State Expert Appraisal Committee (SEAC)

Minutes of 412th meeting of the State Expert Appraisal Committee (SEAC) held on 04.10.2023 (Wednesday) at SEIAA Conference Hall, 2nd Floor, Panagal Maligai, Saidapet, Chennai 600 015 for consideration of Mining projects.

Confirmation of Earlier Minutes

The minutes of the 411th SEAC meeting held on 27.09.2023 were circulated to the Members in advance and as there are no remarks, the Committee decided to confirm the minute.

Agenda No: 412-01

(File No.10252/2023)

Proposed Rough Stone Quarry lease over an extent of 2.80.0 Ha (Government Poramboke land) in S.F.No. 136 (Part-1) of Venkatesapuram Village, Hosur Taluk, Krishnagiri District, Tamil Nadu by Thiru. S. Chinnanna – For Environmental Clearance. (SIA/TN/MIN/437327/2023 dt. 19.07.2023)

The proposal was placed in the 412th meeting of SEAC held on 04.10.2023. 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. S. Chinnanna has applied for Environmental Clearance for the Proposed Rough Stone Quarry lease over an extent of 2.80.0 Ha (Government Poramboke land) in S.F.No. 136 (Part-1) of Venkatesapuram Village, Hosur 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.

During the meeting, the EIA Coordinator stated that PP would like to withdraw the proposal as it was wrongly applied for obtaining the prior EC under B2 category instead of applying for ToR application under B1 category. Hence, the SEAC decided that SEIAA may accordingly decide on the application to withdraw the current application as and when received from the PP.

MEMBER SECRETARY

CHAIRMAN SEAC- TN

Agenda No: 412-02

(File No.10259/2023)

Existing Grey Granite Quarry lease over an extent of 2.16.0 Ha (Government Poramboke land) in S.F.Nos. 356/1B1, 356/2, 356/3B & 360/2 of Chendarapalli Village, Bargur Taluk, Krishnagiri District, Tamil Nadu by Thiru. D. Loganathan – For Environmental Clearance. (SIA/TN/MIN/437872/2023 dt. 24.07.2023)

The proposal was placed in the 412th meeting of SEAC held on 04.10.2023. 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. D. Loganathan has applied for Environmental Clearance for the Existing Grey Granite Quarry lease over an extent of 2.16.0 Ha (Government Poramboke land) in S.F.Nos. 356/181, 356/2, 356/38 & 360/2 of Chendarapalli Village, Bargur Taluk, Krishnagiri District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. Earlier, EC was accorded to the proponent vide Lr. No.SEIAA-TN/F.No.2519/EC/ 1(a)/2638/2015 dated: 05.01.2016 for the quantity of 1375 cu.m of Grey Granite upto a depth of 8m.
- 4. EC Amendment issued vide Lr. No.SEIAA-TN/F.No.2519/2013 dated: 30.04.2021
- 5. CCR obtained from IRO, MoEF&CC vide EP/12.1/2023-24/SEIAA/21/TN/732 Dt:15.06.2023.
- 6. Earlier, the PP has applied for Extension of EC vide File No. 2519/2014. The proposal was placed in the 389th SEAC Meeting held on 06.07.2023. The PP has requested the SEAC to grant permission for the withdrawal of the proposal, as the project is not eligible to obtain the extension of Environmental Clearance granted earlier. Hence the Committee decided that SEIAA may consider withdrawal request as and when received.

The proposal was placed in the 639th Authority meeting held on 18.07.2023. The Authority after detailed discussion decided that the withdrawal request by PP is accepted by the Authority.

• From the details & documents submitted by the project proponent, the

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following were ascertained:

Description	As per Earlier EC dated.05.01.2016	Parameters Achieved
Quantity	ROM – 6,875 m³ 1,375 m³ of Grey Granite (Anticipated recovery 20%)	ROM – 77,427 m³ 5,871 m³ of Grey Granite (Achieved recovery 20%)
Depth	8m	21m

From the above, it is found that the proponent has exceeded the quantity and depth approved in the earlier EC dated.05.01.2016.

As per MoEF & CC Notification S.O. 8O4 (E) dated 14.03.2017,

""In case the project or activities requiring prior Environmental Clearance under EIA Notification 2006 from the concerned Regulatory Authority are brought for Environmental Clearance after starting the construction work, or have undertaken expansion, modernization and change in product-mix without prior EC, these projects shall be treated as cases of violations and in such cases, even Category B projects which are granted Environmental Clearance by the SEIAA constituted under sub-section(3) section 3 of the Environment (Protection) Act 1986 shall be appraised for grant of Environmental Clearance only by the concerned Expert Appraisal Committee and Environmental Clearance will be granted accordingly".

In the present case, the proponent has exceeded/expanded the production capacity beyond the limit specified in the prior EC issued and has therefore violated the provisions of EC dated.05.01.2016.

Therefore, in view of the above & based on the presentation and documents furnished by the project proponent, SEAC decided to grant of Terms of Reference (TOR) under Violation category, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and ToR given in Annexure-I, the EIA/EMP report along with assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter by the accredited consultants. Terms of Reference issued are subject to the outcome of the final orders of the Hon'ble High Court of Madras in the matter of W.P.(MD) No. 11757 of 2021.

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- 1. The PP shall furnish an Independent Chapter 13 as per the MoEF & CC Violation Notification S.O. 804 (E), dated. 14.03.2017 for the project in case of assessment of Ecological damage, remediation plan and natural & community resource augmentation plan to be prepared as an independent chapter in the Environment Impact assessment report by the Accredited consultant and also with collection and analysis of data for assessment of ecological damage, preparation of remediation plan and natural & community resource augmentation plan to be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1996, accredited by NABET or a Laboratory of council of Scientific and industrial research institutions working in the field of environment...
- As a part of procedural formalities as per the MoEF & CC Violation Notification
 5.O. 804 (E), dated. 14.03.2017, the action will be initiated by the competent authority under section 15 read with section 19 of the Environment (Protection)
 Act, 1986 against violation.
- 3. The PP shall obtain a letter to AD (Mines) regarding the quantity of mineral exceeding the permitted quantity as stipulated in the approved mining plan for the previous scheme of mining (2012-2017) and also the PP has carried out illegal mining to a depth of 21m against the approved mining plan depth 8m indicating whether any penalty (or) compensation levied, if any, for illegal mining carried out by the PP in strict compliance of judgement of Hon'ble Supreme Court dated.

 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause Versus Union of India and Ors.
- 4. The PP shall obtain wetland conversion certificate for the Survey No. 360/2 from the District Collector, Krishnagiri for continuing quarrying activity.
- 5. The PP shall enumerate the structures and schools located at a distance of 50m, 100m, 150m, 200m, 250m & 300m around the quarry site.
- 6. The project proponent shall submit the No Objection certificate (NOC) in compliance of the orders of the Hon'ble Supreme court to approach State Mines and Geology Department for certification regarding payment of 100% cost of illegally mined minerals to the State Government in terms of the Section 21(5) of the MMDR Act, 1957.

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Agenda No: 412 - 03

(File No:10191/2023)

Existing Multi colour Granite quarry lease over an extent of 1.62 .0 Ha in S.F.Nos. 584/2A, 584/5, 584/6 and 584/12, Veerapatti Village, Iluppur Taluk, Pudukkottai District, Tamil Nadu by Thiru.V.Aasimuddeen - For Environmental Clearance. (SIA/TN/MIN/429864/2023 Dt.20.05.2023)

The proposal was placed for appraisal in 412th meeting of SEAC held on 04.10.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

- 1. Earlier, the PP has obtained precise are communication vide Lr. Letter No. Roc. 1647/2015(G&M), Dated 25.01.2016.
- The Mining plan approved for the period 2017 to 2022 vide Letter No. R.C. No. 640/MM2/2016, Dated 28.10.2016 for production should not exceed 17425 m3 of ROM, 6975m3 of Multi colour Granite (Recovery 40 %) and the depth of mining upto 8m BGL.
- 3. Qurry Lease granted for the period of 20 Years vide G.O. (3D) No.5 Industries (MME.2)
- 4. Department, Dated 24.07.2017 (Lease period 20.09.2017 to 19.09.2037).
- 5. Earlier, the PP has obtained EC from DEIAA vide Lr. No. DEIAA-PDK-II-21/F.No.1260/1(C)/Ec.No. 35/2017, Dated:30.06.2017 (EC Valid up to 29.06.2022) for production of 6975m3 of Multi colour Granite for a period of 5 Years and upto depth of 8m under B2 category(<25 Ha).
- MoEF&CC OM Dt: 28.04.2023
- 7. Now, the project proponent, Thiru.V.Aasimuddeen has applied for reappraisal of Environmental Clearance for the existing Multi colour Granite quarry lease over an extent of 1.62 .0 Ha in S.F.Nos. 584/2A, 584/5, 584/6 and 584/12, Veerapatti Village, Iluppur Taluk, Pudukkottai District, Tamil Nadu.
- 8. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
- 9. The 1st Scheme of Mining plan (2022-23 to 2026-27) vide Rc. No. 4026/MM2/2022, Dated 14.10.2022 for the production should not exceed 30612

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m3 of ROM, 12245 m3 of Multi Colour Granite (Recovery 40 %) & 18,367 m3 of Granite Waste (Reject 60%)]. The annual peak production is 6240 m3 of ROM (2nd Year), 2496m3Multi Colour Granite (Recovery 10%) & 3744m3 of Granite Waste (Reject 60%)]. The depth of mining upto 28m BGL.

10. The PP has obtained CCR from IRO (SZ), MoEF&CC vide EP/12.1/2022-2023/SEIAA/88/TN/1121 Dt:03.10.2023.

SI. No	Salient	Salient Features of the Proposal					
1.	Name of the Owner/Firm	;	Thiru.V.Aasimuddeen, S/o. Vajhuddin, No. 5/FF2, 2nd Floor, Cresent Park, Sulaiman Hazrat Street, Khajanagar, Trichy District, Tamil Nadu – 620 020				
2.	Type of quarrying	:	Multi Colour	Granite			
3.	S.F Nos. of the quarry site with area break-up	:	584/2A, 584/5, 584/6 and 584/12,				
4.	Village in which situated	:	Veerapatti				
5.	Taluk in which situated	:	lluppur				
6.	District in which situated	:	Pudukkottai				
7.	Extent of quarry (in ha.)	:	1.62.0 Ha				
8.	Latitude & Longitude of all corners of the quarry site	:	10°28'03.35" N to 10°28'11.35"N 78o39'01.10"E to 78o39'04.74"E				
9.	Topo Sheet No.	:	58-J/11				
10.	Type of mining	:	Open Cast Se	mi Mechanize	ed of Mining		
	Life of Project	:	20 Years				
11.	Lease Period		20 Years				
	Mining Plan Period	:	5 Years				
	Mining Plan Details	:	As per appro				
12.	Geological Resources m³ (RoM)	;	ROM in m³	MultiColo ur Granite Recovery	MultiColou r Granite Reject		

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			T	1	-	
				(40%) in	(60%) in	
				m³	m³	
			4,10,875m³	164350m ³	246525m³	
				MultiColo	MultiColou	
			ROM	ur Granite	r Granite	
	Mineable Resources m ³	;	in m³	Recovery	Reject	
	(RoM)	•	"" ""	(40%) in	(60%) in	
				m³	m³	
			96,197 m³	38479m³	57718m³	
				MultiColo	MultiColou	
			ROM	ur Granite	r Granite	
	Annual Peak Production in	:	in m³	Recovery	Reject	
	m3	•		(40%) in	(60%) in	
				m³	m³	
			6240m³	2,496m³	37440m³	
	Maximum Depth in meters	:	28m			
13.	Depth of water table	;	54m			
14.	Man Power requirement per		35 Nos			
	day:	•	33 1403			
	Water requirement:		2.0 KLD			
	Drinking water&					
15.	domestic	:	0.5 KLD			
	2. Dust suppression		0.8 KLD			
	3. Green belt		0.7 KLD			
16.						
	Power requirement					
	Precise area communication		Letter No. Ro	oc. 1647/2015	(G&M),	
17.	approved by Distirict	:				
	Collector.		Dated 25.01.2	2016.		
18.	Mining Plan approved by		Letter No R	C. No. 640/M	IM2/2016	
16.	Comissioner, Department of	:	Dated 28.10.2	-		
	G&M.					
19.	500m Cluster Letter by		Rc.No.329/20	022 (G&M) d	t .	
17.	Assistant Director,		Rc.No.329/2022 (G&M) dt: 09.12.2022.			
	Department of G&M.					
20.	VAO Certificate Regarding					
20.	Structures within 300m		Letter Furnished.			
	Radius				۸	

21.	Project Cost (excluding EMP cost)	:	Rs.80.75Lakhs			
			As per approved mining plan			
22.	EC Recommendation	;	Max Total RoM in m³	ROM in m ³ 30612 m3	MultiC olour Granit e Recov ery (40%) in m³	Multi Colo ur Grani te Rejec t (60%) in m³ 18,36 7 m3
		:	Annual Max RoM in m ³ Max Depth	6240m	2,496 m³	3744 Om³
		in mtrs 28 1		m		
23.	EMP cost (in Rs. Lakh).	:	Capital Cost - Rs29.45 Lakhs Recurring Cost - Rs.11.51 Lakhs @ 5% inflation for every Year till life of the mine.			
24.	CER cost (in Rs. Lakh).	:	Rs.7 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 not exceeding 6240 m³ of ROM, and the ultimate depth of mining upto 28m 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:

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

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- 2. The proponent shall submit the SOP for the safe operation of Diamond Wire saw cutting in the extraction of granite at the time of lease execution.
- 3. The PP shall provide the welfare amenities for the persons employed in the mine against the noise and dust produced during the extraction of granite blocks.
- 4. 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.
- 5. As accepted by the Project Proponent the CER cost of Rs.7 lakhs and the amount shall be spent for the Panchayat Union Primary School, Kadamparayanpatti Village including towards the construction of an open-air auditorium for a value of Rs. 4 Lakhs before obtaining CTO from TNPCB.

