2961,
2	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)		:	Black Granite & Qu Gneiss	artzo-Feldspathic
3	S.F Nos. of the quarry site with area break-up		:	58/1 (Pothuvai Villa (Pazhavalam Villag	age 10.44.0 Ha) & 135/1 e 29.69.05 Ha)
4	Village in w	hich situated	:	Pothuvai & Pazhav	alam
5	Taluk in wh	ich situated	:	Gingee	
6	District in w	hich situated	:	Villupuram	
7	Extent of qu	arry (in ha.)	:	40.13.05 Ha	
8	1	Longitude of all he quarry site	:	12°08'15.47"N to 12 79°15'39.40"E to 79	
9	Topo Sheet	No.	:	57-P/4 & 8	
10	Type of mining		:	Opencast Semi-Med	chanized Mining
	Life of Proje	ect	:	30 years	
11	Lease Period	<b>d</b>	Ŀ	30 years	A
	Mining Plan	Period	:	5 years	

	Mining Plan Details	:	As per app Mining Pla		As modi	ified by
			Black Granite	Quartzo- Feldspath ic Gneiss	Black Granit e	Quartzo - Feldspat hic Gneiss
12	Geological Resources m³ (RoM)		4,79,221 m³ ROM which includes 47,922 m³ of Black Granite Recovery (@10%) & 4,31,299 m³ of Granite Rejects (@90%)	1,08,13,3 95 m³	-	
	Minable Resources m³ (RoM)		Black Granite	Quartzo- Feldspath ic Gneiss	Black Granit e	Quartzo - Feldspat hic Gneiss
		• •	3,37,609 m³ ROM which includes 33,761 m³ of Black Granite Recovery (@10%) &	77,39,96 1 m³	-	-

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			2 02 040		<u> </u>	
			3,03,848 m³ of			
					-	
			Granite			
			Rejects			
		<u> </u>	(@90%)			_
!				_		Quartzo
			Black	Quartzo-	Black	•
			Granite	Feldspath	Granit	Feldspat
				ic Gneiss	e	hic
						Gneiss
			18,108 m <sup>3</sup>			
			ROM			
			which			
ļ			includes	<u> </u>		
	Annual Peak Production in m <sup>3</sup>	:	1811 m³			
			of Black			
			Granite	7,52,124	_	<u>-</u>
i			Recovery	m³		
]			(@10%)			
			& 16,297			
			m³ of			
			Granite			
			Rejects			
		_	(@90%)			<u> </u>
	Ultimate Depth in meters		30m		<u> </u>	·
13	Depth of water table	:	15-13m BG	<u>L</u>		
14	Man Power requirement per	:	30 Nos.			
	day:	<u> </u>				
	Water requirement:		1.5 KLD			
	1. Drinking water		0.5 KLD			
15	2. Wire saw cutting	:	0.3 KLD			
	3. Dust suppression		0.3 KLD			
	4. Green belt	_	0.4 KLD	· · · · · · · · · · · · · · · · · · ·		
16	Power requirement	:		of HSD / day		
	Precise area communication			21835/MME	1/2007-7.	
17	approved by Principal Secretary		Dated:2.11.	.2011		
''	to Government, Industries	'			$\wedge$	^
	(MME.1) Department					1
					777	T

	Modified Mining Plan	<u> </u>	Rc.No.2823/M	M4/2022, dated:	
18	approved by Commissioner, Department of G&M	:	14.09.2022		
19	500m Cluster Letter	:	-		
20	VAO Certificate Regarding Structures within 300m Radius	:			
21	Project Cost (excluding EMP cost)	:	Rs. 97,92,000/-	• 	
				30 years subject	[
				following upper	
					Quartzo
		<del>•</del>	Validity	Black Granite	Feldspat hic Gneiss
22	EC Recommendation		Max Total RoM in m³	90,298 m³ ROM which includes 9030 m³ of Black Granite Recovery (@10%) & 81,268 m³ of	35,96,0 21 m³
				Granite Rejects (@90%)	
				18,108 m <sup>3</sup> ROM which includes 1811 m <sup>3</sup> of Black	
		.	Annual Max	Granite	7,52,12
		'	RoM in m <sup>3</sup>	Recovery	4 m³
				(@10%) &	
				16,297 m³ of	
				Granite Rejects (@90%)	
		:	Max Depth in mtrs	30m	
23	EMP cost (in Rs. Lakh).	Τ.	· ·	Rs. 49,37,610/-	
	2.771 CON (III TO LONG).		Recurring Cost	- Rs. 20,83,987)	-

24	CER cost (in Rs. Lakh).	:	Rs. 10,00,000/-	
!				

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity not exceeding 18,108 m³ ROM which includes 1811 m³ of Black Granite Recovery (@10%) & 16,297 m³ of Granite Rejects (@90%) and 7,52,124 m³ of Quartzo-Feldspathic Gneiss by maintaining the ultimate depth of mining upto 30m 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, vide MoEF&CC Notification S.O.
  1807(E) dated 12.04.2022.
- 2. The PP shall ensure the safety provisions as stipulated in the DGMS Circular No:02, dated. 29.11.2019 while using the Diamond Wire Saw machines in the proposed quarry operation.
- 3. To ensure the conditions of occupational safety, health & welfare status of persons working in the mine, the PP shall annually conduct occupational health survey to determine prevalence of Noise Induced Hearing Loss (NIHL) due to the operation of Diamond Wire Saw cutting & other HEMMs deployed in the mine and to prepare a plan for hearing conservation programme by involving anyone of the reputed institutes Regional Occupational Health Centre (Southern) of ICMR-National Institute of Occupational Health, Bengaluru, National Institute of Miners' Health, Nagpur and Anna University, Chennai.
- 4. The PP shall properly provide all the required welfare amenities near quarry such as Drinking water, Rest Shelter, Canteen, Toilets, etc for the persons to be employed in the proposed quarry before the execution of lease, in accordance with the provisions of the Mines Rules, 1955.

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- 5. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 4th year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 6. The PP shall not dump any waste from the mining operation outside the Mine Lease Area.
- 7. As accepted by the Project Proponent the CER cost of Rs. 10 lakhs and the amount shall be spent for the activities as committed towards the Government Schools. Pothuvai & Pazhavalam Villages, Gingee Taluk, Villupuram District, before obtaining CTO from TNPCB.

Agenda No: 420-16

(File No: 9648/2022)

Proposed Black Granite quarry lease area over an extent of 20.95.5 Ha (Government Poramboke land) at S.F.Nos. 1193/1 (Part 5 & 16) of Kodakkal Village, Sholinghur Taluk, Ranipet District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited - For Environmental Clearance. (SIA/TN/MIN/445737/2023, Dated: 13.10.2023)

The proposal was placed for appraisal in this 420th meeting of SEAC held on 02.11.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

- The project proponent, M/s. Tamil Nadu Minerals Limited has applied for Environmental Clearance for the Proposed Black Granite quarry lease area over an extent of 20.95.5 Ha (Government Poramboke land) at S.F.Nos. 1193/1 (Part 5 & 16) of Kodakkal Village, Sholinghur Taluk, Ranipet District, Tamil Nadu.
- 2. The project/activity is covered under category "B" of Item 1(a) "Mining of

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- Minerals Projects" of the schedule to the EIA Notification, 2006.
- 3. As per the precise area communication letter, the lease period is 20 years and mine plan period is 5 years. As per the approved mine plan, the annual peak production shall not exceed 24,064 m³ ROM which includes 2406 m³ of Black Granite Recovery (@10%) & 21,658 m³ of Granite Waste (@90%) for an ultimate depth of 30m.
- 4. ToR along with Public Hearing issued vide Lr No. SEIAA-TN/F.No.9648/SEAC/ ToR-1344/2023 Dated: 16.02.2023. The total quantity of 1,10,265 cu.m of RoM does not exceed with 11,027 cu.m of Black Granite (10% Recovery) & 99238 cu.m of Granite waste/rejects, are permitted with ultimate depth up to 40m GL considering the safety aspects for a period of 5 years.
- 5. Public hearing was conducted on 18.07.2023.
- 6. EIA Report was submitted on 13.10.2023.
- 7. The salient features of the proposal are as follows:

	File No 9648 / 2022			Category	B / 1(a)
SI. No		Salient F	eat	ures of the Proposal	
1	Name of the Owner/Firm		:	M/s. Tamil Nadu Minerals Limited, No.31, Kamarajar Salai, TWAD House, Chepauk, Post Box No.2961, Chennai - 600 005.	
2	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)		:	Black Granite	
3	S.F Nos. of the quarry site with area break-up		:	1193/1 (Part 5 & 16)	
4	Village in w	hich situated	:	Kodakkal	
5	Taluk in wh	ich situated	:	Sholinghur	
6	District in w	hich situated	1:	Ranipet	
7	Extent of qu	arry (in ha.)	;	20.95.5 Ha	
8		Longitude of all ne quarry site	:	13°04'37.36450"N to 79°24'14.80812"E to	
9	Topo Sheet	No.	:	57–O/8	

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10	Type of mining	:	Opencast Semi-Mechan	ized Mining
	Life of Project	:	20 years	······
11	Lease Period	:	20 years	
	Mining Plan Period	:	5 years	
			As per approved	As modified by
	Mining Plan Details	:	Mining Plan	SEAC
			Black Granite	Black Granite
			1,86,802 m³ ROM	
			which includes 18,680	
	Geological Resources m <sup>3</sup>		m³ of Black Granite	
	(RoM)	•	Recovery (@10%) &	-
			1,68,122 m <sup>3</sup> of	
			Granite Waste	{
			(@90%)	
			Black Granite	Black Granite
	Minable Resources m³ (RoM)	•	1,10,265 m <sup>3</sup> ROM	
12			which includes 11,027	
			m³ of Black Granite	_
			Recovery (@10%) &	
			99,238 m³ of Granite	
			Waste (@90%)	
			Black Granite	Black Granite
			24,064 m <sup>3</sup> ROM	
			which includes 2406	
	Annual Peak Production in m <sup>3</sup>	:		_
			Recovery (@10%) &	
			21,658 m³ of Granite	
	1100 Double Double		Waste (@90%)	
	Ultimate Depth in meters	:	40m	
13	Depth of water table	<u> </u> :	15m-10m BGL	<del></del>
14	Man Power requirement per	:	30 Nos.	
	day: Water requirement:	<del>  -</del>	1.5 KLD	
	1. Drinking water		0.5 KLD	
15	2. Wire saw cutting	<u>.</u>	0.3 KLD	
'	3. Dust suppression	'	0.3 KLD	
•	4. Green belt		0.4 KLD	Λ
16	Power requirement	-	200 Liters of HSD / day	,
	- Core respective	<u> </u>		' <del>        </del>

		Т	1 N 3040/1414E	1/2022 1
17	Precise area communication approved by Additional Chief Secretary to Government, Industries (MME.1) Department	:	Letter No.3040/MME. Dated:02.06.2022	1/2022-1,
18	Mining Plan approved by Commissioner, Department of G&M	:	Rc.No.5123/MM4/202 25.08.2022	2, dated:
19	500m Cluster Letter	:	-	į
20	VAO Certificate Regarding Structures within 300m Radius	:	-	
21	Project Cost (excluding EMP cost)	:	Rs. 97,92,000/-	
	:	Validity	30 years subject to the following upper limits.  Black Granite	
22	EC Recommendation	•	Max Total RoM in m³	1,10,265 m³ ROM which includes 11,027 m³ of Black Granite Recovery (@10%) & 99,238 m³ of Granite Waste (@90%)
		••	Annual Max RoM in m <sup>3</sup>	24,064 m³ ROM which includes 2406 m³ of Black Granite Recovery (@10%) & 21,658 m³ of Granite Waste (@90%)
		••	Max Depth in mtrs	40m
23	EMP cost (in Rs. Lakh).	:	Capital Cost – Rs. 65,43 Recurring Cost – Rs. 26	
24	CER cost (in Rs. Lakh).	:	Rs. 10,00,000/-	

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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 annual peak production capacity not exceeding 24,064 m<sup>3</sup> ROM which includes 2406 m³ of Black Granite Recovery (@10%) & 21,658 m³ of Granite Waste (@90%) by maintaining the ultimate depth of mining upto 40m and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- 1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
- 2. The PP shall not dump any waste from the mining operation outside the Mine Lease Area.
- 3. The PP shall ensure the safety provisions as stipulated in the DGMS Circular No:02. dated. 29.11.2019 while using the Diamond Wire Saw machines in the proposed quarry operation.
- 4. To ensure the conditions of occupational safety, health & welfare status of persons working in the mine, the PP shall annually conduct occupational health survey to determine prevalence of Noise Induced Hearing Loss (NIHL) due to the operation of Diamond Wire Saw cutting & other HEMMs deployed in the mine and to prepare a plan for hearing conservation programme by involving anyone of the reputed institutes - Regional Occupational Health Centre (Southern) of ICMR-National Institute of Occupational Health, Bengaluru, National Institute of Miners' Health, Nagpur and Anna University, Chennai.
- 5. The PP shall properly provide all the required welfare amenities near quarry such as Drinking water, Rest Shelter, Canteen, Toilets, etc for the persons to be employed in the proposed quarry before the execution of lease, in accordance with the provisions of the Mines Rules, 1955.

