

State Expert Appraisal Committee (SEAC)

Minutes of 410th meeting of the State Expert Appraisal Committee (SEAC) held on 22.09.2023 (Friday) 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 409th SEAC meeting held on 21.09.2023 were circulated to the Members in advance and as there are no remarks, the Committee decided to confirm the minute.

Agenda No: 410-01

(File No.6557/2023)

Existing Limestone Quarry Lease over an extent of 1.90.5 Ha at S.F.Nos. 833/4B, 836 (P) & 843/2 of Varavanai Village, Kulithalai Taluk, Karur District, Tamil Nadu by Thiru. S. Sekhar - For Environmental Clearance under violation category (SIA/TN/MIN/438560/2023 dt:30.07.2023)

The proposal was placed in this 410th Meeting of SEAC held on 22.09.2023. The details of the project furnished by the proponent are available on the website (parivesh.nic.in). SEAC noted the following:

- 1) The Project Proponent, Thiru. S. Sekhar has applied for Environmental Clearance under violation category for the Existing Limestone quarry lease over an extent of 1.90.5 Ha at S.F.Nos. 833/4B, 836 (P) & 843/2 of Varavanai Village, Kulithalai Taluk, Karur District, Tamil Nadu.
- 2) The project/activity is covered under Category "B" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3) ToR under violation category was issued to the project proponent vide Lr.No.SEIAA-TN/F.No.6557/SEAC/ToR - 1168/2018, Dated: 30.05.2022.
- 4) Subsequently, the proponent requested for an amendment in the earlier issued ToR dated.30.05.2022. The amendment request was placed in the 298th SEAC meeting held on 22.07.2022.

During the presentation, the proponent referred to the following Office Memorandums issued by MoEF & CC:


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- i) O.M from MoEF&CC dated 04.04.2016, exempts mining projects (major minerals) with lease area up to 25 hectares from public hearing.
- ii) O.M from MoEF&CC dated 12.11.2020 states that "While considering the applications for Environmental Clearance under the violation category as the provisions of S.O.804(E) dated 14.03.2017, the EACs/SEACs may insist upon public hearing to be conducted only for those categories of projects for which the EIA notification 2006 itself requires public hearing to be conducted.

Based on the above-mentioned O.Ms, the PP requested for an amendment in ToR exempting from public hearing stating that the proposed project came under Mining projects (major minerals) category with lease area < 25ha and coming under cluster mining >5ha.

After the detailed deliberations and discussion, the SEAC decided not to consider the request of the Project proponent for the above said amendment as it falls under violation case and also considering the circumstances of this case.

- 5) Subsequently, the proponent has submitted the EIA Report in the PARIVESH Portal on 30.07.2023 without conducting Public Hearing. The proposal was placed for appraisal in this 410th SEAC meeting held on 22.09.2023. During the presentation, Committee noted the following:

I. Notification & office memorandum issued by MoEF&CC from time to time

1. As per EIA Notification 2006 S.O. 1533 (E) Dated: 14.09.2006, under A. para 7(i)

- **I. Stage (1) - Screening:**

"... The projects requiring an Environmental Impact Assessment report shall be termed Category 'B1' and remaining projects shall be termed Category 'B2' and will not require an Environment Impact Assessment report. For categorization of projects into B1 or B2 except item 8 (b), the Ministry of Environment and Forests shall issue appropriate guidelines from time to time."

- **III. Stage (3) - Public Consultation:**


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"...All Category 'A' and Category B1 projects or activities shall undertake Public Consultation, except the following: -

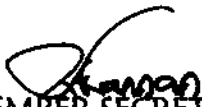
- a) modernization of irrigation projects (item 1(c) (ii) of the Schedule).*
- b) all projects or activities located within industrial estates or parks (item 7(c) of the Schedule) approved by the concerned authorities, and which are not disallowed in such approvals.*
- c) expansion of Roads and Highways (item 7 (f) of the Schedule) which do not involve any further acquisition of land.*
- d) All Building/Construction projects/Area Development projects and Townships (item 8).*
- e) all Category 'B2' projects and activities.*
- f) all projects or activities concerning national defense and security or involving other strategic considerations as determined by the Central Government.*

B. para 12 Operation of EIA Notification, 1994, till disposal of pending cases:

From the date of final publication of this notification the Environment Impact Assessment (EIA) notification number S.O.60 (E) dated 27th January, 1994 is hereby superseded, except in suppression of the things done or omitted to be done before such suppression to the extent that in case of all or some types of applications made for prior environmental clearance and pending on the date of final publication of this notification, the Central Government may relax any one or all provisions of this notification except the list of the projects or activities requiring prior environmental clearance in Schedule I , or continue operation of some or all provisions of the said notification, for a period not exceeding one year from the date of issue of this notification.

2. MoEF&CC vide office memorandum No. J-13012/12/2013-IA-II (I) dated: 24.12.2013 issued guidelines for consideration of proposals for grant of environmental clearance Environmental Impact Assessment (EIA) Notification, 2006 and its amendments regarding categorization of Category 'B' projects/activities into Category 'B1' & 'B2' among the others stated therein

(a) Para 2.


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I. Mining of Minerals

Mining of minor minerals

II. Other projects or activities

(b) Para 3

"The guidelines for categorization of Category 'B' projects/activities into Category 'B1' & 'B2' are applicable only to those projects/activities mentioned above. All the other Category 'B' projects/activities listed under the Schedule of EIA Notification, 2006 and its amendments shall be considered as Category 'B1' projects and appraised as per the procedure prescribed in the EIA Notification."

3. Following the dictum of the Hon'ble Supreme Court of India laid down in the case of Deepak Kumar vs. State of Haryana (2012) 4 SCC 629, the National Green Tribunal, principal bench had passed a detailed judgment in the case of Himmat Singh Shekhawat Vs. State of Rajasthan & ors decided on 13th January 2015, the Tribunal had issued large number of directions in paragraph 83 of the judgment as follows among others stated therein:

- I. For the reasons afore recorded, we hold and declare that the Notification dated 9th September, 2013 is invalid and inoperative for non-compliance of the statutorily prescribed procedure under the Environment (Protection) Rules, 1986 and 90 for absence of any justifiable reason for dispensation of such procedure.
- II. We also hold and declare that the Office Memorandums dated 24th June, 2013 and 24th December, 2013 to the extent afore indicated are invalid and inoperative being beyond the power of delegated legislation.
- III. All the Office Memorandums and Notifications issued by MoEF i.e., 1st December, 2009, 18th May, 2012 and 24th June, 2013 and 24th December, 2013(except to the extent afore-stated) are operative and would apply to the lease mine holders irrespective of the fact that whether the area involved is more or less than 5 hectares.

4. Subsequently, as per EIA Notification 2006 S.O. 141 (E) Dated: 15.01.2016,

"...And whereas, in pursuance to the order of Hon'ble Supreme Court dated the

27th February, 2012 in I.A. No.12- 13 of 2011 in Special Leave Petition (C) No.19628-19629 of 2009, in the matter of Deepak Kumar etc. Vs. State of Haryana and Others etc., prior environmental clearance has now become mandatory for mining of minor minerals irrespective of the area of mining lease;

And whereas, as a result of the above said Order of Hon'ble Supreme Court, the number of cases which are now required to obtain prior environmental clearance has increased substantially; And whereas, the Hon'ble National Green Tribunal, vide its order dated the 13th January, 2015 in the matter regarding sand mining has directed for making a policy on environmental clearance for mining leases in cluster for minor minerals;

And whereas, the State Governments have represented for streamlining the process of environmental clearance for mining of minor mineral;

...the Central Government made the following amendments in the said notification, namely: -

Para (k) in the Schedule, -

(i) for item 1 (a) and the entries relating thereto, the following item and entries shall be substituted, namely: -

(1)	(2)	(3)	(4)	(5)
"1(a)	(i) Mining of minerals	≥50 ha of mining lease area in respect of noncoal mine lease. >150 ha of mining lease area in respect of coal mine lease. Asbestos mining irrespective of	<50 ha of mining lease area in respect of non-coal mine lease ≤150 ha of mining lease area in respect of coal mining lease	General Conditions shall apply except: (i) for project or activity of mining of minor minerals of Category 'B2' (up to 25 ha of mining lease area); (ii) River bed mining projects on account of inter-state boundary. <i>Note:</i>

		mining area.		(1) Mineral prospecting is exempted.”; (2) The prescribed procedure for environmental clearance for mining of minor minerals including cluster situation is given in Appendix XI.”; (3) The mining leases which have obtained environmental clearance under Environment Impact Assessment Notification, 1994 and Environment Impact Assessment Notification, 2006 shall not require fresh environmental clearance during renewal provided the project has valid and subsisting environmental clearance.
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Para (1) after Appendix VI, the following appendices shall be inserted, namely: -

APPENDIX - XI

[See paragraph 7 (iii) (b)]

PROCEDURE FOR ENVIRONMENTAL CLEARANCE FOR MINING OF MINOR MINERALS INCLUDING CLUSTER


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The following policy shall be followed for environmental clearance of mining of minor minerals including cluster situation: -

"... (6). A cluster shall be formed when the distance between the peripheries of one lease is less than 500 meters from the periphery of other lease in a homogeneous mineral area."

5. Subsequently, as per EIA Notification 2006 S.O. 2269 (E) Dated: 01.07.2016, "Whereas by notification of the Government of India in the erstwhile Ministry of Environment and Forest number S.O. 1533 (E), dated the 14th September, 2006 published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) (hereinafter referred to as the said notification) directions has been given on environmental clearance for minor minerals and environment clearance for leases in cluster;

And whereas, the provision of cluster in the said notification is causing practical difficulty in the State of Rajasthan, where a large number of small size (15x30 sq. mt or 30x60 sq. mt) leases and quarry licenses are operational for many years. A large number of such leases have been granted years before, and have been further fragmented with family partitions. These mines are located adjacent to each other leaving no space between two leases, which make it difficult to prepare and implement Environment Management Plan for individual leases;

And whereas, many of the lessees who applied for environmental clearance for individual leases, but by classification of cluster in the said notification are being included in B1 category and has to be processed at the State level, whereas the work of appraisal and environmental clearance for small leases is assigned to the district level authority; And whereas, in view of the sudden unemployment of a large number of persons in the State of Rajasthan due to closure of mines,

... the Central Government hereby makes the following further amendments to the notification of the Government of India, in the erstwhile Ministry of Environment and Forests number S.O. 1533(E), dated the 14th September, 2006 after having dispensed with the requirement of notice under clause (a) of sub-

rule (3) of the said rule 5 in public interest, namely: –

(b) in Appendix XI, -

(i) for paragraph 6, the following shall be substituted, namely: - “(6) A cluster shall be formed when the distance between the peripheries of one lease is less than 500 meters from the periphery of other lease in a homogeneous mineral area which shall be applicable to the mine leases or quarry licenses granted on and after 9th September, 2013.”;

(ii) after the Table relating to “Schematic Presentation of Requirements on Environment Clearance of Minor Minerals including cluster situation” and before Appendix XII, the following Note shall be inserted at the end, namely: -

“Note. –

(1) In the State of Rajasthan, for mining of minor minerals, in situation of a large number of leases or quarry licenses of very small size (up to one hectare each) in contiguous area, the Mines and Geology Department of the State Government shall stated therein.

(5) The leases not operative for three years or more and leases which have got environmental clearance as on 15th January, 2016 shall not be counted for calculating the area of cluster, but shall be included in the Environment Management Plan and the Regional Environmental Management Plan.”

6. Subsequently, as per EIA Notification 2006 S.O. 3977 (E) Dated: 14.08.2018,

The following amendments were made in the schedule among the others stated therein

(i) against item 1(a),

(a) in column (4),

for “<50 ha of mining lease area in respect of non-coal mine lease”, the following were substituted as

“... ≤ 100 ha of mining lease area in respect of non-coal mine lease.”

7. Subsequently, as per EIA Notification 2006 S.O. 1886 (E) Dated: 20.04.2022, The following amendments were made in the schedule among the others stated therein

(2) in the Schedule,

(i) against item 1(a), –

(b) in column (4)

(A) for “≤ 100 ha of mining lease area in respect of non-coal mine lease”, the following shall be substituted, namely: –

“All mining lease area in respect of minor mineral mining leases and ≤ 250 ha mining lease area in respect of major mineral mining lease other than coal”;

(B) for the symbols, figures and letters “≤ 150 ha”, the symbols, figures and letters “≤ 500 ha” shall be substituted;

II. Observations of SEAC

Hence, based on the above Notification and office memorandum issued by MoEF&CC issued by MoEF&CC from time to time,

- a. In the parent notification S.O. 1533 (E) dated 14.09.2006, under para 7 public consultation was mandated for category A and category B1 projects with certain exemptions as stated above.
- b. Subsequently, MoEF&CC vide office memorandum dated 24.12.2013 had issued guidelines for consideration of proposals for grant of environmental clearance Environmental Impact Assessment (EIA) Notification, 2006 and its amendments regarding categorization of Category 'B' projects/activities into Category 'B1' & 'B2'.

- Where in para 3 of the above-mentioned OM among the other stated therein, states that

“The guidelines for categorization of Category 'B' projects/activities into Category 'B1' & 'B2' are applicable only to those projects/activities mentioned above. All the other Category 'B' projects/activities listed under the Schedule of EIA Notification, 2006 and its amendments shall be considered as Category 'B1' projects and appraised as per the procedure

prescribed in the EIA Notification."

- c. Further, the above-mentioned office memorandum was modified by the Hon'ble National Green Tribunal, principal bench vide order dated 13.01.2015 in O.A. No. 123 of 2014 and M.A. No. 419 of 2014 and the Tribunal had issued a number of directions in paragraph 83 of the judgment.
- Further, based on the above judgement, Sustainable sand mining management guidelines, 2016 was issued by MoEF&CC, where under Regime of Law and Administrative Orders Relating to Mining of Minor Minerals, it states that
"...the proviso at paragraph 2 (iii) of O.M. dated 24.12.2013 which says that "No river sand mining project, with mine lease area less than 5 ha, may be considered for granting EC" has been quashed."
- d. Subsequently, in the notification issued by MoEF&CC vide
- i. S.O. 141 (E) dated 15.01.2016,
 - Appendix XI was included in the EIA Notification 2006 which provides the procedure to be followed for grant of Environmental clearance for mining of minor minerals including cluster.
 - ii. S.O. 2269 (E) dated 01.07.2016,
 - Certain amendments were made in the para 6 of the notification S.O. 141 (E) dated 15.01.2016 which pertains to the cluster situation of mining of minor minerals stated therein.
- e. Subsequently, in the notification issued by MoEF&CC S.O. 1886 (E) Dated: 20.04.2022,
- Up to 250 Ha of major minerals shall be appraised at state level by SEIAA.
 - All minor minerals irrespective of extent shall be appraised at state level by SEIAA.

In the light of the above-mentioned notification & office memorandum issued from time to time, Committee is of the opinion that

- A. The cluster situation has been defined with respect to mining of minor minerals

only vide notification S.O. 141 (E) dated 15.01.2016 & S.O. 2269 dated 01.07.2016.

B. Further, as per the parent notification S.O. 1533 (E) dated: 14.09.2006, under para 7(i) I. stage (1) – Screening,

- “...For categorization of projects into B1 or B2 except item 8 (b), the Ministry of Environment and Forests shall issue appropriate guidelines from time to time.”