Agenda No: 412 - 04.

(File No:10215/2023)

Proposed Rough stone quarry lease over an extent of 2.65.0Ha (Patta Land) in S.F.No: 309/1, 309/2, 309/8 & 309/14A(Part), Naranamangalam Village, Alathur Taluk, Perambalur District, Tamil Nadu by Mr.S.Nandakumar - For Environmental Clearance. (SIA/TN/MIN/436410/2023 Dt.12.07.2023)

The proposal was placed for appraisal in 412th meeting of SEAC held on 04.10.2023. 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, Mr.S.Nandakumar has applied for Environmental Clearance for the proposed eRough stone quarry lease over an extent of 2.65.0Ha in S.F.No:309/1, 309/2, 309/8 & 309/14A(Part), Naranamangalam Village, Alathur Taluk, Perambalur District, Tamil Nadu.
- 2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
- 3. The precise area communication was issued for the period of 10 years. The approved mining plan is for the period of 1st five years & product of should not

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exceed 414460m³ of Rough Stone & 41948m³ of Gravel & 59460m³ of Weathered Rock. The annual peak production is 90745m³ of Rough Stone (1st Year) & 41948m³ of Gravel (1st Year) & 59460m³ of Weathered Rock (1st Year). The depth of miningupto 45m BGL.

Based on the presentation and documents furnished by the project proponent, SEAC decided to defer this proposal seeking additional particulars as follows.

- 1. The PP shall submit NOC obtained from the DFO in regard to existence of any Reserve Forest (i.e., Naranamangalam) along with recommendation for conservation measures.
- 2. The PP shall submit a letter of NOC obtained from the competent persons of the National Highway Authority for carrying the quarrying activities involving the blasting operation as the distance between the NH and the proposed mining area is within 500m (i.e., Blasting Danger Zone as per the DGMS Circulars).
- 3. The PP shall complete land registration for all the survey nos. of the proposed mining area.

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: 412- 05

(File No: 10227 /2023)

Proposed Rough stone & Gravel quarry lease over an extent of 4.08.32Ha (Patta Land) in S.F. No:374/1A & 374/1B, Sindalakattai Village, Ottapidaram Taluk, Thoothukudi District, Tamil Nadu by Thiru.S.Pandi - For Environmental Clearance. (SIA/TN/MIN/435997/2023 Dt.17.07.2023)

The proposal was placed for appraisal in 412th meeting of SEAC held on 04.10.2023. 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.Pandi has applied for Environmental Clearance for the Rough stone & gravel quarry lease over an extent of 4.08.32Ha in S.F.No:374/1A & 374/1B, Sindalakattai Village, Ottapidaram Taluk Thoothukudi

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District, Tamil Nadu.

- 2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
- 3. The precise area communication was issued for the period of 5 Years. The approved mining plan is for the period of 1st five years & production should not exceed 9,48,540m³ of Rough Stone, 1,46,160m³ of Gravel & 37,701m³ of Topsoil. The annual peak production is 191080m3 of Rough Stone (5th Year) & 52896m³ of Gravel (1st Year). The depth of mining upto 50m BGL.

SI. No	Salient Features of the Proposal					
1.	Name of the Owner/Firm	:	Thiru.S.Pandi, S/o.Sannasi D.No.5/51, Mela Arasadi, Keela Velyayuthapuram, Ottapidaram Taluk, Thoothukudi District-628002.			
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limesto ne)	:	Rough stone & Gravel			
3.	S.F Nos. of the quarry site with area break-up	:	374/1A & 374/1B			
4.	Village in which situated	:	Sindalakattai			
5.	Taluk in which situated	:	Ottapidaram			
6.	District in which situated	:	Thoothukudi			
7.	Extent of quarry (in ha.)	;	4.08.32Ha			
8.	Latitude & Longitude of all corners of the quarry site	:	08°53'39.20"N to 08°53'43.70"N 78°04'15.46"E to 78°04'23.80"E			
9.	Topo Sheet No.	:	58 L/1			
10.	Type of mining	:	Open Cast Semi-Mechanized of Mining			
	Life of Project	:	5 Year			
11.	Lease Period		5 Year			
	Mining Plan Period	;	5 Year			
12.	Mining Plan Details	:	As per approved Mining Plan			

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	Geological Resources m ³ (RoM)	:	Rough Stone in m ³	Gravel in m³	Topsoi I in m³
	(KOIVI)		1969920m³	175104m	43776 m³
	Mineable Resources m³	:	Rough Stone in m ³	Gravel in m ³	Topsoi I in m³
	(RoM)		948540m³	146160 m³	37,701 m³
	Annual Peak Production in m3		Rough Stone in m ³	Gravel in m³	Topsoi I in m³
	ms		191080m³	52896m³	13983 m³
	Maximum Depth in meters	:	50m		
13.	Depth of water table	:	65m		
14.	Man Power requirement per day:	:	20 Nos		
15.	Water requirement: 4. Drinking water 5. Utilized water 6. Dust suppression 7. Green belt	:	10.0 KLD 2.0 KLD 6.0 KLD 2.0 KLD		
16.	Power requirement		TNEB	<u></u> -	
17.	Precise area communication approved by the District Collector	:	Na.Ka.No.G.M.1/8 27.04.2023	71/2021, dt:	
18.	Mining Plan approved by Assistant Geologist / Assistant Director (i/c), Department of G&M.	:	Rc.No.G.M.1/871/2021, dt: 23.05.2023		
19.	Department of G&M, Assistant Geologist / Assistant Director (i/c) 500m Cluster Letter		Rc.No.G.M.1/871/2021, dt: 22.06.2023		

20.	VAO Certificate Regarding Structures within 300m Radius		Letter Dt: 18.05.202	23	
21.	Project Cost (excluding EMP cost)	:	Rs.286.68Lakhs		
			As per approv	ed mining	plan
	22. EC Recommendation	;		Rough Stone	Gravel
22.		:	Max Total RoM	948540	146160
			in m³	m³	m³
			Annual Max RoM	191080	52896
		:	in m³	m³	m³
			Max Depth in	50 m	
			mtrs	ou m	
			Capital Cost - Rs. 28	8.35 La khs	
23.	EMP cost (in Rs. Lakh).	:	Recurring Cost - Rs.		_
	Erri Cost (III Rs. Euriy.	•	inflation for every Year till life of the		of the
			mine.		
24.	CER cost (in Rs. Lakh).	<u> </u> :	Rs.6.0 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 shall not exceed 191080m³ of Rough Stone & 52896 m³ of Gravel by restricting the ultimate depth of mining upto 50m BGL and for the period five Years subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- The prior Environmental Clearance granted for this mining project shall be valid
 for the project life including production value as laid down in the mining plan
 approved and renewed by competent authority, from time to time, subject to a
 maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O,
 1807(E) dated 12.04.2022.
- 2. The PP shall furnish the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting Aexcavation,

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- transportation and green belt development, to the concerned AD (Mines) at the time of lease execution.
- 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. The PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 3 years of operation whichever is earlier, by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation. If applicable.
- 5. The PP shall carry out the scientific studies within a period of one year from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air-vibrations and eliminating the fly rock from the blasting operations carried out in the quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 6. However, as a part of monitoring the implementation of eco-friendly blasting operation, the PP shall 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 and 1000 m and the fly rock level produced through capturing a video image once in six months, by involving any of the

reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT (ISM) - Dhanbad, and Anna University Chennai-CEG Campus, etc. 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.

- 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.
- 8. As accepted by the Project Proponent the CER cost of **Rs.6** lakhs and the amount shall be spent for the Government Panchayat Union Primary School, A.Velayathapuram Village before obtaining CTO from TNPCB.

Agenda No: 412- 06.

(File No: 10246 /2023)

Proposed Black Granite quarry lease over an extent of 1.64.0Ha (Govt. tender cum auction quarry) in S.F. No: 309(Part), Guttur Village, Bargur Taluk, Krishnagiri District, Tamil Nadu by Thiru. D. Mathiazhagan – For Environmental Clearance. (SIA/TN/MIN/436900/2023 Dt. 16.07.2023)

The proposal was placed for appraisal in 412th meeting of SEAC held on 04.10.2023. 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. D. Mathiazhagan has applied for Environmental Clearance for the Proposed Black Granite quarry lease over an extent of 1.64.0Ha in S.F.No:309(Part) Guttur Village, Bargur Taluk, Krishnagiri District, Tamil Nadu.
- 2. The project/activity is covered under category 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
- 3. The Mining Lease was issued for the period of 20 Years. The approved current scheme mining plan for the period of 5 Years & production should not exceed 27150m³ of ROM, 2715m³ of Black Granite (Recovery 10 %) / & / 24435m³ of Granite Waste (Reject 90%)]. The annual peak production is 5700m³ of ROM (5th

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yr) of 570m3 Black Granite (Recovery 10%) & 5130m3 (5th Yr) of Granite Waste (Reject 90%)]. The depth of mining upto13.0m BGL.

Based on the presentation and documents furnished by the project proponent, SEAC noted that the Krishnagiri District Gazette Notification vide Rc.No.90/2017/Mines, dt: 09.10.2020 invited tender application for the survey nos. of the Guttur Village, Bargur Taluk, Krishnagiri District, Tamil Nadu.

In view of the above, SEAC observed that the cluster area for the proposed mining area is 6.88 ha which attracts EIA with EMP with public hearing as per EIA notification, 2006 as amended. Hence, SEAC decided that the PP shall apply for Terms of Reference (ToR) for this project and the PP shall submit request for withdraw of this application seeking EC through online.

Agenda No: 412- 07

(File No: 10253/2023)

Proposed Ordinary Earth quarry lease over an extent of 4.65.0Ha (Patta Land) in S.F. No:427/5, 427/6, 427/8, 427/9, 427/11, 427/12, 427/13, 428/4, 428/6, 428/7 & 428/10, Pottipuram Village, Uthamapalayam Taluk, Theni District, Tamil Nadu by Thiru.P.Vinnarasu, - For Environmental Clearance. (SIA/TN/MIN/437643/2023) Dt.22.07.2023)

The proposal was placed for appraisal in 412th meeting of SEAC held on 04.10.2023. The details of the project furnished by the proponent are given in the website The SEAC noted the following: (parivesh.nic.in).

- 1. The project proponent, Thiru. P. Vinnarasu has applied for Environmental Clearance for the proposed Ordinary Earth quarry lease over an extent of 4.65.0Ha in S.F.No:427/5, 427/6, 427/8, 427/9, 427/11, 427/12, 427/13, 428/4, 428/6, 428/7 & 428/10, Pottipuram Village, Uthamapalayam Taluk, Theni District, Tamil Nadu.
- 2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
- 3. The precise area communication was issued for the period of 2 years. The approved mining plan is for the period of 2 Years & production should not exceed

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m³ of 33678m³ of Ordinary Earth. The depth of mining upto 1m BGL.