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- 6. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 4th year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 7. As accepted by the Project Proponent the CER cost of Rs. 10 lakhs and the amount shall be spent for the activities as committed towards the Government High School, Kodakkal Village, Sholinghur Taluk, Ranipet District, before obtaining CTO from TNPCB.

Agenda No: 420-17 (File No: 9044/2022)

Proposed Rough Stone and Gravel quarry lease area over an extent of 2.69.05 Ha at S.F.Nos. 343 & 344/1 of Belladhi Village, Mettupalayam Taluk, Coimbatore District, Tamil Nadu by Tvl. Sri Blue Metals - For Environmental Clearance. (SIA/TN/MIN/446051/2023, Dated: 27.09.2023)

The proposal was placed for appraisal in this 420th meeting of SEAC held on 02.11.2023. 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, Tvl. Sri Blue Metals has applied for Environmental Clearance for the Proposed Rough Stone and Gravel quarry lease area over an extent of 2.69.05 Ha at S.F.Nos. 343 & 344/1 of Belladhi Village, Mettupalayam Taluk, Coimbatore District, Tamil Nadu.
- 2. The project/activity is covered under category "B" of Item 1(a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.

3. ToR along with Public Hearing issued vide Lr No. SEIAA-TN/F.No.9044/SEAC/TOR-1163/2022 Dated: 06.06.2022

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- Public hearing conducted on 03.08.2023.
- 5. EIA Report submitted on 27.09.2023.

The SEAC has observed the following:

The concept of 'public hearing' in the Environmental Clearance, under the EIA Notification mandating 'obtaining of prior EC,' was first promulgated on 27th January, 1994 as amended in 1997, and underwent several amendments till 2004. The Legislature has given utmost importance to ascertain the public views in the entire EC procedure by making provision of public hearing and consultation before appraisal of specified development projects for grant of EC.

"...A public consultation in terms of the Notification dated 14 th September, 2006 consists of two parts. They are: - (a) A public hearing at the site or in its close proximity - district wise, to be carried out for ascertaining the concerns of local affected persons; and (b) Obtaining responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity...."

"...The 'public hearing'/consultation is undisputedly a legal right endowed by the EIA Notification, 2006 to the people in the project area and also public at large..."

The excerpts from the Judgement delivered on the Writ Petition (Civil) No. 9317 of 2009 Judgment reserved Samarth Trust And Another vs Union Of India And Others on 28 May, 2010 in the HIGH COURT OF DELHI: NEW DELHI states that

"....A public hearing is a form of participatory justice giving a voice to the voiceless (particularly to those who have no immediate access to courts) and a place and occasion to them to express their views with regard to a project. Participatory justice is in the nature of a Jan Sunwai where the community is the jury....."

"....The advantage of a public hearing is that it brings about transparency in a proposed project and thereby gives information to the community about the project; there is consultation with the affected parties and they are not only taken into confidence about the nature of the project but are given an opportunity to express their informed opinion for or against the project. This form of a social audit, as it were, provides wherever necessary, social acceptability to a project and also gives an opportunity to the EAG to get information about a project that may not be disclosed to it or may be

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concealed by the project proponent....."

The SEAC have also taken note of the following key observations during the deliberations on the Public Hearing as stipulated below:

"Environmental Impact Assessment Guidance Manual for MINING OF MINERALS" published by the MoEF & CC in 2010 which states that

".....The study area for the mining projects should be defined as follows: 'Core zone' is the mining lease area.

'Buffer zone' in case of ML area up to 25 ha. is to be considered as 5 km all around the periphery of the core zone and for ML area above 25 ha. an area 10 km all around the periphery of the core zone....."

The NGT vide order dated 21.07.2020 in the case of M. Haridasan Vs State of Kerala & Ors. (Original Application No. 304/2019) indicates that

"....'Impact zone' as per the MMR 1961 stipulates for danger zone (500 m) by Directorate General of Mines Safety which have to be complied compulsorily and necessary measures should be taken to minimise the impact on environment when the blasting is involved..."

From the documents submitted and presentation made by the PP, the Committee noted the following.

- 1. The data regarding number of people residing in even 2 kms, area of influence zone, and that of agricultural practices, totally rely upon the secondary data collected from various Government Departments. It is expected that during preparation of EIA Report, the PP should have gathered some primary material with respect to the socio-economic data in the Project area. The EIA report has no details on the economic and agricultural activities carried out by the people living in the surrounding area so that appropriate environmental management plan is formulated.
- 2. A bare perusal of the records of public hearing and the minutes of meeting conducted on 03.08.2023 reveal that there was heavy opposition for the proposed mines from the participating public. They have pointed out the harmful effects they are forced to face from the mines already functioning in the area. Vibration damage to the buildings, dust pollution, respiratory diseases due

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- to harmful dust pollution and adverse effects on agricultural activity are some of the objections raised by the public.
- Few of the concerns expressed by the public in the public hearing conducted by the Tamil Nadu Pollution Control Board for the mines in the cluster including that of PP are extracted below.
  - Mr. E. Anandakumar, Mongampalayam "....For our village, stone quarries are not needed. Because of the quarry, well water is gone. In the quarries, explosion is not properly done. Because of the explosion, cracks develop on the walls of the buildings and dust spreads. Roads are damaged by heavy vehicles. Our area is depending on agriculture for many years...."
  - Mrs. S. Vinothini, Mongampalayam "...Walls in our house were cracked. Even, Underground Water Tank too is cracked. Even with repairs, again Water is wasted. There is huge noise due to quarries explosion and houses are vibrating. Hence, stone quarry is not needed..."
  - Mr.K.Balathandayutham, Mongampalayam ".... So far, none of the Officers or owners of the quarries spoke about Agriculture. They are taking about the public only......Here, the Public are farmers. Officer said that because of the quarry, there is no more impact. There is no more impact but a small impact is there. What is that? Our lungs damage. If you run the quarry after damaging the lungs, you may kill the people and run the quarry. If you say that you are subjected to power, where is the farmers Authority. Farmers are living like daily wages in the quarry and going for 100 days work under MGNREGA...."
  - Mr. Mukesh, Bellathy "...We are native farmers. Our earth is fertile earth. Paddy grows in this land. Earlies, the rainwater stand nearly a feet above the surface of land if it rains. Now, it is like a dry forest. Earlier, in our well, we can take water just by sitting down....Now, there is no water in the well. At the outset of the program, you have explained about the quarries. But already in the existing quarries, did you perform any inspection of how much permission is given and how much they dug? First of all, you check this. Then, ask for the new quarries permission. Stone quarry is not needed...."
  - Mr. Satish Kumar, Tamil Nadu Farmers Protection Association.
     "...Already, as our area quarries have crossed allowed size of cutting out stones, how the permission can be given for new quarries.
     They prepared false document hiding all the true information. That was read by one person and another publishes it as white report and another

gives permission. They think that only four of these may live well and others can go elsewhere. We will severely resist this."

"...In field number 63, two houses are there. As per the 1959 Tamil Nadu Small Mineral Concession Rules, if there is any house within 300 meters, the permission will not be given. In field number 63, two houses are there and in 65, a house is there, and in 69, a stream is there. Also, in field number 71, a house is there. In 424th field number, there is natham land of Chinnapadiyanur. A town is there and the town itself is hidden. In 426, a stream is there. In 451, a house is there. 392 has two houses and 338 has a house, and field number 337 has two houses. There should be no house within 300 meters and also a home for differentially-abled persons is there. So, definitely permission should not be given."

- 4. Further, there are 10 to 12 mines already operating in the cluster. Addition of new mines in this area will lead to increase in the existing pollution levels thereby affecting the nearby people.
- 5. It is seen from the Google Map that urbanisation is increasing continuously in the proposed area and the number of structures is also increasing steadily.

Hence, considering the public concerns during the PH, health of the people living nearby and environment, and the existence of many operating quarries around the proposed mine lease, the committee decided not to recommend the project.

Agenda No: 420-18

(File No: 9739/2023)

Proposed production enhancement from 2.00 MTPA to 6.97 MTPA (ROM-Limestone & Marl) in existing limestone quarry (GO No.76) over an extent of 166.005 Ha at S.F. Nos. 39/8, 40, 41/1, 47/1, 47/3, 47/4, 47/11, 49, 50, 51, 52, 53/1, 55/1 (P), 55/15, 101, 102/20, 104/1A, 104/15, 104/24, 110/2, 110/3, 110/4, 110/15, 111/1, 111/2, 112/1, 112/8, 112/11B, 112/12, 112/14A, 112/15, 113/1, 113/3, 114/1, 114/6, 114/7, 114/11, 114/12, 114/13, 114/14, 114/15, 114/17A, 114/17B, 114/18, 114/19, 115/1, 115/3, 115/4, 115/6, 115/7, 115/9, 115/10, 116/1, 116/2, 116/3, 117/1, 117/2, 117/3, 117/4, 117/5, 117/6, 117/7, 117/8, 118/1, 118/3A, 118/3C, 118/5, 118/10, 119/1, 119/19B, 120, 121/1, 121/7A, 121/18, 121/19, 122, 135/1, 135/2, 136/1, 136/3, 136/7, 136/10, 136/11, 136/12, 136/13, 136/14, 137/1, 137/2, 137/3, 137/6, 137/7, 138/1, 138/2, 139/1, 139/2, 139/3, 139/4, 139/5, 139/6, 139/7, 140/1, 140/2, 140/3, 140/4, 140/6B, 252, 254/4, 254/7, 254/8, 254/9, \$54/10, 254/11,

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CHAĬŔMÁŇ SEAC- TN 254/12, 254/13, 258/1, 259/6, 260/3, 260/7, 260/9, 260/13, 260/16, 260/18, 268/1(P), 403 of Kallakudi Village (97.955 Ha), S.F Nos. 54/1, 54/2, 55, 56, 57, 58(P), 59/18(P), 60, 61/8, 72/1, 72/3(P), 73/1, 73/3, 73/5, 74/1, 75, 77/4(P), 78/5(P), 78/7(P), 78/8A, 79/1A(P), 79/1B, 79/2, 79/6, 80/1, 81/1B, 81/3, 81/4, 82, 83, 85/2, 86/1, 87, 88/1, 89/1, 92(P), 93/1D, 94/7(P), 95/8(P), 140A/1, 147/1 of Kovandakurichi Village (66.820 Ha) and S.F No. 32 of Venkatachalapuram Village (1.230 Ha), Lalgudi Taluk, Trichy District, Tamil Nadu by M/s. Dalmia Cement (Bharat) Limited - For Environmental Clearance. (S1A/TN/MiN/443674/2023, Dated: 08.09.2023)

The proposal was placed for appraisal in this 420th meeting of SEAC held on 02.11.2023. The details of the project furnished by the proponent are given in the website (particular). The SEAC noted the following:

1. The project proponent, M/s. Dalmia Cement (Bharat) Limited has applied for Environmental Clearance for the Proposed production enhancement from 2.00 MTPA to 6.97 MTPA (ROM-Limestone & Marl) in existing limestone Mines (G.O No.76) over an extent of 166.005 Ha at S.F Nos. 39/8, 40, 41/1, 47/1, 47/3, 47/4, 47/11, 49, 50, 51, 52, 53/1, 55/1 (P), 55/15, 101, 102/20, 104/1A, 104/15, 104/24, 110/2, 110/3, 110/4, 110/15, 111/1, 111/2, 112/1, 112/8, 112/118, 112/12, 112/14A, 112/15, 113/1, 113/3, 114/1, 114/6, 114/7, 114/11, 114/12, 114/13, 114/14, 114/15, 114/17A, 114/17B, 114/18, 114/19, 115/1, 115/3, 115/4, 115/6, 115/7, 115/9, 115/10, 116/1, 116/2, 116/3, 117/1, 117/2, 117/3, 117/4, 117/5, 117/6, 117/7, 117/8, 118/1, 118/3A, 118/3C, 118/5, 118/10, 119/1, 119/19B, 120, 121/1, 121/7A, 121/18, 121/19, 122, 135/1, 135/2, 136/1, 136/3, 136/7, 136/10, 136/11, 136/12, 136/13, 136/14, 137/1, 137/2, 137/3, 137/6, 137/7, 138/1, 138/2, 139/1, 139/2, 139/3, 139/4, 139/5, 139/6, 139/7, 140/1, 140/2, 140/3, 140/4, 140/6B, 252, 254/4, 254/7, 254/8, 254/9, 254/10, 254/11, 254/12, 254/13, 258/1, 259/6, 260/3, 260/7, 260/9, 260/13, 260/16, 260/18, 268/1(P), 403 of Kallakudi Village (97.955 Ha), S.F Nos. 54/1, 54/2, 55, 56, 57, 58(P), 59/18(P), 60, 61/8, 72/1, 72/3(P), 73/1, 73/3, 73/5, 74/1, 75, 77/4(P), 78/5(P), 78/7(P), 78/8A, 79/1A(P), 79/1B, 79/2, 79/6, 80/1, 81/1B, 81/3, 81/4, 82, 83, 85/2, 86/1, 87, 88/1, 89/1, 92(P), 93/1D, 94/7(P), 95/8(P), 140A/1, 147/1 of Kovandakurichi Village (66.820

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- Ha) and S.F No. 32 of Venkatachalapuram Village (1.230 Ha), Lalgudi Taluk, Trichy District, Tamil Nadu.
- 2. The project/activity is covered under category "B" of Item 1(a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
- 3. There were 6 Nos. Leases earlier and were amalgamated as a single Lease through GO(3D) No. 1 Industries MMA.2 Department dated 08.01.2002 for an Extent of 166.005 Ha. As per MMDR Amendment Act, 2015, Lease has been renewed upto 31.03.2030 vide GO No. 76 dated 26.07.2018. Supplementary Lease Deed is executed on 30.11.2019 and Registered as Document No. 2497 on 05.12.2019.
- 4. As per the GO NO. 76 dated 26.07.2018, the lease period is for 25 years (i.e., up to 31.03.2030) and Production & Development Plan of Review of Mining Plan Period (Period for which the modification is accepted by the IBM) is 5 years (i.e., 2024-2025 to 2028-2029).
- 5. As per the UNFC Guidelines mandated by the Ministry of Mines, Govt of India, the PP has explored the total Lease area of 166.005 Ha completely as a part of detailed reassessment of resources to fulfill the requirements of the Minerals (Evidence of Mineral Contents) Rules, 2015, in the 'G1 category' under the provisions of the sub-rule(4) of rule 12 of the Mineral Conservation and Development Rules (MCDR), 2017 which states that
  - "...the depth of exploration to be proposed in the modified mining plan for opencast shall be upto 300 m or up to discontinuance of ore body, whichever is earlier, depending upon the geological set up of the area...." and it has revealed that it possesses the Mineralised Area of 124.98 Ha and the Non Mineralised Area of 41.025 Ha.
- 6. Based on the above assessment, the Review of Mining Plan (including Progressive Mine Closure Plan) submitted by M/s. Dalmia Cement (Bharat) Limited under Rule 17(2) of MCR, 2016 for the existing limestone Mines over an extent of 166.005 Ha was approved by the Indian Bureau of Mines vide No. TN/TCR/LST/ROMP-1721.MDS, dated. 03.10.2023 by duly approving the 'Modification in RoMP' submitted earlier in view of EC expansion.

- 7. Subsequently, the IBM / Chennai Region has approved the Review of Mining Plan for the annual peak production quantity of not exceeding 69,70,000 T ROM for an ultimate depth to 118.5m BGL, to facilitate the 'Zero Waste' mining operations are carried out in scientific and systematic way thereby improving the productivity, safety and conservation of mineral. Further, it has been informed that the actual existing limestone production capacity of mines is less than the enhanced cement production capacity of cement plants (Dalmiapuram and Ariyalur) which is based on the cement market in view of infrastructural development across the state.
- 8. It was informed by the PP that the mine is captive and no sale of raw material is done as entire ROM is being consumed for their own cement plants located at Dalmiapuram and Ariyalur.
- 9. The PP have informed that all the Pits are being worked by the Non-Conventional Method of Mining using Vibro silenced model of Rock Breakers and Surface Miners, as conventional method of drilling & blasting operation has been stopped since 2005 due to existence of quarry in close proximity to habitation, worship places, etc. Besides, the PP has furnished an affidavit for 'No Blasting operation' in the above mine vide a letter addressed to the MS, SEIAA dated, 15.05.2023.
- 10. During the drone video shown to the SEAC, the PP have informed that they have planted about 22,500 number of plants covering the area of extent upto 22.50 Ha with a survival rate of 85% during the last five years and another set of 12500 number of plants will be planted with annual rate of 2500 number of plants within the mine lease and avenue / haul roads during the next five years. Effective Green Belt is developed in all Lease Areas as per CPCB guidelines.
- 11. The PP have added that the Land Use of Lease Area at the Expiry of Lease Period (total mined out area) will have mined out area with fully 'Rehabilitated from Reclaimed area' of 14.50 Ha and 'Area under Water Reservoir considered Rehabilitated' of 108.73 Ha besides stabilizing the waste dump rehabilitated of 20.81 Ha, virgin area under green belt of 20.34 Ha. About 20.340 Ha will be

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- under Green Belt (29,500 Trees @ 1,450 Tree/Ha with 85-90% Survival Rate) and another 14.50 Ha will be backfilled and Afforested. Thus, total Green Belt Coverage will be 34.84 Ha (20.99%) pertaining to ML-I.
- 12. It was informed that the water from the existing pits are suitably treated before it has been delivered for the drinking purposes and the quality of water is also monitored on daily basis especially for fluoride & arsenic by the Environmental management cell.
- Earlier, EC issued by MoEF&CC, New Delhi vide J-11015/912/2007-1 A. II (M),
   Dated: 27.05.2008 for the Production Enhancement from 1.0 MTPA to 2.0
   MTPA and the validity is awarded for a period of 30 years (valid till 2038).
- 14. CCR obtained from Integrated Regional Office, MoEF&CC, Chennai vide F.No. EP/12.1/724/TN/966 Dated: 09.09,2022.
- Consents to Operate Orders (CTOs) from Tamil Nadu Pollution Control Board (TNPCB) has been obtained vide order No. 1908121917156 (Water Act) and No.1908221917156 (Air Act) dated 13.09.2019 which are valid upto 31.03.2024.
- 16. ToR along with Public Hearing issued vide Lr No. SEIAA-TN/F.No.9739/SEAC/ ToR-1420/2023 Dated: 03.04.2023
- 17. Public hearing conducted on 19.07.2023
- 18. EIA Report submitted on 11.09.2023.
- 19. Karaivetti Bird Sanctuary, Notified Eco Sensitive Area (ESA) vide S.O. 1909(E) dated 31.05.2019, is located at a shortest distance of 7.6 km from the Lease of KLK Pits. As the ESZ is notified, no NOC from National Board for Wildlife (NBWL) is required for the Project.
- 20. There is no Reserved Forest (RF) exists within 1 km of Lease Area.
- 21. It was informed that the Hon'ble Supreme Court judgment dated. 02.08.2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of 'Common Cause versus Union of India & Ors.' is not applicable to this Lease.
- 22. The salient features of the proposal are as follows:

File No	9739 / 2023	Category	B / 1(a)
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SI. No	Salient Features of the Proposal				
1	Name of the Owner/Firm	:	M/s. Dalmia Cement (Bharat) Limited, Dalmiapuram, Lalgudi Taluk, Tiruchirappalli District - 621 651.		
2	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Limestone & Marl		
3	S.F Nos. of the quarry site with area break-up		S.F. Nos. 39/8, 40, 41/1, 47/1, 47/3, 47/4, 47/11, 49, 50, 51, 52, 53/1, 55/1 (P), 55/15, 101, 102/20, 104/1A, 104/15, 104/24, 110/2, 110/3, 110/4, 110/15, 111/1, 111/2, 112/1, 112/8, 112/11B, 112/12, 112/14A, 112/15, 113/1, 113/3, 114/1, 114/6, 114/7, 114/11, 114/12, 114/13, 114/14, 114/15, 114/17A, 114/17B, 114/18, 114/19, 115/1, 115/3, 115/4, 115/6, 115/7, 115/9, 115/10, 116/1, 116/2, 116/3, 117/1, 117/2, 117/3, 117/4, 117/5, 117/6, 117/7, 117/8, 118/1, 118/3A, 118/3C, 118/5, 118/10, 119/1, 119/19B, 120, 121/1, 121/7A, 121/18, 121/19, 122, 135/1, 135/2, 136/1, 136/3, 136/7, 136/10, 136/11, 136/12, 136/13, 136/14, 137/1, 137/2, 137/3, 137/6, 137/7, 138/1, 138/2, 139/1, 139/2, 139/3, 139/4, 139/5, 139/6, 139/7, 140/1, 140/2, 140/3, 140/4, 140/6B, 252, 254/4, 254/7, 254/8, 254/9, 254/10, 254/11, 254/12, 254/13, 258/1, 259/6, 260/3, 260/7, 260/9, 260/13, 260/16, 260/18, 268/1(P), 403 of Kallakudi Village (97.955 Ha), S.F. Nos. 54/1, 54/2, 55, 56, 57, 58(P), 59/1B(P), 60, 61/8, 72/1, 72/3(P), 73/1, 73/3, 73/5, 74/1, 75, 77/4(P), 78/5(P), 78/7(P), 78/8A, 79/1A(P), 79/1B, 79/2, 79/6, 80/1, 81/1B, 81/3, 81/4, 82, 83, 85/2, 86/1, 87, 88/1, 89/1, 92(P), 93/1D, 94/7(P), 95/8(P), 140A/1, 147/1 of Kovandakurichi Village (66.820 Ha) and S.F. No. 32 of Venkatachalapuram Village (1,230 Ha)		

