# State Expert Appraisal Committee (SEAC)

Minutes of 415<sup>th</sup> meeting of the State Expert Appraisal Committee (SEAC) held on 12.10.2023 (Thursday) at SEIAA Conference Hall, 2<sup>nd</sup> 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 414th SEAC meeting held on 06.10.2023 were circulated to the Members in advance and as there are no remarks, the Committee decided to confirm the minutes.

Agenda No: 415 - 01

(File No: 10332/2023)

Proposed Reconstruction of (G+5 Floor) Residential Building with 607 Dwelling units & 5 Electrical Rooms at Parvathi Kakkan Colony in S.No 1736/27, Block No, 39, Vepery Village, Chennai District, Tamil Nadu by M/s. Tamil Nadu Urban Habitat Development Board - For Environmental Clearance. (SIA/TN/INFRA2/440669/2023, Dated: 17/08/2023)

The proposal was placed in this 415th meeting of SEAC held on 12.10.2023. The project proponent made a detailed presentation. The details of the project furnished by the proponent are available on the PARIVESH website (parivesh.nic.in).

#### The SEAC noted that.

- The environmental clearance is sought for "Proposed Reconstruction of (G+5 Floor) Residential Building with 612 Units (607 Dwelling units & 5 Electrical Rooms) at Parvathi Kakkan Colony in S.No 1736/27, Block No, 39, Vepery Village, Chennai District by Tamil Nadu Urban Habitat Development Board."
- 2. Total plot area of the project is 10,296.68 sq.m and built-up area is 23,705.34 sq. m.
- 3. Maximum number of floors will be 5 Blocks G+5 and maximum height of the building will be 18.5 m.
- 4. Total Saleable DU's (dwelling units) is 607 units.

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5. The project site has at present, 19 residential blocks with 594 dwelling units(G+4) constructed during 1970's with total built-up area of 15,948.29 sq.m all in dilapidated condition.

6. Approval has been sought for demolition of the existing buildings, fresh water supply and disposal of sewage.

During the meeting the SEAC further noted that (1) the PP has proposed only 6% of total land area for developing green belt as against the norm of 15% minimum at the project site, (2) layout of the new design seems to be congested and not conducive for hygienic living and (3) as the site is located within the city, PP should explore the possibility of constructing more dwelling units by adding more floors. SEAC, therefore, directed the PP to consider the above and submit their response. On receipt of the same, the Committee will further deliberate and decide on future course of action. Hence, the proponent is advised to submit the additional documents/ information as sought above within a period of 30 days failing which your proposal will automatically get delisted from the PARIVESH portal.

Agenda No: 415-02

(File No: 10038/2023)

Proposed Ordinary Earth quarry lease over an extent of 3.60.42Ha at S.F.Nos. 1606, 1609(Part) & 1610/28 (Part), in Andipatti Bit-II Village, Andipatti Taluk, Theni District, Tamil Nadu by Thiru.M.Kasimayan- For Environment Clearance. (SIA/TN/MIN/428795/2023 Dt:11.05.2023)

The proposal was earlier placed in the 391<sup>h</sup> meeting of SEAC held on 13.07.2023. The Project Proponent made a detailed power point presentation about the proposed project. The details of the project furnished by the proponent are available in the website (parivesh.nic.in). The SEAC noted the following:

1. The Project Proponent, Thiru. M. Kasimayan has applied seeking Environment Clearance for the proposed Ordinary Earth quarry lease over an extent of 3.60.42Ha at S.F.Nos. 1606, 1609(Part) & 1610/2B (Part), in Andipatti Bit-II Village, Andipatti Taluk, Theni District, Tamil Nadu.

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

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- 3. In the Soil test report dated 11.07.2023 the soil sample is classified as intermediate plastic clay (CI) category Ordinary Earth.
- 4. Project activity does not involve blasting or drilling operations.

Based on the presentation and documents furnished by the project proponent, SEAC directed the PP to obtain the following document/detail:

 Revised land lease deed document from the landowner detailing the project activity.

The PP furnished the details sought vide letter dated 04.08.2023 and hence the subject was taken up for discussion in this 415th meeting of SEAC held on 12.10.2023.

	10038	_	Category	B2
File No	SIA/TN/MIN/428795/2023 Dt:11.05.2023		DOR: 16.05.2023	1(a)
Sl. No	No Salient		tures of the Proposal	
1.	Name of the Owner/Firm	:	Thiru.M.Kasimayan, S/o.Muthukaruppatheva T.Annaikaraipatty, T.Subbulapuram, Andipatti Taluk, Theni District-625518	ar,
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	;	Ordinary Earth	
3.	S.F Nos. of the quarry site with area break-up	:	S.F.Nos. 1606, 1609(P (Part)	Part) & 1610/2B
4.	Village in which situated	:	Andipatti Bit-II Village.	
5.	Taluk in which situated	:	Andipatti Taluk,	
6.	District in which situated	:	Theni District	<u></u>
7.	Extent of quarry (in ha.)	;	3.60.42 Ha	<u>-</u>
8.	Latitude & Longitude of all corners of the quarry site	:	10°58'07.60"N to 10°58' 77°38'57.12"E to 77°39'0	
9.	Topo Sheet No.	:	58 G/09	
10.	Type of mining	:	Opencast semi mechaniz mining.	red method of
11.	Life of Project	:	3 years	//
11.	Lease Period		3 years	<del>- [   </del>

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-	Mining Plan Period	:	3 years		
	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC	
	Geological Resources in m <sup>3</sup> (RoM)	:	Ordinary Earth - 72084 m³		
12.	Minable Resources in m <sup>3</sup> (RoM)	:	Ordinary Earth - 32616 m³	Ordinary Earth - 31,559 m <sup>3</sup>	
	Annual Peak Production in m <sup>3</sup>	:	Ordinary Earth - 10872 m³	Ordinary Earth - 10,520 m³	
	Maximum Depth in meters	:	2m BGL		
13.	Depth of water table	:	32m BGL		
14.	Man Power requirement per day:	:	9 Nos.		
15.	Water requirement:  1. Drinking & domestic purposes (in kLD)  2. Dust suppression . Green Belt &Wet Drilling (in kLD)	:	7.0 kLD 1.0 kLD 3.0 kLD & 3.0 kLD		
16.	Power requirement		TNEB & 5440 litres of HSD for DG set		
17.	Precise area communication issued by Dept. of Geology & Mining	:	Rc.No.787/kanimam/2021 Dt.:08.02.2023		
18.	Mining Plan approved by Dept. of Geology & Mining	:	Rc.No.787/kanimar Dt.:10.02.2023	n/2021	
19.	500m Cluster Letter issued by Dept. of Geology & Mining		Rc.No.787/kanimar Dt:10.02.2023	n/2021	
20.	VAO Certificate regarding Structures within 300m Radius		Letter dated: 14.03.2023		
21.	Project Cost (excluding EMP cost)	:	Rs. 1724 Lakh		
22.	EC Recommendation	:	Validity	30 years subject to the following upper limits.	
				Ordinary Earth	

		:	Max Total RoM in m <sup>3</sup>	31,559
			Annual Max RoM in m <sup>3</sup>	10,520
		:	Max Depth in m	2m BGL
23.	EMP cost (in Rs. Lakh).	:	Capital cost - Rs.26. Recurring cost/Annu + 5% inflation cost	36 Lakh m - Rs. 16.83 Lakh-
24.	CER cost (in Rs. Lakh).	:	Rs 4.0 Lakhs	

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 10,520 m³ of Ordinary Earth by maintaining the ultimate depth of mining of 2m BGL for a period of 2 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:

- The proponent shall provide the particulars for carrying out the plantation of 1250 Nos. of tall saplings of native species within the proposed mining area as committed before obtaining CTO from TNPCB.
- 2. The PP shall install a bio-toilet for the welfare of persons employed in the mine, before obtaining the CTO from the TNPCB.
- As accepted by the Project Proponent the CER cost of Rs. 4.0 Lakhs and the amount shall be spent for the committed activities towards Government Primary School, Yethakovil village given below before obtaining CTO from TNPCB.

SI. No.	PROPOSED CER ACTIVITIES	COST IN LAKH.
1	<ul> <li>Provision of Library with racks</li> <li>Plantations inside the school premises (50Nos.)</li> <li>School maintenance for the entire mine lease period</li> </ul>	4.00

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•	Providing	Chairs	&	tables	for	the
	classrooms					

4. In addition to that the PP shall remit Rs. 1.0 lakh to DFO concerned as Conservation/mitigation measures for the Srivilliputhur Megamalai Tiger Reserve (SMTR) since the site is within 10km radius and the same shall be included in the EMP.

Agenda No: 415 - 03

File No: 10333/2023

Proposed Construction of Residential Building -High Rise Group Development in S.F. No: 15/2A2, 15/2A3, 15/2A4, 15/2B1, 15/2B2, 15/2B3A, 15/2B3B & 16/1 of Moondramkattalai Village, Kundrathur Taluk, Kancheepuram District, Tamil Nadu by M/s. Casagrand Fresh Private Limited - For Environmental Clearance. (SIA/TN/INFRA2/440707/2023, Dated: 17.08.2023)

The proposal was placed in this 415<sup>th</sup> SEAC meeting held on 12.10.2023. 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. SEAC noted the following:

- The Project Proponent, M/s. Casagrand Fresh Private Limited has applied for Environmental Clearance for the Proposed Construction of Residential Building -High Rise Group Development in S.F. No: 15/2A2, 15/2A3, 15/2A4, 15/2B1, 15/2B2, 15/2B3A, 15/2B3B & 16/1 of Moondramkattalai Village, Kundrathur Taluk, Kancheepuram District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of item 8(a) "Building & construction projects" of the Schedule to the EIA Notification, 2006.
- 3. Total Plot area is 31,929.73 Sq.m & the total built-up area of the proposed High-Rise Buildings is 1,33,549.12 Sq.m.

Now, the proposal was placed in the 415<sup>th</sup> SEAC meeting held on 12.10.2023. Based on the presentation and documents furnished by the proponent, SEAC decided to call for additional details

1. The proponent shall submit the details regarding the land use classification from Nanjai land to non-agricultural purpose from the competent authority.

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2. The PP stated that Kundrathur Municipality has given commitment letter for providing drinking water and for giving connection to UGSS that is under implementation. As UGSS takes long time to implement, PP shall produce a commitment letter from the nearby Pallavaram Municipality to accept the surplus treated waste water until the UGSS comes into operation. The cost of transportation shall be borne by the PP.

3. As committed by the proponent, PP shall submit revised CER details for the activities committed towards aiding blind people in Blind street, Damian Gate, Peramamur, Maraimalai Nagar.

Upon the receipt of above-mentioned details, further deliberation shall be done. Hence, the proponent is advised to submit the additional documents/ information as sought above within a period of 30 days failing which your proposal will automatically get delisted from the PARIVESH portal.

Agenda No: 415 - 04

(File No: 10060/2023)

Proposed Colour Granite quarry lease area over an extent of Extent 2.55.69 Ha at S. F. No. 219/1, 219/4, 219/6 & 219/7A of Kunnathur Village, Uthangarai Taluk, Krishnagiri District, Tamil Nadu by Thiru. S.L. Govindaraj - For Environmental Clearance. (\$IA/TN/MIN/430513/2023, Dated: 25.05.2023)

The proposal was placed in 415th SEAC meeting held on 12.10.2023. 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. S.L. Govindaraj has applied for Environmental Clearance for the Proposed Colour Granite quarry lease area over an extent of Extent 2.55.69 Ha at S.F.No. 219/1, 219/4, 219/6 & 219/7A of Kunnathur Village, Uthangarai Taluk, Krishnagiri District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan, the lease period is for 20 years. The production for 5 years not to exceed RoM – 27,265 m³, Recovery @ 35% – 9,543 m⅓ahd 17,722

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- m³of Rejects with an annual peak production of RoM 5880m³ and Recovery @ 35% 2058 m³ with an ultimate depth of Mining 32m below ground level.
- 4. Environmental Clearance obtained from DEIAA vide Lr. No. 25/DEIAA-KGI/EC No.21/2018 Dated: 27.02.2018. This EC issued by the DEIAA has been filed before the SEIAA-TN for reappraisal in compliance to the order of the Hon'ble NGT in O.A142 of 2022 as per the Guidelines stipulated in MoEF &CC OM F.No. IA3-22/11/2023-IA.III (E-208230), dated. 28.04.2023.
- 5. Earlier, the proposal was placed in 392<sup>nd</sup> SEAC meeting held on 14.07.2023. Based on the presentation and documents furnished by the proponent, SEAC decided to call for the following additional details.
  - The PP shall submit Certified Compliance Report obtained from the office of the concerned DEE/TNPCB (or) IRO, MoEF & CC, Chennai and appropriate mitigating measures for the non-compliance items, if any.
  - 2. For the existing quarry, the concerned AD (Mines) shall inspect the quarry site and he shall authentically provide the following information with necessary evidences and photographs:
    - 1 Original pit dimension of the existing quarry
    - 2 Quantity achieved Vs EC Approved Quantity
    - 3 Balance Quantity as per Mineable Reserve calculated.
    - 4 Mined out Depth as on date Vs EC Permitted depth
    - 5 Details of illegal/illicit mining carried out, if any
    - 6 Violation in the quarry during the past working.
    - 7 Quantity of material mined out outside the mine lease area (or) in the adjacent quarry/land.
    - 8 Existing condition of Safety zone/benches
  - The AD (Mines) shall provide the details of payment of compensation under Section 21(5) of the MMDR Act for allegedly operating (or) any penalties levied on the PP for any violation caused in the quarry operation under the Common Cause judgment.
  - 4. The proponent shall complete fencing and submit photographic/videographic evidence.

CHAIRMAN.

The salient features off the proposal are given below.

	ile No	10060/2023		Cohogon	B2	
	lie NO	430513/2023		Category	1(a)	
SI. No		Salient I	eat	ures of the Proposal		
1.	Name of the Owner/Firm		:	Thiru.S.L.Govindara No. 286,BTM Road Bargur Post and Tal Krishnagiri District-6	i, luk,	
2.		rying (Ordinary Granite/Limestone)	:	Colour Granite Qua	arry	
3.	S.F Nos. of the quarry site with area break-up		:	219/1, 219/4, 219/6 & 219/7A		
4.	Village in which situated		:	Kunnathur		
5.	Taluk in which situated		:	Uthangarai		
6.	District in which situated		:	Krishnagiri		
7.	Extent of qua	arry (in ha.)	:	2.55.69 Ha		
8.	Latitude & Lo corners of th	ongitude of all e quarry site	:	12°21'06.70"N to 12°21'16.66"N 78°31'14.33"E to 78°31'18.76"E		
9.	Topo Sheet 1	No.	:	57 - L/11		
10.	Type of mini	ng	:	Opencast Semi-Med	hanized Mining	
_	Life of Projec	tt	:	20 years		
11.	Lease Period		· <b>-</b>	20 years		
	Mining Plan	Period	:	5 years		
	Mining Plan	Details	:	As per approved  Mining Plan  As modified by SE		
12.	Geological R (RoM)	esources m³	:	Colour Granite 7,22,027m³ Granite Recovery @ 35%	Colour Granite  - Granite Recovery @ 35%	

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			2,52,709m³	-
			Granite Waste @	Granite Waste @
			65%	65%
			4,69,318m³	•
			Colour Granite	Colour Granite
			3,14,775m³	-
			Granite Recovery	Granite Recovery @
	NA:		@ 35%	35%
	Minable Resources m³ (RoM)	;	1,10,171m³	-
			Granite Waste @	Granite Waste @
			65%	65%
			2,04,604m³	•
	Annual Peak Production in m <sup>3</sup>	:	Colour Granite	Colour Granite
			5,880m³	-
			Granite Recovery	Granite Recovery @
			@ 35%	35%
			2,058m³	-
			Granite Waste @	Granite Waste @
			65%	65%
			3,822m³	-
	Maximum Depth in meters	:	17m BGL	-
13.	Depth of water table	:	50m in rainy & 55r	n in summer season
14.	Man Power requirement per		20 Nos	
14.	day:	•	20 1403	
	Water requirement:		2.9 KLD	
	1. Drinking & utilized		0.9 KLD	
15.	water	:	1.0 KLD	
	<ul><li>2. Dust suppression</li><li>3. Green belt</li></ul>		1.0 KLD	
16.	Power requirement	:	TNEB	7,
_		-		

		!	43,632 Litres of HS	D for five years
17.	Precise area communication approved by the Indutries (MME.2) Department, Dept of G&M	:	G.O. (3D) No.13, d	lated: 19.03.2018
18.	Mining Plan approved by Commissioner, Dept of Geology & Mining.	:	Rc.No.8663/MM4/ 22.02.2023	'2022, dated:
19.	Department of G&M, Deputy Director, 500m Cluster Letter	:	Roc.No.2156/2022 22.05.2023	/Mines, dated:
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated: 19.05	.2023
21.	Project Cost (excluding EMP cost)	:	Rs. 64,55,000	
	EC Recommendation	:	Validity	30 years subject to the following upper limits.  Colour Granite
22.		:	Max Total RoM in m³	RoM - 27,265m <sup>3</sup> , Granite Recovery @ 35% - 9,543m <sup>3</sup> & Granite Waste @ 65% - 17,722m <sup>3</sup>
		:	Annual Max RoM in m <sup>3</sup>	5,880m³
		:	Max Depth in mtrs	17m BGL
23.	EMP cost (in Rs. Lakhs).	:	Capital Cost – Rs. 5 Recurring Cost – Rs.	
24.	CER cost (in Rs. Lakhs).	:	Rs. 5,10,000	$\bigcap$

CHAIRMAN

Now, the proposal was again placed in the 415th SEAC meeting held on 12.10.2023.