C. Subsequently, MoEF&CC vide office memorandum dated 24.12.2013, issued guidelines regarding categorization of various Category 'B' projects/activities in the schedule into Category 'B1' & 'B2' for consideration of proposals for grant of environmental clearance Environmental Impact Assessment (EIA) Notification, 2006 and its amendments.

- Hence, as per the provision contained in para 3 of the above-mentioned OM, it is ascertained that, all category 'B' projects/activities, other than minor minerals which are categorized as B1 and B2 as stated therein, shall be considered as category B1 projects and appraised as per procedure prescribed in the EIA Notification.

D. Further, as per MoEF&CC notification S.O. 1886 dated: 20.04.2022,

- The major mineral extent up to 250 Ha shall be appraised at state level by SEIAA.

III. Conclusion

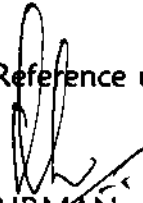
Based on the above, SEAC decided to conclude that

- i. The major minerals up to 250 Ha falls under the 'B1' category as per the above-mentioned OM dated 24.12.2013.
- ii. As per the EIA notification, 2006 para 7(i) III. Stage (3) under Public Consultation mandates that all Category 'A' and Category 'B1' projects or activities shall undertake Public Consultation.

Based on the presentation and documents furnished by the proponent and considering the provisions of MoEF&CC's notifications and office memorandums, the Committee noted that

1. The proponent's request to amend the earlier issued Terms of Reference under


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violation category to exempt from public hearing was rejected in the 298th SEAC meeting held on 22.07.2022.

2. Further, the proponent has not conducted public hearing despite the fact that the proponent's request to exempt from public hearing was rejected previously and subsequently, the proponent had submitted an EIA report in PARIVESH portal vide online proposal number SIA/TN/MIN/438560/2023 dt:30.07.2023 without public hearing.
3. Further, the proponent shall resubmit EMP after making changes wherever required based on public hearing.
4. The proponent shall submit Scheme of Mining approved by IBM.

Hence, the Committee decided to direct the proponent to (1) conduct public hearing and submit the public hearing minutes in PARIVESH portal and (2) revise EMP based on PH wherever required and submit it through Parivesh Portal.

Upon receipt of the same, further deliberation shall be made.

Agenda No: 410-02

(File No.8552/2023)

Proposed Rough stone and Gravel Quarry Lease over an extent of 2.41.0 Ha at S.F.Nos. 112/6A and 112/7A in Konganakkurichi village, Aruppukottai Taluk, Virudhunagar District, Tamil Nadu by Thiru. K. Bharathiraja - For Environmental Clearance (SIA/TN/MIN/437939/2023 dated:24.07.2023)

The proposal was placed in this 410th Meeting of SEAC held on 22.09.2023. 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. K. Bharathiraja** has applied for Environmental Clearance for the Proposed Rough stone and Gravel Quarry Lease over an extent of 2.410 Ha at S.F.Nos. 112/6A and 112/7A in Konganakkurichi village, Aruppukottai Taluk, Virudhunagar District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
3. ToR was issued to the project proponent vide Lr.No.SEIAA-TN/F.No.8552/SEAC/ ToR-1041/2022 dated.27.01.2022.


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4. Public Hearing was conducted on 05.01.2023.

5. The other salient features of the proposal are as follows:

File No		8552	Category	1(a)	
		SIA/TN/MIN/437939/2023		B1	
Sl. No	Salient Features of the Proposal				
1	Name of the Owner/Firm	:	Thiru. K. Bharathiraja, S/o. Krishnan, No. 7-8M-33, Azees Nagar, Aruppukkottai Post & Taluk, Virudhunagar District-626101.		
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	:	112/6A and 112/7A		
4	Village in which situated	:	Konganakkurichi		
5	Taluk in which situated	:	Aruppukottai		
6	District in which situated	:	Virudhunagar		
7	Extent of quarry (in ha.)	:	2.41.0 Ha		
8	Latitude & Longitude of all corners of the quarry site	:	9° 28' 31.56" N to 9° 28' 36.83" N 78° 10' 55.06"E to 78° 11' 03.77"E		
9	Topo Sheet No.	:	58-K/03		
10	Type of mining	:	Open cast mechanized mining method		
11	Life of Project	:	10 years		
	Lease Period	:	10 years		
	Mining Plan Period	:	10 years		
12	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC	
	Geological Resources m ³ (RoM)	:	Rough Stone – 7,23,000m ³	-	
		:	Gravel - 48,200m ³	-	
	Minable Resources m ³ (RoM)	:	Rough Stone – 1,05,480m ³	-	
		:	Gravel – 18,032m ³	-	
	Annual Peak Production in m ³	:	Rough Stone – 13,640m ³	-	

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			Gravel - 6336m ³	-
	Maximum Depth in meters	:	32m Below Grou Level	-
13	Depth of water table	:	65 - 60m	
14	Man Power requirement per day	:	14 Nos.	
15	Water requirement: 1. Drinking & Domestic Purpose 2. Dust Suppression 3. Green belt	:	10. KLD 1.0 KLD 8.0 KLD 1.0 KLD	
16	Power requirement		No electricity will be required for mining operation.	
17	Precise area communication approved by the Deputy Director, Dept. of Geology and Mining with date	:	Roc.No.KV1/531/2020/Kanimam/ dt: 01.02.2021.	
18	Mining Plan approved by the Deputy Director, Dept. of Geology and Mining with date	:	Roc.No.KV1/531/2020, Dated:16.02.2021.	
19	500m cluster letter issued by the Deputy Director, Dept. of Geology and Mining with date	:	Roc.No.KV1/531/2020, Dated:21.04.2021.	
20	VAO Certificate Regarding Structures within 300m Radius		Letter dated: 15.02.2021	
21	Project Cost (excluding EMP cost)	:	Rs. 21,64,000/-	
22	EC Recommendation	:	Validity	30 years subject to the following upper limits.
		:	Max Total RoM in m ³	Rough stone 1,05,480m ³ Gravel - 18,032m ³
		:	Annual Max RoM in m ³	Rough stone - 13,640m ³ Gravel - 6336m ³

		:	Max Depth in mtrs	32m below ground level
23	EMP cost (in Rs. Lakh)	:	Capital Cost – Rs. 20.36 Lakhs Recurring Cost – Rs. 14.10 Lakhs; Total Cost: Rs. 196.78 Lakhs (10 years)	
24	CER cost (in Rs. Lakh).	:	Rs. 5,00,000/-	
25	ToR Issued Details		Lr.No.SEIAA-TN/F.No.8552/SEAC/ ToR-1041/2022 dated.27.01.2022	
26	Public Hearing Conducted on		05.01.2023.	
27	EIA Report Submitted on		27.07.2023.	

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity not exceeding 13,640m³ of Rough stone & 6336m³ of gravel by maintaining the ultimate depth of mining up to 32m below ground level and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MoEF &CC, in addition to the following specific conditions:

- 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 strengthen the road passing over the pipe line area by laying tar / asphalt road of adequate thickness.
- 3) The PP shall construct an embankment along the boundary existing adjacent to the Kanmai before executing the lease with adequate plantation.
- 4) The PP shall install a continuous water sprinkling system along the travel route passing through the habitants for suppressing the dust before obtaining the CTO from the TNPCB.
- 5) The PP shall submit a Traffic Plan for the smooth & safe movement of the haultrucks by avoiding the crowded population of trucks after finalizing with the other quarries situated in the cluster to the DEE/TNPCB before obtaining the CTO.

- 6) 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 to store only the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008 before the execution of the lease.
- 7) 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 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.
- 8) For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 3rd year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 9) The PP shall carry out the comprehensive hydrogeological studies during the 4th year from the commencement of the mining operations to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving anyone of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM-Bangaluru, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, Anna University Chennai-Dept of Geology, CEG Campus, and University of Madras – Centre for Environmental Studies,

Chennai. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.

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

Agenda No: 410-03

(File No: 8602/2021)

Proposed Rough Stone & Gravel quarry lease over an extent of 2.22.0Ha at SF.No. 315/2D of Kodangipalayam Village, Palladam Taluk, Tiruppur District, Tamil Nadu by Thiru S.Thangavel - for Environmental Clearance. (SIA/TN/MIN/437984/2023, Dated:25.07.2023)

The proposal was placed in 410th meeting of SEAC held on 22.09.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

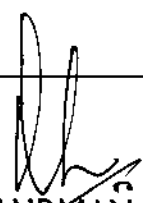
The SEAC noted the following

1. The Project Proponent, Thiru.S.Thangavel has applied for Environmental Clearance for the proposed Rough Stone & Gravel quarry lease over an extent of 2.22.0Ha at SF.No. 315/2D of Kodangipalayam Village, Palladam Taluk, Tiruppur District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

File No	8602/2021	Category	B1
	SIA/TN/MIN/437984/2023, Dated:25.07.2023		
Sl. No	Salient Features of the Proposal		
1.	Name of the Owner/Firm	:	Thiru S.Thangavel S/o.Sinnasubbaiah Gounder No.1/510, Kodangipalayam Palladam Taluk Tiruppur -641662
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough Stone & Gravel


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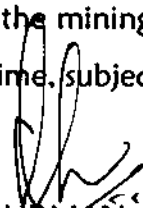
3.	S.F Nos. of the quarry site with area break-up	:	315/2D
4.	Village in which situated	:	Kodangipalayam
5.	Taluk in which situated	:	Palladam
6.	District in which situated	:	Tiruppur
7.	Extent of quarry (in ha.)	:	2.22.0Ha
8.	Latitude & Longitude of all corners of the quarry site	:	11°00' 50.19"N to 11°00'58.82"N 77°12'43.01"E to 77°12'46.62"E
9.	Topo Sheet No.	:	58-E/04
10.	Type of mining	:	Opencast mechanized mining
11.	Life of Project	:	5 years
	Lease Period	:	5 years
	Mining Plan Period	:	5 years
12.	Mining Plan Details	:	As per approved Mining Plan
			Rough Stone Gravel
	Geological Resources m ³	:	7,81,842m ³ 19,324m ³
	Mineable Resources m ³	:	2,35,150m ³ 13,376m ³
	Annual Peak Production in m ³	:	54,230m ³ 4,712m ³
	Ultimate Depth in meters	:	47m BGL
13.	Depth of water table	:	70m in summer season - 65m in Rainy season
14.	Man Power requirement per day:	:	28 Employees
15.	Water requirement:		3.0 KLD
	1. Drinking water & Utilized water	:	0.5 KLD
	2. Dust suppression	:	2.0 KLD
	3. Green belt	:	0.5 KLD
16.	Power requirement	:	TNEB 1,91,828 liters of HSD will be utilized for Entire project
17.	Precise area communication approved by the Deputy Director, Department of G&M.	:	Na.Ka.No.1498/Kannimam/2020, dated:25.02.2021
18.	Mining Plan approved by Deputy director, Department of G&M.	:	Rc.No. 1498/2020/Mines, dated:05.05.2021

19.	500m Cluster Letter approved by Deputy Director, Department of G&M,	:	Rc.No. 1498/2020/Mines, dated:05.05.2021		
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated: 11.05.2021		
21.	Project Cost (excluding EMP cost)	:	Rs.1,43,15,000/-		
22.	EC Recommendation	:	Validity	30 years subject to the following upper limits.	
			Rough Stone	Gravel	
		:	Max Total in m ³	1,86,450 m ³	13,376m ³
		:	Annual Max in m ³	49,000 m ³	4,712m ³
		:	Ultimate Depth in mtrs	42m BGL	
23.	EMP cost (in Rs. Lakh).	:	Rs.124 Lakhs		
24.	CER cost (in Rs. Lakh).	:	Rs.5 Lakhs		
25.	EIA report submitted on	:	Dated: 27.07.2023		
26.	ToR details	:	Lr.No:SEIAA-TN/F.No.8602/SEAC/ToR-1013/2021,Dated: 26.08.2021.		
27.	Public hearing details	:	Public hearing conducted on Dated:27.04.2023.		

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 49,000m³ of Rough stone & 4,712 m³ of Gravel by maintaining the ultimate depth of mining up to 42m BGL and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a


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maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.

2. Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the proposed quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
3. The PP shall furnish a Standard Operating Procedures (SoP) for carrying out the blasting operations in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.
4. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority to store only the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008 before the execution of the lease.
5. As a part of Ground Water Management, the PP shall carry out the scientific studies to assess the existing hydrogeological condition and impacts of the quarrying operation on the ground water level present in the core zone, within 2 years from the commencement of mining operations, by involving any one of the reputed Research and Academic Institution - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras – Centre for Environmental Studies, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be

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

6. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall within a period of six months from the commencement of quarrying operations, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, University of Madras-Dept of Geology, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
7. As accepted by the Project Proponent the CER cost of Rs. 5 Lakhs and the amount shall be spent for the activities as committed towards Panchayat Union Primary School, Karanampettai Village, Palladam Taluk before obtaining CTO from TNPCB.

Agenda No: 410-04

(File No: 8707/2021)

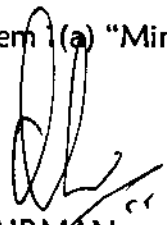
Proposed Rough Stone quarry lease over an extent of 4.35.85Ha at SF.No. 315/1(P), 334/1A(P) & 334/1B(P) of Dharavendiram Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu by M/S.AVS Tech Building Solutions - for Environmental Clearance. (SIA/TN/MIN/438852/2023, Dated:01.08.2023)

The proposal was placed in 410th meeting of SEAC held on 22.09.2023. 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.AVS Tech Building Solutions has applied for Environmental Clearance for the proposed Rough Stone quarry lease over an extent of 4.35.85Ha at SF.No. 315/1(P), 334/1A (P) & 334/1B(P) of Dharavendiram Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.