- 4. DFO letter vide Rc.No. 11185/2018/ Dt:05.09.2019.
- 5. AD letter vide Rc.No.340/Mines/2018, dt: 24.03.2023 for expression of Earth to Ordinary Earth as per G.O. Ms. No. 244 Dt: 14.12.2022.
- 6. AD letter vide Rc.No.340/Mines/2018, dt: 09.02.2023 regarding distance of rivers, streams, canal etc.
- Soil Test Report vide Job No. SM&FE2041p/Soil Test/Pottipuram Village/ 2023 Dt:05.07.2023 from Division of Soil Mechanics & Foundation Engineering, Dept. Of Civil Engineering, Collge of Engineering Guindy Campus, Anna University, Chennai - 600025.
- 8. The PP during presentation informed that since the lease area is in 2 blocks, non contiguous & the land consent of survey no 427/8 of Block I could not be registered, request the Honorable committee to issue Environmental Clearance for producing 12,512 m3 of ordinary earth over an area of 1.725 ha for 1m depth over a period of 2 years in Block II only.

	1.	(F	
St. No	Sallent Fe		res of the Proposal
1.	Name of the Owner/Firm	•	Thiru.P.Vinnarasu, S/o.Panneerselvam, No.23A, Kallar Palli Street, Pannaipuram Uthamapalayam Taluk, Theni District-625524
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Ordinary Earth
3.	S.F Nos. of the quarry site with area break-up	:	427/5, 427/6, 427/8, 427/9, 427/11, 427/12, 427/13, 428/4, 428/6, 428/7 & 428/10
4.	Village in which situated	:	Pottipuram
5.	Taluk in which situated	:	Uthamapalayam
6.	District in which situated	:	Theni
7.	Extent of quarry (in ha.)	:	4.65.0Ha

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	1 :	09°55'29.36"N to 09°55'39.68"N
corners of the quarry site		77°17'48.76"E to 77°17'59.89"E
Topo Sheet No.	:	58-G/05
Type of mining	:	Opencast Semi-Mechanized mining
Life of Project	:	2 Year
Lease Period		2 Year
Mining Plan Period	:	2 Year
Mining Plan Details	:	As per approved Mining Plan
Geological Resources m ³		Ordinary Earth in m ³
(RoM)	١.	232500m³
Minophlo Descurses m3 (DoM)		Ordinary Earth
Willieable Resources III ^a (ROWI)	:	33678m³
A		Ordinary Earth
Annual Feak Froduction in 1113		16839m³
Maximum Depth in meters	:	1m BGL
Depth of water table	:	14m to 16m
Man Power requirement per day:	:	18 Nos
Power requirement		TNEB
Precise area communication approved by the District Collector	•	Na.Ka.No.340/Kanimam/2018, dt: 19.06.2019
Mining Plan approved by Assistant Geologist / Assistant Director (i/c) Department of G&M.	••	Rc.No.340/Mines/2018, dt: 05.07.2019
Department of G&M, Assistant Director 500m Cluster Letter		Rc.No.340/Mines/2018, dt: 13.07.2022
VAO Certificate Regarding Structures within 300m Radius		Dt: 02.07.2022
Project Cost (excluding EMP cost)	;	Rs.33.32 Lakhs
F.C.D		As per approved mining plan
EC Recommendation		The PP requested EC for Block 2 - 1.725ha only for the SF. No. 428/4, 428/6, 428/7 & 427/13 of Pottipuram
	Life of Project Lease Period Mining Plan Period Mining Plan Details Geological Resources m³ (RoM) Mineable Resources m³ (RoM) Annual Peak Production in m3 Maximum Depth in meters Depth of water table Man Power requirement per day: Power requirement Precise area communication approved by the District Collector Mining Plan approved by Assistant Geologist / Assistant Director (i/c) Department of G&M. Department of G&M, Assistant Director 500m Cluster Letter VAO Certificate Regarding Structures within 300m Radius Project Cost (excluding EMP cost)	Type of mining Life of Project Lease Period Mining Plan Period Mining Plan Details Geological Resources m³ (RoM) Mineable Resources m³ (RoM) Annual Peak Production in m3 Maximum Depth in meters Depth of water table Man Power requirement per day: Power requirement Precise area communication approved by the District Collector Mining Plan approved by Assistant Director (i/c) Department of G&M. Department of G&M, Assistant Director 500m Cluster Letter VAO Certificate Regarding Structures within 300m Radius Project Cost (excluding EMP cost)

			District. Since, the area is non conti	layam Taluk, Thenie proposed mining iguous & the land no 427/8 of Block – stered.	
			Ordinary Eart		
		:	Max Total RoM in m³	12512 m³	
		:	Annual Max RoM in m ³	6256 m³	
		:	Max Depth in mtrs	ī m	
22.	EMP cost (in Rs. Lakh).	:	Capital Cost - Rs. 13 Recurring Cost - Rs.		
23.	CER cost (in Rs. Lakh).] :	Rs.1.5 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 Block 2 (1.725 ha) alone & for the SF. No. 428/4, 428/6, 428/7 & 427/13 of Pottipuram Village, Uthamapalayam Taluk, Theni District and the annual peak production shall not exceed 6256 m³ of Ordinary Earth by restricting the ultimate depth of mining up to 1m BGL and for the period 2 Years subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions, in addition to the standard conditions & normal conditions stipulated by MOEF &CC:

- 1. The PP shall furnish an affidavit stating that the mineral produced from the quarry is used only for the Brick chamber owned by him, at the time of lease of execution.
- 2. The PP shall not carry out the drilling and blasting activities in the quarry.
- The proponent shall carryout plantation of 500 Nos. of tall saplings of native species within the proposed mining area as committed before obtaining CTO from TNPCB.
- 4. As accepted by the Project proponent the CER cost is Rs.1.5 Lakhs and the amount shall be spent for the Govt. Middle School, T. Pudukottai as committed, before obtaining CTO from TNPCB.

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Agenda No:412-08

(File No: 10233/2023)

Proposed Multi Colour Granite Quarry over an extent of 4.31.0Ha at S.F.Nos.108/1, 108/2, 108/3, 108/4, 108/5, 108/6, 108/7, 108/8, 108/9, 108/10, 108/11, 108/12, 108/13, 108/14, 108/15, 108/16, 108/17 and 614/1 of Pandiyampalayam Village, Perundurai Taluk, Erode District, Tamil Nadu by Thiru.P.Velmani -For Environmental Clearance. (SIA/TN/MIN/431141/2023, Dated:27.05.2023).

The proposal was placed in the 412nd Meeting of SEAC held on 04.10.2023. 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.P.Velmani has applied for Environmental Clearance for the Proposed Multi Colour Granite Quarry over an extent of 4.31.0Ha at S.F.Nos.108/1, 108/2, 108/3, 108/4, 108/5, 108/6, 108/7, 108/8, 108/9, 108/10, 108/11, 108/12, 108/13, 108/14, 108/15, 108/16, 108/17 and 614/1 of Pandiyampalayam Village, Perundurai Taluk, Erode District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. The quarry lease was granted for a period of Twenty years. The quarry lease deed was executed on 16.11.2018 and the lease period is valid upto 15.11.2038.
- 4. Earlier, the project proponent has obtained EC from DEIAA vide Lr.No.DEIAA-ERD/F.No.32213/2017/EC.No.13/2018 dated: 03.10.2018 for the period of 5 years with respect to lease period.
- 5. The mining plan is for the period of Five years (2023 to 2028) & production should not exceed 59,570 m³ of ROM & 17,871 m³ of Recovery@30% with ultimate depth of mining 28.5m.

Based on the presentation and document furnished by the proponent, SEAC noted that the applied lease area falls under cluster mining since the total area of other existing quarries within 500m radius is more than 5 Ha. Hence the Committee directed the Proponent to withdraw this online application and PP shall apply a fresh application for obtaining Terms of Reference along with revised 500m cluster certificate indicating

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the status of other quarries (existing/abandoned/expired/proposed/instant) located in the cluster zone.

On receipt of the new online application the subject may be placed before the SEAC for appraisal.

Agenda No: 412-09

(File No: 10254/2023)

Proposed Rough Stone and Gravel Quarry over an extent of 2.90.0 Ha at S.F.Nos.750/1(P), 752/1 & 752/2 of Ayyanaruthu Village, Kayathar Taluk, Thoothukudi District, Tamil Nadu by Thiru.Karuppasamy -For Environmental Clearance. (SIA/TN/MIN/437012/2023, Dated:21.07.2023).

The proposal was placed in the 412nd Meeting of SEAC held on 04.10.2023. 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.Karuppasamy has applied for Environmental Clearance for the Proposed Rough Stone and Gravel Quarry over an extent of 2.90.0 Ha at S.F.Nos.750/1(P), 752/1 & 752/2 of Ayyanaruthu Village, Kayathar Taluk, Thoothukudi 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 457050 m³ of Rough Stone & 47270 m³ of Gravel with ultimate depth of mining 47m BGL.
- 4. It is observed that the windmill structures are located at a distance of 56m (E), 74m (S) and 119m (NE) with reference to the quarry lease boundary.
- 5. The PP vide letter dated:21.09.2023 has requested the following "...Due to the typographical error, the latitude proposed site in the uploaded documents i.e., Checklist, Form 1M, Form 1, PFR & Approved Mining Plan were given wrongly. In this regard I kindly apologize for the above said mistakes and herewith furnishing the original co-ordinates of the proposed site as follows:

Latitude 08°55'56.65"N to 08°56'02.32"N

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Longitude	77°44'33.52"E to 77°44'40.02"E

Further, the windmills located within 200m radius from the proposed quarry site
has been dismantled and certificate in this regard has been obtained from
Tahsildar dated:21.09.2023.

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

 The Project Proponent shall furnish the Modified Mining Plan approved by the competent authority, incorporating the legitimate co-ordinates of the proposed site as approved by the competent authority.

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: 412 - 10

(File No: 10255/2023)

Proposed Gravel quarry lease over an extent of 2.47.0 Ha at S.F.Nos. 85/4 and 85/5A of Malaikandan village, Karaikudi Taluk, Sivagangai Disrict, Tamil Nadu by Thiru. R.Suresh Kumar - For Environment Clearance. (SIA/TN/MIN/437583/2023 dt: 22/07/2023)

The proposal was placed in this 412th meeting of SEAC held on 29.09.2023. The Project Proponent made a detailed power point presentation on 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 among other things:

- The Project Proponent, Thiru. R. Suresh Kumar has applied seeking Environment Clearance for the proposed Gravel quarry lease over an extent of 2.47.0 Ha at S.F.Nos. 85/4 and 85/5A of Malaikandan Village, Karaikudi Taluk, Sivagangai 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.
- 3. In the Soil test report dated 12.01.2023 the soil sample is classified as poorly graded

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Gravel.