S.	ADS	Reply
No		
1.	The PP shall submit Certified Complian Report obtained from the office of the concerned DEE/TNPCB (or) IRO, MoEF CC. Chennal and appropriate mitigation measures for the non-compliance items, any.	e & CCR Obtained and submitted.
2.	For the existing quarry, the concerned A (Mine, shall inspect the quarry site and I shall authentically provide the following information with necessary evidences and photographs:  i. Original pit dimension of the existing quarry  ii. Quantity achieved Vs EC Approved Quantity  iii. Balance Quantity as per Mineal Reserve calculated.  iv. Mined out Depth as on date Vs I Permitted depth  v. Details of illegal/illicit minicular carried out, if any  vi. Violation in the quarry during the Past working.  vii. Quantity of material mined of outside the mine lease area (or) the adjacent quarry/land.	e g d d e AD Letter Obtained and submitted.

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	viii. Existing condition of Safety zone/benches	
3.	The AD (Mines) shall provide the details of payment of compensation under Section 21(5) of the MMDR Act for allegedly operating (or) any Penalties levied on the PP for any violation caused in the quarry operation under the Common Cause judgment.	
4.	The proponent shall complete fencing and submit Phototrophic/ Videographic evidence.	Green Belt & Fencing Photos submitted.

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 an annual peak production of 2,058m³ of Multi Colour Granite by maintaining the ultimate depth of mining up to 32m 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:

- 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 proponent shall develop fencing around the abandoned pits situated near the proposed project area in order to ensure safety before the execution of the lease.
- 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.

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- 4. The proponent shall erect tall sheet fencing in the lease boundary of the proposed quarry abutting the road before the execution of the lease and the PP shall obtain the necessary permission for maintaining higher benches of more than 6 m with vertical face angle from the Director of Mines Safety, Chennai Region as per the Reg. 106 (2) (b) of the MMR 1961.
- 5. 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.
- 6. 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.
- 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 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.
- 8. As accepted by the Project Proponent, Rs. 5.10 Lakhs and and the amount shall be spent for the activities as committed towards Government Higher Secondary School, Kunnathur Village before obtaining CTO from TNPCB.

CHAIRMAN

Agenda No: 415 - 05

File No: 9426/2023

Proposed Rough Stone & Gravel quarry lease over an extent of 3.48.0 ha in S.F. No. 67/1, 68 at Myleripalayam Village, Madukkarai Taluk, Coimbatore District, Tamil Nadu by Tmt.M.Sarojini - For Environmental Clearance. (SIA/TN/MIN/426915/2023, Dated: 21.04.2023)

The proposal was placed in this 415th SEAC meeting held on 12.10.2023. 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. SEAC noted the following:

- The Project Proponent, Tmt. M. Sarojini has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry lease over an extent of 3.48.0 ha in S.F. No. 67/1, 68 at Myleripalayam Village, Madukkarai Taluk, Coimbatore District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per mining plan, the lease period is for 10 years. The mining plan is for 5 years & production should not exceed 3.04,716m³ of Rough Stone & 1,350m³ of Gravel. The annual peak production 62.905m³ of Rough Stone & 15,276m³ of Gravel. The ultimate depth of mining is 32m BGL.
- 4. Subsequently, the proponent had obtained vide Lr.No.SEIAA—TN/F.No.9426/SEAC/ToR 1285/2022, Dated: 08.10.2022.
- 5. Public hearing was conducted on 30.01.2023.
- 6. Earlier, the proposal was placed in the 400th SEAC meeting held on 11.08.2023.

  During the presentation, SEAC noted the following
  - 1. As per MOEF&CC Office Memorandum vide F. No. IA3-22/10/2022-IA.III, dated: 08.06.2022 regarding Standardizing the validity of baseline data and public consultation reports for submission of proposal within the validity period of Terms of Reference (ToR) under the provisions of EIA Notification, 2006.

Under Para 6

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"The aforesaid matter has been examined in the Ministry. In order to address this issue in a practical manner and to bring uniformity in handling such proposals, the following standard procedures shall be followed with immediate effect:

- i. Baseline data used for preparation of EIA/EMP reports may be collected at any stage of the EC process or even before the grant of ToR.
- ii. Public consultation shall be conducted after the grant of ToR. The Public consultation conducted after the expiry of ToR shall not be accepted by the Regulatory Authority.
- iii. The baseline data and Public Hearing shall not be more than three years old at the time of submission of application for consideration of EC.
- iv. At the time of application for EC, in case baseline data is older than three years, but less than five years old in the case of River valley and HEP Projects, or less than four years old in the case of other projects, the same shall be considered, subject to the condition that it is revalidated with one season fresh non-monsoon data collected after three years of the initial baseline data..."
- 2. As per the EIA report submitted by the PP in Parivesh Portal, under Chapter 1.5: Methodology of EIA study, it was ascertained that, Baseline data was considered between Oct 1st 2019 to Dec 31st 2019 which is more than 3 years old at the time of submission of application for EC.

Hence, in the view of the above, SEAC decided that PP shall revalidate the Baseline data collected as per the direction given in the sub-para (iv) of Para 6 in the above-mentioned OM.

Now, the proposal was again placed in the 415th SEAC meeting held on 12.10.2023. The salient feature of the proposal and the replies given by the PP for the queries raised are given below.

File No	9426/2023	9426/2023 Category				
File NO	426915/2023	Category	1(a)			
SI. No	. No Salient Features of the Proposal					

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	<del></del>	1	T	
			Tmt. M. Sarojini	
			W/o. K. Marudhachalam	
1.	Name of the Owner/Firm	:	4/61-E, Kurumbapa	•
			Madukkarai Village	, Madukkarai Taluk,
			Coimbatore District	t
2.	Type of quarrying (Ordinary	:	Rough Stone & Gra	vel Quarry
	Stone/Sand/Granite/Limestone)	Ľ.		
3.	S.F Nos. of the quarry site		67/1 & 68	
J.	with area break-up	•		
4.	Village in which situated	:	Myleripalayam	
5.	Taluk in which situated	:	Madukkarai	
6.	District in which situated	:	Coimbatore	
7.	Extent of quarry (in ha.)	:	3.48.0 Ha	
8.	Latitude & Longitude of all		10°51`55.82053"N to 10°52'04.64902"N	
0.	corners of the quarry site	:	77°01'53.03435"E to 77°01'58.86562"	
9.	Topo Sheet No.	:	58 – F/1	
10.	Type of mining	:	Opencast Semi-Mechanized Mining	
	Life of Project	:	5 years	
11.	Lease Period		5 years	
	Mining Plan Period	:	5 years	
	Mining Plan Details		As per approved	As modified by
	waring rant Details	;	Mining Plan	SEAC
	Geological Resources m <sup>3</sup>		Rough Stone	Rough Stone
	(RoM)	:	3,61,530 m <sup>3</sup>	-
12.			Rough Stone	Rough Stone
'2'	Minable Resources m³ (RoM)	:	3,20,754m³	-
	iviiriable kesources m² (KOM)	•	Gravel	Gravel
	ļ		1,350m³	-
	Appual Post Production in m3	:	Rough Stone	Rough Stone
	Annual Peak Production in m <sup>3</sup>		66,217m³	
	<del></del>		·	<del></del>

			Gravel	Gravel	
			1,350m³	-	
	Ultimate Depth in meters	:	32m BGL	-	
13.	Depth of water table	:	40-42m BGL		
14.	Man Power requirement per day:	:	20 Nos		
15.	Water requirement:  1. Drinking & utilized water  2. Dust suppression & Green belt	:	5.0 KLD 1.5 KLD 3.5 KLD		
16.	Power requirement	:	TNEB		
17.	Precise area communication approved by the Assistant Director, Dept of G&M	:	Na.Ka.No.927/Kanimam/2021, dated: 24.06.2022		
18.	Mining Plan approved by Assistant Director, Dept of Geology & Mining.	:	Rc.No.927/Mines/2021, dated: 06.07.2022		
19.	Department of G&M, Assistant Director, 500m Cluster Letter	:	Rc.No.927/Mines/2021, dated: 06.07.2022		
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated: 01.07.2021		
21.	Project Cost (excluding EMP cost)	:	Rs. 95,00,000		
22.	EC Recommendation	•	Validity	30 years subject to the following upper limits.  Rough Stone	

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		:	Max Total RoM in m³	3,20,754m³
		:	Annual Max RoM in m <sup>3</sup>	66,217m³
		:	Max Depth in mtrs	32m BGL
23.	EMP cost (in Rs. Lakhs).	;	Capital Cost - Rs. 7,66,800 Recurring Cost - Rs. 7,45,302	
24.	ToR issued Details	:	Lr.No. SEIAA-TN/F.No.9426/SEAC/ToR- 1285/2022 Dated: 08.10.2022.	
25.	Public Hearing conducted on	:	30.01.2023.	
26.	CER cost (in Rs. Lakhs).	:	Rs. 5,00,000	

SI.	Particulars	Reply
No		
1.	As per the EIA report submitted by the	The TOR application was made in
	PP in Parivesh Portal. Under Chapter	PARIVESH portal vide:
	1.5: Methodology of EIA study, it was	SIA/TN/MIN/81043/2022, dated
	ascertained that, Baseline data was	21.07.2022 for our rough stone and
	considered between Oct 1st 2019 to	gravel quarry over an extent of
	Dec 31st 2019 which is more than 3	3.48.0 ha located in SF.No.67/1&68.
	years old at the time of submission of	Myleripalayam Village, Madukkarai
	application for EC.	Taluk, Coimbatore District, Tamil
		Nadu. The proposal was placed in
		312th SEAC meeting held on
		16.09.2022 and in 557th SEIAA
		meeting held on 08.10.2022 and
		TOR letter has been issued by SEIAA
		vide LyNo.SEAA-
		TN/F.No.9426/ToR-

1285/2022dated08.10.2022. The baseline study during post monsoon season (1<sup>st</sup> Oct,2022 to 31<sup>st</sup> Dec,2022).

EIA Baseline data generated during 1 st Oct, 2019 to 31st Dec, 2019 was incorporated in the report along with Shri Shanmugasundaram, Thiru A.Ammasaiappan and Tmt.S.Selvamani. Second time Public hearing was 30.01.2023 conducted on for A.Ammasaiappan, Tmt.S.Selvamani and Vetrivelavan Blue metals and Tmt.M.Sarojini. As period of base line study exceeds three years we have conducted the Base line study again during 1stOct, 2022 to 31st Dec. 2022 to revalidate the data and submitted to SEIAA on 16.08.2023.

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 66,217 m<sup>3</sup> of rough stone by maintaining the ultimate depth of mining up to 32 m 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:

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- The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.
- The 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.
- 3. 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.
- 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. 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 operation, 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.

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
school, Myleripalayam village and arranging Solar light to village road sides
before obtaining CTO from TNPCB.

Agenda No: 415 - 06

(File No: 9983/2023)

Proposed Rough Stone Quarry lease over an extent of 1.00.0 Ha at S.F. Nos. 121 (PART–3) of Perumugai Village, Vellore Taluk, Vellore District, Tamil Nadu by Thiru. K. Devendiran - For Environmental Clearance. (SIA/TN/MIN/425776/2023, Dated: 12.04.2023)

The proposal was placed in 415th SEAC meeting held on 12.10.2023. 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. K. Devendiran has applied for Environmental Clearance for the proposed Rough Stone Quarry lease over an extent of 1.00.0 Ha at S.F. Nos. 121 (PART-3) of Perumugai Village, Vellore Taluk, Vellore District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- The Proponent had earlier applied for Environmental Clearance under B2 category vide Online number SIA/TN/MIN/175565/2020 Dated: 29/09/2020 & offline F.No. 7902/2020.
- 4. The Proposal was placed in 269th SEAC meeting held on 05.05.2022. Based on the presentation and documents furnished by the project proponent, SEAC noted that in G.O(MS) No. 295 dated 03.11.2021 the Government in Industries

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Department has notified the following Rules specifying certain conditions for permitting mining activities near ecologically sensitive areas.

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

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

- 5. Subsequently, the proposal was placed in 514th SEIAA meeting held on 31.05.2022. In view of the above, the authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 31.05.2022.
- Subsequently, the above rule has been amended vide GO No. 243 Industries, Investment Promotion and Commerce (MMC.1) Department, dated 14.12.2022, as below.

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

7. Subsequently, the proponent has re-presented/applied the proposal as under to reconsider the earlier decision based on the above G.O.

Description	Old File	New File
File No	7902	9983
Online	SIA/TN/MIN/175565/2020	SIA/TN/MIN/425776/2023,
Proposal No	Dated: 29/09/2020.	Dated: 12.04.2023.
for EC		$\bigwedge_{\Lambda}$

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Based on the presentation and document furnished by the proponent, SEAC decided to call for additional details

- The proponent shall submit letter obtained from DFO regarding the existence of nearest RF from the proposed mine lease boundary.
- 2. The proponent shall submit a fresh 500m cluster certificate obtained from the concerned AD (Mines) since the 500m cluster certificate submitted is more than 3 years old.

Now, the proposal was again placed in the 415th SEAC meeting held on 12.10.2023. The salient features of the proposal and PP's response for the queries raised are given below.

File No 9983/2023 425776/2023		Cotogony		B2	
		425776/2023		Category	1(a)
SI. No		Salient Fo	eatures of the Proposal		
1.	Name of the Owner/Firm		:	Thiru.K.Devendiran  S/o.Kanniyappan,  No.6, Pillaiyar Kovil Street,  Rangapuram Village,  Sathuvachari, Vellore-632 009.	
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)		:	Rough Stone Quarry	
3.	S.F Nos. of the quarry site with area break-up		:	121 (PART-3)	
4.	Village in which situated		:	Perumugai	
5.	Taluk in wh	ich situated	:	Vellore	
6.	District in w	hich situated	:	Vellore	
7.	Extent of qu	ıarry (in ha.)	:	1.00.0 Ha	
8.	Latitude & Longitude of all corners of the quarry site		:	12°56'12.95"N to 12 79°11'56.92"E to 79	
9.	Topo Sheet No.		:	57 - P/01	
10.	Type of mining		:	Opencast Semi-Med	hanized Mining

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	Life of Project	;	5 years		
11.	Lease Period		5 years		
	Mining Plan Period	:	5 years		
	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC	
	Geological Resources m <sup>3</sup>		Rough Stone	Rough Stone	
	(RoM)	:	2,32,295 m³	•	
12.	Minable Resources m³ (RoM)		Rough Stone	Rough Stone	
12.	Minable Resources III* (ROM)	:	70,995m³	•	
	Annual Peak Production in m <sup>3</sup>		Rough Stone	Rough Stone	
		:	16,175m³	-	
	Maximum Depth in meters	:	31m (11m AGL +		
		•	20m BGL)		
13.	Depth of water table	:	55m in rainy & 58m in summer season		
14.	Man Power requirement per		21 Nos		
	day:	:	2,700		
	Water requirement:		2.0 KLD		
	3. Drinking & utilized	:	1.0 KLD		
15.	water		0.5 KLD		
	4. Dust suppression		0.5 KLD		
	5. Green belt		_		
			TNEB		
16.	Power requirement	:	56,800 Litres of HSD will be used for		
			rough stone		
	Precise area communication		Na.Ka.No.341/2019	(Kanimam), dated:	
17.	approved by the District	:	26.11.2019	· · · · · · · · · · · · · · · · · · ·	
	Collector, Dept of G&M				
	Mining Plan approved by		Rc.No.341/2019 (Mi	nes), dated:	
18.	Assistant Director, Dept of	:	24.02.2020	^	
	Geology & Mining.			/	

19.	Department of G&M, Assistant Director, 500m Cluster Letter	:	Rc.No.341/2019 (Mines), dated: 04.07.2023	
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated: 29.07.2020	
21.	Project Cost (excluding EMP cost)	:	Rs. 58,00,000	
		:	Validity	30 years subject to the following upper limits.  Rough Stone
22.	EC Recommendation	:	Max Total RoM in m <sup>3</sup>	70,995m³
		:	Annual Max RoM in m <sup>3</sup>	16,175m³
		:	Max Depth in	31m (11m AGL +
			mtrs	20m BGL)
23.	EMP cost (in Rs. Lakhs).	:	Capital Cost – Rs. 4,39,000	
			Recurring Cost – Rs	. 3,68,500
24.	CER cost (in Rs. Lakhs).	:	Rs. 5,00,000	

S.	SEAC Minutes	Reply
No		
1.	The proponent shall submit letter	DFO Letter vide C.No.1162/2023/D2
	obtained from DFO regarding the	dated 26.07.2023 has been obtained
	existence of nearby RF from the	and submitted.
	proposed mine lease boundary.	

 The proponent shall submit a fresh 500m cluster certificate obtained from the concerned AD(Mines) since the 500m Cluster certificate submitted is more than 3 years old. 500 m radius letter obtained from The Assistant Director, Geology and Mining, Vellore District vide Rc.No.341/2019 (Mines) dated 04.07.2023 and submitted.

Now, the proposal was again placed in the 415th SEAC meeting held on 12.10.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 16,175m3 of rough stone by maintaining the ultimate depth of mining up to 31m (11m AGL + 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. 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.
- 3. 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

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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.

- 4. The PP shall furnish a Standard Operating Procedures (SoP) for carrying out the blasting operations to the concerned AD (Mines) at the time of execution of lease.
- 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 within a period of six months, 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.
- As accepted by the Project Proponent the CER cost is Rs. 5 Lakhs and the amount shall be spent for the activities as committed towards Government Higher Secondary School, Perumugai before obtaining CTO from TNPCB.