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File No	8707/2021		Category	B1
	SIA/TN/MIN/438852/2023, Dated:01.08.2023			
Sl. No	Salient Features of the Proposal			
1.	Name of the Owner/Firm	:	M/S.AVS Tech Building Solutions No.112/B, ESI Back Side Mookandapalli Hosur Taluk Krishnagiri District-635126	
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough Stone	
3.	S.F Nos. of the quarry site with area break-up	:	315/1(P), 334/1A (P) & 334/1B(P)	
4.	Village in which situated	:	Dharavendiram	
5.	Taluk in which situated	:	Denkanikottai	
6.	District in which situated	:	Krishnagiri	
7.	Extent of quarry (in ha.)	:	4.35.85Ha	
8.	Latitude & Longitude of all corners of the quarry site	:	12°33'34.45"N to 12°33'44.96"N 77°40'47.64"E to 77°40'55.77"E	
9.	Topo Sheet No.	:	57-H/10	
10.	Type of mining	:	Opencast mechanized mining	
11.	Life of Project	:	10 years	
	Lease Period	:	10 years	
	Mining Plan Period	:	10 years	
12.	Mining Plan Details	:	As per approved Mining Plan	
			Rough Stone	Topsoil
	Geological Resources m ³	:	17,43,400m ³	43,585m ³
	Minable Resources m ³	:	9,50,820m ³	37,626m ³
	Annual Peak Production in m ³	:	1,08,140m ³	16,536m ³
	Ultimate Depth in meters	:	41m BGL	
13.	Depth of water table	:	67m in summer season - 62m in Rainy season	
14.	Man Power requirement per day:	:	25 Employees	
15.	Water requirement:	:	3.5 KLD	

	1. Drinking water & Utilized water 2. Dust suppression 3. Green belt	0.5 KLD 2.0 KLD 1.0 KLD															
16.	Power requirement	TNEB : 7,66,926 liters of HSD will be utilized for Entire period of life															
17.	Precise area communication approved by the Assistant Director (Addl.charge), Department of G&M.	Roc.No.1157/2020/Mines, dated:25.02.2021															
18.	Mining Plan approved by Assistant Director(Addl.charge),Department of G&M.	Rc.No. 1157/2020/Mines, dated:29.04.2021															
19.	500m Cluster Letter approved by by Assistant Director(Addl.charge), Department of G&M,	Rc.No. 1157/2020/Mines, dated:30.04.2021															
20.	VAO Certificate Regarding Structures within 300m Radius	: Letter Dated: 10.06.2021															
21.	Project Cost (excluding EMP cost)	: Rs.1,34,06,000/-															
22.	EC Recommendation	<table> <tr> <td>: Validity</td><td colspan="2">30 years subject to the following upper limits.</td></tr> <tr> <td></td><td>Rough Stone</td><td>Topsoil</td></tr> <tr> <td>: Max Total in m³</td><td>9,50,820 m³</td><td>37,626m³</td></tr> <tr> <td>: Annual Max in m³</td><td>1,08,140 m³</td><td>16,536m³</td></tr> <tr> <td>: Ultimate Depth in mtrs</td><td colspan="2">41m BGL</td></tr> </table>	: Validity	30 years subject to the following upper limits.			Rough Stone	Topsoil	: Max Total in m ³	9,50,820 m ³	37,626m ³	: Annual Max in m ³	1,08,140 m ³	16,536m ³	: Ultimate Depth in mtrs	41m BGL	
: Validity	30 years subject to the following upper limits.																
	Rough Stone	Topsoil															
: Max Total in m ³	9,50,820 m ³	37,626m ³															
: Annual Max in m ³	1,08,140 m ³	16,536m ³															
: Ultimate Depth in mtrs	41m BGL																
23.	EMP cost (in Rs. Lakh).	: Rs.387 Lakhs															
24.	CER cost (in Rs. Lakh).	: Rs.5 Lakhs															
25.	EIA report submitted on	: Dated: 03.08.2023															
26.	ToR details	: Lr.No:SEIAA-TN/F.No.8707/SEAC/ToR-															

		1070/2022,Dated: 01.03.2022.
27.	Public hearing details	: Public hearing conducted on Dated:10.05.2023.

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 1,08,140m³ of Rough stone by maintaining the ultimate depth of mining up to 41m BGL and subject to the standard conditions as per the Annexure 1 of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

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. Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the proposed quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
3. The PP shall furnish a Standard Operating Procedures (SoP) for carrying out the blasting operations in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.


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4. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority to store only the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008 before the execution of the lease.
5. As a part of Ground Water Management, the PP shall carry out the scientific studies to assess the existing hydrogeological condition and impacts of the quarrying operation on the ground water level present in the core zone, within a period of one year from the commencement of mining operations, by involving any one of the reputed Research and Academic Institution - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras – Centre for Environmental Studies, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
6. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 3rd year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
7. The PP shall strengthen the haulroad passing through the habitation by laying tar / asphalt road of adequate thickness with adequate speed restricting mechanisms and maintain it during the period of quarrying operation and a half-yearly compliance report shall be furnished to the DEE/TNPCB.
8. The PP shall construct an embankment along the boundary existing adjacent to the Kanmai before executing the lease with adequate plantation.

9. The PP shall install a continuous water sprinkling system along the travel route passing through the habitants for suppressing the dust before obtaining the CTO from the TNPCB.
10. As accepted by the Project Proponent the CER cost of Rs. 5 Lakhs and the amount shall be spent for the activities as committed Panchayath Union primary school, Daravendram Taluk, Krishnagiri District, before obtaining CTO from TNPCB.
11. Since Cauvery North Wildlife Sanctuary is located at a distance of 6km, the PP shall deposit an amount of Rs.5 Lakhs to DFO, Hosur as a conservation measures.

Agenda No: 410-05

(File No: 8966/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 2.40.0Ha at SF.Nos. 324/1A, 324/1B1, 324/1B2, 324/2A, 324/2B, 324/2C1, 324/2C2, 324/3, 324/8A, 324/9A and 324/9B2 of Sirudhamur Village, Uthiramerur Taluk, Kanchipuram District, Tamil Nadu by Thiru.M.Ganesan- for Environmental Clearance. (SIA/TN/MIN/439424/2023, Dated:06.08.2023)

The proposal was placed in 410th meeting of SEAC held on 22.09.2023. 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.Ganesan has applied for Environmental Clearance for the proposed Rough Stone & Gravel quarry lease over an extent of 2.40.0Ha at SF.Nos. 324/1A, 324/1B1, 324/1B2, 324/2A, 324/2B, 324/2C1, 324/2C2, 324/3, 324/8A, 324/9A and 324/9B2 of Sirudhamur Village, Uthiramerur Taluk, Kanchipuram District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

File No	8966/2022	Category	B1
	SIA/TN/MIN/439424/2023, Dated:06.08.2023		
Sl. No	Salient Features of the Proposal		
1.	Name of the Owner/Firm	:	Thiru.M.Ganesan


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		S/o.Manivel No.36/1, Mallampatti Village Kalamavur Post Kulathur Taluk Pudukkottai District-622502
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	Rough Stone & Gravel
3.	S.F Nos. of the quarry site with area break-up	324/1A, 324/1B1, 324/1B2, 324/2A, 324/2B, 324/2C1, 324/2C2, 324/3, 324/8A, 324/9A and 324/9B2
4.	Village in which situated	Sirudhamur
5.	Taluk in which situated	Uthiramerur
6.	District in which situated	Kanchipuram
7.	Extent of quarry (in ha.)	2.40.0Ha
8.	Latitude & Longitude of all corners of the quarry site	12°43' 30.90"N to 12°43'37.05"N 79°51'00.54"E to 79°51'10.04"E
9.	Topo Sheet No.	57-P/14
10.	Type of mining	Opencast mechanized mining
11.	Life of Project	10 years
	Lease Period	10 years
	Mining Plan Period	5 years
12.	Mining Plan Details	As per approved Mining Plan
		Rough Stone Gravel
	Geological Resources m ³	10,80,000m ³ 48,000m ³
	Mineable Resources m ³	2,82,475m ³ 33,312m ³
	Annual Peak Production in m ³	33,750m ³ 13,280m ³
	Ultimate Depth in meters	47m BGL
13.	Depth of water table	53m in summer season - 48m in Rainy season
14.	Man Power requirement per day:	21 Employees
15.	Water requirement: 1. Drinking water & Utilized water 2. Dust suppression 3. Green belt	2.5 KLD 0.5 KLD 1.0 KLD 1.0 KLD
16.	Power requirement	TNEB

		1,33,038 liters of HSD will be utilized for Entire project			
17.	Precise area communication approved by the Assistant Director, Department of G&M.	:	Na.Ka.No.222/Q3/2021, dated:08.10.2021		
18.	Mining Plan approved by Assistant director, Department of G&M.	:	Rc.No. 222/Q3/2021, dated:11.10.2021		
19.	500m Cluster Letter approved by Assistant Director, Department of G&M,	:	Rc.No. 222/Q3/2021, dated:11.10.2021		
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Furnished Dated: Nil		
21.	Project Cost (excluding EMP cost)	:	Rs.61,39,000/-		
22.	EC Recommendation	:	Validity	30 years subject to the following upper limits.	
			Rough Stone	Gravel	
		:	Max Total in m ³	2,71,955m ³	33,312 m ³
		:	Annual Max in m ³	32,350m ³	13,280m ³
		:	Ultimate Depth in mtrs	47m BGL	
23.	EMP cost (in Rs. Lakh).	:	Rs.2 Crore 77 Lakhs		
24.	CER cost (in Rs. Lakh).	:	Rs.5 Lakhs		
25.	EIA report submitted on	:	Dated: 07.08.2023		
26.	ToR details	:	Lr.No:SEIAA-TN/F.No.8966/SEAC/ToR-1255/2022,Dated: 19.09.2022.		
27.	Public hearing details	:	Public hearing conducted on Dated:23.06.2023.		

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 32,350m³ of Rough stone & 13,280 m³ of Gravel by maintaining the ultimate depth of mining up to 47m BGL and subject to the standard conditions as per the Annexure I of this minutes & normal


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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. Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the proposed quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
3. The PP shall ensure that the transport of materials and the blasting operations shall not be carried out during school hours from 8AM-10AM and during 3PM -5PM.
4. The PP shall furnish a Standard Operating Procedures (SoP) for carrying out the blasting operations in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.
5. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority to store only the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008 before the execution of the lease.
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


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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 during the 3rd year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
8. The PP shall improve the haulroad passing through the habitation by laying tar / asphalt road of adequate thickness with adequate speed restricting mechanisms and maintain it during the period of quarrying operation and a half-yearly compliance report shall be furnished to the DEE/TNPCB.
9. The PP shall install a continuous water sprinkling system along the travel route passing through the habitants for suppressing the dust before obtaining the CTO from the TNPCB.
10. As accepted by the Project Proponent the CER cost of Rs. 5 Lakhs and the amount shall be spent for the activities as committed Government Higher Secondary School, Thirumukkoodal, Kancheepuram before obtaining CTO from TNPCB.
11. Since Karikili Birds Sanctuary is located at a distance of 8.5km, the PP shall deposit an amount of Rs.5 Lakhs to Wildlife warden, Guindy as a conservation measures.


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Agenda No. 410-06

(File No: 9176/2022)

Proposed expansion of grey and ductile iron castings manufacturing at S.F Nos. 256 Part, 270 Part of Pappankuppam Village, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu by M/s Danblock Brakes India Pvt Ltd - For Environmental Clearance. (SIA/TN/INDI/435843/2023, Dated:12.07.2023)

The proposal was placed in 410th meeting of SEAC held on 22.09.2023. 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 Danblock Brakes India Pvt Ltd has applied for Environmental Clearance for the proposed expansion of grey and ductile iron castings manufacturing at S.F Nos. 256 Part, 270 Part, Pappankuppam Village, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 3(a) "Metallurgical Industries" of the Schedule to the EIA Notification, 2006.
3. ToR Issued vide - Letter No. SEIAA-TN/F.No.9176/SEAC/(3a)/ToR.1252/2022 dated 07.09.2022.
4. Public hearing conducted on 09.05.2023.
5. The existing unit is manufacturing Grey and Ductile Iron Casting in their plant spread over 15.54 Acres.
6. The unit is proposed to expand the manufacturing of Grey and Ductile Iron Casting from the existing quantity of 25,000 TPA to 95,000 TPA.

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

1. As per MoEF&CC Office memorandum vide FC-11/119/2020-FC Dated: 17.05.2022, the proposed site attracts NBWL clearance as per the provisions contained in para 5 of the above-mentioned OM. Hence, the proponent shall submit NBWL Clearance as stated in the ToR issued earlier.
2. The PP shall conduct energy audit of the existing facility through an accredited BEE consultant and submit the report along with the action taken report on the recommendations made by the consultant.


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3. The PP shall furnish point wise ToR compliance.
4. The PP furnish an action plan for either produce 50% of its energy consumption or buy green energy from TNEB or combination of both.
5. The PP shall furnish protective measures to arrest fugitive emission.
6. The PP shall complete all plantation and shall furnish photographs and video proof in this regard.
7. The PP furnish an action plan for adopting ITI in Gummidipoondi to improve its software and hardware infrastructure.
8. PP shall identify local youth in that area and impart skill training and also discuss with local panchayat and furnish an action plan to meet its commitment, with reference to points raised in public hearing.
9. The PP shall furnish RoA of STP/ETP.

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: 410-07

(File No: 6993/2019)

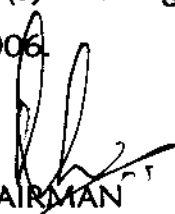
Proposed Rough Stone and Gravel quarry lease area over an extent of 2.80.5 Ha at S.F.Nos. 15/1 & 15/2 of Sivayam (North) Village, Krishnarayapuram Taluk, Karur District, Tamil Nadu by Tvl. Navamani Mines Private Limited - For Environmental Clearance. (SIA/TN/MIN/439433/2023, Dated: 06.08.2023)

The proposal was placed for appraisal in this 410th meeting of SEAC held on 22.09.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

1. The project proponent, Tvl. Navamani Mines Private Limited has applied for Environmental Clearance for the Proposed Rough Stone and Gravel quarry lease area over an extent of 2.80.5 Ha at S.F.Nos. 15/1 & 15/2 of Sivayam (North) Village, Krishnarayapuram Taluk, Karur District, Tamil Nadu.
2. The project/activity is covered under category "B" of Item 1(a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.


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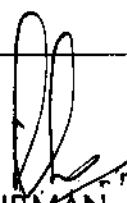

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3. As per the precise area communication letter, the lease period is 5 years and mine plan period is 5 years. As per the approved mine plan, the annual peak production shall not exceed 82,755 m³ of Rough Stone and 17,652 m³ of Gravel for an ultimate depth of 38m (3m Gravel + 35m Rough Stone) below ground level.
4. ToR along with Public Hearing issued vide Lr No. SEIAA-TN/F.No.6993/SEAC/ToR-761/2020 Dated:24.09.2020
5. Public hearing conducted on 21.06.2023
6. EIA Report submitted on 10.08.2023
7. The salient features of the proposal are as follows:

File No	6993 / 2019	Category	B / I(a)
Sl. No	Salient Features of the Proposal		
1	Name of the Owner/Firm	:	Tvl. Navamani Mines Private Limited, Thiru. Pazhaniyandi Vimalathithan, Director S/o. Pazhaniyandi, No.5/898, Alagu Nagar, Trichy Main Road, Namakkal District - 637 001.
2	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough Stone and Gravel
3	S.F Nos. of the quarry site with area break-up	:	15/1 & 15/2
4	Village in which situated	:	Sivayam (North)
5	Taluk in which situated	:	Krishnarayapuram
6	District in which situated	:	Karur
7	Extent of quarry (in ha.)	:	2.80.5 Ha
8	Latitude & Longitude of all corners of the quarry site	:	10°52'19.57"N to 10°52'25.68"N 78°22'26.70"E to 78°22'34.23"E
9	Topo Sheet No.	:	58 - J/05
10	Type of mining	:	Opencast Mechanized Mining
11	Life of Project	:	5 years
	Lease Period	:	5 years

	Mining Plan Period	:	5 years			
12	Mining Plan Details	:	As per approved Mining Plan		As modified by SEAC	
	Geological Resources m ³ (RoM)	:	Rough Stone	Gravel	Rough Stone	Gravel
			9,80,455 m ³	84,039 m ³	-	-
	Minalable Resources m ³ (RoM)	:	Rough Stone	Gravel	Rough Stone	Gravel
			3,95,935 m ³	49,332 m ³	-	-
	Annual Peak Production in m ³	:	Rough Stone	Gravel	Rough Stone	Gravel
82,755 m ³			17,652 m ³	-	-	
Ultimate Depth in meters	:	38m (3m Gravel + 35m Rough Stone) below ground level		-		
13	Depth of water table	:	45m-50m below ground level			
14	Man Power requirement per day:	:	36 Nos.			
15	Water requirement: 1. Drinking water 2. Utilized water 3. Dust suppression 4. Green belt	:	4.0 KLD 1.5 KLD - 1.5 KLD 1.0 KLD			
16	Power requirement	:	3,24,972 Liters of HSD			
17	Precise area communication approved by District Collector	:	Na.Ka.No.256/Kanimam/2019, dated:19.06.2019			
18	Mining Plan approved by Deputy Director, Department of G&M	:	Rc.No.256/Mines/2019, dated: 24.06.2019			
19	Department of G&M, Deputy Director 500m Cluster Letter	:	R.C. No.256/Mines/2019, dated:25.06.2019			
20	VAO Certificate Regarding Structures within 300m Radius	:	Letter dated 24.06.2019			


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21	Project Cost (excluding EMP cost)	:	Rs. 65,68,505/-		
22	EC Recommendation	:	Validity	30 years subject to the following upper limits.	
		Rough Stone		Gravel	
		:	Max Total RoM in m ³	3,95,935 m ³	49,332 m ³
		:	Annual Max RoM in m ³	82,755 m ³	17,652 m ³
		:	Max Depth in mtrs	38m (3m Gravel + 35m Rough Stone) below ground level	
23	EMP cost (in Rs. Lakh).	:	Capital Cost – Rs. 35,23,350/- Recurring Cost – Rs. 22,51,441/-		
24	CER cost (in Rs. Lakh).	:	Rs. 5,00,000/-		

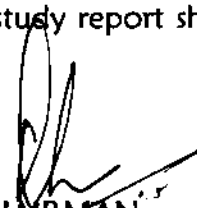
Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity not exceeding 82,755m³ of Rough Stone and 17,652m³ of Gravel by maintaining the ultimate depth of mining upto 38m (3m Gravel + 35m Rough Stone) 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 a Standard Operating Procedures (SoP) for carrying out the blasting operations in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.
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 to store only the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008 before the execution of the lease.