4. Project activity does not involve blasting or drilling operations.

	10255			B2	
File No	SIA/TN/MIN/437583/2023 dt: 22/07/2023)		Category	1(a)	
SI. No	Salient F	eat	tures of the Proposal		
1.	Name of the Owner/Firm	:	Thiru.R. Suresh Kum S/o. Raja, No.1305, Patterkanr Kalayarkovil, Sivagangai District		
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Gravel		
3.	S.F Nos. of the quarry site with area break-up	:	S.F.Nos. 85/4 and 85/5A		
4.	Village in which situated	:	Malaikandan		
5.	Taluk in which situated	:	Karaikudi		
6.	District in which situated	:	Sivagangai		
7.	Extent of quarry (in ha.)	:	2.47.0 Ha		
8.	Latitude & Longitude of all corners of the quarry site	:	09°55'08.44"N to 09 78°40'00.09"E to 78		
9.	Topo Sheet No.	:	58K/09		
10.	Type of mining	:	Opencast semi mec mining.	hanized method of	
	Life of Project	:	2 years		
11.	Lease Period		2 years		
	Mining Plan Period	;	2 years		
	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC	
12.	Geological Resources in m ³ (RoM)	:	Gravel – 49400 m³	-	
	Minable Resources in m³ (RoM)	:	Gravel – 37966 m³	-	
			1		

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	Annual Peak Production in m ³	:	Gravel - 18983 m³	-	
	Maximum Depth in m	<u> </u> :	2m BGL	-	
13.	Depth of water table	:	35m BGL		
14.	Man Power requirement per day:	:	7 Nos.		
15.	Water requirement: a. Drinking & Utilized water b. Dust suppression& Green Belt	:	1.5 kLD 0.5 kLD 0.5 kLD & 0.5 kLD		
16.	Power requirement		TNEB & 6330 litres of be utilized	of HSD (DG set) will	
17.	Precise area communication approved by, Dept. of Geology & Mining	:	Rc.No.465/Mines/2021, Dt:22.02.2023.		
18.	Mining Plan approved by Dept. of Geology & Mining	:	Rc.No.465/Mines/2021, Dt:24.03.2023.		
19.	500m Cluster Letter issued by Dept. of Geology & Mining		Rc.No.465/Mines/2021, Dt:28.03.2023.		
20.	VAO Certificate regarding Structures within 300m Radius		Letter dated: 24.04.2023.		
21.	Project Cost (including EMP cost)	:	Rs. 15.27 Lakh		
		:	Validity	30 years subject to the following upper limits. Gravel	
22.	EC Recommendation	:	Max Total RoM in m ³	37966	
		:	Annual Max RoM in m³	18983	
		:	Max Depth in m	2 m	
23.	EMP cost (in Rs. Lakh).	:	Capital Cost- Rs.8.00 Recurring cost-Rs.5. period		

24. CER cost (in Rs. Lakh).	:	Rs. 1,50,000/-
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Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 18983 m³ of Gravel by maintaining the ultimate depth of mining of 2m BGL for a period of 2 years only 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 furnish an affidavit stating that the mining of gravel from the quarry is used only for own purposes, at the time of lease of execution.
- 3. The PP shall not carry out the drilling and blasting activities in the quarry.
- 4. The PP shall install a Bio-toilet for the persons employed in the quarry before obtaining the CTO from the TNPCB.
- As accepted by the Project Proponent the CER cost of Rs. 1,50,000/- and the amount shall be spent for the committed activities at Village Government School before obtaining CTO from TNPCB.

Agenda No: 412 - 11

(File No: 10262/2023)

Proposed Ordinary Earth quarry (PWD Tank) lease over an extent of 3.15.0 Ha at S.F.Nos. 450A(Part) of Alapakkam Village, Uthukottai Taluk, Thiruvallur District, Tamil Nadu by Thiru. R. Babu - For Environment Clearance, (SIA/TN/MIN/438165/2023 dt: 26/07/2023)

The proposal was placed in this 412th meeting of SEAC held on 29.09.2023. The Project Proponent made a detailed power point presentation on 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 among other things:

1. The Project Proponent, Thiru.R.Babu has applied seeking Environment Clearance for the proposed Ordinary Earth Quarry (PWD Tank) lease over an extent of

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- 3.15.0 Ha at S.F.Nos. 450A(Part) of Panapakkam village, Uthukottai Taluk, Thiruvallur 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.
- 3. SEIAA EC Lr.No. SEIAA-TN/F.No.921/2013/EC/1(a)/199 dated 03.04.2013
- 4. SEIAA EC Lr.No. SEIAA-TN/F.No.1739/EC/1(a)/790/2013 dated 04.10.2013
- 5. SEIAA EC Lr.No. SEIAA-TN/F.No.3597EC/1(a)/2246/2015 dated 23.10.2015
- 6. Mining plan approval issued vide letter no. Rc.No.741/2014/G&M-2, Dt:19.03.2015
- 7. Soil test report dated 14.07.2023

	10255 SIA/TN/MIN/437583/2023 dt: 22/07/2023)			B2	
File No			Category	1(a)	
SI. No	Salient F	eat	ures of the Proposal		
1.	Name of the Owner/Firm		Thiru. R.Babu S/o. Ramakrishnan Yadav, New No.7,Old No.2, Palayakarar St., Periyapalayam Village, Uthukottai Taluk, Tiruvallur District, Tamil Nadu -601102		
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. 450A(Part) - PWD Tank		
4.	Village in which situated	: Panapakkam Village,			
5.	Taluk in which situated	:	Uthukottai Taluk,		
6.	District in which situated	:	Thiruvallur		
7.	Extent of quarry (in ha.)	:	3.15.0 Ha		
8.	Latitude & Longitude of all corners of the quarry site		13°17'55"N to 13°17'45"N 80°03'22"E to 80°03'19"E		
9.	Topo Sheet No.	:	66 C/03		
10.	Type of mining		Opencast semi mechanized method of mining.		

	Life of Project	:	55 days		
11.	Lease Period	Ė	55 days		
	Mining Plan Period	:	55 days		
	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC	
	Geological Resources in m ³ (RoM)	:	Ordinary Earth – 49400 m³	•	
12.	Minable Resources in m ³ (RoM)	:	Ordinary Earth – 28350 m³	-	
	Annual Peak Production in m ³	:	Ordinary Earth – 28350 m³	~	
	Maximum Depth in m	:	0.9m BGL		
13.	Depth of water table	:	10m-15m BGL		
14.	Man Power requirement per day:	:	7 Nos.		
	Water requirement:	;	1.3 kLD		
1,5	a. Drinking & Utilized water		0.5 kLD		
15.	b. Dust suppression& Green Belt		0.5 kLD & 0.3 kLD		
16.	Power requirement		TNEB & 7560 litres of HSD (DG set) will be utilized		
17.	PWD letter issued by EE, PWD, WRO, Araniyar Basin Division, Chepauk, Chennai- 5		PWD Lr.No. DB/JDO-2/F.No.203/2014		
18.	Precise area communication approved by the District Collector, Tiruvallur	:	Rc.No.741/2014/G&M-2,Dt:20.02.2015.		
19.	Mining Plan approved by Dept. of Geology & Mining	:	Rc.No.741/2014/G&M-2, Dt:19.03.2015		
20.	500m Cluster Letter issued by Dept. of Geology & Mining		Rc.No.741/2014/G&M-2,Dt:17.07.2023.		
21.	VAO Certificate regarding Structures within 300m Radius		Letter dated: 18.07.2	O23.	

22.	Project Cost (excluding EMP cost)	:	Rs. 5.73 Lakh	
	EC Recommendation	:	Validity	30 years subject to the following upper limits.
				Ordinary Earth
23.		:	Max Total RoM in m ³	28350
		;	Annual Max RoM in m³	28350
		:	Max Depth in m	0.9 m BGL
24.	Total EMP cost (in Rs. Lakh).	:	Rs.6.65 Lakh	
25.	CER cost (in Rs. Lakh).	:	Rs. 60,000/-	

During the meeting the PP informed the Committee that SEIAA-TN issued EC vide Lr.No. SEIAA-TN/F.No.3597EC/1(a)/2246/2015 dated 23.10.2015 for a period of 55 days. However, it has observed that the mining was not carried out as the mining lease was not executed vide referring letter of the District Collector, Tiruvallur No:RC. No. 741/ 2014/G&M-2, dated. 11.05.2019, addressed to SEIAA- TN requesting for amendment in EC. Further the PP swore that no mining was carried out in the said mine lease area since then.

Based on the presentation and the 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 28350 m³ of Ordinary Earth by maintaining the ultimate depth of mining of 0.9m BGL for a period of 4 months from the date of lease execution and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for a period of not exceeding four months from the date of lease execution to carry out only desilting work in the tank.

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- The Project Proponent shall ensure the duration of lease period for the proposed mining is not less than one year as directed by Hon'ble High Cout of Madras (Madurai Bench) in its orders dated 12.02.2021 in W.P.(MD)Nos.20903 of 2016, 23452, 24495, 17370 and 18035 of 2019.
- As accepted by the Project Proponent the CER cost of Rs. 60,000/- and the amount shall be spent for the committed activities at Village Government School before obtaining CTO from TNPCB.

Agenda No: 412-12

(File No: 10212/2023)

Proposed Multi-coloured Granite Quarry lease over an extent of 2.52.42 Ha at S.F.Nos.17/9A, 17/10A (Part), 17/11A, 18/9, 18/10, 18/12, 19/12A, 19/12B1 & 19/12B2 (Part) of Keelamangalam Village, Ottapidaram Taluk, Thoothukudi District, Tamil Nadu by Thiru. G. Gopalakrishnan - For Environmental Clearance. (SIA/TN/MIN/435949/2023, dated: 11.07.2023)

The proposal was placed in 412th SEAC meeting held on 04.10.2023. The details of the project furnished by the proponent are given in the website (partiesh.nic.in).

The SEAC noted the following:

- The Project Proponent, Thiru. G. Gopalakrishnan has applied for Environmental Clearance for the Proposed Multicoloured Granite Quarry lease over an extent of 2.52.42 Ha at 5.F.Nos.17/9A, 17/10A (Part), 17/11A, 18/9, 18/10, 18/12, 19/12A, 19/12B1 & 19/12B2 (Part) of Keelamangalam Village, Ottapidaram Taluk, Thoothukudi District, Tamil Nadu.
- The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per mining plan, the lease period is for 20 years. The mining plan is for 5 years & production should not exceed RoM 21,435m³, Granite Recovery @ 30% 6,431m³ & Granite waste @ 70 % 15,004m³. The annual peak production RoM 4,320m³, Granite Recovery 1,296m³ & Granite waste 3,024m³. The ultimate depth of mining is 27m BGL.
- 4. Earlier Environmental clearance issued vide Lr.No. SEIAA-TN/F.No.4275/EC/1(a)/2349/2015, Dated: 06.11.2015 for a quantity of 3.054

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Cbm of multi-coloured granite, 4,104 Cbm of top soil & 18,456 cbm of granite waste upto a depth of 7m.

The proponent had obtained Certified compliance report from IRO, MoEF&CC vide Letter F.No. E.P/12.1/2022-23/SE!AA/320/TN/572, Dated: 02.05.2023.

The proposal was placed in 412th SEAC meeting held on 04.10.2023. Based on the presentation and documents furnished by the proponent, committee decided to call for additional details as follows.

- 1. PP shall provide section wise comparison between the new Mining Plan and the old Mining Plan.
- 2. The earlier environmental clearance had been issued for 7m depth. Further, the existing pit depth as per the approved scheme of mining is 22m. Hence, the PP shall give the clarification with proper justifications regarding the discrepancies in the existing pit dimension against the approved depth in the earlier issued EC dated: 06.11.2015.

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: 412-13

(File No: 10218/2023)

Proposed Rough stone & Gravel Quarry lease over an extent of 2.06.5 Ha at S.F.Nos. 44/4 & 45 of Mangudi Village, Illuppur Taluk, Pudukkottai District, Tamil Nadu by Thiru. K.Munisamy - For Environmental Clearance. (SIA/TN/MIN/436132/2023, dated: 10.07.2023)

The proposal was placed in 412th SEAC meeting held on 04.10.2023. 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. K.Munisamy has applied for Environmental Clearance for the Proposed Rough stone & Gravel Quarry lease over an extent of 2.06.5 Ha at S.F.Nos. 44/4 & 45 of Mangudi Village, Illuppur Taluk, Pudukkottai District Famil Nadu.

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- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per mining plan, the lease period is for 5 years. The mining plan is for 5 years & production should not exceed 3,64,800m³ of Rough stone & 35,028m³ of Gravel. The annual peak production should not exceed 83,550m³ of Rough stone & 35,028m³ of Gravel. The ultimate depth of mining is 48m BGL.

The proposal was placed in 412th SEAC meeting held on 04.10.2023. Based on the presentation and documents furnished by the proponent, committee decided to call for additional details as follows

- Implication of proposed quarrying operations in terms of dust, ground vibrations
 and water pollution on the surrounding habitatants located within a core zone
 of 1 km from the lease boundary and mitigating measures proposed by the PP.
- 2. Details of PWD Tank situated within a distance of 100 m.
- 3. No. of Govt/Pvt Schools (or) any other Educational Institutions located within 500m from the proposed area & no. of students (including Residential) studying in it.
- 4. Ayacut area from the competent authority.
- 5. Water Spread area (distance) & implications due to the proposed mining activity.
- 6. Wind direction & its implication with respect to school.
- 7. Transportation route for the proposed quarrying operation and anticipated traffic volume.
- 8. Direct /Indirect Employment opportunities for the residents of neighbouring villages.
- 9. A letter from the concerned AD (Mines) to indicate whether any penalty (or) compensation levied, if any, for illegal mining/illicit mining carried out by the PP in the past in same area (or) other areas, in strict compliance of judgement of Hon'ble Supreme Court dated. 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause Versus Union of India and Ors.