Agenda No: 415 - 07

(File No. 5653/2016)

Proposed construction of Residential Building Project by M/s. Chennai Luxury Home Developers Pvt Ltd at S.F.No. 65/2, 3, 4, 5A, 6A, 70/lpt, 4Apt, 6pt, 71/1, 7, 10, 73/1B, 3B, 4B, 75/1B, 76/1A, 5A, 77/1, 2, 78/3pt, 4A2, 4A3, 4B1, 4B2, 6, 81/1A2, 1B1B, 2C1, 2C2,1D1, 1D2, & 82/3B of Nedunchery Village, PoonamalleeTaluk, Thiruvallur District, Tamil Nadu –For Environmental Clearance. (SIA/TN/NCP/58380/2016 Dated: 12.08.2016)

The proposal was placed in 415th SEAC Meeting held on 12.10.2023. The project proponent gave detailed presentation. The salient features of the project and the environmental impact assessment as presented by the proponent are as follows:

1. The site falls in Primary Residential Use Zone.

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- 2. The proposed development comprises of 5 Blocks with Stilt floor +9 Floors configuration, with a combination of 1 BHK,2 BHK & 3 BHK and 972 dwelling units in total, with lawns, greenbelt, neatly paved driveways, and parking facilities with Total Built Up area is 71,572.125q.m in a total plot area of 63,873.00 Sq.m.
- 3. The area for vehicle/car parking [including stilt area] is 1514.034 Sq.m.
- 4. Green belt area will be 9,662.86 Sq.m which is 15.12% of the total plot area; the area reserved for future development is 29,383.62 sq.m area; apart from that, an OSR [ Open Space Reservation] area of 5516.60 Sq.m (8.63%) of the plot area is identified for gifting to the Greater Chennai Corporation.
- 5. The project envisages an overall population of 5346 inclusive of residents and facility management staff and visitors.
- 6. The Total water requirement will be 669 klD. The Total Daily freshwater requirement for the project will be 442 klD, which shall be met through in-house borewell provision and will be used only for domestic purposes. Grey water that would be generated in the project would be 307 klD and proposed to be treated in a Grey water Treatment plant, and treated Grey water of 292 klD will be utilized for flushing requirement and balance 15klD will be allowed to recharge through percolation pits.
- 7. The treated sewage after treatment will be 260 klD out of which 104 klD will be recycled for flushing and balance 156klD will be utilized for green belt development within the premises.
- 8. Solid waste generation shall be 3.20 tons/Day of which 1.92 tons /Day Biodegradable wastes will be treated through Bio-Methanation Plant [BARC Technology] of 2 tons /day capacity and 1.28 tons /Day of Non-Biodegradable recyclable wastes will be handed over to authorized recyclers. Organic sludge generation of 84 kg/day from STP shall be used as manure for in house green belt development.
- 9. The power required @ 4.4 MW shall be sourced through TANGEDCO. Five numbers of 500 KVA DG sets are proposed for power back-up With exhaust

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- routed to the top of the blockthrough stack of adequate height and exhausted at an elevation of 2 meters above the roof.
- 10. Rainwater harvesting shall be done by harvesting roof top rainwater and collection of surface run-off. Roof top rainwater directed to 5 nos. of 32 KL rainwater sumps. Surface run-off is diverted to the storm water drain with cross section 1mx1m that will be laid all along the boundary. Online percolation pits (30 Nos.) with 250 mm diameter will be made to percolate the water collected at the Storm Water drain.
- 11. The project proposes INR 1.00 crores towards environmental management plan during construction phase and INR 2.98 crores towards the same for operational phase with INR 0.63 crores recurring operational expenditure.
- 12. The total cost of the project is about INR.214.29 crores. The project proposes a CER budget of Rs.107 Lakhs for various activities as stipulated by the MoEF& CC.
- 13. Chembarambakkamlake is located at 3.0km of project site. Bangaru canal is located at 100m radius from the project site.

#### The SEAC noted the following:

- The Proponent, M/s.Chennai Luxury Home Developers Pvt Ltd has applied for EC to SEIAA-TN on 18.08.2016 for the proposed construction of Residential Building for S.F.No. 65/2, 3, 4, 5A, 6A, 70/1pt, 4Apt, 6pt, 78/3pt, 81/1A2, 1B1B, 2C1, 2C2,1D1, 1D2, & 82/3B of Nedunchery Village, Poonamallee Taluk, Thiruvallur District, Tamil Nadu. This proposal was referred to TNPCB & CMDA for present status on ground of the construction vide this office letter dated: 13.02.2018. But till date no reply has been received yet.
- The project proponent has submitted a revised proposal vide dated 08.02.2019 for the proposed construction of Residential Building for S.F.No. 65/2, 3, 4, 5A, 6A, 70/1pt, 4Apt, 6pt, 78/3pt, 81/1A2, 1B1B, 2C1, 2C2,1D1, 1D2, & 82/3B of Nedunchery Village, Poonamallee Taluk, Thiruvallur District, Tamil Nadu.
- 3. The project/activity is covered under Category "B" of Item 8(a) "Building and Construction projects" of the Schedule to the EIA Notification, 2006.

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- 4. Earlier the proposal was placed in 131st SEAC meeting held on 17.07.2019. The proponent made a presentation about the project proposal. The SEAC instructed the project proponent to furnish the following details:
  - i. The project proponent proposed to take water from in- house Bore well. Hence, the proponent has to furnish necessary permission from competent authority for the drawal of ground water.
  - ii. In the proposal submitted to the SEIAA the Survey field Number is mentioned as 65/2, 3, 4, 5A, 6A, 70/1pt, 4Apt, 6pt, 71/1, 7, 10, 73/1B, 3B, 4B, 75/1B, 76/1A, 5A, 77/1, 2, 78/3pt, 4A2, 4A3, 4B1, 4B2, 6, 81/1A2, 1B1B, 2C1, 2C2,1D1, 1D2, & 82/3B of Nedunchery Village, PoonamalleeTaluk, Thiruvallur District. But in the presentation, the proponent has presented for S.F.No. 65/2, 3, 4, 5A, 6A, 70/1pt, 4Apt, 6pt, 78/3pt, 81/1A2, 1B1B, 2C1, 2C2,1D1, 1D2, & 82/3B of Nedunchery Village, Poonamallee Taluk, Thiruvallur District. Hence, request to clarify on which Survey Number the proponent the project is planned to be constructed.
  - submitted to the SEIAA for the future development, the land allotted for 32619.21 Sq.m. But, during presentation the proponent has presented for the future development has 29383. 6Sq.m and this needs to be clarified.
  - iv. Ambient Air Quality modeling for PM<sub>10</sub>, PM<sub>2.5</sub>, SOx, NOx&CO for the existing and incremental impact due to the proposed project shall be analyzed and furnished.
  - v. The project site lies 3.0 km from the Chembarambakkam lake and 100 m from the Bangaru canal. The project proponent should get flood inundation certificate from the PWD for the proposed site considering the 2015 flood. The proponent was directed to plan, design and execute the project in such a way that the housing project does not suffer due to floods. The proponent was directed to furnish the details along with PWD certification to ensure that the site will not be flooded in future, along with the flood management (evacuation) plan.

vi. The contour level of the proposed site shall be studied and furnished

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- vii. A detailed storm water plan shall be prepared in accordance with the contour levels of the proposed project considering the flood occurred in the year 2015 and also considering the surrounding environment.
- viii. In the water balance furnished by the project proponent, it was mentioned that the excess treated water from grey water treatment plant will be lead into the ground water recharge. This is not advisable since the treated grey water should be monitored continuously to achieve the standards described by the CPCB for the ground water recharge of the excess treated gray water. Further, a total quantity of 121 KLD is proposed to be utilized for the avenue plantation through Thirumalisai local body. The project proponent is requested to explore the maximum possibility of utilization of the treated sewage and treated gray water within the premises before sending for avenue plantation. Accordingly, the water balance shall be revised accordingly EMP shall be revised.
  - ix. The characteristics of the treated water from existing grey water treatment plant and sewage treatment plant shall be furnished. Further, the design details of the STP and grey water treatment plant with the component wise shall be furnished.
  - x. Solar energy utilization for 10% of total energy shall be provided.
  - xi. The layout plan furnished for the greenbelt area earmarked with GPS coordinates by the project proponent on the periphery of the site and the same shall be submitted for CMDA approval.
- xii. Necessary permission shall be obtained and furnished for utilization of the treated sewage for local body and the same shall be furnished.
- xiii. It was proposed that Surface run-off is diverted to the storm water drain with cross section 1mx1m that will be laid all along the boundary. Further, the proponent has to clearly specify where it goes.
- xiv. Details of Solid Waste management plan shall be prepared as per Solid waste management Rules, 2016 and shall be furnished.
- xv. The rainwater harvesting shall be revised based on the rain water harvesting and conservation manual 2002.

xvi. The proposal for CER shall be furnished as per the office memorandum of MoEF&CC dated 01.05.2018.

xvii. The project proponent is requested to submit the revised proposal considering the above points (Sl. No. 1 to 15).

The project proponent is requested to submit the aforesaid details to SEIAA-TN. On receipt of above details (SI. No. 1 to 15) from the project proponent, SEAC decided to make an on - the - spot inspection to assess the present status of the site for the M/s. Chennai Luxury Home Developers Pvt Ltd at S.F.No. 65/2, 3, 4, 5A, 6A, 70/1pt, 4Apt, 6pt, 78/3pt, 81/1A2, 1B1B, 2C1, 2C2,1D1, 1D2, & 82/3B of Nedunchery Village, Poonamallee Taluk, Thiruvallur District, Tamil Nadu by the sub-committee constituted by the SEAC. Since the proposal submitted earlier by the proponent was referred to TNPCB & CMDA for present status on ground of the construction vide this office letter dated: 13.02.2018. But till date no replay has been received yet from them. Based on the inspection report and the data furnished for S.No. 1 to 15 stated above, SEAC would further deliberate on this project and decide the further course of action.

5. Subsequently, the PP had submitted a letter to O/o SEIAA on 23.08.2023, requesting to withdraw the Application No: SIA/TN/NCP/58380/2016 Dated: 12.08.2016.

In the view of the above letter received from the proponent, the proposal was placed in the 415th SEAC meeting held on 12.10.2023. During the presentation, neither the proponent nor the EIA coordinator was present for the meeting. Hence, the proposal was not taken up for appraisal.

Further, SEIAA may write a letter to TNPCB & CMDA regarding the present status of the site condition and action taken report shall be sought from TNPCB and CMDA with respect to the earlier letter addressed to TNPCB & CMDA vide letter dated 13.02.2018.

Agenda No: 415 - 08

(File No: 7627/2023)

Existing Construction of Mixed-Use Development (Residential & Commercial) at T.S.No.2, Block No.4 of Arumbakkam Village, Aminjikkarai Taluk (Earlier Egmore – Nungambakkam Taluk), Chennai District, Tamil Nadu by M/s. Tamil Nadu Housing Board – Environmental Clearance issued - Compliance of Hon'ble National Green Tribunal (SZ) order – Appeal No. 10 of 2021 (SZ).

MEMBER SECRETARY SEAC -TN

CHAIRMAN SFACE TN The proposal was placed in this 415th SEAC meeting held on 12.10.2023. 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. Tamil Nadu Housing Board had been accorded Environmental Clearance for the Construction of Mixed-Use Development (Residential & Commercial) at T.S.No.2, Block No.4 of Arumbakkam Village, Aminjikkarai Taluk (Earlier Egmore – Nungambakkam Taluk), Chennai District, Tamil Nadu.
- 2. The proposed activity was covered under Category "B2" of Item 8(a) "Building and Construction Projects" of the Schedule to the EIA Notification, 2006.
- 3. Earlier Environmental Clearance was accorded vide Lr. No. SEIAA-TN/F-7627/EC/8(a)/739/2020 dated: 23.01.2021.
- 4. TNHB Letter No. AND/Sur/092/1975 Dated: 03.10.2022 requested to impose further conditions, if any based on the Hon'ble National Green Tribunal order.
- 5. TNHB Letter No. AND/PLG/869/2018 Dated: 29.05.2023 regarding the same as above.
- 6. Earlier the proposal was placed in 398th SEAC meeting held on 04.08.2023. During the meeting the Committee noted that neither the project proponent nor the consultant attended the meeting. Hence the subject was not taken up for appraisal and committee decided that the project proponent should furnish the reason for his absence.

Now, the proposal was again placed in the 415th SEAC meeting held on 12.10.2023. The proponent vide email dated 11.10.2023 requested to postpone the meeting. Hence, committee decided to take it up in the ensuing meeting.

Agenda No: 415 - 09

(File No: 8999/2023)

Proposed Rough Stone & gravel quarry lease area over an extent of Extent 3.03.0 Ha at SF. No. 908 & 914 of Panaiyadipatti Village, Vembakottai Taluk, Virudhunagar District, Tamil Nadu by Thiru. A. Subbaraman - For Environmental Clearance. (SIA/TN/MIN/413966/2023, Dated: 18.01.2023)

MEMBEŘ SĚČŘETÁRY SEAC -TN

CHAIRMAN / SEAC - TN

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The proposal was placed for appraisal in the 415th SEAC meeting held on 12.10.2023. 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. A. Subbaraman has applied for Environmental Clearance for the Proposed Rough Stone & gravel quarry lease area over an extent of Extent 3.03.0 Ha at SF. No. 908 & 914 of Panaiyadipatti Village, Vembakottai 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. As per the mining plan, the lease period is for 5 years. The production for 5 years not to exceed 2,10,505m³ of rough stone & 88,280m³ of Gravel to an ultimate depth of Mining 30m Below ground level.
- 4. ToR issued vide Lr No -SEIAA-TN/F.No.8999/SEAC/ToR-1153/2020, Dated: 06.06.2022.
- 5. Public hearing was conducted on Dated 13.09.2022.
- 6. Earlier the proposal was placed in the 371st meeting of SEAC held on 26.04.2023. During the presentation SEAC observed that some of the structures from Google imagery, hence SEAC decided to call for the following details.
  - 1. The PP shall carry out a survey and enumerate on the structures located within 50m, 100m, 200m and 300m radius from the proposed site, with details such as nature of structure, use, occupation, etc.
- Subsequently, the proposal was again placed in the 396th SEAC meeting held on 28.07.2023. Based on the presentation and documents furnished. The SEAC decided to call for additional details.
  - i. The proponent shall revise the mining area and submit 'modified mining plan' duly approved by the concerned AD/Mines with revised quantity, extent and SF No.
  - ii. The proponent shall submit an action plan in order to address the non-compliance of earlier issued EC conditions and to effectively implement the systematic and scientific mining on ground.

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iii. The proponent shall submit the photographic/videographic evidence of garland drain.

Now, the proposal was again placed in the 415th SEAC meeting held on 12.10.2023. The salient features of the proposal and the PP's response for the point raised are given below.

8999/2023 File No			Cataman	<b>B</b> 1	
F	ile No	413966/2023		Category	1(a)
SI. No	Salient Features of the Proposal				
1.	Name of the Owner/Firm		•	Thiru.A.Subbaraman, S/o.Ayyappan, D.No.411-F, Kalugumalai Raod, Thiruvenkadam, Tenkasi District-627719.	
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)		;  :	Rough Stone & grav	el Quarry
3.	S.F Nos. of the quarry site with area break-up		:	908 & 914	
4.	Village in wh	nich situated	:	Panaiyadipatti	
5.	Taluk in whi	ch situated	:	Vembakottai	
6.	District in wl	hich situated	:	Virudhunagar	
7.	Extent of qu	arry (in ha.)	:	1.54.97 Ha	
8.	Latitude & Longitude of all corners of the quarry site		:	09°18'36.80"N to 0'	
9.	Topo Sheet	No.	:	58 - G/15	
10.	Type of min	ing	:	Opencast Semi-Med	hanized Mining
	Life of Proje	ct	:	5 years	
11.	Lease Period			5 years	
	Mining Plan	Period	:	5 years	

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	Mining Plan Details	:	As per approved  Mining Plan	As modified by SEAC	
	Geological Resources m <sup>3</sup>		Rough Stone	Rough Stone	
			6,03,680 m³	-	
	(RoM)	:	Gravel	Gravel	
			68,992m³	-	
			Rough Stone	Rough Stone	
12.	Minable Resources m³ (RoM)		2,10,505m³	1,90,400m³	
	Williable Resources III- (ROM)	:	Gravel	Gravel	
			88,280m³	50,560m³	
	Annual Peak Production in m <sup>3</sup>		Rough Stone	Rough Stone	
		:	42,900m³	40,120m³	
			Gravel	Gravel	
			13,860m³	17,920m³	
	Ultimate Depth in meters	:	30m BGL	40m BGL	
13.	Depth of water table	:	60m BGL		
14.	Man Power requirement per day:	:	12 Nos		
	Water requirement:		1.5 KLD		
15.	Drinking & utilized  water		0.5 KLD		
15.	2. Dust suppression	:	0.5 KLD		
	3. Green belt		0.5 KLD		
			TNEB		
16.	Power requirement	:	1.77,220 Litres of F rough stone	ISD will be used for	
17.	Precise area communication approved by the Assistant Director, Dept of G&M	:	rough stone  Na.Ka.No.KV1/704/2020 - Kanimam,  dated: 25.08.2021		

18.	Mining Plan approved by Assistant Director, Dept of Geology & Mining.	:	Roc.No.KV1/704/20 06.12.2021	020, dated:	
19.	Department of G&M, Assistant Director, 500m Cluster Letter	;	Roc.No.KV1/704/20 06.12.2021	020, dated:	
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated: 28.01.	.2022	
21.	Project Cost (excluding EMP cost)	:	Rs. 1,08,57,600		
			Validity	30 years subject to the following upper limits.  Rough  Gravel	
22.	EC Recommendation	:	Max Total RoM in m³	\$tone 1,90,400m <sup>3</sup>	50,560m³
		:	Annual Max RoM in m <sup>3</sup>	40,120m³	17,920m³
		:	Max Depth in mtrs	40m	BGL
23.	EMP cost (in Rs. Lakhs).	:	Capital Cost – Rs. 3 Recurring Cost – Rs		
24.	ToR issued Details	:	Lr.No. SEIAA-TN/F. 1153/2022, Dated:		AC/ToR -
25.	Public Hearing conducted on	:	13.09.2022.		
26.	EIA report submitted on	:	19.01.2023.		
27.	CER cost (in Rs. Lakhs).	;	Rs. 5,00,000		

S. No	SEAC MINUTES	MINUTES REPLY
1	The proponent shall revise the	The revised mining plan has been
	mining area and submit 'modified	enclosed. We have reduced the land
	mining plan' duly approved by the	area from 3.03.0 Ha to 1.54.97 Ha in
	concerned AD/Mines with revised	S.F.No. 908 (0.19.97) and 914
	quantity, extent and S.F.No.	(1.35.00).
		Mining Plan approved by Assistant
		Director, geology and Mining,
		Virudhunagar vide
		Roc.No.KV1/704/2020 dated
		17.08.2023.
2	The proponent shall submit an	The action plan for the non-compliance
	action plan in order to address the	in EC conditions are enclosed in Slide
	non-compliance of earlier issued EC	No.11 & 12.
	conditions and to effectively	
	implement the systematic and	
	scientific mining on the ground.	
3	The proponent shall submit the	The photos of the garland drain is
	photographic/videographic	provided in Slide No.13.
	evidence of garland drain.	