		$\overline{}$	Kallalundi Kanandaluniahi a				
4	Village in which situated	:	Kallakudi, Kovandakurichi and Venkatachalapuram				
5	Taluk in which situated	:	Lalgudi				
6	District in which situated	:	Trichy				
7	Extent of quarry (in ha.)	<b> </b> ;	166.005 Ha				
8	Latitude & Longitude of all	Τ.	10°57'19.37"N to 10°59'40.36"N				
°	corners of the quarry site	:	78°55'29.67"E to 78°57'08.33"E				
9	Topo Sheet No.	:	58-J/13				
10	Type of mining		Opencast Mechanized Non-Conventional				
10			Method of Mining				
	Life of Project	:	9 years				
11	Lease Period	:	<u> </u>				
	Mining Plan Period	:	25 years				
	Review of Mining Plan						
	Mining Plan Details		As per approved Mining	As modified			
	Mining Plan Details		Plan	by SEAC			
ļ	Geological Resources T (RoM)		Limestone & Marl	Limestone &			
				Marl			
			12,45,61,661 T ROM which				
			includes 6,45,74,456 T of	-			
			Limestone & 5,99,87,205 T				
	<del></del>		of Marl				
12	Minable Resources T (RoM)	:	Limestone & Marl	Limestone &			
			6.25.04.650.T.DOM	Marl			
			6,25,04,659 T ROM which				
			includes 3,31,08,690 T of Limestone & 2,93,95,969 T	-			
			of Marl				
	Annual Peak Production in T		OI IVIGIT	Limestone &			
		.	Limestone & Marl	Marl			
			69,70,000 T	- IAIGII			
	Ultimate Depth in meters		47m to 118.5m BGL				
	Depth of water table		60m-65m BGL (Post Monsoc	<u> </u>			
13			70m BGL (Pre-Monsoon)				
	Man Power requirement per day:		296 Nos.	<del>-</del>			
14							
	Water requirement:		142 KLD	$\overline{\bigcap}$			
15	Domestic Consumption	: 10 KLD					
	· · · · · · · · · · · · · · · · · · ·		· <del>·</del>	<del>                                      </del>			

<u> </u>	2. Workshop		2 KLD			
	3. Dust Control Measures		50 KLD			
!	4. Green Belt use		80 KLD			
16	Power requirement	:	12000 Liters of HSD / day			
	Precise area communication		G.O.(Ms)No.76, Industries (MMA.1)			
17	approved by Additional Chief		Department, Dated: 26.07.2018			
	Secretary to Government.	;				
	Industries (MMA.1) Department					
	Review of Mining Plan		No.TN/TCR/LST/ROMP-172	1.MDS		
18	approved by Regional		dated:03.10.2023			
"	Controller of Mines, Indian	•				
	Bureau of Mines, Chennai					
19	500m Cluster Letter	:	-			
_			Letter dated 05.05.2023 (Kallakudi			
20	VAO Certificate Regarding Structures within 300m Radius	:	Village)			
20			Letter dated 08.05.2023 (Kovandakurichi			
L			Village)			
21	Project Cost (excluding EMP cost)	۱:	Rs. 10.00 Crores			
	EC Recommendation	:		30 years		
				subject to		
				the		
			Validity	following		
ŀ				upper limits.		
				Limestone &		
22				Mari		
		:	Max Total RoM in T	3,48,50,000 T		
		-				
		:	Annual Max RoM in T	69,70,000 T		
			Max Depth in mtrs	47m to		
				118.5m BGL		
22	23 EMP cost (in Rs. Lakh).		Capital Cost - Rs. 110.14 lakhs			
23			Recurring Cost – Rs. 48.05 lakhs			
24	CER cost (in Rs. Lakh).	:	: Rs. 130.00 lakhs			

Further, the SEAC has observed the following points:

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- I. Justifications for determining the Ultimate Mining Depth of 118.5 m for the Proposed Mine:
- 1. Detailed exploration has been done based on UNFC norms and IBM guidelines for the entire ML area. This existing mining area has been proved and mineable reserves are categorized as "111" under UNFC NORMS.
- 2. Pit wise exploration details are as follows:

S.N o	Name of the pit	Max. depth of the hole drilled in m	Limeston e proved (Encount ered) upto depth (m)	Depth of hole drilled below Limesto ne strata in	Depth of drilling in baseme nt rock in m	Propose d ultimate mining depth in m	Remarks
1	KLK PIT No:1	134	56	78	0	58.80	Drilling started from surface RL and ends in Shale at the bottom. Limestone not encountered for a depth of 78m.
2	KLK PIT No:2	168	166	15	15	118.50	Drilling started from surface RL and ends in Gnesis
3	KVK PIT No:3 (West)	157*	183	5	5	117.0	*Drilling was started from the depth of 31 m from surface. (46 mRL 5th bench and end in (-)110 mRL @Gnesis
4	KVK PIT No:3 (East) (VPQ)	85*	117	8	3 '	108.0	*Drilling was started from the depth of 36 m from surface. (44 mRL 5th bench and end in -41

							mRL @Gnesis with sandstone
5	KVK PIT No:4	100	100	O	0	47.0	Entire thickness of drilling indicated low grade marl / subgrade Limestone only and will be utilized only by blending with high grade limestone.

- 3. From the above table it is evident that, drilling was continued to a further depth below the limestone strata i.e upto reaching basement rock (Older formation). This exploratory drill holes were terminated in the basement rock of the deposit i.e Gnesis which is geologically very older formation and beyond this gnesis rock (older formation), Limestone (Younger formation) will not occur. Hence, the exploration programmed has also proved it scientifically.
- 4. To have Sustainable Mining and SDF Implementations in Compliance of Rule 35 of MCDR'2017.

"...every holder of a mining lease shall take all possible precautions for undertaking sustainable mining while conducting prospecting, mining, beneficiation or metallurgical operations in the area..."

Hence it has been planned to have the complete extraction of limestone upto the basement of the rock of the deposit which eliminates the possibility of unwanted waste of valuable mineral by leaving at a depth of more than 100m and it also ensures the mineral conservation.

5. The proposed method of mining is a non-conventional method which does not involve drilling & blasting operations and the environment-friendly rock breakers & surface miners will be deployed as it will not produce the ground vibrations, air pollution (dust) and fly rock. This deployment of environment-friendly equipment enhances the stability of the highwall slopes, which are generally deteriorated due to the excessive dynamic stresses caused by the blasting operation and flast rate of

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rock mass removal. Hence, the complete elimination of drilling & blasting replaced with such non-conventional equipment comprises of the rock breakers and surface miner will certainly improvise the stability of highwall which results in extending the depth of mine to larger extent.

- 6. The above details have been incorporated in the Review of Mining Plan and it was scrutinized & approved by the competent authority IBM, Chennai considering all above mining parameters, exploration details, mineral conservation and environmental factors to ensure sustainable mining.
- 7. In order to establish the ultimate pit bottom scientifically and also to evaluate the slope stability of the quarry bench walls (existing & proposed working highwall benches) for the proposed pit, the Department of Mining Engineering, Anna University, Chennai has carried out the scientific investigation on "Design of Safe Bench Geometry and Evaluation of Slope Stability" for ensuring safety of men and machinery deployed in the Lease. The following observations & recommendations are made for carrying out the mining operations to an ultimate pit depth of 120 m:
  - (i) In the existing mine, the slope stability of walls is evaluated in term of critical SRF value. Based on the analysis of Bishop method, FoS values of Kallakudi and Kovandakurichi is 1.4-1.5.
  - (ii) In the existing bench configuration, it has been observed that all the side of working walls is safe and stable condition with factor of safety of more than 1.5.
  - (iii) So, it has been suggested to increase the mine depth of all the pits upto 120 m with the bench configuration of 9x9 m with the bench slope angle of 70-80°.
  - (iv)It is strongly suggested to install the real-time continuous slope monitoring system and also bench stabilization techniques to be adopted in the weaker and weathered zones of benches.
  - (v) Installed slope monitoring system shall be monitored and tested & calibrated once in six months for safe guarding its effective monitoring system during the life of the mine.
  - (vi)The groundwater levels as well as pore pressure shall be constantly monitored to assist in the assessment of slope stability by installing the

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Piezometers as a part of mine dewatering programme in the surface level of the mine.

- The mine has already obtained the statutory permission under Reg. 106 of MMR
   1961 for working legally, systematically and scientifically in the mines, from the Chief
   Inspector of Mines, Directorate General of Mines Safety, Dhanbad.
- 9. The Mine has already employed adequate statutory Personnel / Officials (First Class/Second Class Mines Manager Certificate of Competency, Surveyor's Certificate of Competency, Foreman Certificate of Competency, Mine Mate Certificate of Competency issued by the Directorate General of Mines Safety, Dhanbad) and Competent Persons as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961 for ensuring the safety of the persons employed and machinery deployed in the mine.
- 10. Hydrological Studies: In order to determine the impacts due to work below the depth of 50 m in the proposed pit by intersecting the water table, the Department of Geology, Anna University, Chennai has carried out the scientific investigation through an 'Aquifer Performance Test' to determine the hydraulic character of the aquifer in the Mine vicinity. The following observations & recommendations are made for carrying out the mining operations to an ultimate pit depth of 120 m:
  - (i) The ground water-table in the mine vicinity is found to be at 45 m below ground level (BGL) during Post-monsoon season and 50 m BGL during Premonsoon season. The proposed ultimate pit depth will be 118 m BGL. Thus, the mining will intersect the ground water-table.
  - (ii) The streamline and seasonal-odai during the rainy season need special caution with proper monitoring of piezo-metric readings.
  - (iii) The project management shall implement a proper recharge mechanism to protect water environment. For instance, abandoned mine void can be used as water storage.
  - (iv)Proper drainage measures shall be adopted in the mines including maintenance of garland drains in the top benches to direct the water away from the pit.
  - (v) Horizontal drainage drill holes can be drilled in the heavily saturated areas to remove water from the benches before working on them.

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- (vi)The water pressure in the excavating benches shall be monitored by installing simple stand-pipe piezometers or using remote-monitoring vibrating-wire type piezometers at strategic locations of the highwall benches.
- There are number of water conservation, storage and recharge structures already developed inside and around the mine pit for beneficiary of the adjacent village people. With the developed water conservation and storage scheme, the mining activities in the core zone does not cause any water depletion nearby villages in the buffer zone.
- (viii) Furthermore, the construction of garland drains and silt traps serves the purpose of arresting silt flow from overburden to the mine pit which also collects the rain water in the mine void, open land and allows recharge to ground water system.
- (ix)The green belt development with ridges and furrows, circular pits around tree depending on slope and spacing of trees is also recommended.
- (x) With this laboratory study of water samples and rainfall data interpretations. it is clearly found that there is quality of groundwater has no impact of mining activities for the last decades.

Regarding the work environment intersecting the ground water table, the PP have informed the SEAC that they have obtained the NOC - Groundwater Clearance for carrying out the dewatering operations during the mining vide Lr. No: OT9/AG3/NOC-Mining/2017, 20.04.2017 for the operations carried out upto 47m BGL. However, for the proposed expansion, PP has requested the Chief Engineer, SG & SWRDC, WRD, Tharamani, Chennai to issue NOC and in turn PP have been informed vide Lr. No: DD(G)/OT9/AG3/NOC-Mining/2023, dtd. 19.01.2023 stating that

"....In this connection, the Department had already submitted temporary guidelines to the Government for issuance of No Objection Certificate to Mining Industries to dispose of the pending proposals of Mining Projects in the State. Moreover, a draft Ground Water Development and Management Act is under the perusal of the Government. On the enactment of the law, issuance of No Objection Certificate for Mining Projects will be covered...."

The PP have informed the SEAC that the detailed Hydro-Geological study has been carried out through Department of Geology, Anna University for evaluating the

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impacts on the ground water due to mining operations which intersects the water table and also to prepare the 'Ground Water Management' for the proposed mining operations. The Hydrogeological report highlights that, there is no significant impact on the ground water regime of the area. However, it was deliberated in detail and suggested the PP to construct additional recharge structure/ borewell in the nearby areas and formation of percolation ponds/ deepening of existing ponds which shall be continued to improve ground water regime. Here, the PP have started few improvement measures in the area to improve ground water regime which was evidently found during the field investigation made by the agency including the IBM. The details of few improvement projects implemented are as below

	WATERSHED AND	DRINKING WATE		
S.No	Activities	Village	Amount (in lakh)	Area of Work
1	Borewell Recharge Shaft (10 nos)-Breakup as below, Kovandakuruchi-2, Arokiapuram-1, Vadugarpettai-2 Melarasur-2, Pudurpalaym-2, Kallakudi-1	6 Villages	10.95	Climate Action
2	Pond Deepening Project	Kovandakurichi	15.19	Climate Action
	Pond Bushes Clearance	_		Climate
3	Project	Pirattiyur	14.64	Action
4	Pond Deepening Project	Pudhurpalayam	4.60	Climate Action
5	Watershed Management	Melarasur	4.55	Climate Action
6	Pond Deepening Project	Kallakudi	3.48	Climate Action
_ <del></del>	Watershed Management	Kovandakurichi	1.12	Climate Action
8	Check Dam (2nos)	Melarasur	27.95	Climate Action
10	Community RO Plant	Kallakudi	7.76	Social Infrastructur
11	Drinking water Pipe line	Palinganatham	3.70 /	Social Infrastructur

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	RO Plant for Government High school and Primary	Palinganatham		Social
12	school	/Kallakudi	0.71	Infrastructure
	Total		83.70	

This has resulted in earning the 'FOUR STAR' rating from the Ministry of Mines, Govt of India from 2019 to 2023 continually, for the efforts being taken towards establishing the Water Reservoir, ground water recharge, and Rainwater (RW) Harvesting, etc by the PP.