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.

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Agenda No: 412-14

(File No: 10224/2023)

Proposed Rough stone Quarry lease over an extent of 1.80.0 Ha at S.F.Nos. 40 (Part) of Nariganapuram Village, Hosur Taluk, Krishnagiri District, Tamil Nadu by Thiru. T.Muralikrishnan - For Environmental Clearance. (SIA/TN/MIN/436861/2023, dated: 16.07.2023)

The proposal was placed in 412th SEAC meeting held on 04.10.2023. 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. T.Muralikrishnan has applied for Environmental Clearance for the Proposed Rough stone Quarry lease over an extent of 1.80.0 Ha at S.F.Nos. 40 (Part) of Nariganapuram Village, Hosur Taluk, Krishnagiri District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per mining plan, the lease period is for 10 years. The mining plan is for 5 years & production should not exceed 1,57,775m³ of Rough stone. The annual peak production should not exceed 41,740m³ of Rough stone. The ultimate depth of mining is 50m (20m AGL + 30m BGL).
- Earlier environmental clearance obtained vide Lr. No. 03/ DEIAA- KGI/ EC No. 87/ 2018, Dated: 27.08.2018 for a quantity of 4,35,183 cbm of rough stone up to a depth of 50m.
- 5. Hosur RDO vide letter Roc.No.4344/2019/B2, Date:01.09.2021 had imposed penalty on the proponent for excavating rough stone of quantity 10,725m³ outside the mine lease area without prior Environmental Clearance as per EIA Notification 2006.

The proposal was placed in 412th SEAC meeting held on 04.10.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to grant of Terms of Reference (TOR) under Violation category, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and ToR given in Annexure-I, the EIA/EMP report along with assessment of ecological

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damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter by the accredited consultants. Terms of Reference issued are subject to the outcome of the final orders of the Hon'ble High Court of Madras in the matter of W.P.(MD) No. 11757 of 2021.

- 1. The PP shall furnish an Independent Chapter 13 as per the MoEF & CC Violation Notification S.O. 804 (E), dated. 14.03.2017 for the project in case of assessment of Ecological damage, remediation plan and natural & community resource augmentation plan to be prepared as an independent chapter in the Environment Impact assessment report by the Accredited consultant and also with collection and analysis of data for assessment of ecological damage, preparation of remediation plan and natural & community resource augmentation plan to be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1996, accredited by NABET or a Laboratory of council of Scientific and industrial research institutions working in the field of environment..
- As a part of procedural formalities as per the MoEF & CC Violation Notification
 S.O. 804 (E), dated. 14.03.2017, the action will be initiated by the competent authority under section 15 read with section 19 of the Environment (Protection)
 Act, 1986 against violation.
- 3 The PP shall furnish letter from AD, mines including the following details,
 - Existing pit dimension through precise mine surveying (DGPS)
 - Quantity achieved Vs EC Approved Quantity
 - Balance Quantity as per Mineable Reserve calculated.
 - Mined out Depth as on date Vs EC Permitted depth
 - Details of illegal/illicit mining carried out in the proposed quarry site
 - Violation in the quarry during the past working.
 - Quantity of material mined out outside the mine lease area
 - Condition of Safety zone/benches as on date
 - (i) The project proponent besides above must submit the No Objection certificate (NOC) in compliance of the orders of the Hon'ble Supreme court to approach State Mines and Geology Department for certification regarding payment of 100% cost of illegally mined

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- minerals to the State Government in terms of the Section 21(5) of the MMDR Act, 1957.
- (ii) Copy of total penalty levied by the concerned AD/DD, Dept of Geology and Mining, and copy of remittance of total penalty by PP.
- (iii) The SEAC also recommends that SEIAA may look into any other legal and regulatory issues that are applicable before issuing the post mining EC.
- 5. The proponent shall submit Certified Compliance Report obtained from IRO, MoEF&CC. Chennal for the earlier obtained Environmental Clearance.

Agenda No: 412-15

(File No: 10235/2023)

Proposed Rough stone Quarry lease over an extent of 3.42.0 Ha at S.F.Nos. 103 (Part - 6) of Madathahalli Village, Pappireddipatti Taluk, Dharmapuri District, Tamil Nadu by Thiru. M.Santhamurthy - For Environmental Clearance. (SIA/TN/MIN/437225/2023, dated: 19.07.2023)

The proposal was placed in 412th SEAC meeting held on 04.10.2023. 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. M.Santhamurthy has applied for Environmental Clearance for the Proposed Rough stone Quarry lease over an extent of 3.42.0 Ha at S.F.Nos. 103 (Part - 6) of Madathahalli Village, Pappireddipatti Taluk, Dharmapuri District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per mining plan, the lease period is for 10 years. The mining plan is for 5 years & production should not exceed 1,92,266m³ of Rough stone. The annual peak production should not exceed 39,310m³ of Rough stone. The ultimate depth of mining is 75m AGL.
- 4. Earlier Environmental clearance obtained vide Lr.No. 12/DEIAA-DPI/EC.No.12/2018, Dated: 31.10.2018 for a quantity of 1.92,266Cbm up to a Depth 110m (95m AGL + 20m BGL).

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The proposal was placed in 412th SEAC meeting held on 04.10.2023. Based on the presentation and documents furnished by the proponent, committee noted the following.

1. The proponent shall obtain letter from DFO regarding the reserve forests around the proposed site.

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: 412-16

(File No.10207/2023)

Proposed Rough Stone and Gravel Quarry Lease over an extent of 4.50.2 Ha at S.F.Nos. 228/1A (P), 230/3(P) and 229/1(P) of Kasthurirengapuram Part-II Village, Tisaiyanvilai Taluk, Tirunelveli District, Tamil Nadu by Thiru. S. Sakthiperiyakumaran - For Environmental Clearance (SIA/TN/MIN/436162/2023 dated:10.07.2023)

The proposal was placed in this 412th Meeting of SEAC held on 04.10.2023. The project details furnished by the proponent are available on the website (parivesh.nic.in).

The SEAC noted the following:

- 1. The project proponent, Thiru. S. Sakthiperiyakumaran has applied for Environmental Clearance for the Proposed Rough Stone and Gravel Quarry Lease over an extent of 4.50.2 Ha at S.F.Nos. 228/1A (P), 230/3(P) and 229/1(P) of Kasthurirengapuram Part-II Village, Tisaiyanvilai Taluk, Tirunelveli 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.

File No		10207	Category	1(a)
		SIA/TN/MIN/436162/2023	Calegory	B2
·SI.	Salient Features of the Proposal			
No				

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1	Name of the Owner/Firm	:	Thiru. S. Sakthiperiyakumaran, S/o. Shanmugavel Nadar, No:5/132, Velavan Illam, Ex.VM Street, Kudankulam, Radhapuram Taluk, Tirunelveli District - 627 106.		
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	:	228/1A (P), 230/3(P) and 229/1(P)		
4	Village in which situated	:	Kasthurirengapuram F	Part-II	
5	Taluk in which situated	:	Tisaiyanvilai		
6	District in which situated	:	Tirunelveli		
7	Extent of quarry (in ha.)	;	4.50.2 Ha		
8	Latitude & Longitude of all corne		08°16'09.44"N to 08°		
	of the quarry site	•	77°46'04.90"E to 77°46'14.31"E		
9	Topo Sheet No.	:	58 H/15		
10	Type of mining	:	Opencast Semi-Mechanized Method		
	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 – 20,25,900 m ³	-	
<u> </u> 			Gravel – 90,040 m³	-	
12	Minable Resources m³ (RoM)	:	Rough Stone – 7,01,960 m³		
			Gravel – 65,824 m³	•	
	Annual Peak Production in m3	;	Rough Stone – 1,45,315 m ³	-	
			Gravel – 60,104m³	-	
	Maximum Depth in meters	:	47 m Below Ground Level		

CHAIR TANK

13	Depth of water table	:	68 m BGL in Summer season	& 65 m BGL in Rainy
14	Man Power requirement	:	32 Nos.	
15	Water requirement: 1. Drinking Water 2. Dust Suppression 3. Green belt Power requirement	:	2.44 KLD 1.44 KLD 0.50 KLD 0.50 KLD 5,72,539 litres of HSD) for the entire period
17	Precise area communication approved by the Joint Director/ Assistant Director (i/c), Dept. of Geology and Mining with date	:	of life. Roc.No.M2/33494/20	022 dt:09.02.2023.
18	Mining Plan approved by the Joint Director/ Assistant Director (i/c), Dept.of Geology and Mining with date	:	Rc.No.M2/33494/202	22 dt:01.03.2023.
19	500m cluster letter issued by the Joint Director/ Assistant Director(i/c), Dept. of Geology and Mining with date		Rc.No.M2/33494/202	22 dt:01.03.2023.
20	VAO Certificate Regarding Structures within 300m Radius		Letter dated: 26.06.2	023.
21	Project Cost (excluding EMP cost)	:	Rs. 1,02,51,200 /-	
		•	Validity	30 years subject to the following upper limits.
22	EC Recommendation	:	Max Total RoM in m ³	Rough stone - 7,01,960m³ Gravel - 65,824m³
		:	Annual Max RoM in m ³	Rough stone – 1,45,315m³ Gravel – 60,104m³
		;	Max Depth in mtrs	47m below ground level

23	EMP cost (in Rs. Lakh).	:	Capital Cost – Rs. 26,63,140/- Recurring Cost – Rs. 11,97,064/-
24	CER cost (in Rs. Lakh).	:	Rs. 10,00,000/-

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity not exceeding 1,45,315m³ of Rough stone & 60,104m³ of gravel by restricting the ultimate depth of mining up to 47m below ground level and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MoEF &CC, in addition to the following specific conditions:

- 1) The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan 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 furnish the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, to the concerned AD (Mines) at the time of lease execution.
- 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) The PP shall appoint a First Class/Second Class Mine Manager for managing the quarrying operations before the execution of lease and a copy of the appointment shall be sent to the Director of Mines Safety, Chennai Region along with Notice of Opening of the Mine under the provisions of MMR 1961.
- 5) 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 & noise from the blasting operations carried out in the overburden/side-burden formation of the proposed

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quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

- 6) Since the village is located within 500 m, as a part of monitoring the implementation of eco-friendly blasting operation, the PP shall monitor the blast-induced ground & air vibration (noise) by installing the DGMS approved 'Vibration Monitoring System (VMS)' at a distance of 300m, 500m, and 750 m and the fly rock level produced through capturing a video image once in six months, by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT (ISM) Dhanbad, and Anna University Chennai-CEG Campus, etc. 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.
- 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 the CER cost of Rs. 10 Lakhs shall be spent for the activities as committed towards the Government Hr. Sec. School, Kasthurirengapuram Village, Radhapuram Taluk before obtaining CTO from TNPCB.

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Agenda No: 412-17

(File No.10225/2023)

Proposed Rough Stone and Gravel Quarry Lease over an extent of 1.50.0 Ha (Patta Land) at S.F.Nos. 6/1B(P) of Kundharappalli Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu by Thiru. N.S. Jyothi Raaja - For Environmental Clearance. (\$IA/TN/MIN/434604/2023 dated:16.07.2023)

The proposal was placed in this 412th Meeting of SEAC held on 04.10.2023. The project details furnished by the proponent are available on the website (parivesh.nic.in).

The SEAC noted the following:

- 1. The project proponent, Thiru. N.S. Jyothi Raaja has applied for Environmental Clearance for the Proposed Rough Stone and Gravel Quarry Lease over an extent of 1.50.0 Ha (Patta Land) at S.F.Nos. 6/18(P) of Kundharappalli Village, Krishnagiri 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. From the KML file uploaded by the proponent in the PARIVESH Portal, it is ascertained that a school is located within 600m from the proposed project site. Further, some other structures are also located within 500m from the proposed project site.

In view of the above and also based on the presentation and documents submitted by the project proponent. SEAC decided to call for the following additional details from the project proponent to consider the proposal for appraisal:

- i) The proponent shall furnish the details on the schools (both Govt. & Private schools), industries, factories and other sensitive structures including temples located within 1 km from the quarry site, and detail the impact of mining activities & mitigation measures for protecting these structures.
- ii) Implication of proposed quarrying operations in terms of dust, ground vibrations and water pollution on the surrounding habitatants located within a core zone of 1 km from the lease boundary and mitigating measures proposed by the PP.

iii) Details of PWD Tank situated within a distance of 100 m.