Description	Mineable R	eserves	Total Five-y Production	ear	Peak Annual Production			
	In Previous Revised Mining Plan Reserves		In Previous Mining Plan	Revised Reserves	In Previous Mining Plan	Revised Reserves		
Rough stone	2,10,505 m <sup>3</sup>	1,90,400 m³	2,10,505 m <sup>3</sup>	1,90,400 m³	42,900 m³	40,120 m		
Gravel	88,280 m³	50,560 m³	88,280 m³	50,560 m³	13,860 m³ /	17,920 m <sup>2</sup>		

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 40,120 m³ of rough stone and 17,920 m³ of Gravel by maintaining the ultimate depth of mining up to 40 m 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 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.
- 3. 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.
- 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

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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. 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 (Fire works), 500m, 750 m 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.

- 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. 5 Lakhs and the amount shall be spent for the activities as committed towards Government High School, Kangarakotta before obtaining CTO from TNPCB.

Agenda No: 415-10

(File No.10334/2023)

Proposed Expansion of Residential and Commercial Group Development at S. Nos. 133/1A, 134/2, 136/1, 136/2A, 136/2B, 137, 138, 139, 140, 141/1A, 141/1B & 141/2 of Koluthuvanchery Village, Sriperumbudur Taluk, Kancheepuram District, Tamil Nadu by M/s. Sheetala Credit and Holdings Private Limited— For Environmental Clearance. (SIA/TN/INFRA2/439895/2023 dt.10.08.2023)

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The proposal was placed in this 415th Meeting of SEAC held on 12.10.2023. 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. Sheetala Credit and Holdings Private Limited has applied for Environmental Clearance for the Proposed Expansion of Residential and Commercial Group Development at S.Nos. 133/1A, 134/2, 136/1, 136/2A, 136/2B, 137, 138, 139, 140, 141/1A, 141/1B & 141/2 of Koluthuvanchery Village, Sriperumbudur Taluk, Kancheepuram District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 8(a) "Building & Construction Projects" of the Schedule to the EIA Notification, 2006.

During the meeting, the Committee decided to defer the proposal and take it up for discussion in the ensuing meeting.

Agenda No: 415-11

(File No.9861/2023)

Proposed Rough Stone & Gravel quarry lease over an extent of 1.21.45 Ha at S.F.Nos. 476/2 (P) & 476/3(P) of Kaliyal Village, Vilavancode Taluk, Kanniyakumari District, Tamil Nadu by Thiru. S. Dhas – For Environmental Clearance (SIA/TN/MIN/419735/2023 dated 24.02.2023)

The proposal was placed in this 415<sup>th</sup> Meeting of SEAC held on 12.10.2023. 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. S. Dhas has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry lease over an extent of 1.21.45 Ha at S.F.Nos. 476/2 (P) & 476/3(P) of Kaliyal Village, Vilavancode Taluk, Kanniyakumari District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.

Based on the presentation and details furnished by the project proponent, the Committee decided to call for the following additional details from the project proponent to decide further on the proposal:

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- The proponent shall furnish an affidavit stating that there are no court cases or litigations pending regarding the ownership of the proposed land.
- ii) The proponent shall furnish a detailed study report on flora and fauna of the project site by involving the Department of Botany, Manonmaniam Sundaranaar University, Tirunelveli.
- iii) The proponent shall furnish the following details obtained from the concerned AD (Mines), Dept. of Geology & Mining:
  - a) Total no. of mining/quarry leases are in existence in the Vilavancode Taluk.
  - b) An updated District Survey Report for Minor Minerals (Rough stone) Geological Reserves, Mineable Reserves, Total no. of mining/quarry leases are in existence (Patta/Patta-Court order/Govt land). Details of various rock formations / Deposits suitable for the production of Rough stone in the District, Details of production of Rough stone in last three years, Quality/Grade of Rough stone availability in the district, Use of Rough stone quarried in the district, Demand and Supply of Rough stone in the last three years, Quarry leases marked on the map of the district, Details of the area of where there is a cluster of mining leases, Details of Eco-Sensitive area in the district, Impact on the Environment (Air, Water, Noise, Soil Flora & Fauna, Land use, Agriculture, Forest etc...) due to Mining Activity in the District, Reclamation of Mined out area, Plantation and Green belt development in respect of leases already granted in the district.
  - c) Total number of Crusher units existence operating/non-operating, period, capacity.
  - d) Number of Major accidents/Disasters including landslides occurred in the Rough stone quarries located in the District for the last 10 years.
  - e) Total Number of Statutory Manpower possessing the I Class/II Class
    Mines Managers; Foreman; Mine Mates; Blasters Certificate of
    Competency available in the District as on date.

iv) The proponent shall furnish a letter obtained from Revenue/Department

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stating whether the proposed project site is declared as Private Forest under Private Forest Act.

- v) 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 & drainage pattern present in the core zone, and survival rate of water bodies & drainage/flow pattern, 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.
- vi) The proponent shall furnish a commitment letter obtained from District Collector stating that the production from this project area will be utilised only for the requirements of TN Fisheries Department.
- vii) The proponent shall furnish details on the structures located within 300m radius from the proposed quarry.

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: 415-12

(File No.9491/2023)

Proposed Rough Stone & Gravel quarry Lease over an extent of 4.98.5 Ha at S.F.Nos. 719, 720, 732/2(P) & 733(P) of Nadanthai South Village, Aravakuruchi Taluk, Karur District, Tamil Nadu by Tvl. New Five Star Crusher – For Environmental Clearance. (SIA/TN/MIN/400924/2022 dated 26.09.2022)

The proposal was placed in this 415th Meeting of SEAC held on 12.10.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in). The SEAC noted the following:

1. The project proponent, Tvl. New Five Star Crusher has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry Lease

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- over an extent of 4.98.5 Ha at S.F.Nos. 719, 720, 732/2(P) & 733(P) of Nadanthai South Village, Aravakuruchi Taluk, Karur District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. Earlier, EC was accorded to the proponent vide Lr.no.SEIAA-TN/F.No.4041/1(a)/EC.No.3089/2015 dated.02.03.2016 for the quantity of 1,63,774 cu.m of rough stone upto the depth of 14m.
- 4. As per the letter from the Dept. of Geology & Mining dated.11.10.2023, the existing pit depth in the project area is 14m.
- 5. Earlier, the proposal was placed in the 360th SEAC meeting held on 03.03.2023. Based on the presentation and documents submitted by the proponent, the SEAC decided to call for certain additional details from the proponent to further decide on the proposal.
- 6. On receipt of the reply from the proponent, the proposal is again placed in this 415th SEAC meeting.
- 7. The proponent has submitted a Certified Compliance Report obtained from IRO of MoEF&CC: Chennai vide EP/12.1/2023-24/SEIAA/34/TN/816 dated.10.07.2023 for the EC obtained earlier.
- 8. The other salient features of the proposal are as follows:

File	No	9491		Category	1(a)		
File No		SIA/TN/MIN/40	A/TN/MIN/400924/2022		B2		
SI. No	Salient Features of the Proposal				roposal		
1	Name of the Owner/Firm			S.F.No.732/2	tner: N. Ganesan , Nadanthai Sout ti, Uthuppatti Post, Taluk,		
2	Type Stone	of quarrying /Sand/Granite/Lim	(Ordina : estone)	Rough Stone and Gravel Quarry			

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3	S.F Nos. of the quarry site with ar break-up	:	719, 720, 732/2(P), 7	'33(P)		
4	Village in which situated	;	Nadanthai South			
5	Taluk in which situated	:	Aravakuruchi	,		
6	District in which situated	:	Karur			
7	Extent of quarry (in ha.)	:	4.98.5 Ha			
8	Latitude & Longitude of all corne		10°53'32.80"N to 10°5	3'42.07"N		
	of the quarry site	•	77°53'19.37"E.to 77°5	3'28.91"E		
9	Topo Sheet No.	:	58F/13			
10	Type of mining	:	Open Cast - Mechaniz	Open Cast - Mechanized		
	Life of Project	:	5 years			
11	Lease Period		5years ·			
	Mining Plan Period	:	5 years			
	Mining Plan Details	:	As per approved Mini	As modified by		
		j	Plan	SEAC		
	Geological Resources m³ (RoM)	:	Rough Stone –	-		
	(13.7)		1,50,743m³			
			Rough Stone -			
		:	1,31,801m³ & Rou	•		
12	Minable Resources m³ (RoM)		stone reject – 6937m³			
			Gravel –	-		
			13,336m³			
		:	Rough Stone			
	Annual Peak Production in m3	.	recovery – 26,539m³			
	, amount can requestion in the		Gravel –			
			13,336m³			
	Maximum Depth in meters	:	20m	-		
13	Depth of water table	:	45m Below Ground L	45m Below Ground Level		
14	Man Power requirement per day	:	17 Nos	17 Nos		

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	Water requirement:		3.5 KLD	
	1. Drinking & Domes		1 KLD	
15	Purposes	:		
	2. Green belt	•	1.5 KLD	
	3. Dust Suppression		1,0 KLD	
16	Power requirement		-	
	Precise area communication			
17	approved by the Deputy	:	B 11 004/14 /005	N
	Director, Dept. of Geology and		Rc.No.236/Mines/202	21, dt:12.05.2022.
	Mining with date			
	Mining Plan approved by the			
18	Deputy Director, Dept. of	:	Rc.No.236/Mines/202	21, dt:29.08.2022.
	Geology and Mining with date			
	500m cluster letter issued by the			
19	Deputy Director, Dept. of		Rc.No.236/Mines/202	21, dt:06.09.2022.
	Geology and Mining with date			
20	VAO Certificate Regarding		Letter dated: 02.09.2	022
	Structures within 300m Radius		201101 02:05:2	022.
21	Project Cost (excluding EMP		Rs. 71 lakhs	
-	cost)	-	N3. 7 Clakiis	
				30 years subject to t
		:	Validity	following
				upper limits.
22	EC Recommendation			Rough stone recovery
				(@95%) –
		.	Max Total RoM in m³	
			The state of the s	(@5%) – 6933m³ &
				gravel – 13,336m³
				Braver - 13,330111

		:	Annual Max RoM in	Rough stone recovery 26,539m³
		:	Max Depth in mtrs	20m
23	EMP cost (in Rs. Lakh).	:	Capital Cost-Rs. 9,18,5 Recurring cost -Rs. 7,2	
24	CER cost (in Rs. Lakh).	:	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 26,539m³ of Rough stone recovery by restricting the ultimate depth of mining up to 20m 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) Tree plantation & fencing and installation of garland drainage with siltation tank around the mine lease area shall be completed before execution of the mine lease.
- 3) The PP shall 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.
- 4) 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

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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.

- 5) 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.
- 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) As accepted by the Project Proponent the CER cost of Rs. 5 Lakhs shall be spent for the activities as committed towards the Govt School, Nadanthal South Village before obtaining CTO from TNPCB.

Agenda No: 415-13

(File No: 10062/2023)

Proposed Rough stone and Gravel quarry lease over an extent of 2.00.00Ha at SF.No. 363/4(P), 364/1(P) & 364/2 (P) of Kadambankulam Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu by Thiru. T. Sathyamoorthy - for Environmental Clearance. (SIA/TN/MIN/430484/2023, Dated: 26.05.2023)

Earlier the proposal was placed in 392<sup>nd</sup> meeting of SEAC held on 14.07.2023. The

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details of the minutes are available in the website (parivesh.nic.in).

## The SEAC noted the following:

- The Project Proponent, Thiru. T. Sathyamoorthy has applied for Environmental Clearance for the proposed Rough stone and Gravel quarry lease over an extent of 2.00.00Ha at SF.No. 363/4(P), 364/1(P) & 364/2 (P) of Kadambankulam Village, Virudhunagar Taluk, Virudhunagar District, Tamil Nadu.
- The PP has stated that the waste material lying on the ground of the proposed quarry site is the rejects from by the crusher unit.
- 3. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

Based on the presentation made and the documents furnished by the Project proponent, SEAC directed the PP to submit the following additional details:

- The PP shall furnish the letter obtained from the AD (Mines) stating that no quarrying has been commenced in the proposed quarry lease and the material dumped on the proposed quarry lease is the rejects received from the crusher unit.
- ii. PP shall remove the crusher material on the proposed site and submit evidence for the same.
- iii. The PP shall submit the details about the structures within 300 m as many structures are seen within 100m.

Now the proposal was placed in 415th meeting of SEAC held on 12.10.2023. The Project proponent has made a presentation along with clarification for the above shortcomings observed by the SEAC.

SI.No	SEAC Query	Reply		
1.	The PP shall furnish the letter	The PP has furnished a letter received from		
	obtained from the AD (Mines)	AD Mines vide Rc.No.KV1/1662/2022		
	stating that no quarrying has been	dated 16.08.2023, stating that quarry		
	commenced in the proposed	activities have not yet commenced in the		
	quarry lease and the material	proposed project site.		
	dumped on the proposed quarry	$\bigcap_{\alpha}$		

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	lease is the rejects received from	
i	the crusher unit.	
2.	PP shall remove the crusher	We have removed the stored crusher
	material on the proposed site and	materials, and photo proof for the same is
	submit evidence for the same.	enclosed.
3.	The PP shall submit the details	The details of the surrounding structures
	about the structures within 300 m	within a 300-meter radius from the project
	as many structures are seen within	site are provided.
	100m.	

File	10062/2023			
No	SIA/TN/MIN/430484/2023,		Category	B2
	Dated:26.05.2023			
SI.	Caliant Feat	150	s of the Proposal	
No	Janetit Featt	71 E	s of the Proposal	
			Thiru.T.Sathyamoo	rthy,
			Managing Director	, Τνί.Kartya
1.	Name of the Owner/Firm	<b> </b> :	Construction Private	e Limited. (KVT
		i	Blue Metals), No.13	A, Yamuna Street,
			Ellis Nagar, Madurai District.	
2.	Type of quarrying (Ordinary	<u> </u>	Rough stone & Gra	vel quarry
۷.	Stone/Sand/Granite/Limestone)	•		
3.	S.F Nos. of the quarry site with		363/4(P), 364/1(P)	& 364/2 (P)
Э.	area break-up	:		
4.	Village in which situated	:	Kadambankulam	_
5.	Taluk in which situated	:	Virudhunagar	-
6.	District in which situated	:	Virudhunagar	
7.	Extent of quarry (in ha.)	:	2.00.00Ha	
8.	Latitude & Longitude of all corners		09°30'12.53"N to 0	9°30'21.33"N
, ø.	of the quarry site	:	78°00`58.40"E to 78°01`03.33"E	

9.	Topo Sheet No.	;	58 K/03		
10.	Type of mining	;	Opencast Semi-mechanized Mining		
	Life of Project	:	5 Years		
11.	Lease Period	5 Years			
	Mining Plan Period	:	5 Years		
	Mining Plan Details	:	As per approve	ed Mining Plan	
	Willing Flair Details		Rough Stone	Gravel	
12.	Geological Resources m <sup>3</sup>	:	5,97,060m³	39,804m³	
	Minable Resources m <sup>3</sup>	:	2,15,525m³	30,438m³	
	Annual Peak Production in m <sup>3</sup>	:	43,455m³	18,868m³	
	Maximum Depth in meters	:	32m BGL		
13.	Depth of water table	:	58m BGL		
14.	Man Power requirement per day	:	26 Employees		
-	Water requirement:		7.0 KLD		
	Drinking water & Utilized		2.0 KLD		
15.	water	:			
	2. Dust suppression		3.0 KLD		
	3. Green belt		2.0 KLD		
16.	Power requirement		TNEB		
10.	rower requirement		1,77,486 liters of H	ISD	
	Precise area communication		Rc.No.KV1/1662/20	22-Kanimam	
17.	approved by the Assistant Director,	:	Dated:26.04.2023		
	Department of G&M.				
18.	Mining Plan approved by Assistant		Roc.No.KV1/1662/2	022,	
10.	Director, Department of G&M.	'	Dated:04.05.2023		
	500m Cluster Letter approved by		Roc.No.KV1/1662/2	022,	
19.	the Assistant Director, Department	:	Dated:04.05.2023		
	of G&M.			•	

20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated:16.0	5.2023	
21.	Project Cost (excluding EMP cost)	:	Rs.66,50,000/-		
	EC Recommendation	:	Validity	30 years s the follow limi	ing upper
				Rough Stone	Gravel
22.		:	Max Total in m³	2,15,525 m³	30,438 m³
			Annual Max in	43,455m	18,868
		:	m³	3	m³
		:	Max Depth in mtrs	32m BGL	
23.	EMP cost (in Rs. Lakh).	;	Rs.168.52 Lakhs		
24.	CER cost (in Rs. Lakh).	:	Rs. 8,00,000/-		

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 43,455m³ of rough stone and 18,868m³ of Gravel by maintaining the ultimate depth of mining up to 32m 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. 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

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- concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.
- 3. 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.
- 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. 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.