Besides the above, the National Mineral Policy- 2019 promulgated by Ministry of Mines, Govt of India to ensure sustainable Mining and Mineral Conservation states that

"....There shall be an adequate and effective legal and institutional framework promoting zero-waste mining as the ultimate goal and a commitment to prevent sub-optimal and unscientific mining...."

"....Mine development and mineral conservation as governed by the rules and regulations will be on sound scientific basis, with the regulatory agencies, viz. IBM and the State Directorates, closely interacting with R&D organizations and scientific and professional bodies, to ensure preparation of optimal Mining plan. Conditions of mining leases regarding extent of area/size, shape, disposition with reference to geological boundaries and other mining conditions shall be such as to favorably predispose the leased areas to systematic, scientific, optimum, and complete extraction of minerals....."

"...Once the reserves in mine are completely exhausted there is need for scientific mine closure which will not only restore ecology and regenerate bio diversity but also take into account the socio-economic aspects of such closure...."

The PP have furnished an affidavit indicating the percolation ponds, recharging pits and farm ponds as pointed out by the SEAC to take adequate mitigation measures towards the Ground Water Management.

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Considering the above facts and observing the legal & policy framework of the Government, the SEAC have decided to recommend the proposal for the grant of Environmental Clearance for the proposed expansion by maintaining the ultimate depth of mining of 118.5m BGL to fulfill the requirements of the mineral conservation by complete exhaustion of mineral and to ensure the scientific mine closure, as per the guidelines stipulated for the Major Mineral & Notified Mineral category by the Ministry of Mines, Gol.

# Il Justifications for Carbon Footprint in Mining:

The PP have informed that the carbon capture plant is a large-scale facility of 500,000 tonnes per year carbon capture in our state of Tamil Nadu and also signed a Memorandum of Understanding with Carbon Clean Solutions Limited (CCSL) the U.K., a leader in low-cost carbon dioxide separation technology to provide technology and operational services for the plant based on its patented CDR Max Technology. This MoU will explore multiple utilization streams for the CO<sub>2</sub> that is captured from this large-scale plant, including direct sale for use in other industries, and manufacture of chemicals. The PP has implemented some of the initiatives as given below:

- (i) Fossil Free Electricity Initiative (RE 100): In Kallakudi & Kovandakurichi Limestone mines, Usage of Bio diesel produced from Animal Fat and Vegetable oil which release less CO<sub>2</sub> when compared to HSD
- (ii) Solar Energy: In Kallakudi Limestone, 5 KW solar power plant installed in mined out area.
- (iii)EV Trucks for Transportation: With the introduction of the company's new EV truck fleet, the CO<sub>2</sub> emissions pertaining to the diesel trucks will be reduced significantly.
- (iv)Doubling Energy Productivity (EP 100): Around 16200 tons of CO<sub>2</sub> emission reduced through the backhauling transportation since 2012.
- (v) Carbon Negative through Afforestation: The plantation made has the capacity to absorb 2848 Tonnes of CO2 every year.
- (vi)Emission Control & Monitoring measures: Engine Technology Exhaust After Treatment Systems Regular Maintenance and Inspections.

Besides, the PP have provided the following responses in responding to the queries raised by the SEAC in the following Table:

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	PROPOSED MITIGATION MEASURES FOR ULTIMATE MINING DEPTH OF 118.5 m				
s. No	Technical studies undertaken/ System under practice	Research Institute which undertake n studies	Purpose	Recommendations and Results	Action underway
1	Slope stability analysis of mining benches for the proposed depth.	Anna	To study and analyze the safety risk associated due to mining upto a depth of 118.5 m	Mining benches are found to be stable for the proposed depth of 118 m, with a Factor of safety of 1.4 to 1.5 as per DGMS guidelines and recommended to go for real time monitoring of slope stability by installing suitable sensors.	vendors and expert to install Real-time monitoring system to give alert and warning in case of any
2	Hydrogeolo gical study.	Anna University, Chennai.	To study the impact of mining upto the proposed depth	,	Already erected recharge bore well structure and desilted ponds in the nearby villages to increase ground water recharge. Needs to increase additional recharge structures to improve recharge of GW.
3	Geothermal gradient of study area		to study long-term impact of temperature variation and its impact.	There is no significant impact in the area due to mining.	Not Applicable - Study completed

4	Greenbelt Developme nt & Ecological balance		To improve ecosystem	Need to carry out afforestation on the proposed backfilling for an extent of 14.5 Ha.	To be carried out at appropriate time
5	Higher capacity machines (HEMM) & Bio diesel	Indigenou s System	To improve productivity and optimal utilization of assets to reduce carbon foot print	Surface miner and higher capacity rock breaker introduced (Non - Conventional Mining- NO DRILLING & BLASTING)	Already in practice
6	Wheel washing system	Indigenou s System	Washing of tipper tires helps to eliminate slush and dust from getting in to public roads	Not applicable	Already in practice
	Mechanized road cleaning/sw eeping system	Indigenou s System	To prevent fugitive dust on the public roads	Not applicable	Already in practice
	Biodiversity Study	To study the nature of shrubs and trees in the study areas	Loyola College & EB Expert Team conducted the Survey.	There is no habitat fragmentation or blocking of migratory corridors due to Project activities since there is no wild life movement or migratory birds movement in the study area.	the vicinity and thus, no Conservation Plan is

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 capacity not exceeding 69,70,000 T of Limestone & Marl by maintaining the ultimate depth of mining of 118.5 m BGL and subject to the standard

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

- The prior Environmental Clearance granted for this mining project shall be valid
  for the project life including production value as laid down in the mining plan
  approved and renewed by competent authority, from time to time, subject to a
  maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O.
  1807(E) dated 12.04.2022.
- 2. The PP shall implement the recommendations as given by the scientific studies carried out by the Department of Mining Engg., Anna University, Chennai for the slope stability of existing & proposed highwall benches, particularly the real-time continuous monitoring of slopes, without any deviation.
- 3. The PP shall maintain the slope of the highwall (working) benches and ultimate pit limit as per the review of mining plan approved by the Indian Bureau of Mines and the drilling & blasting operation shall not be conducted in the mine.
- 4. However, for ensuring the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to reassess the slope stability of the working benches and existing quarry walls when the depth of mine exceeds 70m and 100 m for evaluating the slope stabilization & protective measures at the ultimate pit limits, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 5. The PP shall use the EV Vehicles for the transportation purposes of mineral & overburden within the mine premises in a phased manner. However, the PP shall ensure that the vehicles used for transportation of mineral from the mine to the plants are adequately covered using the hydraulic system so as to avoid the spillage & dust pollution.

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- 6. The PP shall ensure that the waste dumps shall be protected by geo textile matting or other suitable material and thick plantations of native trees and shrubs shall be done for prevention & control of soil erosion and management of silt to avoid the dump failures.
- 7. The PP shall ensure that water quality both for surface as well as ground water in the core zone are monitored regularly and the records are maintained accordingly. However, the water supplied by the PP for drinking shall be monitored on daily basis and the details on the quality of water monitored & recorded shall be reported as a part of compliance report to the TNPCB, GWC/WRD and the IRO, MoEF &CC, Chennai.
- 8. Hence, the PP shall carry out the scientific studies to assess the hydrogeological condition of the mine and core zone when the depth of mine exceeds 70 m & 100 m from the date of lease execution, by involving any one of the reputed Research and Academic Institution CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras Centre for Environmental Studies, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 9. The SEAC has recommended the PP to find out the innovative techniques & strategies for converting the waste / rejects produced during the life of mine into a 'secondary resource' such that the backfilling of such meagre quantity of waste material need not be carried out during the closure of mine as the open pit mine at the end of the mine life can be utilized as 'Rainwater & Ground water harvesting Pit'.
- 10. The PP shall obtain prior permission from the Competent Authority of State Govt for extraction of ground water. In the meanwhile, the PP to construct the recharge structures / borewell in the nearby areas within core zone of 1 km and

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- formation of percolation ponds / deepening of existing ponds which shall be continued to improve ground water regime.
- 11. The PP shall implement the recommendations as given by the scientific studies carried out by the Department of Geology, Anna University, Chennai for management of Ground Water regime without any deviation.
- 12. The PP shall furnish a Standard Operating Procedures (SoP) for carrying out the transportation of mineral from the mines to the concerned plants located at Dalmiapuram & Ariyalur enumerating the deployment of watch guards to manage the traffic at critical junctions, speed of the trucks, etc to the DEE/TNPCB while obtaining the CTO.
- 13. As accepted by the Project proponent, Rs. 30 Lakhs shall be included in the CER and the amount shall be spent towards mitigation measures for Karaivetti Bird Sanctuary in consultation with the DFO, Ariyalur, before obtaining CTO from TNPCB.
- 14. As accepted by the Project Proponent the EMP cost of Rs. 110.14 lakhs and EMP operating budget/annum is Rs.48.05 Lakhs and the amount shall be spent for the below activities as committed.

### EMP Budget: -

Revised Budget now,
Rs. Lakhs
46.14
47.00
2.00
$\Lambda_{\Lambda}$

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		Revised Budget now,	
Con	nponent	Rs. Lakhs	
	pt of Mining Engg., Anna University, ennai-25.		
	pt of Botany, Govt Arts & Science College, indanam, Chennai.		
Surrou	nstruction of Recharge Wells in Kallakudi & nding villages for ground water recharge – rinking Water Sources – 10 Nos.	12.00	
Percola	onstruction of additional Farm Ponds / ation Ponds in Kallakudi & Surrounding s for ground water recharge –5 Nos.	3.00	
Total	EMP-Capital Budget	110.14	
i Otal	EMP-Operating Budget per Annum	48.05	

# Breakup of Budget to address Public Hearing issues- Rs.47.00 Lakhs

SI. No.	Component	Budget, Rs. Lakhs
ll .	Construction of Community Hall in Kallakudi/Vadugarpettai	20.00
2	Construction/Renovation of School Building at Pudhurpalayam	10.00
3	Construction of a cement road from Dalmia Gate to Railway Gate	
4	Construction of Compound Wall around the church cemetery garden in Vadugarpettai/Kallakudi 3.00	
. 5	Keeping Drinking Water Supply to Vadugarpettai/Arokiyapuram	2.00
6	Contribution to complete the construction of community hall in temple complex in Vadugarpettai	2.00
	Total	47.00

15. As accepted by the Project Proponent the CER cost of Rs. 130 lakhs and the amount shall be spent for the below-mentioned activities as committed, before obtaining CTO from TNPCB.

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Component	CER Amount in Rs. Lakhs
1. Contribution to TN Champion Foundation	100.00
2. Contribution to DFO. Ariyalur for Infrastructure Development in Karaivetti Bird Sanctuary	30.00
Total CER Budget	130.00

Agenda No: 420 - 19

(File No: 9087 /2023)

Proposed Rough stone & Gravel quarry lease over an extent of 2.11.5Ha in S.F.Nos.393/1A (P) Belladhi Village, Mettupalayam Taluk, Coimbatore District, Tamil Nadu by K. Sundararaj - For Environmental Clearance. (SIA/TN/MIN/446195/2023 Dt.28.09.2023)

The details of the proposed project are given in the website (parivesh.nic.in).