4. Due to the existence of habitations at a distance of 460m, the PP shall carry out a scientific study within a period of six months from the commencement of mining operation for evolving the Controlled Blast Design and Safe Blasting Practices, 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, IIT(ISM)/Dhanbad, 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.
5. As a part of Ground Water Management, the PP shall carry out the scientific studies to assess the existing hydrogeological condition and impacts of the quarrying operation on the ground water level present in the core zone, within 2 years from the commencement of mining operations, by involving any one of the reputed Research and Academic Institution - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras – Centre for Environmental Studies, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
6. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 3rd year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall


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

7. The PP shall improve the haulroad passing through the habitation by laying tar / asphalt road of adequate thickness with adequate speed restricting mechanisms and maintain it during the period of quarrying operation and a half-yearly compliance report shall be furnished to the DEE/TNPCB.

8. As accepted by the Project Proponent the CER cost of Rs. 5 lakhs and the amount shall be spent for the activities as committed towards the Panchayat Union Middle School, Sivayam (West), Ayyarmalai, Kulithalai Taluk, Karur District, before obtaining CTO from TNPCB.

Agenda No: 410-08

(File No: 8743/2021)

Proposed Rough Stone and Gravel quarry lease area over an extent of 1.10.5 Ha at S.F.Nos. 293/1A(P) & 293/2B(P) of Mellur-Duraisampuram Village, Rajapalayam Taluk, Virudhunagar District, Tamil Nadu by Thiru. K.A. Rajagopal - For Environmental Clearance. (SIA/TN/MIN/438048/2023, Dated: 26.07.2023)

The proposal was placed for appraisal in this 410th meeting of SEAC held on 22.09.2023. 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.A. Rajagopal has applied for Environmental Clearance for the Proposed Rough Stone and Gravel quarry lease area over an extent of 1.10.5 Ha at S.F.Nos. 293/1A(P) & 293/2B(P) of Mellur-Duraisampuram Village, Rajapalayam Taluk, Virudhunagar District, Tamil Nadu.
2. The project/activity is covered under category "B" of Item 1(a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. ToR along with Public Hearing issued vide Lr No. SEIAA-TN/F.No.8743/SEAC/ToR-1052/2022 Dated: 31.01.2022
4. Public hearing conducted on 18.04.2023
5. EIA Report submitted on 27.07.2023


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Based on the presentation made and documents submitted and from the KML file uploaded in the PARIVESH Portal, SEAC noted the following.

- i) Highly sensitive Nellai Wildlife Sanctuary is located close to the project site.
- ii) Srivilliputhur – Megamalai Tiger Reserve is located close to the project site.
- iii) Two residential educational institutes, namely, (i) Stella Mary's B.Ed., College and (ii) Stella Mary's Teachers Training College are located within the blasting danger zone (500m from the lease) as prescribed by DGMS Circular: (SOMA)/(Tech) Cir No. 2 of 2003, Dt. 31/01/2003.
- iv) Two waterbodies, namely (i) Periyakulam Kanmai and (ii) Odai are located at a distance of 240 m from the quarry site.
- v) Brick chamber is located at a distance of 145m from the project site and Hollow blocks manufacturing unit is located at a distance of 60m from the project site.
- vi) A Government Hospital and a Government School are located close to the project site.
- vii) Residential Houses and other structures are also located nearby the project site.
- viii) Public village road is located at a distance of 60m from the project site and Devipattanam Road is located at a distance of 170m from the project site.
- ix) Tenkasi – Madurai Road is located on the eastern side of the project area at a distance of 500m.

In view of the above sensitivities, the Committee decided not to recommend the proposal for grant of Environmental Clearance.

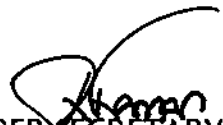
Agenda No: 410 - 09

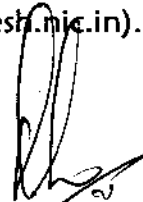
(File No: 8583/2023)

Proposed of Rough stone & Gravel Quarry lease over an extent of 1.42.0Ha by Thiru. P.A.Raja in S.F.Nos. 225/1B of Kokkalai Village, Tiruchengode Taluk, Namakkal District, Tamil Nadu by Thiru.P.A.Raja - For Environmental Clearance. (SIA/TN/MIN/437634/2023 Dt. 21.07.2023)

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

The SEAC noted the following:


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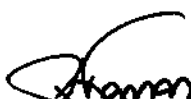

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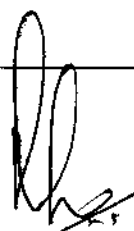
1. The project proponent, Thiru.P.A.Raja has applied for Environmental Clearance for the Proposed Rough stone & Gravel Quarry lease over an extent of 1.42.0Ha in S.F.Nos.225/1B of Kokkalai Village, Tiruchengode Taluk, Namakkal District, Tamil Nadu.
2. The project/activity is covered under category "B1" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. ToR vide. Lr No. SEIAA-TN/F.No.8583/SEAC/ToR-1020/2021 Dated: 23.08.2021.
4. Public Hearing Conducted on 09.02.2023.
5. EIA Received on 27.07.2023.

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 88160m³ of Rough Stone & 19712m³ of Gravel. The annual peak production is 19440m³ of Rough Stone (5th Year) & 7168m³ of Gravel (1st Year). The depth of mining is 13m BGL.

Sl. No	Salient Features of the Proposal	
1.	Name of the Owner/Firm	Thiru.P.A.Raja S/o.Arumugam No.120, Samiyappa Nagar Seelanaickenpatty Salem Town & Taluk Salem District-636201
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Lime stone)	Rough stone & Gravel
3.	S.F Nos. of the quarry site with area break-up	225/1B
4.	Village in which situated	Kokkalai
5.	Taluk in which situated	Thiruchengode
6.	District in which situated	Namakkal
7.	Extent of quarry (in ha.)	1.42.0Ha
8.	Latitude & Longitude of all corners of the quarry site	11°21'54.40" N to 11°21'57.53" N 78°03'37.22"E to 78°03'43.33"E

9.	Topo Sheet No.	:	58 I/03			
10.	Type of mining	:	Opencast Mechanized Mining Method			
11.	Life of Project	:	5 Year			
	Lease Period	:	5 Year			
	Mining Plan Period	:	5 year			
12.	Mining Plan Details	:	As per approved Mining Plan		As modified by SEAC	
	Geological Resources m ³ (RoM)	:	Rough Stone	Gravel	Rough Stone	Gravel
			4,93.29 0 m ³	28,188 m ³	-	-
	Mina ble Resources m ³ (RoM)	:	Rough Stone	Gravel	Rough Stone	Gravel
			1,61.56 0 m ³	19,712 m ³	1,59.68 0 m ³	-
	Annual Peak Production in m ³	:	Rough Stone	Gravel	Rough Stone	Gravel
		19,440 m ³	7,168 m ³	-	-	
	Maximum Depth in meters	:	38m (BGL)		33m (BGL)	
13.	Depth of water table	:	65-70m			
14.	Man Power requirement per day:	:	17 Nos.			
15.	Water requirement: 1. Drinking water 2. Utilized water 3. Dust suppression 4. Green belt	:	7.4 KLD 0.4 KLD 7.0 KLD			
16.	Power requirement	:	TNEB 134168 Liters of HSD			
17.	Precise area communication approved by the District Collector with date	:	Na.Ka.No.1508/Kanimam/2019 dated: 19.02.2021			
18.	Mining Plan approved by the Deputy Director of Geology and Mining with date	:	Rc.No.1508/Mines/2019 dated: 24.02.2021			


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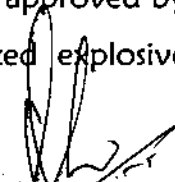

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19.	Department of G&M, Deputy Director 500m Cluster Letter	Rc.No.1508/Mines/2019 dated: 24.02.2021												
20.	VAO Certificate Regarding Structures within 300m Radius	Letter dated Nil												
21.	Project Cost (excluding EMP cost)	: Rs. 37.43 Lakhs												
22.	EC Recommendation	Ist Five Years as per approved mining plan : <table border="1"> <thead> <tr> <th></th><th>Rough Stone</th><th>Gravel</th></tr> </thead> <tbody> <tr> <td>: Max Total RoM in m³</td><td>1,59,680 m³</td><td>28,188 m³</td></tr> <tr> <td>: Annual Max RoM in m³</td><td>19,440 m³</td><td>7,168 m³</td></tr> <tr> <td>: Max Depth in mtrs</td><td colspan="2">33 m</td></tr> </tbody> </table>		Rough Stone	Gravel	: Max Total RoM in m ³	1,59,680 m ³	28,188 m ³	: Annual Max RoM in m ³	19,440 m ³	7,168 m ³	: Max Depth in mtrs	33 m	
	Rough Stone	Gravel												
: Max Total RoM in m ³	1,59,680 m ³	28,188 m ³												
: Annual Max RoM in m ³	19,440 m ³	7,168 m ³												
: Max Depth in mtrs	33 m													
23.	EMP cost (in Rs. Lakh).	: Rs. 7.60 Lakhs												
24.	CER cost (in Rs. Lakh).	: Rs. 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 quantity of 1,59,680m³ of Rough Stone & 19,712m³ of Gravel and the annual peak production shall not exceed 19,440 m³ of Rough Stone & 7,168 m³ of Gravel by restricting the ultimate depth of mining up to 33m 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:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.
2. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority to store only the authorized explosives &


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detonators separately in accordance with the Explosive Rules, 2008 before the execution of the lease.

3. Within one year from the commencement of mining operations, the PP shall carry out the scientific studies comprising all the operating leases located in a cluster situation, on 'Optimisation of Controlled Blast Techniques for reducing the cumulative impact of blast-induced ground & air vibrations and flyrock caused due to the blasting operations' using the NONEL initiation systems on the structures located within 500 m to 750 m (radial distance), by involving anyone of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining and Fuel Research / Nagpur, NIRM, Bangaluru, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus shall be carried out before the commencement of mining operations. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
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. 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.
6. As accepted by the Project Proponent the CER cost of Rs. 5 lakhs and the amount shall be spent for the Panchayat Union Middle School, Kokkalai Village, Elachipalayam Union, Thiruchengode Taluk, Namakkal District before obtaining CTO from TNPCB.


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Agenda No: 410 - 10

(File No: 8968/2023)

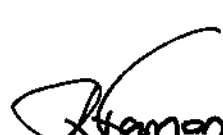
Proposed Rough Stone & Gravel Quarry lease over an extent of 1.98.0Ha at S.F.No.320/1A, 320/1B & 320/2 of Siruthamur Village, Uthiramerur Taluk, Kanchipuram District, Tamil Nadu by Thiru.M.Ganesan - For Environmental Clearance. (SIA/TN/MIN/439401/2023 Dt. 05.08.2023)

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

The SEAC noted the following:

1. The project proponent, Thiru.M.Ganesan has applied for Environmental Clearance for the Rough Stone & Gravel Quarry lease over an extent of 1.98.0Ha at S.F.No.320/1A, 320/1B & 320/2 of Siruthamur Village, Uthiramerur Taluk, Kanchipuram District, Tamil Nadu.
2. The project/activity is covered under category "B1" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. ToR vide. Lr No. SEIAA-TN/F.No.8968/SEAC/ToR-1254/2022 Dated: 19.09.2022.
4. Public Hearing Conducted on 23.06.2023.
5. The precise area communication was issued for the period of 10 years. The approved mining plan is for the period of 1st five years & production should not exceed 103520m³ of Rough Stone & 22338m³ of Gravel. The annual peak production is 23000m³ of Rough Stone (3rd Year) & 8750m³ of Gravel (1st Year). The depth of mining is 32m BGL.

Sl. No	Salient Features of the Proposal	
1.	Name of the Owner/Firm	Thiru.M.Ganesan S/o.Manivel No.36/1, Mallampatti Village Kalamavur Post Kulathur Taluk Pudukkottai District-622502
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Lime stone)	Rough Stone, Jelly & Gravel


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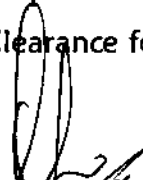

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3.	S.F Nos. of the quarry site with area break-up	:	320/1A, 320/1B & 320/2			
4.	Village in which situated	:	Siruthamur			
5.	Taluk in which situated	:	Uthiramerur			
6.	District in which situated	:	Kanchipuram			
7.	Extent of quarry (in ha.)	:	1.98.0Ha			
8.	Latitude & Longitude of all corners of the quarry site	:	12°43'14.06"N to 12°43'22.54"N 79°51'01.92"E to 79°51'06.63"E			
9.	Topo Sheet No.	:	57 – P/14			
10.	Type of mining	:	Opencast Mechanized Method of Mining			
11.	Life of Project	:	10 Year			
	Lease Period	:	10 Year			
	Mining Plan Period	:	5 year			
12.	Mining Plan Details	:	As per approved Mining Plan		As modified by SEAC	
	Geological Resources m ³ (RoM)	:	Rough Stone	Gravel	Rough Stone	Gravel
			6,93.000 m ³	48,000 m ³	-	-
	Mina ble Resources m ³ (RoM)	:	Rough Stone	Gravel	Rough Stone	Gravel
			1,64,165 m ³	33,312 m ³	1,62,995 m ³	-
	Annual Peak Production in m ³	:	Rough Stone	Gravel	Rough Stone	Gravel
23,000 m ³			8,750 m ³	-	-	
	Maximum Depth in meters	:	37m (BGL)		-	
13.	Depth of water table	:	53m-48m BGL			
14.	Man Power requirement per day:	:	15 Nos.			