- 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 3rd 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 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, 500m, 750 m 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.
- 8. As accepted by the Project Proponent the CER cost is **Rs. 8 Lakhs** and the amount shall be spent for the activities as committed towards Government Higher Secondary School, Palavanatham before obtaining CTO from TNPCB.

Agenda No: 415-14

(File No: 9605/2022)

Proposed Rough stone and Gravel quarry lease over an extent of 3.12.50 Ha in, SF. No. 346/2 and 346/3 of Murugambakkam Village, Maduranthagam Taluk, Chengalpattu District, Tamil Nadu by Tmt.B.Saraswathi - For Environmental Clearance. (SIA/TN/MIN/408342/2022, Dt: 29.11.2022).

Earlier the proposal was placed in 363rd SEAC meeting held on 14.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

## The SEAC noted the following:

1. The Project Proponent, Tmt.B.Saraswathi has applied for Environmental Clearance for the proposed Rough stone and Gravel quarry lease over american

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- of 3.12.50 Ha in S. F. No. 346/2 and 346/3 of Murugambakkam Village, Maduranthagam Taluk, Chengalpattu District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

The SEAC noted that the project proponent has not attended the meeting. Hence the subject was not taken up for discussion and the project proponent shall furnish the reason for his absence.

The PP stated that due to non-avaliablity of DFO letter, the PP was unable to attend 363<sup>rd</sup> SEAC meeting. Now the proposal was placed in 415<sup>th</sup> meeting of SEAC held on 12.10.2023.

File No	9605/2022 SIA/TN/MIN/408342/2022, Dated:29.11.2022		Category	B2
SI. No	Salient Featur		es of the Proposal	
1.	Name of the Owner/Firm	:	Tmt.B.Saraswathi, W/o.Babu, No.164, Arungunam Village, Maduranthagam Taluk, Chengalpattu District-603 30	
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough stone & Gravel quarry	/
3.	S.F Nos. of the quarry site with area break-up	:	346/2 And 346/3	<u>-</u>
4.	Village in which situated	:	Murugambakkam	
5.	Taluk in which situated	:	Maduranthagam	-
6.	District in which situated	:	chengalpattu	
7.	Extent of quarry (in ha.)	:	3.12.50Ha	
8.	Latitude & Longitude of all corners of the quarry site	;	12°28'24.65"N to 12°28'32.4 79°58'27.10"E to 79°58'34.0	

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9.	Topo Sheet No.	:	57 P/15	·- ·- ·-	
10.	Type of mining	:	Opencast Semi-mechanized Mining		
	Life of Project	:	5 Years	<u> </u>	· <u>-</u>
11.	Lease Period		5 Years		
	Mining Plan Period	:	5 Years		
		:	As per ap	proved Minin	g Plan
:	Mining Plan Details		Rough Stone	Weathered rock	Gravel
	Geological Resources m <sup>3</sup>	:	12,49,200m³	62,460m³	93,690m
12.	Minable Resources m <sup>3</sup>	:	5,00,110m³	23,100m³	35,802m
:	Annual Peak Production in m <sup>3</sup>	:	1,06,305m³	23,100m³	35,802m
	Maximum Depth in meters	:	45m BGL		
13.	Depth of water table	:	: 58m BGL		
14.	Man Power requirement per day	:	: 24 Employees		
	Water requirement:		2.0 KLD		<u> </u>
	<ol> <li>Drinking water &amp; Utilized</li> </ol>		0.5 KLD		
15.	water	:			
	2. Dust suppression	<b>!</b>	0.5 KLD		
	3. Green belt		1.0 KLD		
16.	Power requirement	:	TNEB		_
	Precise area communication		Rc.No.369/Q2	2/2019,	· _ <del>,</del>
17.	approved by the Assistant Director,	:	Dated:19.08.20	021	
	Department of G&M.				
10	Mining Plan approved by Assistant	<del>ا</del> .	Rc.No.369/Q2	2/2019,	
18.	Director, Department of G&M.	;	Dated:06.09.2	2021	

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	500m Cluster Letter approved by	-	Rc.No.36	9/Q2/2019	),	
19.	the Assistant Director, Department	:	Dated:06	.09.2021		
	of G&M.					
20.	VAO Certificate Regarding		Letter Dated:17.11.2021			
20.	Structures within 300m Radius	'	Letter Da	(CG.17,11,2)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
21.	Project Cost (excluding EMP cost)	:	Rs.77,50,	000/-		
				30 yea	ırs subject t	o the
			Validity	follow	ing upper l	imits.
		•	Validity	Rough	Weathe	Gravel
				Stone	red rock	Gravei
			Max	5,00,110	23,100	35,80
	EC Recommendation	:	Total in	m <sup>3</sup>	m <sup>3</sup>	2m <sup>3</sup>
22.	20 Neconniciadion		m³	'''	""	2111
			Annual	1,06,30	23,100	35.80
		:	Max in	5m³	m <sup>3</sup>	2m³
			m³	3111		21112
			Max			_
		;	Depth	45m BGL		
		i	in mtrs			
23.	EMP cost (in Rs. Lakh).		Rs.90.34	Lakhs		
24.	CER cost (in Rs. Lakh).	:	Rs. 5,00,0	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 1,06,305m³ of Rough stone, 23,100m³ of Weathered Rock and 35,802m³ of Gravel by maintaining the ultimate depth of mining up to 45m BGL and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

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

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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 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.
- 3. 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.
- 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. 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, 500m, 750 m 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.

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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 within a period of six months from the date of lease execution, 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 transport of materials shall not be carried out during school hours from 8AM-10AM and during 3PM -5PM (or as specified by the school administration).
- 8. The PP shall only carry out the NONEL-based (or) Electronic Detonator based blasting operation for controlling the environmental impacts with keeping the security guards at a radial distance of 500 m by ensuring that all persons within such area have taken proper shelter.
- 9. The PP shall ensure that the haul road dust 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.
- 10. 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

CHAIRMAN SEAC-TH · · submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

11. As accepted by the Project Proponent the CER cost is Rs.5 Lakhs and the amount shall be spent for the activities as committed towards Government Secondary School, Murukkambakkam Village before obtaining CTO from TNPCB.

Agenda No: 415-15

(File No: 9936/2023)

Proposed Rough Stone & Gravel quarry lease over an extent of 0.76.5Ha at SF.No. 474/1B & 474/2 of Mylampadi Village, Bhavani Taluk, Erode District, Tamil Nadu by Tmt. T.M. Vijayalakshmi - for Environmental Clearance. (SIA/TN/MIN/ 422742/2023, Dated:20.03.2023)

Earlier the proposal was placed in 387th meeting of SEAC held on 28.06.2023. 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, Tmt. T.M. Vijayalakshmi has applied for Environmental Clearance for the proposed Rough Stone & Gravel quarry lease over an extent of 0.76.5Ha at SF.No. 474/1B & 474/2 of Mylampadi Village, Bhavani Taluk, Erode District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. Earlier EC was obtained from DEIAA vide Ec.No.Lr.No.DEIAA-ERD/F.No.31720/2017/EC.No.(5/2018) dated 16.04.2018.
- 4. CCR obtained vide CCR. Letter No.E.P/12.1/2023-24/SEIAA/56/TN/912 dated 28.07.2023.

Based on the presentation and document furnished by the project proponent, SEAC decided to seek the following details from the project proponent.

- The PP shall furnish certified compliance report.
- (ii) The PP shall revise action plan for high wall.
- (iii) The PP shall furnish slope stability action plan for the existing pit with benches as the existing pit appears to be devoid of benches.

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Now the proposal was placed in 415th meeting of SEAC held on 12.10.2023. The Project proponent has made a presentation along with clarification for the above shortcomings observed by the SEAC.

SI.No	SEAC Query	Reply
1.	The PP shall furnish Certified	Proponent obtained Certified
	Compliance Report.	Compliance Report from MoEF & CC,
		Regional office, Chennai vide Letter No.
		E.P/12.1/2023-24/SEIAA/56/TN/912,
		Dated:28.07.2023.
2.	The PP shall revise action plan	Action Plan for the High Wall
	for high wall.	<ul> <li>The width of the bench &lt; 12m has</li> </ul>
		been removed and the production
		plan has been revised
		<ul> <li>Wall meshing will be installed</li> </ul>
		along the south side and East of
		high wall
		<ul> <li>Safety berms will be laid all along</li> </ul>
		the haul road
i		<ul> <li>Waste debris will be removed near</li> </ul>
!		the haul road
		<ul> <li>As per the slope stability report the</li> </ul>
		bench height and width
		recommended to maintain on the
		west side 5*3m
		<ul> <li>Haul road gradient will be</li> </ul>
3.	The PP shall furnish slope	maintained 1 in 16 gradient
J.	The state of the s	Proponent obtained Slope Stability
	stability action plan for the existing pit with benches as the	Analysis and Action Plan report for the
	existing pit appears to be devoid	existing quarry from Department of
	of benches.	Mining Engineering, College of
	o, bendies,	Engineering, Guindy Anna University,
		Chennai – 600 025.

File	9936/2023		
No	SIA/TN/MIN/422742/2023,	Category	B2
	Dated:20.03.2023		

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SI.	Salient Features of the Proposal			
No				
			Tmt. T.M. Vijayalakshm	ni,
			W/o Madeswaran	
1. Name of the C	;		NO.1/1-147, Kilaku Vee	thi,
	Name of the Owner/Firm	:	Thottipalayam,	
			Kadaiyampatti Post ,	
			Bhavani Taluk	
			Erode District- 638 312.	
2.	Type of quarrying (Ordinary		Rough stone & Gravel of	quarry
	Stone/Sand/Granite/Limestone)			·
3.	S.F Nos. of the quarry site with		474/1B & 474/2	
٥.	area break-up			
4.	Village in which situated	:	Mylampadi	
5.	Taluk in which situated	:	Bhavani	
6.	District in which situated	:	Erode	
7.	Extent of quarry (in ha.)	:	0.76.5Ha	
8.	Latitude & Longitude of all corners		11°31'32.89"N to 11°31'	37.42"N
0.	of the quarry site		77°39`34.92"E to 77°3	9`37.42"E 
9.	Topo Sheet No.	:	58-E/10	
10.	Type of mining	:	Opencast Manual Mini	ing
	Life of Project	:	5 Years	
11.	Lease Period		5 Years	
	Mining Plan Period	:	5 Years	
	Mining Plan Details	1:	As per approved	Mining Plan
	Coological Percurses m <sup>3</sup>	1.	Rough Stone	Gravel
12	Geological Resources m³		84,106m³	608m³
12.	Minable Resources m³	:	12,240m³	-
	Annual Peak Production in m³	:	2,720m³	
	Maximum Depth in meters	1:	37m BGL	110

13.	Depth of water table	:	70m in summer season	on – 65m in Rainy	
14.	Man Power requirement per day	:	13 Employees	13 Employees	
	Water requirement:		1.2 KLD	<del></del>	
	Drinking water & Utilized		0.3 KLD		
15.	water	:			
	2. Dust suppression		0.5 KLD		
	3. Green belt		0.4 KLD		
			TNEB		
16.	Power requirement	:	9,792 liters of HSD	will be utilized for	
			rough stone		
	Precise area communication		NA.KA.No.083/Kani	mam/2022	
17.	approved by the Deputy Director.	:	Dated:09.02.2023		
	Department of G&M.				
18.	Mining Plan approved by Deputy		Rc.No.7387/Mines/2018.		
	Director, Department of G&M.	•	Dated:21.02.2023		
	500m Cluster Letter approved by		Rc.No.083/Mines/20	22,	
19.	the Deputy Director, Department	<b> </b> :	Dated:21.02.2023		
	of G&M.				
20.	VAO Certificate Regarding	,	Letter Dated:20.02.2023		
	Structures within 300m Radius		Letter Dated, 20.02, 2	023	
21.	Project Cost (excluding EMP cost)	:	Rs.25,56,000/-		
İ				30 years subject	
			Nielt des	to the following	
		١	Validity	upper limits.	
22.	EC Recommendation			Rough Stone	
		:	Max Total in m <sup>3</sup>	7,840m³	
		:	Annual Max in m <sup>3</sup>	2,720m³	
		:	Max Depth in mtrs	32m BGL	

23.	EMP cost (in Rs. Lakh).	:	Rs.36.51 Lakhs
24.	CER cost (in Rs. Lakh).	:	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 2,720m³ of Rough stone by maintaining the ultimate depth of mining up to 32m 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 5.0,
  1807(E) dated 12.04.2022.
- 2. 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.
- 3. The PP shall not involve any machinery for the digging & excavation and no blasting operation is permitted in this quarry.
- 4. For the safety of the persons employed in the quarry, the PP shall implement the recommendations of the scientific studies carried out to assess the slope stability of the working benches and existing quarry wall by the Department of Mining Engineering, Anna University Chennai-CEG Campus without any deviation. A copy of compliance of such scientific study report shall be submitted annually to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 5. As accepted by the Project Proponent the CER cost is Rs.5 Lakhs and the amount shall be spent for the activities as committed towards Panchayat Union Middle School, Iruganur, Mylambadi Village before obtaining CTO from TNPCB.

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Agenda No: 415 – 16.

(File No: 9973/2023)

Proposed Rough Stone & Gravel Quarry lease over an extent of 2.02.5Ha S.F.No.236/2B (P), 236/3B (P), 236/4 (P), 237/1A, 237/1B & 237/3 (P), Vairapuram Village, Tindivanam Taluk, Viluppuram District by M/s. V. K. New Technologies Blue Metals - For Environmental Clearance. (\$1A/TN/M1N/424280/2023, dt: 01.04.2023) Earlier, the proposal was placed in 388th SEAC Meeting held on 30.06.2023. The project proponent gave detailed presentation. 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. V. K. New Technologies Blue Metals has applied for Environmental Clearance for the Rough stone & gravel quarry lease over an extent of 2.02.5Ha (Patta Land) S.F.No.236/2B (P), 236/3B (P), 236/4 (P), 237/1A, 237/1B & 237/3 (P), Vairapuram Village, Tindivanam Taluk, Viluppuram District by M/s. V. K. New Technologies Blue Metals, Tamil Nadu.
- 2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
- 3. The precise area communication was issued for the period of 5 years. The approved mining plan is for the period of 1st five years & production should not exceed 190335m³of Rough Stone & 30148m³of Gravel. The annual peak production is 44950m³ cu.m of Rough Stone (3rd Year) & 11188m³ of Gravel (3rd Year). The depth of mining is 22m BGL.

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

- i) To enumerate the details of farm lands within 1km radius around the proposed mining area and its agricultural vegetation pattern details with source of water including seasonal crops.
- ii) To enumerate the details of wells, tank, waterbodies within 1km radius around the proposed mining area and impact of proposed mining activity on the wells/ ground water table within 1km radius.

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- iii) Scientific Report on analysis of topsoil composition including the presence of micro-organic contents to be obtained from any one of the institutes University of Madras-Centre for Environmental Sciences, Chennai and TN-Agricultural University, Coimbatore.
- iv) Details of transport route of the proposed quarried minerals and its impact on the habitations.
- v) Impact of quarrying in hard rock formation particularly with reference to drilling, blasting, excavation and transportation on the surrounding habitants, structures and other environmental settings.
- vi) Socio-economics studies on the persons living within a radial distance of 2 km with reference to their profession, income, life style, education, etc.
- vii) Occupational Health Survey of the villages/habitants located within a radial distance of 2 km with reference to their gender, age, history of disease, life expectancy rate, etc.

Subsequently, the proposal was placed in 638<sup>th</sup> SEIAA meeting held on 17.07.2023. The authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 30.06.2023.

In this connection, the project proponent has furnished reply vide Lr. dt:16.08.2023. This proposal was again placed for appraisal in 415th meeting of SEAC held on 12.10. 2023. During presentation the EIA coordinator & PP has requested additional time for furnishing additional details sought vide 388th SEAC Meeting held on 30.06.2023.

Agenda No: 415-17.