## The SEAC noted the following:

- The project proponent, K. Sundararaj has applied for Environmental Clearance for the Rough stone & gravel quarry lease over an extent of 2.11.5Ha in S.F.Nos.393/1A (P) Belladhi Village, Mettupalayam Taluk, Coimbatore 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 vide. Lr No. SEIAA-TN/F.No.9087/SEAC/ToR-1176/2022, Dated:14.06.2022.
- 4. Public Hearing was conducted on 03.08.2023.
- EIA Received 03.10.2023
- 6. The precise area communication was issued for the period of 5 years. The approved mining plan is for the period of 1st five years & production should not exceed 292600m³ of Rough Stone & 32660m³ of Gravel & 29648m³ of Weathered Rock. The annual peak production is 63650m3 of Rough Stone (4th Year) & 15410m³ of Gravel (1st Year) & 13298m³ of Weathered Rock. The depth of mining is 44m BGL.

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The SEAC has observed the following:

The concept of 'public hearing' in the Environmental Clearance, under the EIA Notification mandating 'obtaining of prior EC,' was first promulgated on 27th January, 1994 as amended in 1997, and underwent several amendments till 2004. The Legislature has given utmost importance to ascertain the public views in the entire EC procedure by making provision of public hearing and consultation before appraisal of specified development projects for grant of EC.

"...A public consultation in terms of the Notification dated 14 th September, 2006 consists of two parts. They are: - (a) A public hearing at the site or in its close proximity - district wise, to be carried out for ascertaining the concerns of local affected persons; and (b) Obtaining responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity...."

"... The 'public hearing'/consultation is undisputedly a legal right endowed by the EIA Notification, 2006 to the people in the project area and also public at large..."

The excerpts from the Judgement delivered on the Writ Petition (Civil) No. 9317 of 2009 Judgment reserved Samarth Trust And Another vs Union Of India And Others on 28 May, 2010 in the HIGH COURT OF DELHI: NEW DELHI states that

"....A public hearing is a form of participatory justice giving a voice to the voiceless (particularly to those who have no immediate access to courts) and a place and occasion to them to express their views with regard to a project. Participatory justice is in the nature of a Jan Sunwai where the community is the jury...."

"....The advantage of a public hearing is that it brings about transparency in a proposed project and thereby gives information to the community about the project; there is consultation with the affected parties and they are not only taken into confidence about the nature of the project but are given an opportunity to express their informed opinion for or against the project. This form of a social audit, as it were, provides wherever necessary, social acceptability to a project and also gives an opportunity to the EAC to get information about a project that may not be disclosed to it or may be concealed by the project proponent....."

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The SEAC have also taken note of the following key observations during the deliberations on the Public Hearing as stipulated below:

"Environmental Impact Assessment Guidance Manual for MINING OF MINERALS" published by the MoEF & CC in 2010 which states that

".....The study area for the mining projects should be defined as follows:

'Core zone' is the mining lease area.

'Buffer zone' in case of ML area up to 25 ha. is to be considered as 5 km all around the periphery of the core zone and for ML area above 25 ha. an area 10 km all around the periphery of the core zone....."

The NGT vide order dated 21.07.2020 in the case of M. Haridasan Vs State of Kerala & Ors. (Original Application No. 304/2019) indicates that

"....'Impact zone' as per the MMR 1961 stipulates for danger zone (500 m) by Directorate General of Mines Safety which have to be complied compulsorily and necessary measures should be taken to minimise the impact on environment when the blasting is involved..."

From the documents submitted and presentation made by the PP, the Committee noted the following.

- 1. The data regarding number of people residing in even 2 kms. area of influence zone, and that of agricultural practices, totally rely upon the secondary data collected from various Government Departments. It is expected that during preparation of EIA Report, the PP should have gathered some primary material with respect to the socio-economic data in the Project area. The EIA report has no details on the economic and agricultural activities carried out by the people living in the surrounding area so that appropriate environmental management plan is formulated.
- 2. A bare perusal of the records of public hearing and the minutes of meeting conducted on 03.08.2023 reveal that there was heavy opposition for the proposed mines from the participating public. They have pointed out the harmful effects they are forced to face from the mines already functioning in the area. Vibration damage to the buildings, dust pollution, respiratory diseases due

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- to harmful dust pollution and adverse effects on agricultural activity are some of the objections raised by the public.
- Few of the concerns expressed by the public in the public hearing conducted by the Tamil Nadu Pollution Control Board for the mines in the cluster including that of PP are extracted below.
  - Mr. E. Anandakumar, Mongampalayam "....For our village, stone quarries are not needed. Because of the quarry, well water is gone. In the quarries, explosion is not properly done. Because of the explosion, cracks develop on the walls of the buildings and dust spreads. Roads are damaged by heavy vehicles. Our area is depending on agriculture for many years..."
  - Mrs. S. Vinothini, Mongampalayam "...Walls in our house were cracked. Even, Underground Water Tank too is cracked. Even with repairs, again Water is wasted. There is huge noise due to quarries explosion and houses are vibrating. Hence, stone quarry is not needed...."
  - Mr.K.Balathandayutham, Mongampalayam ".... So far, none of the Officers or owners of the quarries spoke about Agriculture. They are taking about the public only......Here, the Public are farmers. Officer said that because of the quarry, there is no more impact. There is no more impact but a small impact is there. What is that? Our lungs damage. If you run the quarry after damaging the lungs, you may kill the people and run the quarry. If you say that you are subjected to power, where is the farmers Authority. Farmers are living like daily wages in the quarry and going for 100 days work under MGNREGA...."
  - Mr. Mukesh, Bellathy "...We are native farmers. Our earth is fertile earth. Paddy grows in this land. Earlies, the rainwater stand nearly a feet above the surface of land if it rains. Now, it is like a dry forest. Earlier, in our well, we can take water just by sitting down....Now, there is no water in the well. At the outset of the program, you have explained about the quarries. But already in the existing quarries, did you perform any inspection of how much permission is given and how much they dug? First of all, you check this. Then, ask for the new quarries permission. Stone quarry is not needed...."
  - Mr. Satish Kumar, Tamil Nadu Farmers Protection Association. "...Already, as our area quarries have crossed allowed size of cutting out stones, how the permission can be given for new quarries. They prepared false document hiding all the true information. That was read by one person and another publishes it as white report and another

gives permission. They think that only four of these may live well and others can go elsewhere. We will severely resist this."

"...In field number 63, two houses are there. As per the 1959 Tamil Nadu Small Mineral Concession Rules, if there is any house within 300 meters, the permission will not be given. In field number 63, two houses are there and in 65, a house is there, and in 69, a stream is there. Also, in field number 71, a house is there. In 424th field number, there is natham land of Chinnapadiyanur. A town is there and the town itself is hidden. In 426, a stream is there. In 451, a house is there. 392 has two houses and 338 has a house, and field number 337 has two houses. There should be no house within 300 meters and also a home for differentially-abled persons is there. So, definitely permission should not be given."

- 4. Further, there are 10 to 12 mines already operating in the cluster. Addition of new mines in this area will lead to increase in the existing pollution levels thereby affecting the nearby people.
- 5. It is seen from the Google Map that urbanisation is increasing continuously in the proposed area and the number of structures is also increasing steadily.

Hence, considering the public concerns during the PH, health of the people living nearby and environment, and the existence of many operating quarries around the proposed mine lease, the committee decided not to recommend the project.

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#### **ANNEXURE-I**

# SPECIAL MITIGATION MEASURES FOR THE QUARRIES LOCATED WITHIN 1 KM FROM THE RESERVE FORESTS

- Since the R.F is located very close to the proposed quarry site, the PP shall develop Green Belt (Thick Tree plantation in two to three rows) along the boundary of the mine lease area before obtaining the CTO from the TNPCB.
- The proponent shall construct and maintain proper fencing all around the boundary of the proposed working quarry adjacent to the direction of the location of the Reserved Forest before the commencement of the operation and shall furnish the photographs showing the same before obtaining the CTO from TNPCB.
- 3. The PP shall take steps so that the overburden, waste rock, rejects and fines generated during the mining operations shall be stored in separate dumps positioned in opposite direction to the location of the reserved forest.
- 4. The PP shall ensure that such waste/reject dumps shall be properly secured to prevent escape of material there from in harmful quantities which may cause degradation of environment and to prevent causation of floods.
- 5. The PP shall select the site for dumps on impervious ground to ensure minimum leaching effects due to precipitations.
- 6. The PP shall take necessary steps that wherever possible, the waste rock, overburden etc. shall be back-filled into the mine excavations with a view to restoring the land to its original use as far as possible.
- 7. Wherever back-filling of waste rock in the area excavated during mining operations is not feasible, the PP shall take adequate steps in discussion with the concerned DFO to suitably terrace the waste dumps ensuring the stability through vegetation to consolidate the green belt development in the areas adjacent to the reserved forest location.
- 8. The PP shall carry out the scientific investigations in order to keep the ground and noise vibrations caused by blasting operations and movement of HEMM such as Excavators, Trucks within safe limit.

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- 9. The PP shall not perform secondary breakage involving the drilling & blasting in the quarrying operations and it can be replaced with non-conventional methods such as noise-controlled rock breakers, usage of non-explosive expansive materials/chemicals, Hydraulic Splitting based on the suitable scientific studies carried out by any reputed scientific and academic institutions.
- 10. The PP shall take adequate steps to control the air pollution due to fines, dust, smoke or gaseous emissions during the quarrying operations within 'Permissible Limits' specified under the environmental laws.
- 11. The Quarrying and Mining activities shall be restricted in the Eco-sensitive Zone of 60 m from the boundary of the Reserved area and hence the PP shall not even indulge in constructing the haul roads in these areas.
- 12. No development on existing steep hill slopes or slopes with a high degree of erosion shall be permitted. Hence, the PP shall not carry out the quarrying on steep hill slopes with a gradient of 20° or more or areas with a high degree of erosion on forestland.
- 13. The PP shall give an affidavit at the time of lease execution that there will be no felling of trees (or) any encroachment will not be made on these Reserved Forest lands and also within the Eco-sensitive Zone of 60 m without the prior permission of the State Government in case of reserve forest land as per the procedures laid down by the State Government.
- 14. The PP shall not use plastic carry bags within the quarry area.
- 15. The PP shall ensure that all the haul roads within the quarry lease shall be provided with adequate number of road side drains and these drains shall be kept free form blockage for runoff disposals. This run off from the road side drainage shall relate to the natural drainage system in the area.
- 16. The PP shall adhere to the provisions of the MoEF had issued Notification No. S.O. 1545 dated 25th June 2009 regulating certain activities in the ecosensitive zone to conserve and protect the reserved forest area from ecological and environmental point of view.

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GRAVEL / RED EARTH & PEBBLES QUARRY - GENERAL CONDITIONS

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- The proponent shall mandatorily appoint the statutory competent persons and commence the quarry operations within the purview of Mines Act 1952.
- The proponent shall erect fencing all around the boundary of the proposed area with gates for entry/exit before the commencement of the operation and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
- Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
- 4. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation. No change in basic mining proposal shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form of Short-Term Permit (STP), Query license or any other name.
- 5. Perennial sprinkling arrangement shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals.
- 6. The Proponent shall ensure that the noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures undertaken accordingly.
- 7. Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology to be adopted by considering the wind direction.

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- 8. The purpose of green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics.
- 9. Taller/one year old saplings raised in appropriate size of bags (preferably eco-friendly bags) should be planted in proper spacing as per the advice of local forest authorities/botanist/horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
- 10. Noise and Vibration Related: (i) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs, (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
- 11. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50 m safety distance from water body should be maintained without carrying any activity. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.
- 12. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
- 13. The proponent shall ensure that the transportation of the quarried granite stones shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the 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

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- IRC Guidelines with respect to complying with traffic congestion and density.
- 14. To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
- 15. The Project Proponent shall comply with the provisions of the Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
- 16. The project proponent shall ensure that the provisions of the MMDR Act, 1957, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are compiled by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.
- 17. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCB) by the proponent without fail.
- 18. 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.
- 19. 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.
- 20. 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.
- 21. 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.
- 22. 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.
- 23. 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.