15.	Water requirement: 1. Drinking water 2. Utilized water 3. Dust suppression 4. Green belt	:	2.5 KLD 1.0 KLD 1.0 KLD												
16.	Power requirement		TNEB 86536Liters of HSD												
17.	Precise area communication approved by the, Assistant Director, Geology and Mining with date	:	Rc.No.220/Q3/2021, dt:08.10.2021												
18.	Mining Plan approved by Assistant Director, Department of Geology and Mining with date	:	Rc.No.220/Q3/2021, dt:11.10.2021												
19.	Joint Director /Assistant Director, Department of Geology and Mining 500m cluster letter		Rc.No.220/Q3/2021, dt:11.10.2021												
20.	VAO certificate regarding 300m radius cluster		Letter Furnished dt: Nil												
21.	Project Cost (excluding EMP cost)	:	Rs.52.18 Lakhs												
22.	EC Recommendation	:	1st Five Years as per approved mining plan <table><tr><td></td><td>Rough Stone</td><td>Gravel</td></tr><tr><td>Max Total RoM in m³</td><td>1,64,165 m³</td><td>33,312 m³</td></tr><tr><td>Annual Max RoM in m³</td><td>23,000 m³</td><td>8,750 m³</td></tr><tr><td>Max Depth in mtrs</td><td colspan="2">37 m</td></tr></table>		Rough Stone	Gravel	Max Total RoM in m ³	1,64,165 m ³	33,312 m ³	Annual Max RoM in m ³	23,000 m ³	8,750 m ³	Max Depth in mtrs	37 m	
	Rough Stone	Gravel													
Max Total RoM in m ³	1,64,165 m ³	33,312 m ³													
Annual Max RoM in m ³	23,000 m ³	8,750 m ³													
Max Depth in mtrs	37 m														
23.	EMP cost (in Rs. Lakh).	:	Rs.7.60 Lakhs												
24.	CER cost (in Rs. Lakh).	:	Rs.1.05 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


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annual peak production capacity of not exceeding 1,64,165 m³ of Rough stone & 33,312 m³ of Gravel by maintaining the ultimate depth of mining up to 37m BGL and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.
2. Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the proposed quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
3. The PP shall ensure that no transport of materials will be done during school hours from 8AM-10AM and during 3PM -5PM.
4. The PP shall furnish a Standard Operating Procedures (SoP) for carrying out the blasting operations in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.
5. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority to store only the authorized explosives & detonators

separately in accordance with the Explosive Rules, 2008 before the execution of the lease.

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 a period of one year 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 – Dept of Geology, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and AD/Mines-DGM 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 3rd year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
8. The PP shall construct an embankment along the lease boundary for the safety concerns before the execution of lease with adequate plantation between the fencing and mounting.
9. As accepted by the Project Proponent the CER cost of Rs. 5 Lakhs and the amount shall be spent for the activities as committed Panchayat Union Primary School, Sirudhamoor, Uthiramerur Union, Kanchipuram District before obtaining CTO from TNPCB.
10. As the Karikili Birds Sanctuary is located at a distance of 8.5km, the PP shall deposit an amount of Rs.5 Lakhs to Wildlife warden, Guindy as a conservation measures.

Agenda No. 410-11

(File No.7779/2023)

Proposed Rough stone & Gravel quarry lease over an extent of 1.00.0ha at S.F.No. 309/2B(Part) of Akkalampatti Village, Tiruchengode Taluk, Namakkal District, Tamil Nadu by Thiru.N.Selvarasu – For Environmental Clearance. (SIA/TN/MIN/438574/2023, Dated:29.07.2023).

The proposal was placed in 410th Meeting of SEAC held on 22.09.2023. The details of the project furnished by the proponent are available in the website (www.parivesh.nic.in). The SEAC noted the following:

1. The Proponent, Thiru.N.Selvarasu, has applied for Environmental Clearance for the Proposed Rough stone & Gravel quarry lease over an extent of 1.00.0ha at S.F.No. 309/2B(Part) of Akkalampatti Village, Tiruchengode Taluk, Namakkal District, Tamil Nadu.
2. The project/activity is covered under Category “B1” of Item 1(a) “Mining of Minerals Projects” of the Schedule to the EIA Notification, 2006.
3. As per the mining plan the lease period is 5 years. The mining plan is for the period of 5 years & production should not exceed 58,600m³ of Rough Stone and 3,030m³ of Gravel. The ultimate depth - 32mBGL (2m Gravel + 30m Rough stone). Existing pit-12m.
4. TOR issued vide Lr No. SEIAA-TN/F.No.7779/SEAC/ToR- 863/2020 Dated: 12.03.2021.
5. Minutes of Public Hearing Conducted on 09.02.2023.
6. EIA Report Submitted on 01.08.2023.

File No	7779	Category	1(a) – BI
	Online Proposal: SIA/TN/MIN/438574/2023, Dated:29.07.2023		EC
Sl. No	Salient Features of the Proposal		

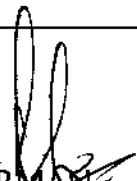

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1.	Name of the Owner/Firm	:	Thiru.N.Selvarasu, No.5/53, Periyagoundampatti, Thalambadi, Namakkal taluk, Namakkal District - 637 019.	
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough stone & Gravel quarry	
3.	S.F Nos. of the quarry site with area break-up	:	309/2B(Part)	
4.	Village in which situated	:	Akkalampatti	
5.	Taluk in which situated	:	Tiruchengode	
6.	District in which situated	:	Namakkal	
7.	Extent of quarry (in ha.)	:	1.00.0ha	
8.	Latitude & Longitude of all corners of the quarry site	:	11°19'01.84"N to 11°19'08.56"N 78°03'45.98"E to 78°03'48.22"E	
9.	Topo Sheet No.	:	58 I/03	
10.	Type of mining	:	Opencast Semi Mechanized Mining Method	
11.	Life of Project	:	5 years	
	Lease Period	:	5 years	
	Mining Plan Period	:	5 years	
12.	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC
	Geological Resources m ³ (RoM)	:	Rough Stone- 2,60,490 m ³	Rough Stone- 2,60,490 m ³
		:	Gravel 6,344 m ³	Gravel 6,344 m ³
	Minal Resources m ³ (RoM)	:	Rough Stone - 58,600 m ³	Rough Stone - 55,920 m ³
		:	Gravel 3,030 m ³	Gravel 3,030 m ³
	Annual Peak Production in m3	:	Rough Stone – 14255 m ³	Rough Stone – 12380 m ³
:		Gravel 3,030 m ³	Gravel 3,030 m ³	
	Maximum Depth in meters	:	32m BGL	

13.	Depth of water table	:	58-63m BGL		
14.	Man Power requirement per day:	:	13 Nos.		
15.	Water requirement: 1. Drinking water 2. Dust suppression 3. Green belt		2.8 KLD 0.55 KLD 1.8 KLD 0.45 KLD		
16.	Power requirement		TNEB 47,380 Liters of HSD		
17.	Precise area communication approved by the Deputy Director	:	Rc.No.868/Kanimam/2019 dt: 09.03.2020		
18.	Mining Plan approved by Assistant Director, Department of G&M Mines	:	Rc.No.868/Mines/2019 dt: 22.06.2020.		
19.	Deputy Director, Department of G&M Mines 500m Cluster Letter		Rc. No. 868/Mines/2019 dated: 23.06.2020.		
20.	VAO Certificate Regarding Structures within 300m Radius		Letter dated 09.06.2020		
21.	Project Cost (excluding EMP cost)	:	Rs. 18,55,000/-		
22.	EC Recommendation	:	Validity	30 years subject to the following upper limits.	
				Rough Stone	Gravel
		:	Max Total RoM in m ³	55,920 m ³	3,030 m ³
		:	Annual Max RoM in m ³	12,380 m ³	3,030 m ³
		:	Max Depth in mtrs	32m BGL	
23.	EMP cost (in Rs. Lakh).	:	Capital –Rs. 19,42,000/- Recurring-Rs.12,08,642/- Recurring For 5 years –Rs. 86,52,460/-		
24.	CER cost (in Rs. Lakh).	:	Rs. 5,00,000 /- as accepted by the PP		


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25.	Tor Issued	Lr No.SEIAA-TN/F.No.7779/SEAC/ToR-863/2020 Dated: 12.03.2021.
26.	Public Hearing	09.02.2023
27.	EIA Report Submitted	01.08.2023

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 12,380 m³ of rough stone & 3,030 m³ of Gravel by maintaining the ultimate depth of mining upto 32m BGL and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

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. Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the proposed quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
3. The PP shall furnish a Standard Operating Procedures (SoP) for carrying out the blasting operations to the concerned AD (Mines) at the time of execution of lease.


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4. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority to store only the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008 before the execution of the lease.
5. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall within a period of one year from the commencement of mining operations, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
6. The proponent shall ensure that boundary pillar stones shall be erected in all the corners and further pillars shall be erected along the effective mining area with suitable colours, differentiating the mine lease boundary and effective mining area, and photographic/videographic evidence shall be submitted before obtaining CTO from TNPCB.
7. As accepted by the Project Proponent the CER cost of Rs. 5.0 Lakhs and the amount shall be spent for the activities as committed towards Panchayat Union Primary School, Kottampatti Village before obtaining CTO from TNPCB.

Agenda No. 410-12

(File No.8885/2023)

Proposed Rough stone quarry lease over an extent of 1.44.0 Ha at S.F.No.95/12, 16, 18, 20(P) & 21(P) of Chithannavasal Village, Illuppur Taluk, Pudukkottai District, Tamil Nadu by Tmt.K. Indirani – For Environmental Clearance. (SIA/TN/MIN/437540/2023, Dated:21.07.2023).

The proposal was placed in the 410th Meeting of SEAC held on 22.09.2023. The details of the project furnished by the proponent are available in the website (www.parivesh.nic.in).


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The SEAC noted the following:

1. The Proponent, Tmt.K. Indirani has applied for Environmental Clearance for the Proposed Rough stone quarry lease over an extent of 1.44.0 Ha at S.F.No.95/12, 16, 18, 20(P) & 21(P) of Chithannavasal Village, Illuppur Taluk, Pudukkottai District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan the lease period is 5 years. The mining plan is for the period of 5 years & production should not exceed 1,21,198 m³ of rough stone with a ultimate depth of mining is 27m below ground level.
4. TOR issued vide Lr.No.SEIAA-TN/F.No.8885/ToR- 1115/2022 Dated: 23.03.2022.
5. Minutes of Public Hearing Conducted on 19.01.2023.
6. EIA Report Submitted on 31.07.2023.
7. The proponent had submitted a report regarding the impacts of quarrying on the Archeological site considering the dust pollution, vibrations, noise etc., and discussed the mitigation measures to be adopted to conserve the archeological site.

File No	8885	Category	1(a) – B1
	Online Proposal: SIA/TN/MIN/437540/2023, Dated:21.07.2023		EC
Sl. No	Salient Features of the Proposal		
1.	Name of the Owner/Firm	:	Tmt.K.Indirani, W/o.Karuppalah, No.45, Thayinipatti Village, Illuppur Taluk, Pudukkottai District-622101.
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Lime stone)	:	Rough stone

3.	S.F Nos. of the quarry site with area break-up	:	95/12, 16, 18, 20(P) & 21(P)	
4.	Village in which situated	:	Chithannavasal	
5.	Taluk in which situated	:	Illuppur	
6.	District in which situated	:	Pudukkottai	
7.	Extent of quarry (in ha.)	:	1.44.0 Ha	
8.	Latitude & Longitude of all corners of the quarry site	:	10°27'20.2308"N to 10°27'17.9149"N 78°44'0.5983"E to 78°43'54.7747"E	
9.	Topo Sheet No.	:	58- J/11	
10.	Type of mining	:	Opencast Semi-Mechanized of Mining	
11.	Life of Project	:	5 years	
	Lease Period	:	5 years	
	Mining Plan Period	:	5 years	
12.	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC
	Geological Resources m ³ (RoM)	:	Rough Stone- 367531 m ³	Rough Stone 367531 m ³
	Minable Resources m ³ (RoM)	:	Rough Stone - 121198 m ³	Rough Stone - 121198 m ³
	Annual Peak Production in m3	:	Rough Stone 28030 m ³	Rough Stone 27156 m ³
	Maximum Depth in meters	:	27m below ground level	
13.	Depth of water table	:	58m BGL	
14.	Man Power requirement per day:	:	18 Nos.	
15.	Water requirement: 1. Drinking water & domestic purposes 2. Dust suppression 3. Green belt	:	1.81 KLD 0.81 KLD 0.5 KLD 0.5 KLD	
16.	Power requirement	:	TNEB 105344Liters of HSD	

17.	Precise area communication approved by the Assistant Director, G&M with date	:	Na.Ka.No.118/2020(G&M), dated.08.10.2021
18.	Mining Plan approved by Assistant Director, Department of Geology and Mining with date	:	Rc.No.118/2020 (G&M), dated.13.10.2021.
19.	Assistant Director, mines 500m cluster letter	:	RC No.118/2020(G&M), dated.18.10.2021
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter dated: 01.11.2021
21.	Project Cost (excluding EMP cost)	:	Rs. 1,22,80,000/-
22.	EC Recommendation	:	Validity
		:	30 years subject to the following upper limits.
		:	Rough Stone
		:	Max Total RoM in m ³
23.	EMP cost (in Rs. Lakh).	:	98,202 m ³
		:	Annual Max RoM in m ³
		:	27,156 m ³
24.	CER cost (in Rs. Lakh).	:	Max Depth in mtrs
		:	27m below ground level
25.	Tor Issued	:	Capital -Rs. 905000/- Recurring-Rs.1063572/-/annum Recurring For 5 years -Rs. 6800000/-
26.	Public Hearing	:	Rs. 5,00,000 /- as accepted by the PP
27.	EIA Report Submitted	:	Lr No. SEIAA-TN/F.No.8885/ToR-1115/2022 Dated: 23.03.2022.
		:	19.01.2023
		:	31.07.2023

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 27,156 m³ of rough stone by maintaining the ultimate depth of mining up to 27m BGL and subject to the


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

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a **maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.**
2. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority to store only the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008 before the execution of the lease.
3. **Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the proposed quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.**
4. **Since the waterbodies are situated nearby, the PP shall carry out the scientific studies to assess the hydrogeological condition of the quarry within a period of six months from the date of lease execution, by involving any one of the reputed Research and Academic Institution - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras – Dept of Geology, 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.

5. The PP shall furnish a conceptual mining plan indicating the development of benches & method of working with incorporating the haul road accessibility to carry out the systematic mining to the concerned AD (Mines) at the time of lease execution.
6. The PP shall furnish a Standard Operating Procedures (SoP) for carrying out the blasting operations to the concerned AD (Mines) at the time of execution of lease.
7. As accepted by the Project Proponent the CER cost of Rs. 5.0 Lakhs and the amount shall be spent for the activities as committed towards Government Higher Secondary School, Annavasal Village before obtaining CTO from TNPCB.

Agenda No: 410 - 13

(File No: 8767/2023)

Existing Rough stone & gravel quarry lease over an extent of 1.15.5Ha at S.F.Nos.197/1, 197/2, 197/10, 197/11 & 201/2 of Ichipatti Village, Palladam Taluk, Tiruppur District, Tamil Nadu by Thiru. S.Balakumar, - Environment Clearance for next scheme of mining. (SIA/TN/MIN/438110/2023 dated: 26/07/2023)

The proposal was placed in this 410th meeting of SEAC held on 22.09.2023. The Project Proponent made a detailed power point presentation about the proposed project. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in). The SEAC noted the following:

1. The Project Proponent, Thiru. S.Balakumar has applied seeking Environment Clearance for next scheme of mining for the existing Rough stone & gravel quarry lease over an extent of 1.15.5Ha at S.F.Nos.197/1, 197/2, 197/10, 197/11 & 201/2 of Ichipatti Village, Palladam Taluk, Tiruppur District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification 2006, as amended.
3. SEIAA EC Lr No. SEIAA-TN/F.No.5247/1(a)/EC-3425/2016 Dt:29.07.2016.
4. IRO CCR.Lr.No.E.P/12.1/2023-24/SEIAA/60/TN/914 DATED 28.07.2023
5. ToRLr No. SEIAA-TN/F.No.8767/SEAC/ToR-1089/2021 Dt:17.03.2022.