(File No. 9473/2022)

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

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

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## The SEAC noted the following:

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

The salient features of the proposed mining activity as follows

SI. No	Det	ails	s of the Proposal
1.	Name of the Owner/Firm	:	Tvl.Mars Mining, Old No.4/131, New No.2, 15th street, Sakthi nagar, Nerukundram., Chennai- 600107.
2.	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough stone & Gravel
3.	S.F No. Of the quarry site with area break-up	:	780, 781/1, 781/2, 782/1, 782/2(P), 783/1(P), 783/2(P), & 786
4.	Village in which situated	:	Kumbikulam
5.	Taluk in which situated	:	Radhapuram
6.	District in which situated	:	Tirunelveli
7.	Extent of quarry (in ha.)	:	4.88.0Ha

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8.	Latitude & Longitude of all	:	08°18'02.67"N to 08°18'11.50"N
	corners of the quarry site		77°43'04.47"E to 77°43'12.46"E
9.	Topo Sheet No.	:	58 – H/11
10.	Type of mining		Opencast Semi-Mechanized of Mining
11.	Lease/precise area	:	5 years
	communication period of		
	quarrying proposed		
12.	Mineable reserve	:	1098200m3 of Rough Stone & 128898m3
			of Gravel & 200355m³ of Weathered rock
13.	Ultimate pit depth & dimension	:	Depth - 58 m
	upto life of mine/mineable		Dimension:
	reserve		A-A' & B-B' -
			216m (L) X 115m (W) X 58m (D)
			A-A' & C-C' -
			188m (L) X 42m (W) X 58m (D)
			A-A' & D-D' -
			110m (L) X 93m (W) X 53m (D)
14.	Lease Period of quarrying	:	5 years
15.	Production (Quantity in m³) as	:	1098200m³ of Rough Stone & 128898m3
	per mining plan		of Gravel & 200355m³ of Weathered rock
16.	Proposed Depth of quarrying	:	58 m
	as per mining plan		
17.	Approved Ultimate Depth of	:	50m
	quarrying as per SEAC		
	recommendation		
18.	Pit dimension as per mining	:	A-A' & B-B' -
	plan		216m (L) X 115m (W) X 58m (D)
			A-A' & C-C' -
			188m (L) X 42m (W) X 58m (D)
i			A-A' & D-D' -

		Τ	110 (I) V 02- AND V 52- (D)
		$\perp$	110m (L) X 93m (W) X 53m (D)
19.	Revised Production (Quantity		1011162m³ of Rough Stone & 128898m3
	in m³) as per SEAC		of Gravel & 200355m³ of Weathered rock
	recommendation upto 50m		
	depth		
20.	Depth of water table	:	65m BGL
21.	Man Power requirement per		25 Nos.
	day:		
22.	Source of Water Requirement	T	water vendors
23.	Water requirement:	:	6.0 KLD
	1. Drinking & domestic		1.0 KLD
	purposes (in KLD)		
	2. Dust suppression, Green		2.5 KLD
	Belt &Wet Drilling (in KLD)		2.5 KLD
24.	Power requirement	$\top$	TNEB
25.	Whether any habitation within	† :	No
	300m distance		
26.	Precise area communication	:	Rc.No.M2/38457/2021, dt: 10.05.2022
	approved by the, District		
	Collector's, Department of		
	Geology and Mining with date		
27.	Mining Plan approved by	:	Roc.No.M2/38457/2021, dt: 13.05.2022
II.	Assistant Director, Department		
	of Geology and Mining with		
	date		
28.	Assistant Director, Department		Rc.No.M2/38457/2021, dt: 13.05.2022
	of Geology and Mining 500m		
	cluster letter		
29.	VAO certificate regarding 300m		Letter dt:18.07.2022
	radius cluster		
	<u> </u>	Щ.	

30.	Project Cost (excluding EMP cost)	:	Rs.346.46 Lakh
31.	EMP cost	:	Rs.206 Lakhs/5 Years including capital cost of Rs. 32.17 Lakhs & slope study cost of Rs. 4 Lakhs & Blast vibration study cost of Rs. 4 Lakhs
32.	CER cost		Rs.7.00 Lakhs

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

- The PP shall enumerate the permanent structures which are belongs to the PP &
  not belongs to the PP, situated within 100m, 200m & 300m radius of the
  proposed mining area.
- 2. The PP shall furnish a report on the scientific studies carried out for the 'Impact of blast-induced ground and fly rock due to the proposed Quarrying on the Surrounding Structures including Wind Mills and Habitations located within 200 m from the quarry lease', from any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, National Institute of Rock Mechanics (NIRM)-Bangaluru, IIT (ISM)-Dhanbad, NIT-Dept of Mining Engg, Surathkal.
- 3. The Project proponent shall furnish revised EMP including mine closure plan.
- 4. The Project proponent shall furnish revised production quantity for ultimate depth of mining up to 50m.
- 5. The project proponent shall photograph of barbered wire fencing and green belt provided.

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

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

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SL.NO	QUERY	REPLY
1	The PP shall enumerate the permanent structures which belongs to the PP ¬ belongs to the PP ¬ belongs to the PP, situated within 100m, 200m & 300m radius of the proposed mining area.	There are 4 structures within 300m radius. All these structures not belong to PP. Its details are shown in Figure no 1 & Enclosure ~ 1. There are no habitations within 300m zone. There is a wind mill located 169m NW of the lease area. Although it is much beyond the followed norm of 60m, by carrying out systematic and scientific mining with controlled blasting it will be ensured that there will be no impact on this far away structure also.
2	The PP shall furnish a report on the scientific studies carried out for the "Impact of blast-induced gound and fly rock due to the proposed Quarrying on the Surrounding Structures including Wind Mills and Habitations located within 200 m from the quarry lease, from any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & FuelResearch (CIMFR) / Dhambad, NarionalInstitute of Rock Mechanics (NIRM)-Bangaluru, IIT (ISM)-Dhambad, NIT-Deptof Mining Engg, Surathkal.	quarry is carried out through Department Of Mining Engineering College Of Engineering, Guindy Anna University, Chennal 600025. Study report is given vide Enclosure – 2. Study concludes that "It can be concluded that the controlled blasting using NONEL initiation system by limiting maximum explosive charge per delay, did not produce peak particle velocities (blast vibrations) greater than 2 mm/s at the locations of the interest, namely, windmill,

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

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

In the proposed quarry of the project proponent, controlled blasting techniques like muffled blasting with conveyor belts & Tyres and line-drilling technique shall be followed to control the fly rock generation and ground vibration towards the

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windmil-

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- ii. The proponent shall implement the trench to be formed around the boundary to reduce the ground vibrations propagate from the blasting operations as in the said report vide annexure VII.
- iii. It is strongly recommended to install the sheet fencing along the proposed quarry boundary to reduce the impact of flyrock on the nearest structures.
- iv. It is suggested that to propose the haul road towards northwest direction of the proposed quarry to reduce the propagation of ground vibrations induced from blasting operations towards the windmill as in the said report vide Annexure VII.
- v. It is strongly recommended to conduct blast vibration study immediately after the commencement of quarrying operation.

Based on the presentation & documents furnished and the Committee carefully examined the points raised by SEAC and the replies given by the PP and SEAC decided to recommend the proposal for the grant of Environmental Clearance for the production of 1011162m³ of Rough Stone & 128898m³ of Gravel & 200355m³ of Weathered rock and the annual peak production shall not exceed 219650 m³ of Rough Stone, 73500 m³ of Weathered rock & 51558 m³ of Gravel and maintaining the ultimate depth of mining of 50m BGL subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions stated therein.

Subsequently, the subject was placed in 614th Authority meeting held on 24 .04.2023 & 25.04.2023. The Authority noted that the proposed mining area is surrounded by agricultural fields. Therefore, Authority after detailed discussion decided to refer back the proposal to SEAC and decided the direct the PP to furnish following additional particulars

- i) The PP shall submit NOC from Agricultural department that the proposed mining lease area is not fit for agriculture purpose.
- ii) NOC for Local panchayat.
- iii) The PP shall furnish details of impacts and mitigation measures on agricultural fields, Aquifers, drainage pattern, water table around the proposed mining area.

The proposal was again placed for appraisal in 383rd meeting of SEAC held on 15.06.2023. the PP/EIA has not attended the meeting. Therefore, SEAC decided to defer the proposal. The proposal was placed in the 633rd Authority fleeting held on 27.06.2023.

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In this connection, the project proponent has furnished reply vide Lr. dt: 30.08.2023 as follows

St.No	AD\$	REPLY
	The PP shell submit NOC from Agriculture	NOC from Agriculture department stating
, <b>1</b> .	department that the proposed mining texas	that the proposed mining lease area a not
	ereals not fit for agriculture purpose.	fit for agriculture purpose is obtained.
		(Enclosure No.1).
2	The PP shall submit NOC from Local Panchayat	NOC from from Local Panchayat is obtained and given vide Enclosure
,		. No.2.

The Project proponent shall furnish details of Study of the area shows most of the area impacts and mitigation measure on Agriculture fields, Aquifores, Drainage pattern, water table. From the discussion with locals it is around the proposed mining area.

is dry barren, rocky, un oultivated land . observed that agricultural activities are almost absent in most of the areas due to poor soil quality, inconsistent rainfail, nonevailability of water, high labor cost. nonavailability of manpower, less yield and poor economics. Only in few patches that too away from the lease area it is carried out.

Detailed hydrology study was carriedout by Dr.Selvam, Department of Geology, V.O Chidambaram College. (Enclosure No. 3).

From the study the following are observed:

- . There are no perminial water body or surface water drainage arrangement near the loads area.
- From the VES study in Location eite 1 and site 2 of the study area are two-three layered 'A' type curves. It consists of weathered soli formation close to the surface. At about 1m, where the resistivity value is 25 ohm.m. Further analysis indicates that hard durability fissure **O**F Chamockite bedrock overlain by a thin overburden (A type).
- 3D model pseudosections clearly depict that resistivity value normally increased and there is

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- no arry other major fracture/seepage from the study area.
- Pumping tests were carried out in 2 open dug wells located uniformly in the hard rock regions. of the study area selected for this purpose. Analysis of the data shows that the transmissivity is comparatively high in the hard rock regions. Low transmissitvity occours in the southern part of the study area. This may be due to the coarse and highly porous formations free from weathered formation intercalation. In other locations the presence of loarny brownish soil and city reduce the permeability.
- Concludingly the study shows that, there is no moisture below 9 metres from ground level and the area is not feasible for ground water extraction.
- In order to increase the recharge, tanks, and percolation ponds may be provided with the recharge wells/recharge shafts penetrating this impervious layer to make it more effective in recharging the aquifer.
- Based on the available information and the geophysical investigations, it is concluded that the project area is considered to poor groundwater polaritial. There

- is no water seepage noticed in to the already quarried pits altusted north-north east of the proposed quarry area. Hence, the quarrying rough stone for a depth of up to 58 meters from ground level will not have any impact in the area over ground water conditions.
- Based on the water level contour very low availability of water in both seasons, especially premoneous season completely dry.
   Most of the ponds, open wells in this area are not in use for agricultural activity.

Carrying out systematic and scientific mining activities and enforcement of various mitigative measures will ensure no adverse impact on the agricultural activities or aguifer of drainage pattern, water table around the proposed mining area.

This proposal was again placed for appraisal in 415th SEAC meeting held on 12.10.2023. Based on the presentation & documents furnished and the Committee carefully examined the points raised by SEIAA and the replies given by the PP. After detailed discussion decided to re-confirm the recommendation already made in 367th meeting of SEAC held on 31.03. 2023. All other conditions prescribed shall remain unchanged.

Agenda No: 415-18

(File No: 9967/2023)

Proposed Rough Stone and Gravel Quarry over an extent of 3.40.0 Ha at S.F. Nos.145 (P), 149 (P) and 151 (P) of Kumbikulam Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu by M/s. Royal Aggregate Resources-For Environmental Clearance. (SIA/TN/MIN/424324/2023, dated: 03.04.2023).

The proposal was earlier placed in the 388<sup>th</sup> Meeting of SEAC held on 30.06.2023. 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, M/s. Royal Aggregate Resources has /applied for

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Environmental Clearance for the Proposed Rough Stone and Gravel Quarry over an extent of 3.40.0 Ha at S.F. Nos.145 (P), 149 (P) and 151 (P) in Kumbikulam Village, Radhapuram Taluk, Tirunelveli District Tamil Nadu.

- 2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. 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 593830 m<sup>3</sup> of Rough Stone & 55490 m<sup>3</sup> of Gravel with ultimate depth of mining 52m BGL.
- 4. The salient features of the proposed project as follows

File	9967	•		"B2" 1(a)
No	SIA/TN/MIN/424324/2023, 03.04.2023		Category	EC
SI. No	Salient i	eat	tures of the Proposal	
1.	Name of the Owner/Firm	:	M/s. Royal Aggregat Kottaikarunkulam v Tisaiyanvilai Taluk, Tirunelveli District -	
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	;	Rough Stone and Gi	ravel Quarry
3.	S.F Nos. of the quarry site with area break-up	:	145 (P), 149 (P) and	151 (P)
4.	Village in which situated	:	Kumbikulam	
5.	Taluk in which situated	:	Radhapuram	
6.	District in which situated	:	Tirunelveli	
7.	Extent of quarry (in ha.)	:	3.40.0 Ha	<del></del>
8.	Latitude & Longitude of all corners of the quarry site	:	08°21'10.01"N to 08' 77°43'05.98"E to 77	
9.	Topo Sheet No.	:	58 H/11	1.

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10.	Type of mining	:	Opencast semi med	nanized mining
	Life of Project	:	5 years	
11.	Lease Period		5 years	
	Mining Plan Period		5 years	
	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC
	Geological Resources m³ (RoM)	:	Rough Stone- 16,95,400 m <sup>3</sup> Gravel – 67,816 m <sup>3</sup>	Rough Stone- 16,95,400 m <sup>3</sup> Gravel – 67,816 m <sup>3</sup>
12.	Minable Resources m³ (RoM)	•	Rough Stone- 5,93,830m <sup>3</sup> Gravel – 55,490m <sup>3</sup>	Rough Stone- 5,93,830m <sup>3</sup> Gravel – 55,490m <sup>3</sup>
	Annual Peak Production in m3	:	Rough Stone- 1,22,350 m <sup>3</sup> Gravel – 48,980 m <sup>3</sup>	Rough Stone- 1,22,350 m <sup>3</sup> Gravel – 48,980 m <sup>3</sup>
	Maximum Depth in meters	:	52m BGL	47m BGL
13.	Depth of water table	:	68m in Rainy season	n and 65m in
14.	Man Power requirement per day:	:	30 Nos.	
15.	Water requirement:  1. Drinking water  2. Dust suppression  3. Green belt	;	3.0 KLD 1.0 KLD 1.5 KLD 0.5 KLD	
16.	Power requirement		TNEB	

	Precise area communication	Ţ <u>.</u>	Rc.No.M2/18732/2	021	
	approved by the Joint		dated 07.02.2023	<b>~~</b> 1	
17.	Director / Assistant Director	:	dated 07.02.2025		
''					
	(i/c).Dep. of Geology &				
	Mining		B 11 1 (0 (10 T) 0 (0		
	Mining Plan approved by		Rc.No.M2/18732/2	021	
18.	Joint Director / Assistant	:	dated 13.02.2023		
	Director (i/c),Dep. of				
	Geology & Mining.		<u></u>		
	Joint Director / Assistant		Rc.No.M2/18732/2	021	
19.	Director (i/c),Dep. of		dated 13.02.2023		
	Geology & Mining 500m				
	Cluster Letter				
	VAO Certificate Regarding				
20.	Structures within 300m		Letter Dated: 14.02.	2023	
	Radius				
21.	Project Cost (excluding EMP	:	Rs. 1,01,20,000/-	· <u>-</u>	. <u></u>
2.11	cost)	-	13. 1,01,20,000/-		
				30 years su	ıbject to
			N 1-11-114.	the following	
		'	Validity	upper limit Rough	
22	EC Recommendation			Stone	Gravel
22.		:	Max Total RoM in	5,84,310	55,490
		<u> </u>	m³ Annual Max RoM	m³	m³
		:	in m <sup>3</sup>	1,22,350 m³	48,980   m³
		:	Max Depth in mtrs	47m BGL	
23.	EMP cost (in Rs. Lakh).		Capital cost - Rs. 25	.24 Lakhs	
	Livia cost (iii iis. takii).		recurring cost/annur	n- Rs. 27.95	Lakhs
24.	CER cost (in Rs. Lakh).	:	Rs. 5,00,000 /- as ac	cepted by t	he PP
	·	<u> </u>			

Based on the presentation made and scrutinizing the documents furnished by the Project proponent, SEAC has observed that the SEIAA had granted Environmental Clearance to Tmt. P.Selva Azhagi, for mining of Rough Stone and Gravel at over an Extent of 2.42.0 Ha of Patta lands in S.F.Nos.162/5 (P), 162/6 (P) & 162/7 (P) of the same area located adjacent to the current proposal.

Therefore, the SEAC decided that the proponent shall furnish the revised 500m cluster certificate obtained from the concerned AD (Mines) by indicating the list of Existing, Abandoned and Proposed Quarries in the lease area.

On the receipt of aforesaid details, the proposal was again placed in the 415<sup>th</sup> Meeting of SEAC held on 12.10.2023. The Project proponent made a presentation along with the clarifications for the above shortcomings observed by the SEAC.

S.No.	ADS raised by the SEAC	Reply submitted by the PP
1.	The proponent shall	Revised 500m radius cluster letter obtained
	furnish the revised 500m	from the Department of Geology and Mining,
	cluster certificate	Tirunelveli vide Rc.No.M2/18732/2021,
	obtained from the	dated:14.07.2023.
	concerned AD (Mines)	As per the letter, only two proposed quarries ie
	by indicating the list of	M/s. Royal Aggregate Resources (This proposal)
	Existing, Abandoned and	& M/s. Blue Metal Company Pvt., Ltd., are
	Proposed Quarries in the	located within 500m radius. Rough Stone and
	lease area	Gravel Quarry of Tmt.P. Selva Azhagi, as
		mentioned by Committee in the 388th SEAC
		minutes is located outside the 500m radius zone
		of this proposed quarry.
		Google image showing the demarcations of the
		quarries located within 500m radius is enclosed.