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- iv)No. of Govt/Pvt Schools (or) any other Educational Institutions located within 500m from the proposed area & no. of students (including Residential) studying in it.
- v) The proponent shall furnish a detailed and thorough assessment on the direction of the wind at the project area since schools are located near the project site.
- vi)Transportation route for the proposed quarrying operation and anticipated traffic volume.
- vii) A letter from the concerned AD (Mines) to indicate whether any penalty (or) compensation levied, if any, for illegal mining carried out by the PP in the past in same area (or) other areas, in strict compliance of judgement of Hon'ble Supreme Court dated. 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause Versus Union of India and Ors.

On receipt of the same, further deliberations will be done.

Hence, the proponent is advised to submit the details within a period of 30 days failing which the proposal will be automatically delisted from the PARIVESH Portal.

Agenda No: 412-18

(File No.10257/2023)

Proposed Gravel Quarry Lease over an extent of 0.64.78 Ha (Patta Land) at S.F.Nos. 458/3D of Bolanahalli Village, Nallampalli Taluk, Dharmapuri District, Tamil Nadu by Thiru. S. Gandhi - For Environmental Clearance. (SIA/TN/MIN/437684/2023 dated:26.07.2023)

The proposal was placed in this 412th Meeting of SEAC held on 04.10.2023. The project details furnished by the proponent are available on the website (parivesh.nic.in).

The SEAC noted the following:

- 1. The project proponent, Thiru. S. Gandhi has applied for Environmental Clearance for the Proposed Gravel Quarry Lease over an extent of 0.64.78 Ha (Patta Land) at S.F.Nos. 458/3D of Bolanahalli Village, Nallampalli Taluk, Dharmapuri District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. On perusal of the documents submitted by the project proponent, it is

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MEMBĚŘ SÉČŘEŤARY SEAC -TN CHAIRMÁÍ SEÁC- TN ascertained that the project proponent has submitted two soil test reports regarding the soil characteristics of the proposed site. The details of the report are as follows:

Details	Soil Test Repor	t 1	Soil Test Report 2			
Obtained from	Govt. College	of Engineering,	Govt. Colle	Govt. College of Engineering.		
	Salem		Salem	Salem		
Letter details	Lr.No.:C-1757/	GCE/SLM/	Lr.No.:C-17	91/GCE/SLM/		
	Civil/ Soil Lab,	/ 2023 dated.	Civil/ Soil	Lab/ 2023 dated.		
	18.07.2023.		26.09.2023	3.		
Result of sieve	Gravel	8%	Gravel	63.8%		
analysis	Coarse Sand	12%	Coarse Sar	nd 3.3%		
	Medium	42%	Medium	6.0%		
	sand		sand			
	Fine sand	15.6%	Fine sand	1.5%		
	Silt/ Clay	22.4%	Silt/ Clay	25.5%		
Soil	SM – Silty Sand		GM – Silty	Gravel		
Classification						

From the above, SEAC noted that the two soil test reports were highly inconsistent with each other. Hence, the SEAC after detailed deliberations, decided to call for the following additional details from the project proponent to consider the proposal for appraisal:

- The proponent shall furnish a fresh soil test report from the Soli Mechanics Laboratory of NIT, Trichy. The soil sample for testing should be collected by the EIA coordinator in person as per the detailed protocol prescribed by SEAC, with videographic evidence.
- ii) The PP shall furnish the video/photographs with legitimate coordinates indicating the sample pit/trench for a depth of 2 m BGL and 3 m AGL showing the lithological characteristics of the earth.

On receipt of the same, further deliberations will be done.

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Hence, the proponent is advised to submit the details within a period of 30 days failing which the proposal will be automatically delisted from the PARIVESH Portal.

Agenda No: 412-19

(File No: 10237/2023)

Proposed Rough stone & Gravel quarry lease over an extent of 1.55.10Ha at SF.No. 1853/1D2(P), 1853/1D3(P) And 1853/1D4B(P) of Gangaikondan Part-I Village, Tirunelveli Taluk, Tirunelveli District, Tamil Nadu by Thiru.M.Shajahan - for Environmental Clearance. (SIA/TN/MIN/436988/2023, Dated:19.07.2023)

The proposal was placed in 412th meeting of SEAC held on 04.10.2023. 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, Thiru. M. Shajahan has applied for Environmental Clearance for the proposed Rough stone & Gravel quarry lease over an extent of 1.55.10Ha at SF.No. 1853/1D2(P), 1853/1D3(P) And 1853/1D4B(P) of Gangaikondan Part-I Village, Tirunelveli 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.

Based on the presentation and documents furnished by the project proponent, SEAC noted that Gangaikondan Spotted Deer Sanctuary is located at 2Km from the lease area and 0.91km is the Eco Sensitive Zone as per Notification S.O. 2773(E)dated 31.07.2019 of MOEF & CC and Talaiyattu RF is located at 390m in West direction. The Committee felt that the proposed mining activity is close to the ecologically highly sensitive area and quarrying activity in a virgin land will have serious adverse impact on the endangered species, wildlife and flora & fauna. The Committee, therefore, decided not to recommend the project proposal.

Agenda No: 412-20

(File No: 10251/2023)

Proposed Rough stone & Gravel quarry lease over an extent of 4.03.0Ha at SF.No. 171/2 (P) of Kuppam Village, Pugalur Taluk, Karur District, Tamil Nadu by Tvl.Shri Selva Vinaayaga Blue Metal - for Environmental Clearance. (SIA/TN/MIN/436262/2023,

Dated:11.07.2023)

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The proposal was placed in 412th meeting of SEAC held on 04.10.2023. 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, Tvl.Shri Selva Vinaayaga Blue Metal has applied for Environmental Clearance for the proposed Rough stone & Gravel quarry lease over an extent of 4.03.0Ha at SF.No. 171/2 (P) of Kuppam Village, Pugalur 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.

The committee noted that, the PP requested for withdrawal of the application since the EC and lease period ends on 25.11.2023. The Committee decided to recommend to SEIAA to accept the withdrawal request made by the PP.

Agenda No: 412-21

(File No: 10258/2023)

Proposed Rough stone quarry lease over an extent of 2.50.0Ha at SF.No. 252/2 Part-4 (East) of Manakadavu Village, Dharapuram Taluk, Tiruppur District, Tamil Nadu by Thiru.R.Senthilkumar - for Environmental Clearance. (SIA/TN/MIN/436209/2023, Dated:10.07.2023)

The proposal was placed in 412th meeting of SEAC held on 04.10.2023. 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.R.Senthilkumar has applied for Environmental Clearance for the proposed Rough stone quarry lease over an extent of 2.50.0Ha at SF.No. 252/2 Part-4 (East) of Manakadavu Village ,Dharapuram Taluk, Tiruppur 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.

File No	10258/2023 SIA/TN/MIN/436209/2023, Dated:10.07.2023		Category	B2
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SI. No	Salient Features of the Proposal			· ·
1.	Name of the Owner/Firm	:	Thiru.R.Senthilkumar, S/o. Ramasamy, 45/1, Elis Nager, Dharapuram Taluk, Thiruppur-638657	
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)		Rough stone quarry	
3.	S.F Nos. of the quarry site with area break-up	:	252/2 Part-4 (East)	
4.	Village in which situated	:	Manakadavu	
5.	Taluk in which situated	:	Dharapuram	
6.	District in which situated	:	Tiruppur	
7.	Extent of quarry (in ha.)	:	2.50.0Ha	
8.	Latitude & Longitude of all	:	10°40'55.00"N to 10°41'03	
9.	corners of the quarry site	┼.	77°34'32.03"E to 77°34'40.01"E : 58- F/10	
10.	Topo Sheet No. Type of mining	:	Opencast Semi-mechanize	d Mining
	Life of Project	:	5 Years	
11.	Lease Period		5 Years	
	Mining Plan Period	:	5 Years	
	Mining Plan Details	:	As per approved Mir Rough stone	ning Plan Topsoil
	Geological Resources m ³	1:	8,27,750m³	15,586m³
12.	Minable Resources m³	1:	1,40,536m³	-
	Annual Peak Production in m ³	;	39,350m³	-
	Maximum Depth in meters	1:	33m (2m AGL +31m BGL)	•
13.	Depth of water table	:	60m in summer season - 5 season	7m in rainy
14.	Man Power requirement per day:	:	11 Employees	
15.	Water requirement: 1. Drinking water & Utilized water	:	1.5 KLD 0.4 KLD	
	2. Dust suppression3. Green belt		0.6 KLD 0.5 KLD	A

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16.	Power requirement		TNEB	
17.	Precise area communication approved by the District Collector, Department of G&M.		Na.ka.No.179/Kanin 24.08.2017.	nam/2017, Dated:
18.	Mining Plan approved by Deputy Director, Department of G&M.		Rc.No.179/Mines/20 Dated:27.11.2017.	017,
19.	500m Cluster Letter approved by the Assistant Director, Department of G&M.		Rc.No.179/Mines/20 Dated:11.05.2023.	017.
20.	VAO Certificate Regarding Structures within 300m Radius		Letter Dated:17.11.20	017
21.	Project Cost (excluding EMP cost)		Rs. 81,05,000/-	
	EC Recommendation	••	Validity	30 years subject to the following upper limits.
:				Rough stone
22.		:	Max Total in m³	1,36,646m³
		:	Annual Max in m³	39,350m³
		:	Max Depth in mtrs	33m (2m AGL +31m BGL)
23.	EMP cost (in Rs. Lakh).	:	Rs.110 Lakhs	
24.	CER cost (in Rs. Lakh).	:	Rs. 10,00,000	

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 39,350m³ of Rough stone by maintaining the ultimate depth of mining up to 33m (2m AGL +31m 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:

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- 1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.
- The PP shall furnish the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, to the concerned AD (Mines) at the time of lease execution.
- 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. Within a period of six months from the date of lease execution, the PP shall carry out the scientific studies after obtaining a prior permission from the Director of Mines Safety, Chennai Region 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 existing 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.
- 5. Since the structures are located within 500 m, as a part of monitoring the implementation of eco-friendly blasting operation, the PP shall monitor the blast-induced ground & air vibration (noise) by installing the DGMS approved 'Vibration Monitoring System (VMS)' at a distance of 300m, 500m, and 750 m and the fly rock level produced through capturing a video image once in six months, by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalofe, IIT (ISM) -

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Dhanbad, and Anna University Chennai-CEG Campus, etc. 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. 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.
- 7. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall within a period of six months from the 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.
- 8. As accepted by the project proponent the CER cost is Rs. 10Lakhs, out of which Rs 5 Lakhs shall be spent for the activities as committed towards the Panchayat Union Primary School, Ponnivadi village and another Rs. 5 Lakhs shall be spent for Government Higher Secondary school Therpatti, Manakadavu village, Dharapuram Taluk, Tiruppur District.

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Agenda No: 414 - 22

(File No: 10198/2023)

Proposed construction of additional Block of Ground floor (Anechoic Chamber) Mezzanine floor (Air Plenum), 1st floor and 2nd floor (Office) and proposed 2nd floor over the existing R&D building with an installation of 3090 HP to the earlier existing blocks 1 to 12, warehouse & R&D building with an installation of 3910 HP at S. No. 175 (part) of Ernavoor Village, S.No. 6/1A1 of Tiruvottiyur Village in T.S. No. 3, 5/1A, 5/2A Block No. 1, Ward No. 1 of Thiruvottiyur, Wimco Nagar, Ennore Express Road, Chennai-600019, Thiruvallur District, Tamil Nadu by M/s. MRF Limited—For Clearance under CRZ Notification 2011. (SIA/TN/INFRA2/433358/2023, Dated: 15.06.2023) The proposal was earlier placed in the 398th meeting of SEAC held on 04.08.2023. 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. MRF Limited has applied for obtaining CRZ Clearance under CRZ Notification 2011 for the Proposed construction of additional Block of Ground floor (Anechoic Chamber) Mezzanine floor (Air Plenum), 1st floor and 2nd floor (Office) and proposed 2nd floor over the existing R&D building with an installation of 3090 HP to the earlier existing blocks 1 to 12, warehouse & R&D building with an installation of 3910 HP at S. No. 175 (part) of Ernavoor Village, S.No. 6/1A1 of Tiruvottiyur Village in T.S. No. 3, 5/1A, 5/2A Block No. 1, Ward No. 1 of Thiruvottiyur, Wimco Nagar, Ennore Express Road, Chennai-600019, Thiruvallur District, Tamil Nadu.
- 2. The project area is falling on the landward side of the existing road at Tiruvottiyur and the project site is falling in CRZ-II.