# ROUGH STONE/JELLY/BLUE METAL QUARRY

- The PP shall inform send the 'Notice of Opening' of the quarry to the Director of Mines Safety, Chennai Region before obtaining the CTO from the TNPCB.
- 2) The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
- 3) The proponent shall appoint the statutory competent persons relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961, as amended from time to time.
- 4) Within a period one month from the execution of lease deed, the PP shall ensure that the persons deployed in the quarry including all the contractual employees/truck drivers shall undergo initial/periodical training in the DGMS approved GVTC situated in Trichy / Salem / Hosur.

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- 5) The PP shall construct a garland drain of size, gradient and length around the proposed quarry incorporating garland canal, silt traps, siltation pond and outflow channel connecting to a natural drain should be provided prior to the commencement of mining. Garland drain, silt-traps, siltation ponds and outflow channel should be de-silted periodically and geo-tagged photographs of the process should be included in the HYCR.
- 6) Monitoring of drainage water should be carried out at different seasons by an NABL accredited lab and clear water should only be discharged into the natural stream. Geo-tagged photographs of the drainage and sampling site should be submitted along with HYCR.
- 7) The proponent shall install the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs showing the same before obtaining the CTO from TNPCB.
- 8) The Proponent shall submit a conceptual 'Slope Stability Action Plan' incorporating the benches & accessible haul road approved by the concerned AD (Mines) for the proposed quarry to the DEE/TNPCB at the time of obtaining the CTO.
- 9) The PP shall ensure that the persons employed in the quarry whether permanent, temporary or contractual are undergoing the initial/periodical medical examination in the DGMS approved OHS Clinics/Hospitals as per the DGMS Circular No. 01 of 2011 before they are engaged in mining activities.
- 10) The PP shall ensure that the persons employed in the quarry whether permanent, temporary or contractual are provided with adequate PPEs before engaged in mining operations.

- 11) The PP shall meticulously carry out the mitigation measures as spelt out in the approved EMP.
- 12) Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology should be adopted by considering the wind direction.
- 13) The Project Proponent shall ensure that the funds earmarked for environmental protection measures are kept in a separate bank account and should not be diverted for other purposes. Year-wise expenditure should be included in the HYCR.
- 14) The Project Proponent shall send a copy of the EC to the concerned Panchayat/local body.
- 15) Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required, in coordination with the concerned Govt. Authority.
- 16) Perennial sprinkling arrangements shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals and submit the consolidated report to TNPCB once in six months.
- 17) The Proponent shall ensure that the noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures are undertaken accordingly. The report on the periodic monitoring shall be included in the HYCR.
- 18) Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology to be adopted by considering the wind direction.
- 19) The purpose of green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix. The plant species with dense/moderate canopy of native origin should be chosen. Species of

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small/medium/tall trees alternating with shrubs should be planted in a mixed manner.

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

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

- 33)The Project Proponent shall comply with the provisions of the Mines Act. 1952, MMR 1961 and Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
- 34) The project proponent shall ensure that the provisions of the MMDR Act, 1957 & the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are compiled by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.
- 35)The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCB) and the Director of Mines Safety (DMS), Chennai Region by the proponent without fail.
- 36)The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
- 37)All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the Precise area communication letter issued by concerned District Collector should be strictly followed.
- 38) That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.
- 39) As per the directions contained in the OM F.No.22-34/2018-IA.III dated 16th January 2020 issued by MoEFCC, the Project Proponent shall, undertake regrassing the mining area and any other area which may have been disturbed

due to his mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The compliance of this direction shall be included in the Half Yearly Compliance Report which will be monitored by SEAC at regular intervals.

- 40) The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
- 41) As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere to the EMP as committed.

# SPECIAL MITIGATION MEASURES FOR THE QUARRIES LOCATED IN CLOSE PROXIMITY TO THE WINDMILLS

SI.	Existing (or) Virgin Quarry	
No	Wind Mills located at a distance of	Wind Mills located beyond 300 m
	150 m to 300 m	Up to 500 m
1.	Appointment of I/II Class Mines	Appointment of I/II Class Mines Manager
	Manager Certificate of	Certificate of Competency under MMR
	Competency under MMR 1961.	1961.
2.	Special precautions are to be taken	Blast design parameters should be
	during blasting within danger zone	mentioned in mining plan/scheme. and
	such as posting guards, etc.	may be reviewed by a competent mining
		engineer.
3.	Blast design parameters should be	MCPD and total charge should be fixed
	mentioned in mining plan/scheme.	such that it should nott exceed 1.3 kg and
		26.50 kg respectively.
4.	The recommendations of scientific	Fresh scientific study may be conducted if
	organisation need to be	mine management wants to increase the
	incorporated in the mining	MCPD and total explosive charge above
	plan/scheme before its approval.	the quantity of 1.30 kg and 26.50 kg

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		respectively. Continuous monitoring using
		seismograph should also be done in such
		cases by the mine management.
5.	Engagement of blasting in-charge	Engagement of blasting in-charge having
	having Diploma/Degree in mining	Diploma/Degree in mining engineering for
	engineering for day-to-day	day-to-day blasting.
	blasting.	
6.	Training of the blasting crew on	Training of the blasting crew on controlled
	controlled blasting practices	blasting practices before engaged in
	before engaged in operation.	operation.
7.	Submission of monthly report on	Submission of monthly report on blast
	blast design pattern and detailed	design pattern and detailed explosive
	explosive consumption as well as	consumption as well as volume of rock
	volume of rock excavation to a	excavation to a statutory body viz. DGMS.
	statutory body viz. DGMS, DMG,	DMG, SPCB. Report of recorded ground
1	PESO or SPCB.	vibration need to be added in monthly
		report.
8.	Report of recorded ground	Report of recorded ground vibration need
	vibration need to be added in	to be added in monthly report which shall
	monthly report which shall be sent	be sent to all the statutory body viz.
	to all the statutory body viz.	DGMS, DMG, SPCB.
	DGMS, DMG, SPCB.	
9.	Small diameter emulsion cartridge	Small diameter emulsion cartridge of 25
	of 25 mm diameter (125 gm	mm diameter (125 gm weight per
	weight per cartridge) shall be used.	cartridge) shall be used. However, ANFO
	However, ANFO explosives may	explosives may also be used as main
	also be used as main explosive	explosive charge.
	charge.	
		<u> </u>

10.	Electronic (or) Non-electric	Non-electric detonators (Nonel) shall be
	detonators (Nonel) shall be used	used in all the blasts for in-hole explosive
	in all the blasts for in-hole	initiation and surface hole-to-hole firing.
	explosive initiation and surface	
	hole-to-hole firing.	
11.	Max. number of holes in a round:	Max. number of holes in a round: 40 to
	30.	60.

## TERMS OF REFERENCE (ToR) FOR GRANITE / ROUGH STONE QUARRY

- 1. In the case of existing/operating mines, a letter obtained from the concerned AD (Mines) shall be submitted and it shall include the following:
  - (i) Original pit dimension
  - (ii) Quantity achieved Vs EC Approved Quantity
  - (iii) Balance Quantity as per Mineable Reserve calculated.
  - (iv) Mined out Depth as on date Vs EC Permitted depth
  - (v) Details of illegal/illicit mining
  - (vi) Violation in the quarry during the past working.
  - (vii) Quantity of material mined out outside the mine lease area
  - (viii) Condition of Safety zone/benches
  - (ix) Revised/Modified Mining Plan showing the benches of not exceeding6 m height and ultimate depth of not exceeding 50m.
- Details of habitations around the proposed mining area and latest VAO
  certificate regarding the location of habitations within 300m radius from
  the periphery of the site.
- 3. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
- 4. The PP shall submit a detailed hydrological report indicating the impact of proposed quarrying operations on the waterbodies like lake, water tanks, etc are located within 1 km of the proposed quarry.
- 5. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.

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- The DFO letter stating that the proximity distance of Reserve Forests,
   Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
- 7. In the case of proposed lease in an existing (or old) quarry where the benches are not formed (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall the PP shall carry out the scientific studies to assess the slope stability of the working benches to be constructed and existing quarry wall, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. The PP shall submit a copy of the aforesaid report indicating the stability status of the quarry wall and possible mitigation measures during the time of appraisal for obtaining the EC.
- 8. However, in case of the fresh/virgin quarries, the Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry during the appraisal while obtaining the EC, when the depth of the working is extended beyond 30 m below ground level.
- 9. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 10. The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site.
- 11. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.

- 12. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
- 13. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
- 14. Quantity of minerals mined out.
  - Highest production achieved in any one year
  - Detail of approved depth of mining.
  - Actual depth of the mining achieved earlier.
  - Name of the person already mined in that leases area.
  - If EC and CTO already obtained, the copy of the same shall be submitted.
  - Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 15. All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology and geology of the mining lease area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 16. The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc.,
- 17. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.
- 18. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment, and the remedial measures for the same.

- 19. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of the Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 20. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of groundwater pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds, etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided.
- 21. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.
- 22. The Proponent shall carry out the Cumulative impact study due to mining operations carried out in the quarry specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
- 23. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 24. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features/ishould be indicated. Land use plan of the mine lease area should be prepared to

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- encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 25. Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided.
- 26. Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be considered.
- 27. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 28. Impact on local transport infrastructure due to the Project should be indicated.
- 29. A tree survey study shall be carried out (nos., name of the species, age, diameter etc..) both within the mining lease applied area & 300m buffer zone and its management during mining activity.
- 30. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
- 32. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University. The plant species with dense/moderate

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- canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 33. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner
- 34. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 35. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 36. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 37. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 38. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

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

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#### Annexure II

Standard Environmental Clearance Conditions prescribed by MoEF&CC for Construction Projects.

## 1. Statutory Compliance:

- The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightning etc.
- 3. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- 4. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- 5. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- The project proponent shall obtain the necessary permission for drawing of ground water / surface water required for the project from the competent authority.
- A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- 8. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department and Civil Aviation

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- Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- 9. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- 10. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

# 2. Air quality monitoring and preservation:

- Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- 2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- 3. The project proponent shall install a system to carry out Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM25) covering upwind and downwind directions during the construction period.
- 4. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- 5. Sand, murram, loose soil, cement, stored on site should be covered adequately so as to prevent dust pollution.
- 6. Wet jet shall be provided for grinding and stone cutting.

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- Unpaved surfaces and loose soil should be adequately sprinkled with water to suppress dust.
- 8. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- 9. The diesel generator sets to be used during construction phase shall be low Sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise mission standards.
- 10. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- 11. For indoor air quality the ventilation provisions as per National Building Code of India.

# 3. Water Quality Monitoring and Preservation:

- The natural drain system should be maintained for ensuring unrestricted flow
  of water. No construction shall be allowed to obstruct the natural drainage
  through the site, on wetland and water bodies. Check dams, bio-swales,
  landscape, and other sustainable urban drainage systems (SUDS) are allowed
  for maintaining the drainage pattern and to harvest rainwater.
- 2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- 3. Total freshwater use shall not exceed the proposed requirement as provided in the project details.
- 4. The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with Half Yearly Compliance Reports (HYCR).

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- 5. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- 6. At least 20% of the open spaces as required by the local building byelaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- 7. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation car washing, thermal cooling, conditioning etc. shall be done.
- 8. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- 10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- 11. The local bye-law provisions on rainwater harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- 12. A rainwater harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one day of total freshwater requirement shall

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be provided. In areas where ground water recharging is not feasible, the rainwater should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

- 13. All recharges should be limited to shallow aquifer.
- 14. No ground water shall be used during construction phase of the project.
- 15. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
- 16. The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with Half Yearly Compliance Reports (HYCR).
- 17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing. AC make up water and gardening. As proposed, not related water shall be disposed into municipal drain.
- 18. No sewage or untreated effluent water would be discharged through storm water drains.
- 19. Onsite sewage treatment of capacity of treating 100% wastewater to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated wastewater shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
- 20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be taken to mitigate the odor problem from STP.