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 1,22,350m³ of rough stone & 48,980 m³ of Gravel by maintaining the ultimate depth of mining upto 47m BGL and subject to the standard conditions as per the Annexure 1 of this minutes & normal

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CHAIRMAN . SEAC-TN . 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 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.
- 3. 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.
- 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. Since the waterbodies are situated nearby, the PP shall carry out the scientific studies to assess the hydrogeological condition of the quarry within a period of six months from the date of lease execution, by involving any one of the reputed

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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.

- 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. Tree plantation & fencing around the mine lease area shall be completed before starting the production.
- 8. The PP shall furnish a Standard Operating Procedures (SoP) for carrying out the controlled blasting operations to the concerned AD (Mines) at the time of execution of lease.
- 9. 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 Panchayat Union Primary School, Surai Village before obtaining CTO from TNPCB.

Agenda No: 415-19

(File No: 10132/2023)

Proposed Rough Stone and Gravel Quarry over an extent of 0.98.0 Ha at S.F. No's: 642/2A (Part), 642/3A (Part), 642/3B (Part), 642/3C (Part) & 642/4 (Part) of Manjanaickenpatti Village, Kadavur Taluk, Karur District, Tamil Nadu by Thiru.C.Perumal -For Environmental Clearance. (SIA/TN/MIN/433210/2023,

Dated:14.06.2023).

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The proposal was earlier placed in the 402<sup>rd</sup> Meeting of SEAC held on 17.08.2023. 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. C. Perumal has applied for Environmental Clearance for the Proposed Rough Stone and Gravel Quarry over an extent of 0.98.0 Ha at S.F. No's: 642/2A (Part), 642/3A (Part), 642/3B (Part), 642/3C (Part) & 642/4 (Part) of Manjanaickenpatti Village, Kadavur Taluk, Karur District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- Earlier, the project proponent has obtained EC from DEIAA vide Lr.No.DEIAA-DIA/TN/MIN/6337/2017-KRR/EC.No.51/2017/Mines dated: 02.08.2017 for the period of 5 years from the date of execution of the mining lease period.
- 4. Certified Compliance Report (CCR) obtained from IRO(SZ); MoEF&CC vide Lr. EP/12.1/2023-24/SEIAA/50/TN/880 Dt:21.07.2023.
- 5. This EC issued by the DEIAA has been filed before the SEIAA-TN for reappraisal in compliance to the order of the Hon'ble NGT in O.A142 of 2022 as per the Guidelines stipulated in MoEF &CC OM F.No. IA3-22/11/2023-IA.III (E-208230), dated. 28.04.2023.
- 6. Existing Pit depth is 8m against the approved depth of 26m.
- 7. Transport permit letter from DD/AD (FAC) vide Rc.No. 629/mines/2022 Dt:14.08.2023 & transport permit details from 16.08.2017 reveals that quantum of transport permit obtained for 8551 Cu.m against the approved quantity of 1,01,406 Cu.m.
- 8. 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 13580 m³ of Rough Stone & 2550 m³ of Gravel with ultimate depth of mining 13m BGL.

Based on the presentation and documents furnished by the project proponent, SEAC noted that there are few structures and wild mills located in the danger zone of the proposed quarry. Hence, the Committee decided to call for certain additional particulars as follows.

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- The PP shall furnish the letter received from DFO concerned stating the proximity details of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.
- 11. The proponent shall enumerate on the details of the structures located within 50m, 100m, 200m, 300m radius from the proposed mine lease area indicating the type of structure/building, usage/purposes of such building commercial/industrial/residential/farm house/Govt. building such as Sub-station, occupants of such buildings/structures, ownership of the buildings/structures whether it belongs to the PP (or) not, etc.

Based on the Proponent's reply, the proposal was again placed in the 415th Meeting of SEAC held on 12.10.2023.

The salient features of the proposed project as follows.

File	10120			"B2" 1(a)
No	SIA/TN/MIN/432996/2023,		Category	EC
SI. No	Salient	Feat	ures of the Propose	ıl
1.	Name of the Owner/Firm	•	Thiru.C.Perumai, S/o. Chinnasamy, D.No.284, Manjanaickenpatt Kaniyalampatti, K	adavur Taluk,
2.	Type of quarrying (Ordinary Stone/ Sand/Granite/Limestone)	:	Rough Stone and	Gravel Quarry
3.	S.F Nos. of the quarry site with area break-up	:	642/2A (Part), 64 (Part), 642/3C (Pa	2/3A (Part), 642/3B art) & 642/4 (Part
4.	Village in which situated	:	Manjanaickenpatt	i
5.	Taluk in which situated :		Kadavur	

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6.	District in which situated	:	Karur	
7.	Extent of quarry (in ha.)	:	0.98.0 Ha	
	Latitude & Longitude of all		10°46'58.89"N to	10°47'3.48"N
8.	corners of the quarry site	:	78°10'15.03"E to	78°10'17.50"E
9.	Topo Sheet No.	:	58 - J/01	
10.	Type of mining	:	Manual Mining	
	Life of Project	:	5 years	
11.	Lease Period		5 years	
	Mining Plan Period	:	5 years	
			As per	
	Mining Plan Details	:	approved	As modified by SEAC
			Mining Plan	
			Rough Stone –	Rough Stone –
	Geological Resources m <sup>3</sup>		204545 m³	204545 m³
	(RoM)	.	Gravel –	Gravel –
			5226 m³	5226 m³
,,,			Rough Stone –	Rough Stone -
12.	Minable Resources m³	.	55560 m³	55560 m³
	(RoM)		Gravel -	Gravel –
			2550 m³	2550 m³
			Rough Stone –	Rough Stone –
	Annual Peak Production in		3360 m³	3360 m³
	m3		Gravel –	Gravel –
			1275 m³	1275 m³
	Maximum Depth in meters	:	13m BGL	
13.	Depth of water table	:	60m in summer a	ind 55m in rainy
	p or water table	L'	seasons.	
14.	Man Power requirement		13 Nos.	Λ
	per day:	Ĺ		

15.	Water requirement:  1. Drinking water & Domestic 2. Dust suppression 3. Green belt		3.75KLD 1.75KLD 1.0KLD 1.0KLD		
16.	Power requirement		Nil		
17.	Precise area communication approved by the Deputy Director, Department of Geology and Mining	:	Rc.No. 629/Mine Dated: 16.05.202		
18.	Mining Plan approved by Deputy Director, Department of Geology and Mining,.	:	Rc.No. 629/Mine Dated: 25.05.202		
19.	Deputy Director,  Department of Geology and  Mining, 500m Cluster Letter	·	Rc.No. 629/Mine Dated: 08.06.202		
20.	VAO Certificate Regarding Structures within 300m Radius		Letter Dated: 05.0	06.2023	
21.	Project Cost (excluding EMP cost)		Rs.26,03,500/-		
22.	EC Recommendation	:	Validity	the follow limits. Rough Stone	subject to wing upper Gravel
		:	Max Total RoM in m³	13580 m³	2550 m³

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		:	Annual Max RoM in m³	3360 m³	1275 m³
		:	Max Depth in mtrs	13m BGL	
23.	EMP cost (in Rs. Lakh).	:	Capital cost – Rs. recurring cost – R		
24.	CER cost (in Rs. Lakh).	:	Rs. 5,00,000 /- as	accepted	by the PP

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 3360 m³ of rough stone & 1275 m³ of Gravel by maintaining the ultimate depth of mining upto 13m 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 waterbodies are situated nearby, the PP shall carry out the scientific studies to assess the hydrogeological condition of the quarry within a period of six months 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.

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- 3) Tree plantation & fencing around the mine lease area shall be completed before starting the production.
- 4) The PP shall install a bio-toilet for the persons employed in the mine before obtaining the CTO from TNPCB.
- 5) The PP shall furnish an affidavit for carrying out the manual operations only to the concerned AD (Mines) at the time of execution of lease.
- 6) 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 Panchayat Union Middle School, Veeriyapatty Village before obtaining CTO from TNPCB.

Agenda No: 415-20

(File No: 7639/2020)

Proposed Gravel Quarry over an extent of 1.45.0Ha at S.F.Nos. 134/1, 134/7, 134/13B, 134/13C, 134/13D, 134/14A, 134/14B, 135/3A, 135/5, 135/6, 135/8, 135/9, 135/12, 135/13, 135/14 and 135/15 of Goonipalayam Village, Uthukottai Taluk, Tiruvallur District, Tamil Nadu by Thiru. K. Umamaheswaran -for Environmental Clearance. (SIA/TN/MIN/157405/2017 Dated: 13.06.2020)

The proposal was earlier placed in the 342<sup>nd</sup> Meeting of SEAC held on 30.12.2022. The details of the project furnished by the proponent are available in the website (www.parivesh.nic.in.) The SEAC noted the following:

- 1. The Project Proponent, Thiru. K. Umamaheswaran has applied for Environmental Clearance for the Proposed Gravel Quarry over an extent of 1.45.0Ha in S.F.Nos. 134/1, 134/7, 134/13B, 134/13C, 134/13D, 134/14A, 134/14B, 135/3A, 135/5, 135/6, 135/8, 135/9, 135/12, 135/13, 135/14 and 135/15 of Goonipalayam Village, Uthukottai Taluk, Tiruvallur District, Tamil Nadu.
- 2. The project/activity is covered under Category "B" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

During the meeting the Committee noted that the project proponent has not attended the meeting. Hence the subject was not taken up for discussion.

Based on the Proponent's request, the proposal was again placed in the 415th Meeting of SEAC held on 12.10.2023.

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During the meeting the committee noted the following

- 1. Earlier, the Proponent was requested to furnish the following details vide letter dated:09.09.2020,
  - VAO letter for Habitation of 300m radius details.
  - Affidavit
  - Registered land document copy.
- Hon'ble Madurai Bench of Madras High Court in order dt: 12.02.2021 & in WP (MD) No. 20903 of 2016.

Acting on the above Judgment, the Director of Geology and mining, Govt of Tamil Nadu, in his letter No. 7240/MM6/2019 Dt. 30.7.2021, has inter alia, issued the following directions:

- No quarry lease shall be granted in areas where the test results indicate the presence of sand in the composition.
- No quarry lease shall be granted in the patta lands adjoining to the rivers,
   streams, canals etc.,
- No permission shall be granted for quarrying Gravel, Earth, etc., in patta land for a period less than one year.
- Lease deed shall be executed in the Form set out in Appendix IV or Appendix V to the Tamil Nadu Minor Mineral Concession Rules 1959.

In view of the above, project proponent is requested to furnish the following additional details so as to consider the said proposal for appraisal

- The proponent shall obtain revised precise area communication letter, mining plan approval regard to period of quarrying in patta land need to be converted to 1 year as per the above direction.
- 2. The PP shall remove the survey numbers of the proposed mining area if wetland and revise the concerned documents accordingly.
- 3. The proponent should produce a letter from the Department of Geology and Mining stating that the location of quarry site does not lie adjoining to the rivers, streams, canals etc., and also does not come under any notified/declared protected zones in terms of the above Judgment.

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- 4. The PP shall furnish registered lease consent document obtained from all the pattadhars of proposed mining area.
- 5. The PP shall furnish VAO certificate regarding the location of habitations within 300m radius from the periphery of the site.

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: 415-21

(File.No:7198/2019)

Proposed construction of Multi Storey Office & Commercial building by M/s. Anjli Infra Developers LLP at S.F.Nos: 480/3B1A & 480/3B1B of Sholinganallur Village Sholinganallur Taluk, Kancheepuram District, Tamil Nadu for Environment Clearance. (SIA/TN/MIS/121217/2019).

The proposal was earlier placed in the 141st and 175th meeting of SEAC. Based on the documents furnished and presentation made by the Proponent, certain additional details were sought. On receipt of the said details from the Proponent, the subject was placed for appraisal in the 188th meeting of SEAC held on 18.12.2020. The details of the project furnished by the proponent are available on the website (parivesh.nic.in).

### The SEAC noted the following:

- 1. The proponent M/s. Anjli Infra Developers LLP has applied seeking Environmental Clearance for the proposed construction of Multi Storey Office & Commercial building at S.F.Nos: 480/3B1A & 480/3B1B of Sholinganallur Village Sholinganallur Taluk, Kancheepuram District, Tamil Nadu.
- 2. The project /activity is covered under Category "B" of Item 8(a) "Building and Construction projects" of the Schedule to the EIA Notification, 2006.
- 3. Project Proponent has still not furnished the proposal for re-plantation of trees as suggested.

Hence SEAC decided to request the project proponent to furnish the following additional details:

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The project proponent is yet to furnish the proposal in consultation with DFO
for re-plantation of large numbers of old trees existing at the project site as
suggested. Hence the committee decided that the project proponent shall get the
report/recommendations from concerned District Forest Officer regarding the
existing details of no. of trees, species, type etc., and proposal for replantation
of the said old trees, etc.,

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

Subsequently, the EIA Coordinator M/s. Perfact Enviro Solutions Pvt Ltd had submitted a letter dated:25.08.2023 stating the following,

S.No	Project Name	Status	Reply from EIA
			Consultant
7.	Environment Clearance Proposed construction of Multi Storey Office & Commercial building located at S.F.Nos: 480/3B1A & 480/3B1B of Sholinganallur Village Sholinganallur Taluk, Kancheepuram District, Tamil Nadu by M/s. Anjli	the proposal	The PP has dropped the project and has not pursued it further. We will continue to contact the PP & get a letter for formal closure of the project.
	Infra Developers LLP.		

Hence, the proposal was placed in the 415<sup>th</sup> meeting of SEAC held on 12.10.2023. The SEAC noted that the project proponent has not attended the meeting. Hence the subject was not taken up for discussion.

Member secretary SEAC-TN

Agenda No: 415 – TA - 01

(File No: 10088/2023)

Proposed Construction of residential Building by M/s. Casagrand Zingo Private Limited at T.S.No. 156/1 of Perambur Village, Perambur Taluk, Chennai District, Tamil Nadu -

For Environmental Clearance. (SIA/TN/INFRA2/429382/2023, Dated: 16.05.2023)

The proposal was placed in 415th SEAC meeting held on 12.10.2023. 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. Casagrand Zingo Private Limited has applied for Environmental Clearance for the Proposed Construction of residential Building at T.S.No. 156/1 of Perambur Village, Perambur Taluk, Chennai District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 8(a) "Building & Construction Projects" of the Schedule to the EIA Notification, 2006.
- 3. Total plot area is 31,328.00 Sq.m & the built up area is 1,36,328.63 Sq.m.
- 4. Earlier the proposal was placed in 393<sup>rd</sup> SEAC meeting held on 20.07.2023. The Committee discussed the matter and recommended a grant of environmental clearance.
- 5. Subsequently, the proposal was placed in 643<sup>rd</sup> SEIAA meeting held on 01.08.2023. In the view of the above, Authority decided that upon the receipt of above-mentioned documents as stipulated by SEAC, further deliberation shall be done.
- 6. Subsequently, proponent vide letter received in this office on 11.08.2023 submitted a reply as follows
  - 1. "We hereby commit to SEIAA and SEAC that the proposed project site comes under Chennai Corporation Zone VI of CMWSSB serving area."

Further, the proponent had submitted an affidavit that commitment for establishment of sewer connection and water supply will be obtained from CMWSSB before obtaining CTE from TNPCB.

In the view of the above representation received from the proponent, authority after detailed deliberation decided to refer back the proposal to the committee

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examine the request made by the proponent with regard to obtaining water commitment letter from the competent authority and shall furnish its remarks to SEIAA to take further course of action.

S. No	SEIAA Minutes	Reply
1.	PP shall submit the commitment	We hereby commit to SEIAA and
	letter from the local body for supply	SEAC that the proposed Project site
	of fresh water to SEIAA before issue	comes under Chennai Corporation
	of EC.	Zone VI of CMWSSB serving area.
		The infrastructure cost for
		establishment of sewer connection
		and water supply for the proposed
	•	site will be paid to CMWSSB along
		the Demand letter of Advice
		payment from CMDA issued before
		issuance of planning permit.
		We hereby enclosed the undertaking
		commitment affidavit in 100 rupees
		stamp paper in next slide for
		obtaining water supply and UGDS
		for disposal of excess treated
		wastewater before commissioning or
		before obtaining CTE from TNPCB.

Based on the above, the proposal was again placed in 415th SEAC meeting held on 12.10.2023. Based on the presentation and documents furnished by the proponent, committee after carefully examining the reply submitted by the proponent, SEAC decided to reiterate its recommendation already made in it's 393th SEAC meeting held on 20.07.2023 subject to the following condition

- 1. PP shall submit the commitment letter from the local body for supply of fresh water and excess treated sewage water from CMWSSB to before obtaining CTE from TNPCB.
- 2. All other conditions remain unaltered.