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6. Public Hearing conducted on 27.04.2023.

7. DD/Mines has reported presence of two existing pits of dimensions 28m x 47m x 2m (Pit 1) and 132m x 49m x 27m (Pit 2) at the project site.

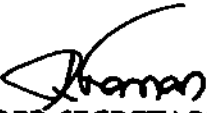
File No	8767 EIA (31.07.2023)	Category	B1
	SIA/TN/MIN/438110/2023 dated: 26/07/2023		EC
Sl. No	Salient Features of the Proposal		
1.	Name of the Owner/Firm	:	Thiru.S.Balakumar S/o.Subbaian No.5/216, Ichipatti Palladam Taluk Tiruppur District-641668
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough stone and Gravel
3.	S.F Nos. of the quarry site with area break-up	:	197/1, 197/2, 197/10, 197/11 & 201/2
4.	Village in which situated	:	Ichipatti
5.	Taluk in which situated	:	Palladam
6.	District in which situated	:	Tiruppur
7.	Extent of quarry (in ha.)	:	1.15.5 Ha (Patta Land)
8.	Latitude & Longitude of all corners of the quarry site	:	11°03'27.55"N to 11°03'33.40"N 77°12'21.61"E to 77°12'24.56"E
9.	Topo Sheet No.	:	58-E/04
10.	Type of mining	:	Opencast mechanized method
11.	Life of Project	:	5 years
	Lease Period	:	5 years
	Mining Plan Period	:	5 years
12.	Mining Plan Details	:	As per approved Mining Plan
	Geological Resources m ³ (RoM)	:	As modified by SEAC 301995 m ³ of Rough stone, 3222 m ³ of Gravel

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	Minable Resources m ³ (RoM)	37520 m ³ of Rough stone,	32800 m ³ of Rough stone
	Annual Peak Production in m ³	7475 m ³ of Rough stone	-
	Maximum Depth in meters	: 42m	37m
13.	Depth of water table	: 62m - 58m	
14.	Man Power requirement:	: 12 Nos	
15.	Water requirement: 1. Drinking water 2. Utilized water 3. Dust suppression 4. Green belt	: 2.0 kLD 1.0 kLD 0.5 kLD 0.5 kLD	
16.	Power requirement	TNEB 200 Liters of HSD/day -proposed	
17.	Precise area communication approved by the Department of G&M.	: Na.Ka. No. 1561/Kanimam/2020, dated: 07.07.2021	
18.	Mining Plan approved by Department of G&M.	: Rc.No. 1561/2020/Mines. Dated: 19.07.2021	
19.	500m Cluster Letter issued by Department of G&M.	: Rc.No. 1561/2020/Mines. Dated: 19.07.2021	
20.	VAO Certificate regarding Structures within 300m radius	: Letter dated: Nil	
21.	Project Cost (excluding EMP cost)	: Rs.27.95 Lakh	
22.	EC Recommendation	: Validity	30 years subject to the following upper limits. Rough Stone
		: Max Total RoM in m ³	32800
		: Annual Max RoM in m ³	7475
		: Max Depth in m	37m
23.	Total EMP cost (in Rs. Lakh).	: Rs 87.0 Lakh inclusive of 5% inflation cost	
24.	CER cost (in Rs. Lakh).	: Rs 5.0 Lakh	


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Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity not exceeding 7475 m³ of Rough stone by maintaining the ultimate depth of mining of 37m 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.
2. The PP shall furnish a conceptual mining plan indicating the development of benches & method of working with incorporating the haul road accessibility to carry out the systematic mining to the concerned AD (Mines) at the time of lease execution.
3. The PP shall furnish a Standard Operating Procedures (SoP) for carrying out the blasting operations to the concerned AD (Mines) at the time of execution of lease.
4. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority to store only the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008 before the execution of the lease.
5. Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to optimize the blast design parameters for controlling the cumulative blast-induced ground/air- vibrations and fly rock from the blasting operations carried out in the quarries located in the cluster, 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.


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6. For securing the safety of persons employed in the mine, the PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall within a period of two years of operation from the date of lease execution, by involving anyone of the reputed Research and Academic Institutions - 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.
7. As a part of Ground Water Management, the PP shall carry out the scientific studies to assess the existing hydrogeological condition and **cumulative impacts of the quarrying operation on the ground water level present in the core zone due to cluster of quarries, within a period of one year 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& CC, 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.5.0 lakh and the amount shall be spent for the committed activities at Village Government School before obtaining CTO from TNPCB.

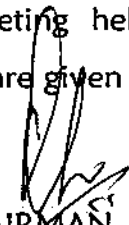
Agenda No: 410 - 14

(File No: 7165/2023)

Proposed Rough Stone quarry lease area over an extent of Extent 2.13.0 Ha at SF.No. 4/3A, 4/4B, 7/4A & 7/4B of Padalur (East) Village, Alathur Taluk, Perambalur District, Tamil Nadu by Thiru. M. Baskaran - For Environmental Clearance. (SIA/TN/MIN/439356/2023, Dated: 05.08.2023)

The proposal was placed for appraisal in this 410th SEAC meeting held on 22.09.2023. The details of the project furnished by the proponent are given in the


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website (parivesh.nic.in). The SEAC noted the following:

1. The project proponent, Thiru. M. Baskaran has applied for Environmental Clearance for the Proposed Rough Stone quarry lease area over an extent of Extent 2.13.0 Ha at S.F.No. 4/3A, 4/4B, 7/4A & 7/4B of Padalur (East) Village, Alathur Taluk, Perambalur District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan, the lease period is for 5 years. The production for 5 years not to exceed 1,49,773m³ of Rough stone. The annual peak production 52,431m³ of Rough Stone. The ultimate depth of mining is 30m below ground level.
4. Quarrying of rough stone in S.F.No. 7/4B from 2006 to 2013. Further, quarrying of rough stone in S.F.No. 4/3A, 4/4B and 7/4A for period of 2010 to 2015 and quantity of rough stone excavated during the period 2006 to 2013 is 2,32,764 m³.
5. Earlier EC obtained vide Lr.No.SEIAA-TN/F.No.4612/1(a)/EC.No:2872/2015 dated:15.02.2015 for S.F.No. 4/1, 4/2, 7/3, 7/4B & 7/5 of Padalur (East) Village, Alathur Taluk, Perambalur District, Tamil Nadu for a quantity of 3,58,375 m³ and depth 21m.
6. ToR issued vide – Lr No -SEIAA-TN/F.No.7165/SEAC/ToR-714/2020, Dated: 02.06.2020.
7. Public hearing was conducted on Dated 27.04.2023.

Now, the proposal was again placed in the 410th SEAC meeting held on 22.09.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to call for additional details

1. The proponent shall submit Certified Compliance Report obtained from IRO, MoEF&CC, Chennai for the earlier obtained Environmental Clearance.

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: 410 - 15

(File No: 8551/2023)

Proposed Rough Stone quarry lease area over an extent of Extent 1.34.0 Ha at SF. No. 217/3A, 217/20, 217/21, 217/22 & 217/24 of Sathiyamangalam Village, Kulathur Taluk, Pudukkottai District, Tamil Nadu by Thiru. C. Rengaraj - For Environmental Clearance. (SIA/TN/MIN/438713/2023, Dated: 31.07.2023)

The proposal was placed for appraisal in this 410th SEAC meeting held on 22.09.2023. 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.C.Rengaraj has applied for Environmental Clearance for the Proposed Rough Stone quarry lease area over an extent of Extent 1.34.0 Ha at SF.No. 217/3A, 217/20, 217/21, 217/22 & 217/24 of Sathiyamangalam Village, Kulathur Taluk, Pudukkottai District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan, the lease period is for 5 years. The production for 5 years not to exceed 37,850m³ of rough stone. The annual peak production 9,125m³ of Rough Stone. The ultimate depth of mining is 25m below ground level.
4. Earlier EC obtained vide Ec. No: Lr.No. SEIAA-TN/F.No.1296/EC/1(a)/1094/2013, Dated:27.02.2014 for S.F No: 217/21,22,24, Sathiyamangalam Village, Kulathur Taluk, Pudukkottai District for a quantity of 42,723 cu.m of Rough Stone & 9900 cu.m of Top Soil over a period of 5 Years up to a depth of 17 meters.
5. ToR issued vide - Lr No -SEIAA-TN/F.No.8551/SEAC/ToR-1141/2022, Dated: 08.04.2022.
6. Public hearing was conducted on Dated 30.05.2023.

Now, the proposal was again placed in the 410th SEAC meeting held on 22.09.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to call for additional details

1. The proponent shall submit Certified Compliance Report obtained from IRO,


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MoEF&CC, Chennai for the earlier obtained Environmental Clearance.

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: 410 - 16

(File No: 8733/2023)

Proposed Rough Stone & Gravel quarry lease area over an extent of Extent 2.48.0 Ha at S.F.No. 80/2B(P) & 81/2(P) of Karunchamigoundenpalayam Village, Madukkarai Taluk, Coimbatore District, Tamil Nadu by Thiru. K. Vazhaithotta Gounder - For Environmental Clearance. (SIA/TN/MIN/438293/2023, Dated: 27.07.2023)

The proposal was placed for appraisal in this 410th SEAC meeting held on 22.09.2023. 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. Vazhaithotta Gounder has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry lease area over an extent of Extent 2.48.0 Ha at SF.No. 80/2B (P) & 81/2(P) of Karunchamigoundenpalayam Village, Madukkarai Taluk, Coimbatore District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan, the lease period is for 5 years. The production for 5 years not to exceed 2,58,755m³ of rough stone & 5,596m³ of Gravel. The annual peak production 77,940m³ of Rough Stone & 2,448m³ of Gravel. The ultimate depth of mining is 32m below ground level.
4. Earlier EC obtained vide Lr.No. SEIAA-TN/F.No.3731/EC/1(a)/2427/2015, Dated:24.11.2015 at S.F. No 80/2B & 81/2, Karunsamygoundenpalayam Village, Madukkarai Taluk, Coimbatore District for a quantity of 46,421 cu.m Rough Stone & 4,992 cu.m of Weathered Gravel for a depth up to 12m.
5. ToR issued vide - Lr No -SEIAA-TN/F.No.8733/SEAC/ToR-1051/2022, Dated: 31.01.2022.
6. Public hearing was conducted on Dated 19.04.2023.


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Now, the proposal was again placed in the 410th SEAC meeting held on 22.09.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to call for additional details

1. The proponent shall submit Certified Compliance Report obtained from IRO, MoEF&CC, Chennai for the earlier obtained Environmental Clearance.

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: 410 - 17

(File No: 8996/2023)

Proposed Rough Stone & Gravel quarry lease over an extent of 3.02.50 Ha in S. F. Nos. 104/1A, 104/1B1, 104/1B2, 104/2A, 104/2B, 104/3, 104/4A1, 104/4A2, 104/4B, 104/4C, 104/5A, 104/5B, 104/6A, 104/6B, 104/7A, 104/7B, 104/8A, 104/8B, 104/8C, 104/8D& 104/8E, Konganakkurichi Village, Aruppukkottai Taluk, Virudhunagar District, Tamil Nadu by Thiru.K.Balamurugan - For Environmental Clearance. (SIA/TN/MIN/437906/2023 Dt. 24.07.2023)

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

The SEAC noted the following:

1. The project proponent, Thiru. K. Balamurugan has applied for Environmental Clearance for the Rough Stone & Gravel quarry lease over an extent of 3.02.50 Ha in S.F.Nos.104/1A, 104/1B1, 104/1B2, 104/2A, 104/2B, 104/3, 104/4A1, 104/4A2, 104/4B, 104/4C, 104/5A, 104/5B, 104/6A, 104/6B, 104/7A, 104/7B, 104/8A, 104/8B, 104/8C, 104/8D& 104/8E, Konganakkurichi Village, Aruppukkottai Taluk, Virudhunagar District, Tamil Nadu.
2. The project/activity is covered under category "B1" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. ToR vide. Lr No. SEIAA-TN/F.No.8996/SEAC/ToR-1156/2022 Dated: 06.06.2022.
4. Public Hearing Conducted on 05.01.2023.
5. EIA Received on 27.07.2023.
6. The precise area communication was issued for the period of 5 years. The approved mining plan is for the period of 1st five years & production should not


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exceed 127278m³ of Rough Stone & 10836m³ of Gravel. The annual peak production is 29023m³ of Rough Stone (4th Year) & 5504m³ of Gravel (1st Year). The depth of mining is 32m BGL.

Sl. No	Salient Features of the Proposal		
1	Name of the Owner/Firm	Thiru.K.Balamurugan S/o.Kannan D.No.3/416, Ramanaickenpattai Chettikurichi Post Auppukottai Taluk Virudhunagar District - 626134	
2	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	Rough stone & Gravel quarry	
3	S.F Nos. of the quarry site with area break-up	104/1A, 104/1B1, 104/1B2, 104/2A, 104/2B, 104/3, 104/4A1, 104/4A2, 104/4B, 104/4C, 104/5A, 104/5B, 104/6A, 104/6B, 104/7A, 104/7B, 104/8A, 104/8B, 104/8C, 104/8D& 104/8E	
4	Village in which situated	Konganakkurichi	
5	Taluk in which situated	Aruppukkottai	
6	District in which situated	Virudhunagar	
7	Extent of quarry (in ha.)	3.02.50Ha	
8	Latitude & Longitude of all corners of the quarry site	090 28'39.40" to 090 28' 46.00" N 780 10'50.70" to 780 10' 58.15" E	
9	Topo Sheet No.	58 K / 2,3,6,7	
10	Type of mining	Opencast Semi Mechanized Mining Method	
11	Life of Project	10 Year	
	Lease Period	10 Year	
	Mining Plan Period	5 year	
12	Mining Plan Details	As per approved Mining Plan	
	Geological Resources m ³ (RoM)	Rough Stone in m ³	Gravel in m ³
		1230080	184512
	Mineable Resources m ³ (RoM)	Rough Stone	Gravel
		192130	94140
	Annual Peak Production in m3	Rough Stone	Gravel

maintaining the ultimate depth of mining up to 46m 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.
- 2) The Tree plantation & fencing and installation of garland drainage around the mine lease area with siltation tank shall be completed before execution of the mine lease.
- 3) The PP shall strengthen the road passing over the pipe line area by laying tar / asphalt road of adequate thickness.
- 4) The PP shall construct an embankment along the boundary existing adjacent to the Kanmai before executing the lease with adequate plantation.
- 5) The PP shall install a continuous water sprinkling system along the travel route passing through the habitants for suppressing the dust before obtaining the CTO from the TNPCB.
- 6) The PP shall submit a Traffic Plan for the smooth & safe movement of the haultrucks by avoiding the crowded population of trucks after finalizing with the other quarries situated in the cluster to the DEE/TNPCB before obtaining the CTO.
- 7) 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 to store only the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008 before the execution of the lease.
- 8) 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 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.