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21. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Centre Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

# 4. Noise Monitoring and Prevention:

- 1. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- 2. Noise level survey shall be carried out as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of Half Yearly Compliance Report (HYCR).
- 3. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

# 5. Energy Conservation Measures:

- 1. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- 2. Outdoor and common area lighting shall be LED.
- 3. The proponent shall provide solar panels covering a minimum of 50% of terrace area as committed.
- 4. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting

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- design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- 5. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- 6. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building byelaws requirement, whichever is higher.
- 7. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building byelaws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

## Waste Management:

- 1. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- 2. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- 3. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- 4. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.

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- 5. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- Any hazardous waste generated during construction phase shall be disposed
  of as per applicable rules and norms with necessary approvals of the State
  Pollution Control Board.
- 7. Use of environmentally friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environmentally friendly materials.
- 8. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September 1999 and amended from time to time. Ready mixed concrete must be used in building construction.
- Any wastes from construction and demolition activities related thereto shall be managed to strictly conform to the Construction and Demolition Rules, 2016.
- 10. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

#### 7. Green Cover:

- No tree can be felled/transplant unless exigencies demand. Where absolutely
  necessary, tree felling shall be with prior permission from the concerned
  regulatory authority. Old trees should be retained based on girth and age
  regulations as may be prescribed by the Forest Department. Plantations to
  be ensured species (cut) to species (planted).
- 2. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.

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- 3. Where the trees need to be cut with prior permission from the concerned local authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- 4. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.
- 5. A wide range of indigenous plant species should be planted as given in the Appendix-I, in consultation with the Government Forest/Horticulture Departments and State Agriculture University.

## 8. Transport:

- A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
  - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b. Traffic calming measures.
  - c. Proper design of entry and exit points.
  - d. Parking norms as per local regulation.
- Vehicles hired to bring construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during nonpeak hours.
- 3. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms

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radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

#### 9. Human Health Issues:

- All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- 2. For indoor air quality the ventilation provisions as per National Building Code of India.
- 3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- 4. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- 5. Occupational health surveillance of the workers shall be done on a regular basis.
- 6. A First Aid Room shall be provided in the project both during construction and operations of the project.

### 10. Corporate Environment Responsibility:

1. The PP shall complete the CER activities, as committed, before obtaining CTE.

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- 2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of Half Yearly Compliance Report (HYCR).
- 3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- 4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Half Yearly Compliance Report (HYCR).

#### 11. Miscellaneous:

- The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in Tamil language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- 2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt.

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- 3. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- 4. The project proponent shall submit Half Yearly Compliance Reports (HYCR) on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.
- 5. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- 6. The project proponent shall inform the Authority (SEIAA) of the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- 7. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- 8. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also during their presentation to the State Expert Appraisal Committee.
- 9. No further expansion or modifications to the plant shall be carried out without prior approval of the Authority (SEIAA).
- 10. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 11. The Authority (SEIAA) may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 12. The Authority reserves the right to stipulate additional conditions if found necessary. The Company in a time-bound manner shall implement these conditions.

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- 13. The Regional Office of the MoEF&CC Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- 14. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

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# Appendix -I List of Native Trees Suggested for Planting

No	Scientific Name	Tamil Name	Tamil Name
1	Aegle marmelos	Vilvam	<b>ജ്</b> രായം
2	Adenaanthera pavonina	Manjadi	மஞ்சாடி. ஆ <b>வை க்குன்றிமன</b> ்
3	Albizia lebbeck	Vaagai	வாகை
4	Albizia amara	Usil	உசில்
5	Beultinia purpurea	Mantharai	மந்தாரை
6	Bauhinia racemosa	Aafhi	2.55
7	Bauhinia tomentos	Iruvathi	இருவாத்தி
8	Buchanania axillaris	Kattuma	sa Guar
9	Borassus flabellifer	Panai	LISTOST
10	Butea monosperma	Murukkamaram	மிகுக்கமரம்
11	Ворах сегра	Ilavu, Sevvilavu	<b>Bea</b>
12	Calophyllum inophyllum	Punnai	Hees
13	Cassia fistula	Sarakondrai	சரக்கௌள்ளு
14	Cassia rozburghii	Sengondrai	GriGerang
15	Chloroxylon sweitenia	Purasamaram	புக மூம்
16	Cochlospermum religiosum	Kongu, Manjalllavu	கோங்கு, மஞ்சன் இலவு
17	Cordia dichotoma	Naruvuli	56apti.
18	Creteva adansoni	Mavalingum	ការព្យាលក្រោះក្
19	Dillenia indica	Uva, Uzha	<b>鱼</b>
20	Dillenia pentagyna	SiruUva, Sitruzha	சிறு உள
21	Diospyro sebenum	Karungali	EGMESO)
22	Diospyro schloroxylon	Vaganai	CHECOOM
23	Ficus anoplissima	Kalltchi	கல் இத்தி
24	Hibiscus tiliaceou	Aatrupoovarasu	- Statistical Company
25	Hardwickis binata	Aacha	शुक्रमा
26	Holoptelia integrifolia	Aayili	ஆயக மரம், ஆயிலி
27	Lannea coromandelica	Odhiam	<del>O</del> Curo
28	Lagerstroemia speciosa	Poo Marudhu	ர் கடுதி
29	Lepisanthus tetraphylla	Neikottaimaram	தெய் கொட்டடை ஐந்
30	Limonia acidissima	Vila maram	egeca retip
31	Litsea glutinos	Pisinpattai	அரம்க. பிசின்பட்டை
32	Madhuca longifolia	Muppei	இலுப்பை
33	Manilkara hexandra	Ulakkai Paalai	
34	Mimusops elengi	Magizhamaram	மகிழமரம்
35	Mitragyna paroifolia	Kadambu	<u>क्रा</u> कृति
36	Morinda pubescens	Nuna	Shows.
37	Morinda citrifolia	Vellai Nuna	Counterer grain
38	Phoenix sylvestre	Eachai	स्ट्रम् व्यक्
39	Ponganta pinnat	Pungam	Lpitotio //

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40	Premna mollissima	Munnai	முன்னை
41	Premna serratifolia	Narumunnai	ந்று முன்னை
42	Premna tomentosa	Malaipoovarasu	ந்தை பிவீச
43	Prosopis cinerea	Vanni maram	வன்னி மரம்
44	Pterocarpus marsupium	Vengai	வேங்கை
45	Pterospermum canescens	Vennangu, Tada	வெள்ளாங்கு
46	Pterospermum xylocarpum	Polavu	<b>Lice</b>
47	Puthranjiva roxburghi	Karipala	&SLIENT
48	Salvadora persica	Ugaa Maram	कास ग्रीक
49	Sapindus emarginatus	Manipungan,	negitişey.
		Soapukai	Centratenti
50	Sетеся азося	Asoca	अधिनस्य
51	Streblus asper	Piray maram	பிராப் மரம்
52	Strychnos nuxvoniic	Yetti	研L境
53	Strychnos potatorum	Therthang Kottai	Caranta Carantana
54	Syzygium cumini	Navai	5Pari
55	Terminalia belleric	Thandri	झक्री
56	Terminalia arjuna	Ven marudini	Court மகுது
57	Toona ciliate	Sandhana vembu	சந்தன வேப்பு
58	Thespesia populnea	Puvarasu	गै <b>रुक्ट</b>
59	Welsuratrifoliate	valsura	ORIGET
60	Wrightia tinctoria	Veppalai	Gen a meneo
61	Pithecellobium dulce	Kodukkapuli	GENGARALLIAN

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## Appendix -II

## **Display Board**

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

கரங்கங்களில் குவாரி செயல்பாடுகளுக்கான சுற்றுச்துறல் அனுமதி கீழ்கண்ட நிடந்தனைகளுக்கு உட்பட்டு வழங்கப்பட்டுள்ளது stiAA/\_\_\_\_\_ தேதியிடப்பட்டு கற்றுச்சூழல் அனுமதி\_\_\_\_\_தேதி வரை செல்லத்தக்கதாக உள்ளது. தவாரியின் எல்லையைச் சுற்றி வேலி அமைக்க வேண்டும் பசமை புத்தி வளர்ச்சி ஷங்கப்பாறையின் ஆழம் தரைவ<u>ட்டத்திலிருத்து</u> மிட்டர்க்கு மினவல் **இ**ருக்க வேண்டும் மேம்பாட்டுக்கான கரங்கத் திட்டம் காற்றில் மாக ஏற்படாதவாறு கரங்க பளிகளை மேற்கொள்ள வேள்டும். arramiad Geógyá பாறையில் மாக ஏற்படாத அளவிற்கு தண்ணினர முறையாக هنمين galanti cultadià pecura acioniturg Ogalisa Cont இவரச்சல் அணையும் நூசி மாவகப்பையும் குறைப்பதுத்தாக குவரியின் எல்கை சுற்றி அடர்த்தியான பகளை பகுதியை ஏற்படுத்த Countr@ம். <del>வுக்கத்தில் பேடை சுவக்குப்போழுது நிலதுதிற்கள் ஏற்படாதவாதும் மற்றும் சுற்கள் பறக்காதவாகும் பாதுகாப்பு</del> நடவடிக்கைகளை உள்ளிப்பாக சொல்படுத்தப்பட வேண்டும். <del>ரம்கத்தில் இருந்து ஏற்படும் இவரச்சல்</del> அவவு 25 டேசியல்லி (ASA) அள**விற்கு** மேல் ஏற்படாதவ**ாற அடிந்த கட்டுப்பாடுகளை** Cad Carder Contribà . சட்ட விறிகள் 100ன் கிற் கரங்கத்தில் உள்ள பணியார்களுக்கு தகுந்த பாறுகாப்பு கருவிகள் வழங்கவதோடு acegnytheir explicing anglanes Grieg of Contribi. கம் அல்றை பஞ்சாபத்து வதியாக வாணங்கள் செல்லும் சலையை தொடர்த்து நண்கு பராவரிக்க வேண்டும். மப்பளிகளால் அகுகில் உள்ள விவசாயப் பளிகள் மற்றும் நிற்றிலைகள் பாதிக்கப்படக் கூடாது. மைகள் பாதிக்கப்படாமல் இருப்பதை உறுற் செய்யும் வணையில் நிலந்து, நிரின் நாந்தினை தொடர்ந்து வள்ளனரிக்க வேள்டும். கரங்கத்திலிருந்து சனிக பொருட்களை எடுத்துச் செல்வது கிராக மக்களுக்கு எந்தத் சிராத் மாதுகாப்போடும் மத்தும் சுத்துதும் மாதிக்களைத வெள்ளம் வாகளங்களை இயக்க Goodbighi. ومعووهان بالمسوي சப்பளிகள் முடிக்கப்பட்டவுடன் அங்க மூடன் <u>நிடத்தி</u>ன் உன்னவாறு கண்கத்தினை மூட வேண்டும். <u>ப்பு நடவடிக்கைகளை முடித்திக்கார் அங்கப் பகுதி மற்றும் அங்கு நடவடிக்கைகளால் இடையூறு ஏற்படக்கூடிய</u> வேறு எந்தப் பகுதியமாக் வறுகட்டுமாகம் பேர்று நாவரங்கள் விலங்குகள் ஆகியவற்றின் வளர்சிக்கு ஏற்ற வகையில் பகைய் ஆதியை உருவாக்க வேண்டும். முளுமையாக நிடத்தனைகளை அடுப் பாரிவேஷ் (http://pub.nb.nic.in) என்றே இணையதனத்தைப் பார்வவகிடவும். மேலும் எத்தவித வந்நதுல் சார்ந்த புகார்வருக்கு செல்லையில் உள்ள வற்றுச்துதல் மற்றுக் வா அமைச்சகத்**தின் ஒருக்கொண**ந்த வட்டனு றுவலைம்: 944 – 2022235 (அல்லது) தவிழ்நாடு மாக கட்டும்பாடு வாரியந்தின் மாவட்ட சுற்றுச்சூழல் போறியா

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