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Agenda No: 415 - TA - 02

(File No: 10182/2023)

Proposed Construction of High-Rise Residential building by M/s. Casa Grande Civil Engineering Private Limited at T. S. No. 156/4 of Perambur Village, Perambur Taluk, Chennai District Tamil Nadu - For Environmental Clearance. (SIA/TN/INFRA2/434015/2023, Dated: 20.06.2023)

The proposal was placed in 415th SEAC meeting held on 12.10.2023. 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. Casa Grande Civil Engineering Private Limited has applied for Environmental Clearance for the Proposed Construction of High-Rise Residential building at T. S. No. 156/4 of Perambur Village, Perambur Taluk, Chennai District, Tamil Nadu.
- 2. The project/activity is covered under category "B2" of Item 8 (a) "Building and Construction Projects" of the schedule to the EIA Notification, 2006.
- 3. The proposed project consists of Extended Double Basement Floor (Parking) + Ground Floor + 1stFloor + 2nd Floor to 32nd Floor with 453 dwelling units with total built up area of the proposed residential development is 79,547.45 Sq.m & total land area of 17,358 Sq.m.
- 4. Earlier the proposal was placed in 398th SEAC meeting held on 04.08.2023. The Committee discussed the matter and recommended a grant of environmental clearance.
- 5. Subsequently, the proposal was placed in the 649th Authority meeting held on 23.08.2023. After detailed discussions, the Authority decided to request the Member Secretary. SEIAA-TN to obtain the following details and place before the Authority for further course of action.
  - 1. The PP shall obtain fresh water supply commitment letter and disposal of excess treated water from the local body /TWAD.
  - 2. The company shall have a well laid down environmental policy duly approved by the Board of Directors.

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- 3. A detailed traffic management and traffic decongestion plan from reputed Research and Academic Institution such as NIRM, IITs, NITs, Anna University Chennai-CEG Campus etc., shall be submitted.
- 4. The PP shall furnish the fire Noc.
- 5. The PP shall furnish Disaster Management Plan and Evacuation plan.
- 6. The proponent shall provide details of sufficient grass lawns, Indoor games, Gym and play facilities for children.
- 7. The PP shall furnish details regarding number of visitor's parking that are provided within the premises & a detailed layout of the parking provided shall be furnished.

Upon the receipt of above said details, further deliberation shall be done.

- Subsequently, proponent vide letter received in this office on 26.09.2023
   submitted a reply as follows
  - "We hereby commit to SEIAA and SEAC that the proposed project site comes under Chennai Corporation Zone VI of CMWSSB serving area."

Further, the proponent had submitted an affidavit that commitment for establishment of sewer connection and water supply will be obtained from CMWSSB before obtaining CTE from TNPCB.

In the view of the above representation received from the proponent, authority after detailed deliberation decided to refer back the proposal to the committee to examine the request made by the proponent with regard to obtaining water commitment letter from the competent authority and shall furnish its remarks to SEIAA to take further course of action.

\$. <b>10</b>	SEAA Minutes	Reply
1.	PP shall submit the commitment	We hereby commit to SEIAA and
	letter from the local body for supply	SEAC that the proposed Project site
	of fresh water to SEIAA before issue	comes under Chennai Corporation
	of EC.	Zone VI of CMWSSB serving area.
:		The infrastructure cost for
		establishment of sewer connection

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and water supply for the proposed site will be paid to CMWSSB along the Demand letter of Advice payment from CMDA issued before issuance of planning permit.

We hereby enclosed the undertaking commitment affidavit in 100 rupees stamp paper in next slide for obtaining water supply and UGDS for disposal of excess treated wastewater before commissioning or before obtaining CTE from TNPCB.

Based on the above, the proposal was again placed in 415th SEAC meeting held on 12.10.2023. Based on the presentation and documents furnished by the proponent, committee after carefully examining the reply submitted by the proponent, SEAC decided to reiterate its recommendation already made in it's 393rd SEAC meeting held on 20.07.2023 subject to the following condition

- PP shall submit the commitment letter from the local body for supply of fresh water and excess treated sewage water from CMWSSB to before obtaining CTE from TNPCB.
- 2. All other conditions remain unaltered.

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#### ANNEXURE-I

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

- 1. 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 include 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.

## GRAVEL / RED EARTH & PEBBLES QUARRY - GENERAL CONDITIONS

- 1. 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.
- 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 IRC Guidelines with respect to complying with traffic congestion and density.

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- 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 stratutory

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- 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

- 1) 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.
- 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

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- 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.

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- 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 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.

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- 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 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

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- 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.

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SPEC	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		
		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.		
	<del></del>	<u> </u>		

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
	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.	
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.
- 6. 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.

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- 7. In the case of proposed lease in an existing (or old) quarry where the benches are not formed (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall 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).
- 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.

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- 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 should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 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.
- 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 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

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- the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner
- 34. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 35. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 36. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 37. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 38. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 39. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 40. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 41. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC/with the site

- photographs which shall duly be certified by MoEF&CC, Regional Office, Chennai (or) the concerned DEE/TNPCB.
- 42. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
- 43. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

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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.
- 2. 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 Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

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- 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.
- 7. 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

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- 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).
- 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

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- 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 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.

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- 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.
- 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.

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# 4. Noise Monitoring and Prevention:

- 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:

- 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.
- 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 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.

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- 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.

## 6. Waste Management:

- 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.
- 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.
- 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.
- 6. 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

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- 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.
- 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

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- 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 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.

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#### 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:

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

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- 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.
- 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.

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- 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.
- 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.

#### ANNEXURE III

Standard Terms of Reference (ToR) for EIA/EMP report for projects/activities requiring environment clearance 3(a): Standard Terms of Reference for conducting Environment Impact Assessment study for Metallurgical Industries (ferrous & non-ferrous) projects and information to be included in EIA/EMP report

# A. STANDARD TERMS OF REFERENCE (TOR)

- 1) Executive Summary
- Introduction
  - i. Details of the EIA Consultant including NABET accreditation
  - ii. Information about the project proponent
  - iii. Importance and benefits of the project
- 3) Project Description
  - i. Cost of project and time of completion.
  - ii. Products with capacities for the proposed project.
  - iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
  - iv. List of raw materials required and their source along with mode of transportation.
  - v. Other chemicals and materials required with quantities and storage capacities
  - vi. Details of Emission, effluents, hazardous waste generation and their management.
  - vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
  - ix. Hazard identification and details of proposed safety systems.

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- x. Expansion/modernization proposals:
  - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing lexisting operation of the project from SPCB shall be attached with the EIA-EMP report.
  - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

# 4) Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale
- on an A3/A2 sheet. (Including all eco-sensitive areas and environmentally sensitive places)
- iii. Details with respect to option analysis for selection of site
- iv. GPS Co-ordinates of all four corners of the site.
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating

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- storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Land use break-up of total land of the project site (identified and acquired), government/ private agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy
- 5) Forest and wildlife related issues (if applicable):
  - i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
  - ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)
  - iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
  - iv. The projects to be located within 10 km of the National Parks, Sanctuaries,
    Biosphere Reserves, Migratory Corridors of Wild Animals, fthe project

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- proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife

## 6) Environmental Status

- Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX. CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.

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- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

# 7) Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyorcum- rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to

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meet standards.

- vi. Measures for fugitive emission control
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
  - ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
  - x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
  - xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
  - xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

# 8) Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
- ii. Details of exposure specific health status evaluation of worker. If the

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CHAIRMAN SEAC-FN- workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during preplacement and periodical examinations give the details of the same. Details regarding last month analyzed data of above-mentioned parameters as per age, sex, duration of exposure and department wise.

- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved.
- iv. Annual report of heath status of workers with special reference to Occupational Health and Safety.

# 9) Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process/ procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms /conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to

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be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

- 11. Enterprise Social Commitment (ESC)
  - i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
- 12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
- 13. A tabular chart with index for points wise compliance of above TOR.

# B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR METALLURGICAL INDUSTRIES (FERROUS & NON-FERROUS)

- Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
- 2. Details on blast furnace/ open hearth furnace/ basic oxygen furnace/ladle refining, casting and rolling plants etc.
- 3. Details on installation/activation of opacity meters with recording with proper calibration system
- 4. Details on toxic metals including mercury, arsenic and fluoride emissions
- 5. Details on stack height requirement for integrated steel
- 6. Details on ash disposal and management -Non-ferrous metal
- 7. Complete process flow diagram describing production of lead/zinc/copper/ aluminium, etc.
- 8. Raw materials substitution or elimination
- 9. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
- 10. Details on Holding and de-gassing of molten metal from prignary and

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secondary aluminium, materials pre-treatment, and from melting and smelting of secondary aluminium

- 11. Details on solvent recycling
- 12. Details on precious metals recovery
- 13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant and their utilization.
- 14. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
- 15. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
- 16. Trace metals in waste material especially slag.
- 17. Plan for trace metal recovery
- 18. Trace metals in water

# C. ADDITIONAL TOR FOR INTEGRATED STEEL PLANT

- Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
- 2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
- 3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
- 4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quick bird, lkonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
- 5. Respirable Suspended particulate matter (RSPM) present in the ambient air must be analysed for source analysis natural dust/RSPM generated from plant operations (trace elements). The RSPM shall also be analysed for presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction, where applicable. Chemical characterization of RSPM and incorporating of RSPM data.
- All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
- 7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
- 8. Plan for slag utilization
- 9. Plan for utilization of energy in off gases (coke oven, blast furnace)

10. System of coke quenching adopted with justification.

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# Appendix -I List of Native Trees Suggested for Planting

No	Scientific Name	Tamil Name	Tamii Name
1	Aegie marmelos	Vilvam	வுல்னம்
2	Adenaanthera pavonina	Manjadi	மஞ்சார். ஆணைக்குன்றிமணி
3	Albizia lebbeck	Vaagai	வாகை
4	Albizia amara	Usil	2Aei
5	Ваннінів ригритов	Mantharai	மந்தாளர
6	Bauhinia racemosa	Aathi	ஆக்கி
7	Bauhinia tomentos	Iruvathi	இருவாக்கி
8	Buchanania axillaris	Kattuma	astri_Quar
9	Borassus flabellifer	Pansi	LIPPORT
10	Butea monosperma	Murukkamaram	ரி <b>செர்கா</b> வர்
11	Bobax ceiba	Ilavu, Sevvilavu	(Second
12	Calophyllum inophyllum	Punnai	Liquido est
13	Cassia fistrila	Serakondrai	syklessing)
14	Cassia roxburghii	Sengondrai	GriGeraion
15	Chloroxylon sweitenia	Purasamaram	புதக மரம்
16	Cochlospermum religiosum	Kongu, Manjalllavu	கோங்கு, மஞ்சன் இவை
17	Cordia dichotoma	Naruvuli	தருவுளி.
18	Creteva adansoni	Mavalingum	மாவிலங்கம்
19	Dillenia indica	Uva, Uzha	<b>≘_</b> 51
20	Dillenia pentagyna	SiruUva, Sitruzha	சிற உள
21	Diospuro sebenum	Karungali	கருங்காலி
22	Diospyro schloroxylon	Vaganai	CHECOM .
23	Ficus amplissima	Kalltchi	கல் இச்சி
24	Hibiscus tiliaceou	Aatrupoovarasu	STUBLITICAL.
25	Hardwickia binata	Aacha	.मु <i>ंग</i>
26	Holoptelia integrifolia	Aayili	அயா மரம், ஆயிலி
27	Lannea coromandelica	Odhiam	அதியம்
28	Lagerstroemia speciosa	Poo Marudhu	ர் ஒஇர
29	Lepisanthus tetraphylla	Neikottaimaram	தெய் கொட்டடை மரம்
30	Limonia acidissima	Vila maram	egent natin
31	Litsea glutinos	Pisinpattai	அரம்பா. பிசின்பட்டை
32	Madhuca longifolia	Iliuppai	இலுப்பை
33	Manilkara hexandra	UlakkaiPanlai	2_90 参加各 山田町町
34	Minusops elengi	Magizhamaram	மகிழமரம்
35	Mitragyna parvifolia	Kadambu	கடம்பூ
36	Morinda pubescens	Nuna	<b>Glema</b>
37	Morinda citrifolia	Veliai Nuna	வெள்ளை நுணா
38	Phoenix sylvestre	Eachai	ஈச்சமரம்
39	Pongamia pinnat	Pungam	riterario V

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40	Premna mollissima	Munnai	முக்கை
41	Premna serratifolia	Narumunnai	ந்ற முன்னை
42	Premna tomentosa	Malaipoovarasu	ம்கை பூரைக
43	Prosopis cinerea	Vanni maram	வன்னி மறம்
44	Pterocarpus marsupium	Vengai	lacios
45	Pterospermum canescens	Vennangu, Tada	Government
46	Pterospermum xylocarpum	Polavu	Timel
<b>4</b> 7	Puthranjiva roxburghi	Karipala	&gluren
48	Salvadora persica	Ugaa Maram	व्यक्त पर्वे
49	Sapindus emarginatus	Manipungan,	மணிப்புங்கள்
		Soapukai	கோட்புக்காப்
50	Sатаси озоса	Asoca	<b>अ</b> वैद्यास्त्र
51	Streblus asper	Piray maram	பிராப் மரம்
52	Strychnos nuxvomic	Yetti	<b>មា</b> ក់
53	Strychnos potatorum	Therthang Kottai	Ogjagner Genien.
54	Syzygium cumini	Navai	5F000
55	Terminalia belleric	Thandri	<i>झ</i> बंही
56	Terminalia arjuna	Ven marudhn	வென் மருது
57	Toona ciliate	Sandhana vembu	சந்தன் வேப்பு
58	Thespesia populnea	Puvarasu	riente
59	Walsuratrifoliata	vaisura	வால்கரா
60	Wrightia tinctoria	Veppalai	Gentilitation:
61	Pithecellobium dulce	Kodukkapuli	GERGEENLIGH

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# Appendix -III

# Display Board

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

கரங்கங்களில் துவாரி செயல்பாடுகளுக்கான கற்றுச்துறல் அனுமதி கீழ்கள்ள. இபந்தனைகளுக்கு உட்பட்டு வழங்கப்பட்டுள்ளது கூடை, தேதியிடப்பட்டு, கற்றுச்துறல் அனுமதிதேதி வரை செல்லத்தக்கதாக உள்ளது.			
பகமை பகுதி வார்ச்சி	குவாரியில் எல்லையைச் சுற்றி வெளி அமைக்க வேண்டும்		
Carineri Géaner agrices Sille	கரங்கப்பாரையின் ஆழம் தணரமட்டத்திலி <u>கத்து பிட்டர்க்கு</u> மிகாமல் இருக்க வேண்டும்		
	காற்றில் மாக ஏற்படாதவாது கரங்க பளிகளை மேற்கொள்ள வேண்டும்.		
<b>⊛نسنو</b>	வாகளங்கள் செல்லுக் பாதையில் மாக ஏற்படாத அளவிற்கு தண்ணிறை முறையாக தண்ணி லாரிகளின் மூலமாக அவ்வப்போது தெளிக்க வேண்டும்.		
taparagidanian Gondonian taparania	இரைச்சல் அன்றையும் நூரி மாவமாட்டையும் குறைப்பதற்காக குவாரியின் எல்லையை		
adadiens:	கத்தி அடர்த்தியான பகைகை பகுதியை ஏற்படுத்த Contriguis.		
	குது நில்அதிர்வுகள் ஏற்படாதவாறும் மற்றும் கற்கள் பறக்காதவாறும் பாதுகாப்பு		
gu can i macamar e dedicurs Ore	intergraphen Commigns		
கரங்கத்தில் இருந்து ஏற்படும் இரைச்சல் அமை( 65 டேசிபல்ஸ் (شA) அளவிற்கு மேல் ஏற்படாதவாறு அகுத்த கட்டுப்பாடுகளை மேற் செலங்க வேண்டும்.			
வுள்ள சட்ட விறிகள் 1996ன் கிழ் வரங்கத்தில் உள்ள பாளியார்வதுக்கு தகுத்த பாதுகாப்பு வதலிகள் வழங்கவுதோடு கைநகழ்முன்ன வழிப்பாற வசதிகளை செய்து நர வேண்டும்.			
கிராமம் அல்லது பஞ்சாபத்து வழியாக வாகளங்கள் செல்லும் சாரையை தொடர்ந்து நண்கு பராமரிக்க வேண்டும்.			
ஷய்கட்டனினைல் அதலில் உள்ள	விவசைய் பளிகள் மற்றும் நிறிகளைள் பாடுக்கப்படக் கூடாது.		
<b>நிறிமைகள் பாதிக்கப்படக்கல் இருப்ப</b>	ng உறுத் செய்யும் commedici நிறந்து, நீரின் நகந்தினை தொடந்து extremedite ContaGib.		
வுண்டித்திலிருந்து கணிக பொருட்களை எடுத்துச் செல்வது விராம மக்களுக்கு எந்தத் சிரமத்தினையும் ஏற்படுத்தாதவாது பாதுகாப்போடும் மற்றும் கற்றுத்துல் பாதிக்கவாத வண்ணம் வாகணங்களை இயக்க வேண்டும்.			
கரங்கப்பளிகள் முடிக்கப்பட்டஷ்டன் கரங்க முடல் திட்டத்தில் உள்ளவாறு கரங்கத்தினை மூட வேண்டும்.			
வுள்ள நடவடிக்கைகளை முடித்தபின்னர் அன்கப் பகுதி மற்றும் அன்க நடவடிக்கைகளல் இடையூறு ஏற்படக்கடிய வேறு எந்தப் பகுதியையும் மறுகட்டுமானம் போய்து தாவுள்கள் விலங்குகள் ஆசியவற்றின் வளர்ச்சிக்கு ஏற்ற வகையில் பகையப்பதுதியை உருவாக்க வேண்டும்.			
முழுமையான நியந்தனைகளை அறிய பாநிவேஷ் (http://puriouth.nic.in) என்றே இணையதகைகளுப் பாந்கையிடவும் மேலும் எந்தவித எற்றுத்துல் சாந்த புவாந்தைக்கு சென்னையில் உள்ள எற்றுச்துமுல் மற்றும் வன அமைச்சகத்தின் ஒருங்கினைந்த வட்டார அதுவலகம்: 044 – 20222325 (அல்லது) தமிழ்நாடு மாக கட்டுப்பாடு வாநியத்தின் மாவட்ட சுற்றுச்துமல் பொறியானை அளுகவும்			

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