- 9) For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 3rd year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 10) The PP shall carry out the comprehensive hydrogeological studies during the 4th year from the commencement of the mining operations to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving anyone of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM-Bangaluru, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, Anna University Chennai-Dept of Geology, CEG Campus, and University of Madras – Centre for Environmental Studies, Chennai. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
- 11) As accepted by the Project Proponent the CER cost of Rs. 7 Lakhs shall be spent for the activities as committed towards the Government Primary School, Melakuranaikulam Village before obtaining CTO from TNPCB.

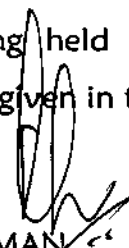
Agenda No: 410 - 18

(File No: 9382/2023)

Proposed Rough Stone quarry lease area over an extent of Extent 2.70.0 Ha at S.F.No. 471/1 of Chockalingapuram Village, Melur Taluk, Madurai District, Tamil Nadu by Thiru. G. Karuppanan - For Environmental Clearance. (SIA/TN/MIN/438191/2023, Dated: 26.07.2023)

The proposal was placed for appraisal in this 410th SEAC meeting held on 22.09.2023. The details of the project furnished by the proponent are given in the


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website (parivesh.nic.in). The SEAC noted the following:

1. The project proponent, Thiru. G. Karuppanan has applied for Environmental Clearance for the Proposed Rough Stone quarry lease area over an extent of Extent 2.70.0 Ha at S.F.No. 471/1 of Chockalingapuram Village, Melur Taluk, Madurai District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan, the lease period is for 10 years. The production for 5 years not to exceed 3,28,975m³ of rough stone. The annual peak production 73,500m³ of Rough Stone. The ultimate depth of mining is 20m (5m agl + 15m bgl).
4. ToR issued vide - Lr No -SEIAA-TN/F.No.9382/SEAC/ToR-1306/2022, Dated: 28.11.2022.
5. Public hearing was conducted on Dated 14.06.2023.

The proposal is for mining of Rough Stone Quarry and the salient features of the proposal are as follows:

File No		9382/2023	Category	B1
		438191/2023		1(a)
Sl. No	Salient Features of the Proposal			
1.	Name of the Owner/Firm	:	Thiru. G. Karuppanan, S/o. Thiru. Gandhithevar, No. 1/3A, TWAD Colony, Thiruppalai, Madurai- 625014.	
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough Stone Quarry	
3.	S.F Nos. of the quarry site with area break-up	:	471/1	
4.	Village in which situated	:	Chockalingapuram	
5.	Taluk in which situated	:	Melur	
6.	District in which situated	:	Madurai	
7.	Extent of quarry (in ha.)	:	2.70.0 Ha	

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8.	Latitude & Longitude of all corners of the quarry site	:	10°10'53.79"N to 10°11'05.41"N 78°23'1.31"E to 78°23'6.83"E	
9.	Topo Sheet No.	:	58 - J/08	
10.	Type of mining	:	Opencast Semi-Mechanized Mining	
11.	Life of Project	:	10 years	
	Lease Period	:	10 years	
	Mining Plan Period	:	5 years	
12.	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC
	Geological Resources m ³ (RoM)	:	Rough Stone 12,14,510m ³	Rough Stone -
	Minable Resources m ³ (RoM)	:	Rough Stone 5,11,350m ³	Rough Stone -
	Annual Peak Production in m ³	:	Rough Stone 73,500m ³	Rough Stone -
	Maximum Depth in meters	:	20m (5m AGL + 15m BGL)	
		:		
13.	Depth of water table	:	55m in rainy & 60m in summer season	
14.	Man Power requirement per day:	:	28 Nos	
15.	Water requirement:	:	3.76 KLD	
	5. Drinking & utilized water	:	1.26 KLD	
	6. Dust suppression	:	1.0 KLD	
	7. Green belt	:	1.5 KLD	
16.	Power requirement	:	TNEB 13,81,885 Ltrs of HSD	
17.	Precise area communication approved by the Joint director/ Assistant Director, Dept of G&M	:	Na.Ka.No.75/2021 - Kanimam, dated: 04.02.2021	
18.	Mining Plan approved by Deputy Director, Dept of Geology & Mining.	:	Roc.75/Mines/2021, dated: 30.04.2021	
19.	Department of G&M, Deputy Director, 500m Cluster Letter	:	Roc.75/Mines/2021, dated: 28.07.2021	
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated: 01.07.2021	

21.	Project Cost (excluding EMP cost)	:	Rs. 1,32,34,000
22	EC Recommendation	:	Validity
			30 years subject to the following upper limits.
			Rough Stone
		:	Max Total RoM in m ³
		:	Annual Max RoM in m ³
		:	Max Depth in mtrs
23	EMP cost (in Rs. Lakhs).	:	Capital Cost – Rs. 50.56 Lakhs Recurring Cost – Rs. 4.11 Lakhs
24	ToR issued Details	:	Lr.No. SEIAA-TN/F.No.9382/SEAC/ToR-1306/2022 Dated: 28.11.2022.
25	Public Hearing conducted on	:	14.06.2023.
26	EIA report submitted on	:	28.07.2023
27	CER cost (in Rs. Lakhs).	:	Rs. 5,00,000

Now, the proposal was again placed in the 410th SEAC meeting held on 22.09.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding an annual peak production of 73,500m³ of Rough Stone by maintaining the ultimate depth of mining up to 45 m (5m AGL + 40m BGL) and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

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


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2. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority to store only the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008 before the execution of the lease.
3. 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 quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
4. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 3rd year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
5. As accepted by the Project Proponent the CER cost of Rs. 5 Lakhs and the amount shall be spent for the activities as committed towards Panchayat Primary School, Chockalingapuram village before obtaining CTO from TNPCB.

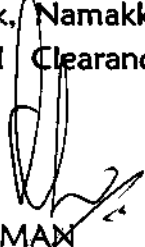
Agenda No: 410-19

(File No.8615/2023)

Proposed Rough Stone & Gravel Quarry lease over an extent of 2.00.5 Ha (Patta land) in S.F.Nos. 232/1B & 233/4B of Kokkalai Village, Tiruchengode Taluk, Namakkal District, Tamil Nadu by Thiru. C. Sivakumar – for Environmental Clearance. (SIA/TN/MIN/437764/2023 dated: 22.07.2023)


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The proposal was placed in this 410th Meeting of SEAC held on 22.09.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

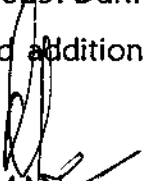
1. The project proponent Thiru. C. Sivakumar has applied for Environmental Clearance for the Proposed Rough Stone & Gravel Quarry lease over an extent of 2.00.5 Ha (Patta land) in S.F.Nos. 232/1B & 233/4B of Kokkalai Village, Tiruchengode Taluk, Namakkal District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
3. Earlier, EC was issued to the project proponent vide Lr.No. SEIAA-TN/F.No.3189/EC/1(a)/1774/2014, Dated:19.03.2015. The proponent has carried out quarrying operations from 16.06.2015 to 17.06.2020.
4. Now, the proponent has submitted an application seeking Environmental Clearance for the next spell of quarrying.
5. ToR was issued to the project proponent vide Lr.No. SEIAA-TN/F.No.8615/SEAC/ToR1015/2021 Dated : 23.08.2021.
6. Public Hearing was conducted on 09.02.2023.
7. EIA Report was submitted on 26.07.2023.
8. Earlier the proposal was placed in 408th SEAC meeting held on 08.09.2023. Based on the presentation and details furnished by the project proponent, the Committee decided to call for the following details from the project proponent to consider the proposal for appraisal:

- i) The project proponent shall submit a Certified Compliance Report as per the MoEF&CC O.M dated.08.06.2022 for the previous EC obtained from SEIAA-TN dated.19.03.2015.

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.

Now the proposal was again placed in 410th SEAC meeting held on 22.09.2023. During the presentation, EIA coordinator informed the Committee that they need additional


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time to submit the additional details sought in the earlier meeting of SEAC.

Hence, the proponent is advised to submit the additional documents/ information as sought earlier within a period of 30 days failing which your proposal will automatically get delisted from the PARIVESH portal.

Agenda No: 410 - 20.

(File No: 7855/2020)

Existing Rough stone & Gravel quarry lease over an extent of 1.57.5ha at S.F.No.232/2 in Kokkalai Village, Tiruchengode Taluk, Namakkal District, Tamil Nadu by Tmt. P.Ramayee - For Environmental Clearance. (SIA/TN/MIN/437716/2023 Dt. 22.07.2023)

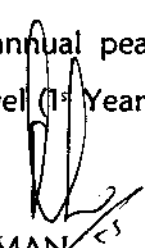
The details of the proposed project are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Tmt.P.Ramayee has applied for Environmental Clearance for the existing Rough stone & Gravel quarry lease over an extent of 1.57.5ha at S.F.No.232/2 in Kokkalai Village, Tiruchengode Taluk, Namakkal District, Tamil Nadu.
2. The project/activity is covered under category "B1" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. Earlier, the PP has obtained EC from SEIAA vide Ec. No: Lr.No. SEIAA-TN/F.No.2792/EC/1(a)/1734/2015, Dated:13.03.2015 for the existing rough stone & Gravel quarry lease over an extent of 1.57.5ha at S.F.No.232/2 in Kokkalai Village, Tiruchengode Taluk, Namakkal District, Tamil Nadu for depth of 32m.
4. ToR vide. Lr No.SEIAA-TN/F.No.7855/SEAC/ToR- 859/2020 Dated:12.03.2021 for the production of 1,12,043 m³ of Rough Stone & 10836m³ of Gravel and for the depth of 32m.
5. Public Hearing Conducted on 09.02.2023.
6. EIA Received on 25.07.2023.
7. 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 1,12,043m³ of Rough Stone & 10836m³ of Gravel. The annual peak production is 29023m³ of Rough Stone (4th Year) & 5504m³ of Gravel (1st Year).


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The depth of mining is 32m BGL.

8. Earlier the proposal was placed in 408th SEAC meeting held on 08.09.2023. After presentation, SEAC decided to call for additional particulars as follows.

1. The PP shall furnish Certified Compliance Report (CCR) obtained from IRO(SZ), MoEF&CC and with mitigation measures for the non-compliance Stated therein.

Now the proposal was again placed in 410th SEAC meeting held on 22.09.2023. During the presentation, EIA coordinator informed that they needed additional time to submit the additional details sought in the earlier meeting of SEAC.

Hence, the proponent is advised to submit the additional documents/ information as sought earlier within a period of 30 days failing which your proposal will automatically get delisted from the PARIVESH portal.

Agenda No: 410- TA-01

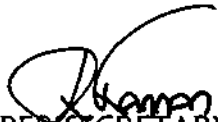
(File No: 9644/2022)

Proposed Rough stone and Gravel quarry lease over an extent of 1.25.0 Ha in S.F.No. 531/1A2 (Part) of Ponmanai A Village, Thiruvattar Taluk, Kanniyakumari District, Tamil Nadu by Thiru. V.S.Raju- For Terms of Reference. (SIA/TN/MIN/410014/2022 Dt: 09.12.2022)

The proposal was earlier placed in the 347th meeting of SEAC held on 13.01.2023. The Project Proponent gave a detailed presentation on the proposal. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in). The SEAC noted the following:

1. The project proponent, Thiru. V.S.Raju has applied seeking Terms of Reference for EIA study for the Proposed Rough stone and Gravel quarry lease over an extent of 1.25.0 Ha in S.F.No. 531/1A2 (Part) of Ponmanai A Village, Thiruvattar Taluk, Kanniyakumari District Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006, as amended.

Based on the presentation made by the proponent, SEAC decided that a sub-committee will be formed to carry out on the spot -inspection of the project site to


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assess the anticipated impacts of mining activity on the surrounding environmental settings and to submit report. Further the SEAC directed the PP to furnish the copy of necessary approvals (mandatory documents) detailing the new Survey number of the mine lease area.

On receipt of the same, SEAC would further deliberate on this project.

Meanwhile the sub-committee comprising of Prof. Dr. D. Narasimhan, Member, SEAC- TN inspected the site and has furnished the following report:

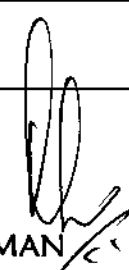
SITE INSPECTION REPORT OF SEAC SUBCOMITTEE

EC Proposal No : SIA/TN/MIN/410014/2022 dated 12.01.2023
File No : 9644
Category : 'B1'
Proposal Description : Mining of Rough Stone & Gravel in an extent of
4.31.69 Ha
SF Nos. 531/1A2 (P)
Village: Ponmanaia
Taluk: Thiruvattar
District: Kanniyakumai
State: Tamil Nadu
Date of Inspection : 30. 4. 2023

1. Salient Features of the Project

Particulars	Details
Name of the Project	Thiru.V.S.Raju Rough Stone & Gravel Quarry
Project Proponent	Thiru.V.S.Raju,
Location of Mine	Survey No: 531/1A2, Ponmanaia Village, Thiruvattar Taluk, Kanniyakumari District, Tamil Nadu
Category of Project	B1
Proposed Production Capacity	Production: 1,26,525 m ³ per annum
Mine Lease Area	4.31.69 Hectares
Total Working Day/year	300 days


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Total Number of workers employed	50
Total Water Requirement & Source	Total Water requirement is 3.0KLD. i) Drinking and utilities shall be 0.7KLD ii) Water for Dust suppression & Green belt shall be 1.5KLD.
Latitude & Longitude	08°19' 13.4432"N to 08°19' 20.3575"N Latitude & 77°19' 58.1712"E to 77°20' 07.1556"E Longitude
Topo Sheet number	58 H/07
Eco-Sensitivity	No protected areas notified under the wild life (Protection) Act, 1972. critically polluted area as notified by the CPCB from time to time. Forest: Virapuli R.F. – 3.62 km – NE Interstate Boundary: There is no interstate boundary located within 10 km radius. National Park/Wild life sanctuary: Kannuiyakumari – 3.5km - NE .
Type of Land	Patta land
Method of Mining	Opencast Mechanized Mining Method involving drilling and blasting
Bench parameters	Bench Height: 5m Bench Width: 5m Bench Slope: 60° (from horizontal)
Depth of Mining	76m(36m agl + 40m bgl)
Dimension of the Pit - Ultimate	245 m (L) X 161 m (W) X 76 m (D) bgl
Water Table	53-58m bgl. Thus Mining will not intersect the ground water table.
Nearest Railway station	Palliyadi – 10.0 km - South west
Nearest Highway	(NH - 66) Kanniyakumari – Thiruvananthapuram - 6.0km - SW
Nearest Airport	Thiruvananthapuram Airport - 49.0km -NW
Seismic zone	Zone-III, Moderate damage risk zone as per BMTPC, Vulnerability atlas Seismic zone of India IS: 1893-2002.
Cost of the project	Project Cost – Rs.360 Lakhs EMP Cost – 5 Lakhs

2. Details of Mining

Sl.No	Particulars	Details
1	Method of Mining	Opencast Mechanized Mining Method involving drilling and blasting
2	Geological Reserve	Rough Stone - 27,88,570 m ³ Gravel - 46,458 m ³
3	Mineable Reserve available	Rough Stone - 10,40,395 m ³ Gravel - 39,418 m ³
4	Proposed Production	Rough Stone - 10,40,395 m ³ Gravel - 39,418 m ³
5	Elevation range of the Mine site	176-218m above MSL
6	Bench Height	5m
7	Bench Width	5m
8	Bench Slope	60°
9	Proposed Depth of Mining	76m bgl
10	Life of Mine	10 Years.