3. Provisions in the CRZ Notification, 2011

- As per the CRZ Notification, 2011 vide Para 1, the restrictions apply on the setting up and expansion of industries, operations or process and the like in the CRZ. Further, vide Para 3(1), setting up of new industries and expansion of existing industries are prohibited activities.
- As per Para 8 (1) II CRZ II (ii) of CRZ Notification 2011, buildings shall be permitted on the landward side of the existing and proposed roads or

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- existing authorized structures subject to the existing Local Town and Country Planning regulations as modified from time to time, except the Floor Space Index or Floor Area Ratio, which shall be as per 1991 level.
- Vide para 4 (i) (d) Construction involving more than 20,000sq mts built-up area in CRZ-II shall be considered in accordance with EIA notification, 2006 and in case of projects less than 20,000sq mts built-up area shall be approved by the concerned State or Union territory Planning authorities in accordance with this notification after obtaining recommendations from the concerned CZMA and prior recommendations of the concern CZMA shall be essential for considering the grant of environmental clearance under ELA notification, 2006 or grant of approval by the relevant planning authority.

4. Existing Clearance:

- i. The Project Proponent has obtained Clearance under the CRZ Notification, 2011 for the "Construction of industrial shed, for raw material and finished products with allied facilities, which consisting of one Block of Ground Floor plus First Floor warehouse, one block of Ground Floor plus First Floor office and 9 blocks of Ground Floor Amenity buildings at S.No.175 (part) of Ernavoor Village, S.No.6/1A1 of Thiruvottiyur Village in T.S.No 3, 5/1A, 5/2A Block No.1, Ward No.1 of Thiruvottiyur Village, Ambattur Taluk, Tiruvallur district, with the Total Plot Area is 48,206.59 Sqm and the Total Built is 29515.80 Sqm vide the office Proc. No. P1/2327/2017, dated 12.02.2018.
- ii. The project area has been changed as "Special and Hazardous Industrial Use Zone" to facilitate the setting up of "Tyre Testing Unit". The CMDA has informed that the reclassification is allowed only for setting up of a Tyre Testing Unit.
- iii. Further, the Project Proponent has obtained amendment for the above Clearance to erect "Tyre Testing Unit" in the warehouse, in the area of 1717.07 sq.m at Ground Floor and 1419.91 sq.m at First Floor for Research

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- and Development activity, with the power requirement of 3910 HP vide the office Proc. No. P1/1721/2019, dated 31.07.2019.
- iv. Again, the PP has obtained amendment for the Builtup area of the project, as 29,542.16 sq.m instead of 29,515.80 sq.m subject to the existing specific conditions issued in the Clearances vide the office Proc. No. P1/2327/2017, dated 12.02.2018 and vide the office Proc. No. P1/1721/2019, dated 31.07.2019.
- v. The PP had obtained Consent to Operate from the Tamil Nadu pollution Control Borad vide Proceedings No.F.1849AMB/OL/DEE/TNPCB/AMB/A/2022 dated:03.09.2022 for operating the facility for the manufacture of Tyres for testing in tyre testing unit for Research and Development activity and warehouse for storage of Raw materials Finished products with allied facilities in a built up area of 29542.16 Sq.m at the rate 1000 Nos/Month.
- 5. Now, the Proponent has Proposed for additional construction of Block of Ground floor (Anechoic Chamber) Mezzanine floor (Air Plenum). 1st floor and 2nd floor (Office) and proposed 2nd floor over the existing R&D building with an installation of 3090 HP. The existing FSI area for the project is 29542.16sqm and proposed FSI area is 4065.73 sqm.

6. COMPARISON STATEMENT

S. No.	Description	As per Existing Clearance	Expansion proposal	incremental load
1	Land Area (Sqm)	48206.59 Sqm	50224.50 Sqm	2017.91
2	FSI Area (Sqm)	29542.16 Sqm	33892.83 Sqm	4350.67
3	No. of Blocks	1 Block of G.F + F.F warehouse building, 1 Block of G.F (Tyre testing activity) + F.F office building and 9 blocks of G.F Amenity building blocks totally 12 blocks	1 Block of G.F + F.F warehouse building, 1 Block of G.F (Tyre testing activity) + F.F office building and 9 blocks of G.F Amenity building blocks totally 12 blocks & Proposed Block - Ground Floor	Proposed additional Block of Ground floor (Anechoic Chamber) Mezzanine floor (Air Plenum), 1st

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			(Anechoic Chamber).	floor and 2 nd
			Mezzanine Floor (Air	floor (Office)
			Plenum), 1st floor and	and proposed
			2nd floor (Office) and	2 nd floor over
			Proposed 2nd floor	the existing
			over the Existing R&D	R&D building.
			building.	
4	No. of	157 Nos	220 Nos	63 Nos
	Occupants			
5	Fresh Water	6 KLD	8 KLD	2 KLD
	Requirement			
6	Recycled water requirement	26 KLD	26 KLD	No increase
7	Total Solid waste generated	27.7 kg/day	39/day	11.3 kg/day
	(kg/day)			
8	Power	3910 Hp and DG 1250	7000 Hp and DG 1250	3090 Hp
	requirement	KVA	KVA	
	and DG sets			
9	STP capacity	12 KLD	12 KLD	

7. Total cost of the project and CRZ classification

The total cost of the project is Rs.264.91 crores and the proposed site is falling in CRZ-II

8. Application status filed before the Hon'ble NGT (SZ):

In this connection, it is submitted that one Application No.224 of 2021 filed by Thiru MR. Thiyagarajan against M/s. MRF Limited on the existing clearance issued by TNSCZMA on the Tyre testing facility and warehouse in the same warehouse and it is pending with the Hon'ble NGT (SZ). Further, the Hon'ble NGT has constituted a joint committee consisting of 1) The District Collector, Chennai district (2) a senior officer from SEIAA, TN (3) a senior officer from TNSCZMA (4) a senior officer from MoEF&CC, Chennai (5) DEE, TNPCB, Chennai. The nodal department for joint committee was Tamil Nadu Pollution Control Board.

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The Hon'ble NGT(SZ) directed the joint committee to inspect the site ascertain as to

- Whether the MRF Limited is having necessary EC to the permissions including for the area in dispute where allegedly, manufacturing activities were extended in a clandestine manner as alleged by the applicant.
- 2) Whether any construction has been made in CRZ zone without obtaining any necessary permission under the CRZ notification 2011 or 2019 whichever is applicable.
- 3) Whether there was any illegal extraction of water by drilling bore wells in the alleged CRZ zone without obtaining necessary permission, if the unit is an unauthorized user, then, what is the nature of action taken by them in this regards.
- 4) If there is any violation found, what is the nature of action taken by the regulators in respect of the same.
- 5) Whether any damage has been caused to environment on account of any alleged illegal activities and if so, assess the environmental compensation as directed by this tribunal including the cost or restoration required for restoring the environment to its original state, apart from assessing compensation for the violations of conditions and environmental laws.
- 6) Whether the hazardous waste Management rules 2016, Hazardous and other wastes (Management and Transboundary Movement) Rules 2016 Which are applicable to the unit are being strictly complied with, if not what is the deficiency found and the action taken on this regard including recommending the methods by which the deficiency can be set right.

Dr. L. Elango. Professor, Dept of Geology, Anna University (Expert Member of TNSCZMA) was deputed on behalf of TNSCZMA for inspection. He inspected the site along with the team. The Joint Committee has inspected the site on 02.03.2022 and furnished report.

9. Recommendations of the DCZMA

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This subject was placed before the DCZMA meeting held on 14.06.2022 and the DCZMA has resolved to recommend the above project to the Tamil Nadu State Coastal Zone Management Authority subject to the conditions stated therein.

10. Decision of TNSCZMA in the 118th meeting held on 14.10.2022:

The SCZMA has examined the recommendation of the DCZMA for Chennai district in the meeting held on 14.06.2022 and replies submitted by the Project Proponent w.r. to the conditions imposed by the DCZMA and remarks of the Technical Expert Committee. The Authority also observed the pending Application before Hon'ble NGT (SZ) on the existing construction of M/s. MRF Ltd., on the same project site.

Legal opinion received from Dr. D. Shanmugonathan, Standing Counsel for East of Tamil Nadu

The Standing Counsel has communicated the Legal Opinion in this matter vide letter dated 14.02 2023 and stated as follows,

"I have gone through orders of the National Green Tribunal made in OA 224 of 2021, to best of my knowledge, the Applicant was not granted an interim order against the respondents, including the Respondent No. 3 (TNSCZMA). Hence, there is no bar on the TNSCZMA to deal with the proposal received from MRF.

It is important to note that Joint Committee appointed by the Tribunal in Ox 224 of 2021, has observed as:

The unit of M/s MRF LTD should obtain environmental clearance because that survey number cannot be used for industrial activity, since that land SF.NO falls on CRZ ZONE area So that construction activity should be considered as separate ware housing, testing and office purpose operation *At this juncture M/s MRF LTD should obtain environmental clearance*. Emphasis added.

However. The Joint Committee has left it with SELAA Expert Committee to decide whether MRF LTD requires EC or not, as MRF's EC application pending with SEIAA.

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At the Final Hearing if the Tribunal found against MRF that they did not obsist Environmental Clearance for their warehouse and R & D building, then the Tribunal has no other option except them to be removed or in other words to be demolished.

11. Remarks of the Technical Expert Committee (TEC):

- The project proponent has assured that there is no any production and or any other industrial activity to be undertaken in the proposed project site.
 The proposal is only for Research and Development activities. And it is expansion of the building.
- 2) As per the legal opinion, it is clarified that, the committee can process the application for CRZ clearance. However, with regard to the applicability of the Environment Clearance, the proponent has to obtain EC, based on the applicability.
- 3) The legal opinion should be included, if the proposal is recommended to SEIAA for the consideration of the Committee.

12. Recommendations of the TNSCZMA

This subject was placed before the 120th meeting of the Tamil Nadu State Coastal Zone Management Authority (TNSCZMA) held on 05.04.2023 and the SCZMA examined the recommendation of the DCZMA of Chennai district and also the legal opinion on the Original Application No. 224 of 2021 offered by Dr. D Shanmuganathan, Standing Counsel, NGT (Southern Zone) in the 120th meeting of TNSCZMA held on 05.04.2023 and decided to recommend the project to SEIAA for issuing CRZ Clearance, with the conditions stated therein.

Hence, this proposal is placed in this 398th meeting of SEAC held on 04.08.2023.

The SEAC further observed the following:

1. Earlier application No. SIA/TN/NCP/60757/2016 dt: 30.11.2016 was appraised (File No. 6227/2016) vide 92nd SEAC meeting held on 11.07.2017. Based on the presentation made by the proponent the Committee inferred that the project might attract CRZ regulations and hence deferred the proposal. The Committee directed the proponent to approach the Tamil Nadu Coastal Zone Management Authority for their appraisal and decision regarding CRZ Clearance and then represent the proposal before the SEAC.

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- 2. This proposal was withdrawn by the PP in the Online Parivesh portal.
- The Application No.224 of 2021 filed by Thiru MR. Thiyagarajan against M/s.
 MRF Limited on the existing clearance issued by TNSCZMA on the Tyre testing
 facility and warehouse in the same warehouse and it is pending with the Hon'ble
 NGT (SZ).

4. As per MoEF & CC O.M dated 4th October, 2022:

"...the Ministry deems it necessary to clarify that, the word Industrial Shed mentioned in the Notification S.O. 3252 (E) dated 22/12/2014 implies buildings/warehouses/sheds (whether RCC or otherwise) which are used for housing machinery of industrial units and/or storage of raw materials and finished goods and industrial products including but not limited to industrial and factory-made products, irrespective of the location and proximity of the Industrial Shed -- any Industry. These Industrial Sheds shall strictly implement the guidelines issued vide OM dated 9/06/2015 to ensure sustainable environmental management. However, if any of the activities/processes covered in the schedule to the EIA Notification 2006 are housed in the said Industrial Shed, then the sa te shall be required to obtain prior BC under the provisions of EIA Notification, 2006".

5. As per MoEF & CC O.M dated 1st September, 2022:

"...R&D activities on laboratory scale/pilot scale carried out for the projects or activities which are listed in the schedule to the EIA Notification 2006, as amended and where no commercial production is involved, are exempted from the requirements of prior EC, provided such activities are clearly mentioned as R&D activities in the consents obtained from the respective State Pollution Control Board".

Based on the documents furnished and the presentation made by the proponent, the SEAC, after detailed deliberations, decided to obtain the following details,

- The PP shall furnish certified compliance report obtained from the TNPCB for the earlier CTE and CTO issued.
- 2. The PP shall explain the details of The Application No.224 of 2021 filed by Thiru MR. Thiyagarajan against M/s. MRF Limited on the existing clearance issued by TNSCZMA on the Tyre testing facility and warehouse in the same warehouse and it is pending with the Hon'ble NGT (SZ).

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- The PP shall furnish the details of Achievements, New technology adopted & design parameters so far made in the existing R&D facility.
- 4. The PP shall furnish the details of existing warehouse viz builtup area, type of activities carrying out and shall submit the videographic proof of the same.

Based on the Proponent's reply, the proposal was again placed in the 414th meeting of SEAC held on 04.10.2023. Based on the documents furnished and the presentation made by the proponent, the SEAC, after detailed deliberations, decided to obtain the following details.

- The industrial shed is located abutting MRF Tyre Industry. According to the PP,
 the shed is used for storing raw materials meant for the use of not Tiruvottiyur
 MRF factory but also for other factories of the Company located elsewhere.
 Hence, the PP is requested to clarify why the industrial shed which serves as
 storage for MRF factory/factories should not be considered as expansion of
 existing industry.
- 2. The PP stated that construction of building within CRZ is a permitted activity. Hence, the PP is requested to furnish information whether the term "Building" will cover industrial sheds and buildings used by an industry for R&D purposes.
- 3. The PP is requested to give details regarding any Hazardous chemical storage & log book extract.
- 4. The PP shall submit the details of Solid waste generated, discarded & disposed.
- 5. The PP shall submit the details of number of persons working in the existing facility & the proposed increase in workforce due to the proposed expansion of existing facility.

On receipt of the above, further deliberations will be done. 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.

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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.

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- 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.
- 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 eco-

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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.
- 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.

- 14. To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
- 15. The Project Proponent shall comply with the provisions of the Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
- 16. The project proponent shall ensure that the provisions of the MMDR Act, 1957, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are compiled by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.
- 17. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCB) by the proponent without fail.
- 18. The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
- 19. Prior clearance from Forestry & Wild Life including clearance from committee of the National Board for Wildlife as applicable shall be obtained before starting the quarrying operation, if the project site attracts the NBWL clearance, as per the existing law from time to time.
- 20. All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the Precise area communication letter issued by concerned District Collector should be strictly followed.
- 21. That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory

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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

- 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.

- 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.

- 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

- 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.

SPEC	IAL MITIGATION MEASURES FO	R THE QUARRIES LOCATED IN CLOSE		
PRO	PROXIMITY TO THE WINDMILLS			
Sl.	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			
	having Diploma/Degree in mining	Diploma/Degree in mining engineering for		
	engineering for day-to-day	day-to-day blasting.		
	blasting.			
6.	Training of the blasting crew on	Training of the blasting crew on controlled		
	controlled blasting practices	blasting practices before engaged in		
	before engaged in operation.	operation.		
		•		

7.	Submission of monthly report on	Submission of monthly report on blast
	blast design pattern and detailed	design pattern and detailed explosive
	explosive consumption as well as	consumption as well as volume of rock
	volume of rock excavation to a	excavation to a statutory body viz. DGMS,
	statutory body viz. DGMS, DMG,	DMG, SPCB. Report of recorded ground
	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

- 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 exceeding 6 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).
- 16. The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc.,
- 17. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.
- 18. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment, and the remedial measures for the same.
- 19. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of the Mines Act 1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.

- 20. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of groundwater pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds, etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided.
- 21. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.
- 22. The Proponent shall carry out the Cumulative impact study due to mining operations carried out in the quarry specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
- 23. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 24. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features 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.
- 28. Impact on local transport infrastructure due to the Project should be indicated.
- 29. A tree survey study shall be carried out (nos., name of the species, age, diameter etc.,) both within the mining lease applied area & 300m buffer zone and its management during mining activity.
- 30. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
- 32. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 33. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along

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

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

Annexure II

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

1. Statutory Compliance:

- The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightning etc.
- 3. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act. 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- 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.
- 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.
- 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 he 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.

4. Noise Monitoring and Prevention:

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

5. Energy Conservation Measures:

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

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components of the plan which involve the participation of these departments.

9. Human Health Issues:

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

10. Corporate Environment Responsibility:

- 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

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- submitted to the MoEF&CC as a part of Half Yearly Compliance Report (HYCR).
- 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.
- 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

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- prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- 6. The project proponent shall inform the Authority (SEIAA) of the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- 7. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- 8. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also during their presentation to the State Expert Appraisal Committee.
- 9. No further expansion or modifications to the plant shall be carried out without prior approval of the Authority (SEIAA).
- 10. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 11. The Authority (SEIAA) may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 12. The Authority reserves the right to stipulate additional conditions if found necessary. The Company in a time-bound manner shall implement these conditions.
- 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
- 2) 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, the project

- 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

- i. 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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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
 - 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)
 - 1. 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
 - Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
 - 10. Details on Holding and de-gassing of molten metal from primary 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

- 1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
- 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, Ikonos, 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

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of RSPM and incorporating of RSPM data.

- 6. 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

Albizia lebbeck Albizia amara Usil Albizia amara Usil Albizia amara Usil Anthi Ashi Bauhinia purpurea Aathi Bauhinia racemosa Aathi Bauhinia tomentos Buchanania axillaris Buchanania uposa Buchania uposa Buchanania Bu	nil Name
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22 Transfilm bit of one National Grant	хī
36 Morinda pubescens Nuna Seem	ET .
37 Morinda citrifolia Vellai Nuna Gust	संस्कृता हुआया
38 Phoenix sylvestre Eachai #####	ரம் ம் ⁷
39 Pongamia pinnat Pungam usia	<u> </u>

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40	Premna mollissima	Munnai	முன்னை
41	Premna serratifolia	Narumunnai	5 ந மு க்கை
42	Premna tomentosa	Malaspoovarasu	மலை பிவச
43	Рговоріз сіпетеа	Vanni maram	வன்னி மறம்
44	Pterocarpus marsupium	Vengai	lacios
45	Pterospermum canescens	Vennangu, Tada	Galati staticity
46	Pterospermum xylocarpum	Polavu	Tiesel
47	Puthranjiva roxburghi	Karipala	egrant
48	Satvadora persica	Ugaa Maram	म्बस्य त्येक्
49	Sapindus emarginatus	Manipungan,	សមា្សាកានុខធ្
		Soapukai	சோப்புக்காய்
50	Saraca азоса	Asoca	अध्यक्ष
51	Streblus asper	Piray maram	பூகார் மல்
52	Strychnos nuxvoniic	Yetti	श ंष
53	Strychnos potatorum	Therthang Kottai	Series Genien.
54	Syzygium cumini	Navai	5/1000
55	Terminalia belleric	Thandri	इ.इ.कं ट्री
56	Terminalia arjuna	Ven marudhu	வென் மருது
57	Toona ciliate	Sandhana vembu	சந்தன வேப்பு
58	Thespesia populnea	Puvarasu	₫®£
59	Walsuratrifoliata	valsura	QUINSIT
60	Wrightia tinctoria	Veppalai	GOLLEGIO
61	Pithecellobium dulce	Kodukkapuli	Gast Gaiast Lipid

Appendix -III

Display Board

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

க ரங்கங்களில் குவாரி செய ல்ப	mடுகளுக்கான கற்றுச்துறல் அறுமா தி கீ ற்கண்ட இடந்தனைகளுக்கு உட்பட்டு			
வழங்கப்பட்டுள்ளது கட்டு, தே	இயிடப்பட்டு, சுற்றுச்துறல் அனுமதிதேறி வரை செல்லத்தக்கதாக உள்ளது.			
	குவாரியின் எல்லையைச் உற்றி வேலி அமைக்க வேண்டும்			
பசசை பகுதி வரைச்சி வேல் மாட்டுக் கணை கண்டுக் கிட்டுக்				
மேம்பாட்டுக்கான கரங்கத் திட்டம்	கரங்கப்பாதையின் ஆழம் தரைமட்டத்திலிருத்து மீட்டர்க்கு பிகாமல் இருக்க வேண் டும்			
	காற்றில் மாக ஏற்படாதவாறு கரங்க பாசிகளை மேற்கோள்ள வேண்டும்.			
l	வாகணங்கள் செல்லும் பாதையில் மாக ஏற்படாத அளவிற்கு த ண்ணி ரை முறையாக			
princip	தன்னர் லாரிகளின் மூலமாக அவ்வப்போது தெளிக்க வேண்டும்.			
прико рож ови. Соляния портоск	இரைச்சல் அனையும் தூரி மாகபாட்டையும் ஒறைப்பதற்காக துவாரியின் எல்லையை			
activations:	சுற்றி அடர்த்தியாள பசுமை பகுதியை ஏற்படுத்த வேண்டும்.			
	இது நிலத்திர்வுகள் ஏற்படாதவாறும் மற்றும் சுற்கள் பறக்காதவாகும் பாதுகாப்பு			
தடவடிக்கைகளை உள்ளிட்டாக செயல்படுத்தப்பட வேண்டும்				
கரங்கத்தில் இருத்து ஏற்படும் இரைச்சல் அனவு 85 டெசியல்ஸ் (கி.) அனவிற்கு மேல் ஏற்படாதவாறு தருத்த கட்டுப்பாடுகளை				
மேற் கொள்ள வேண்டும்.				
அங்க சட்ட வீழிகள் 1986ன் கிற் கரங்கத்தில் உள்ள பணியார்களுக்கு தகுத்த பாதுகாப்பு களுவிகள் வழங்கவதோடு				
கராதாரமுன்ன அமிப்பாற வசநிகளை செய்து தர வேண்டும்.				
கிராவம் அல்லது பஞ்சாபத்து வழியாக வாகளங்கள் செல்லும் சாலையை தொடந்து நன்கு பராவரிக்க வேண்டும்.				
ஷங்கப்பளிகளால் அகுசில் உள்ள விவசாயப் பளிகள் மற்றும் நீர்நிலைகள் பாதிக்கப்படக் கூடாது.				
நீர்நிலைகள் பாடுக்கப்படலால் திருப்பாத உறுதி செய்யும் வகையில் நிலத்துடி நீரின் தரத்தினை தொடர்ந்து கண்களைக்க வேண்டும்.				
கரங்கத்திலிருத்து களிம் பொகுட்களை எடுத்துச் செல்வது வீராம மக்களுக்கு எந்தத் சிரமத்தினையும் ஏற்படுத்தாதவாறு பாதுகாப்போடும் மற்றும் சுற்றுத்தும் பாதிக்களை வண்ணம் மாகணங்களை இயக்க வேண்டும்.				
அண்கப்பாரிகள் முடிக்கப்பட்டவுடன் கரங்க முடல் திட்டத்தில் உள்ளவாறு கரங்கத்தினை மூட வேண்டும்.				
ஷங்க நடவடிக்கைகளை முடித்தபின்னர் கரங்கப் பகுதி மற்றும் ஷங்க நடவடிக்கைகளால் இடையூறு ஏற்படக்கூடிய				
வேறு எந்தப் பகுதியையும் மறுகட்டுமானம் செய்து நாவரங்கள் விலங்குகள் ஆகியவற்றின் வளர்ச்சிக்கு ஏற்ற வகையில்				
பசமைப்ப த தியை உகுவாக்க வேண்டும்.				
	பார்வேஷ் (http://purivaturic.in) என்றே இணையதனத்தைப் பார்வையிடவும். மேலும் எந்தவித			
கற்றதழல் சாந்த புகாந்களுக்கு சென்னையில் உள்ள கற்றுச்தழல் மற்றும் வன அமைச்சகத்தின் ஒருங்கினைந்த வட்டார				
அலுவலகம்: 044 – 28222325 (அல்லது) தமிழ்நாடு மாக கட்டும்.எடு வாரியத்தின் மாவட்ட சுற்றுச்சூழல் கொறியாணை அனுகவும்				

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