Proposed Production Details

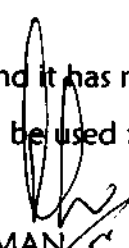
Year wise Development

Year	Rough Stone (m ³)	Gravel (m ³)	RL/AMSL
I	126525	13720	218m - 217m 202m - 182m
II	97000	13475	218m - 217m 202m - 182m
III	106730	12223	218m - 217m 212m - 182m
IV	111850	-	182m - 172m
V	95550	-	172m - 152m
Total	5,37,655	39,418	218m - 152m
VI	93680	-	217m - 197m
VII	100715	-	202m - 187m
VIII	84280	-	187m - 177m
IX	110295	-	177m - 162m
X	113770	-	162m - 142m
Total	5,02,740	-	217m - 142m

Land Use Pattern

The mining operation was concentrated only in the mineral bearing area and it has not reached the cut-off limit of mining. After completion of mining the pit will be used for


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fishy culture and as a Pond for storing ground water for agricultural developments of adjacent patta lands. Land use pattern is given below in Table

Computation of proposed land use pattern

Description	Area of Land Use (in Ha)		
	Present area (Ha)	Area at the 1 st Five year quarrying Period (Ha)	At the end of life of the mine
Area under Quarrying	Nil	3.72.0	3.72.0
linfrastructure	Nil	0.02.0	0.02.0
roads	Nil	0.02.0	0.02.0
Greenbelt	Nil	0.27.97	0.53.69
Un utilized area	4.31.69	0.27.72	Nil
Total	4.31.69	4.31.69	4.31.69

Green Belt Development and Plantation

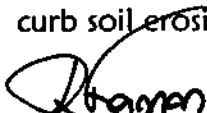
It is proposed to plant 2600 Trees in the boundary barrier & in the Village roads.

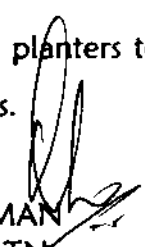
Proposed Green Belt Development

Plantation Details	Required	No. of tress provided (Considering 80% survival rate)	1 st Year
No. of plants	2150	2600	2600
Yearly %	100 %	120 %	100 %

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

- The Proposed rough stone quarry is located at the hill top and is surrounded by Rubber plantations.
- It is located at 3.5 km distance to Kanyakumari Wildlife Sanctuary and within 10 km radius of Perunchani Dam
- There are no Habitations within 500 km radius.
- The quarry site is covered by an invasive weed, introduced by the planters to curb soil erosion, which were removed and burnt by the proponents.


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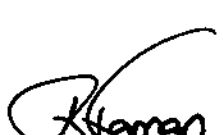
- There is a lone building near the quarry site which is used as a dwelling place for the watchman.
- Fencing has been erected around the quarry
- Plants have been planted around the quarry but in inadequate numbers.
- No Garland drainage dug around the quarry.

SUB-COMMITTEE CONCLUSIONS & RECOMMENDATIONS

- The quarry is located in a sensitive environmental setting, close to Kanyakumari Wildlife sanctuary. Since the quarry site is a hilltop digging the sites will interfere and acutely affect the Natural Drainage system. It is also abutting the catchment area of Perunchani Dam and hence will affect the inflow of water into the Dam. Hence, it is my considered opinion that this area may be left undisturbed and the SEAC not to issue TOR for the quarry.

SEAC RECOMMENDATION:

The above site inspection report was placed in this 410th meeting of SEAC held on 22.09.2023. The Committee held detailed discussions on the observations made by the sub-committee during inspection of the site and decided to accept the recommendations of the sub-committee not to grant ToR for the quarry. The SEAC, for the aforesaid reasons, decided not to issue of Terms of Reference for EIA study and thereby not to recommend Environmental Clearance for the Project.


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

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

GRAVEL / RED EARTH & PEBBLES QUARRY – GENERAL CONDITIONS

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

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 complied by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.
17. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCB) by the proponent without fail.
18. The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
19. Prior clearance from Forestry & Wild Life including clearance from committee of the National Board for Wildlife as applicable shall be obtained before starting the quarrying operation, if the project site attracts the NBWL clearance, as per the existing law from time to time.
20. All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the Precise area communication letter issued by concerned District Collector should be strictly followed.
21. That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory

obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.

22. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

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


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ROUGH STONE/JELLY/BLUE METAL QUARRY

- 1) The PP shall inform send the 'Notice of Opening' of the quarry to the Director of Mines Safety, Chennai Region before obtaining the CTO from the TNPCB.
- 2) The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
- 3) The proponent shall appoint the statutory competent persons relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961, as amended from time to time.
- 4) Within a period one month from the execution of lease deed, the PP shall ensure that the persons deployed in the quarry including all the contractual employees/truck drivers shall undergo initial/periodical training in the DGMS approved GVTC situated in Trichy / Salem / Hosur.
- 5) The PP shall construct a garland drain of size, gradient and length around the proposed quarry incorporating garland canal, silt traps, siltation pond and outflow channel connecting to a natural drain should be provided prior to the commencement of mining. Garland drain, silt-traps, siltation ponds and outflow channel should be de-silted periodically and geo-tagged photographs of the process should be included in the HYCR.
- 6) Monitoring of drainage water should be carried out at different seasons by an NABL accredited lab and clear water should only be discharged into the natural stream. Geo-tagged photographs of the drainage and sampling site should be submitted along with HYCR.
- 7) The proponent shall install the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs showing the same before obtaining the CTO from TNPCB.

- 8) The Proponent shall submit a conceptual 'Slope Stability Action Plan' incorporating the benches & accessible haul road approved by the concerned 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 complied 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 re-grassing the mining area and any other area which may have been disturbed due to his mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The compliance of this direction shall be included in the Half Yearly Compliance Report which will be monitored by SEAC at regular intervals.
- 40) The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
- 41) As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere to the EMP as committed.

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

Sl. No	Existing (or) Virgin Quarry	
	Wind Mills located at a distance of 150 m to 300 m	Wind Mills located beyond 300 m Up to 500 m
1.	Appointment of I/II Class Mines Manager Certificate of Competency under MMR 1961.	Appointment of I/II Class Mines Manager Certificate of Competency under MMR 1961.
2.	Special precautions are to be taken during blasting within danger zone such as posting guards, etc.	Blast design parameters should be mentioned in mining plan/scheme. and may be reviewed by a competent mining engineer.
3.	Blast design parameters should be mentioned in mining plan/scheme.	MCPD and total charge should be fixed such that it should not exceed 1.3 kg and 26.50 kg respectively.
4.	The recommendations of scientific organisation need to be incorporated in the mining plan/scheme before its approval.	Fresh scientific study may be conducted if mine management wants to increase the MCPD and total explosive charge above 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 engineering for day-to-day blasting.	Engagement of blasting in-charge having Diploma/Degree in mining engineering for day-to-day blasting.
6.	Training of the blasting crew on controlled blasting practices before engaged in operation.	Training of the blasting crew on controlled blasting practices before engaged in operation.

7.	Submission of monthly report on blast design pattern and detailed explosive consumption as well as volume of rock excavation to a statutory body viz. DGMS, DMG, PESO or SPCB.	Submission of monthly report on blast design pattern and detailed explosive consumption as well as volume of rock excavation to a statutory body viz. DGMS, DMG, SPCB. Report of recorded ground vibration need to be added in monthly report.
8.	Report of recorded ground vibration need to be added in monthly report which shall be sent to all the statutory body viz. DGMS, DMG, SPCB.	Report of recorded ground vibration need to be added in monthly report which shall be sent to all the statutory body viz. DGMS, DMG, SPCB.
9.	Small diameter emulsion cartridge of 25 mm diameter (125 gm weight per cartridge) shall be used. However, ANFO explosives may also be used as main explosive charge.	Small diameter emulsion cartridge of 25 mm diameter (125 gm weight per cartridge) shall be used. However, ANFO explosives may also be used as main explosive charge.
10.	Electronic (or) Non-electric detonators (Nonel) shall be used in all the blasts for in-hole explosive initiation and surface hole-to-hole firing.	Non-electric detonators (Nonel) shall be used in all the blasts for in-hole explosive initiation and surface hole-to-hole firing.
11.	Max. number of holes in a round: 30.	Max. number of holes in a round: 40 to 60.

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

1. In the case of existing/operating mines, a letter obtained from the concerned AD (Mines) shall be submitted and it shall include the following:
 - (i) Original pit dimension
 - (ii) Quantity achieved Vs EC Approved Quantity
 - (iii) Balance Quantity as per Mineable Reserve calculated.
 - (iv) Mined out Depth as on date Vs EC Permitted depth
 - (v) Details of illegal/illicit mining
 - (vi) Violation in the quarry during the past working.
 - (vii) Quantity of material mined out outside the mine lease area
 - (viii) Condition of Safety zone/benches
 - (ix) Revised/Modified Mining Plan showing the benches of not exceeding 6 m height and ultimate depth of not exceeding 50m.
2. 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.

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:

1. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightning etc.
3. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
4. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
5. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
6. The project proponent shall obtain the necessary permission for drawing of ground water / surface water required for the project from the competent authority.
7. 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.

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:**
1. 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, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
 5. Sand, murrum, 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

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:

1. 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

specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

6. At least 20% of the open spaces as required by the local building byelaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
7. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation car washing, thermal cooling, conditioning etc. shall be done.
8. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
9. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
11. The local bye-law provisions on rainwater harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
12. A rainwater harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one day of total freshwater requirement shall be provided. In areas where ground water recharging is not feasible, the rainwater should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
13. All recharges should be limited to shallow aquifer.
14. No ground water shall be used during construction phase of the project.

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.
5. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.

6. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building byelaws requirement, whichever is higher.
7. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building byelaws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

6. Waste Management:

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

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.
9. 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:

1. 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

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:

1. 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.
2. 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 non-peak hours.
3. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of

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

9. Human Health Issues:

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

10. Corporate Environment Responsibility:

1. The PP shall complete the CER activities, as committed, before obtaining CTE.
2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be

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

3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Half Yearly Compliance Report (HYCR).

11. Miscellaneous:

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in Tamil language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt.
3. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
4. The project proponent shall submit Half Yearly Compliance Reports (HYCR) on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.
5. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as

prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

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.

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 existing 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

- 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.

- 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

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

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 pre-placement 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 health status of workers with special reference to Occupational Health and Safety.

9) Corporate Environment Policy

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

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

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
9. 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

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
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quick bird, 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

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.

Appendix -I
List of Native Trees Suggested for Planting

No	Scientific Name	Tamil Name	Tamil Name
1	<i>Aegle marmelos</i>	Vilvam	விவம்
2	<i>Adenanthura pavonina</i>	Manjadi	மஞ்சள், ஆனைக்குன்றிமணி
3	<i>Albizia lebeck</i>	Vaagai	வாகை
4	<i>Albizia amara</i>	Usil	உசில்
5	<i>Bauhinia purpurea</i>	Mantharai	மந்தாரை
6	<i>Bauhinia racemosa</i>	Aathi	ஆத்தி
7	<i>Bauhinia tomentos</i>	Iruvathi	இருவத்தி
8	<i>Buchanania axillaris</i>	Kattuma	காட்டுமர
9	<i>Borassus flabellifer</i>	Panai	பனை
10	<i>Butea monosperma</i>	Murukkamaram	முருக்கமரம்
11	<i>Bobax caba</i>	Ilavu, Sevvilavu	இலவு
12	<i>Calophyllum inophyllum</i>	Punnai	புன்னை
13	<i>Cassia fistula</i>	Serakondrai	சர்க்கொன்றை
14	<i>Cassia roxburghii</i>	Sengondrai	செங்கொன்றை
15	<i>Chloroxylon swietenia</i>	Purasamaram	புரசு மரம்
16	<i>Cochlospermum religiosum</i>	Kongu, Manjallavu	கோங்கு, மஞ்சள் இலவு
17	<i>Cordia dichotoma</i>	Naruvu	நருவு
18	<i>Creteva adansoni</i>	Mavalingum	மாவலிங்கம்
19	<i>Dillenia indica</i>	Uva, Uzha	உவா
20	<i>Dillenia pentagyna</i>	SiruUva, Sitruzha	சிறு உவா
21	<i>Diospyro sebenum</i>	Karungali	கருங்காலி
22	<i>Diospyro schloroxylon</i>	Vaganai	வாகை
23	<i>Ficus amplissima</i>	Kallitchi	கல் இச்சி
24	<i>Hibiscus tiliaceou</i>	Aatrupoovarasu	ஆற்றாப்பூவரசு
25	<i>Hardwickia binata</i>	Aacha	ஆச்சா
26	<i>Holoptelia integrifolia</i>	Aayili	ஆயில் மரம், ஆயிலி
27	<i>Lannea coromandelica</i>	Odhiam	ஒதியம்
28	<i>Lagerstroemia speciosa</i>	Poo Marudhu	பூ மருது
29	<i>Lepisanthus tetraphylla</i>	Neikottaimaram	நெய் கொட்டை மரம்
30	<i>Limonia acidissima</i>	Vila maram	விளா மரம்
31	<i>Litsea glutinos</i>	Pisinpattai	அம்பா பிசின்பட்டை
32	<i>Madhuca longifolia</i>	Illuppai	இலுப்பை
33	<i>Manilkara hexandra</i>	UlakkaiPaalai	உலக்கை பாலை
34	<i>Mimusops elengi</i>	Magizhamaram	மகிழ்மரம்
35	<i>Mitragyna parvifolia</i>	Kadambu	கடம்பு
36	<i>Morinda pubescens</i>	Nuna	நுனா
37	<i>Morinda citrifolia</i>	Vellai Nuna	வெள்ளை நுனா
38	<i>Phoenix sylvestre</i>	Eechai	நச்சமரம்
39	<i>Pongamia pinnat</i>	Pungam	பங்கம்

40	<i>Premna mollissima</i>	Munnai	முன்னை
41	<i>Premna serratifolia</i>	Narumunnai	நறு முன்னை
42	<i>Premna tomentosa</i>	Malaipoovarasu	மலை பூவரசு
43	<i>Prosopis cinerea</i>	Vanni maram	வன்னி மரம்
44	<i>Pterocarpus marsupium</i>	Vengai	வேங்கை
45	<i>Pterospermum canescens</i>	Vennangu, Tada	வேண்டிவாங்கு
46	<i>Pterospermum xylocarpum</i>	Polavu	பூவடி
47	<i>Putranjiva roxburghii</i>	Karipala	கரிபலா
48	<i>Salvadora persica</i>	Ugaa Maram	உகா மரம்
49	<i>Sapindus emarginatus</i>	Manipungan, Soapukai	மணிப்புகன் சோப்புகாய்
50	<i>Saraca asoca</i>	Asoca	அசோகா
51	<i>Strobilus asper</i>	Piray maram	பிராய் மரம்
52	<i>Strychnos nuxvomica</i>	Yetti	யெட்டி
53	<i>Strychnos potatorum</i>	Therthang Kottai	தேத்தாங் கோட்டை
54	<i>Syzygium cumini</i>	Naval	நாவல்
55	<i>Terminalia belleric</i>	Thandri	தாண்ட்ரி
56	<i>Terminalia arjuna</i>	Ven marudhu	வேன் மருது
57	<i>Toona ciliata</i>	Sandhana vembu	சந்தாந வேம்பு
58	<i>Thespesia populnea</i>	Puvarasu	பூவரசு
59	<i>Walsuratrifoliata</i>	valsura	வால்சுரா
60	<i>Wrightia tinctoria</i>	Veppalai	வேப்பலை
61	<i>Pithecellobium dulce</i>	Kodukkapuli	கோடுககாபுலி


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