

**STATE EXPERT APPRAISAL COMMITTEE - TAMIL NADU**

Minutes of 360<sup>th</sup> meeting of the State Expert Appraisal Committee (SEAC) held on 03.03.2023 (Friday) at SEIAA Conference Hall, 2<sup>nd</sup> Floor, Panagal Malligai, Seldapet, Chennai 600 015 for consideration of Building Construction Projects & Mining Projects

Agenda No: 360-01

(File No: 9438/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 1.92.0 Ha at S.F.Nos. 101/1B, 129/2A, 129/2B, 129/10, 129/13A & 129/13B(P) of Odukkur Village, Kulathur Taluk, Pudukkottai District, Tamil Nadu by Thiru. M.Ravi -For Environmental Clearance (SIA/TN/MIN/288203/2022,dt 11.08.2022).

The proposal was placed in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

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

Sl.No	Detail of the Proposal	
1.	Name of the Owner/Firm	Thiru.M.Ravi, S/o. Mani, 964,Sivappatti, Vellanur, Kulathur Taluk, Pudukkottai- 622501.
2.	Type of quarrying	Rough Stone and Gravel
3.	S.F No. of the quarry site with area break-up	101/1B, 129/2A, 129/2B, 129/10, 129/13A & 129/13B(P)
4.	Village in which situated	Odukkur
5.	Taluk in which situated	Kulathur
6.	District in which situated	Pudukkottai


  
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7.	Extent of quarry (in ha.)	1.92.0 Ha (Patta land)
8.	Lease Period granted	5 Years, vide Rc. No. 41/2022 (G&M), dated. 16.05.2022
9.	Life of the Project	10 years
10.	Type of mining	Opencast Mechanized mining
11.	Production (Quantity in m3)	The mining plan is for the period of five years & production should not exceed 1,87,440 m <sup>3</sup> of Rough stone, 13956 m <sup>3</sup> of Weathered Rock & 30296 m <sup>3</sup> of Gravel.
12.	Annual peak Production (Quantity in m3)	The annual peak production is 52960 m <sup>3</sup> of rough stone, 8712 m <sup>3</sup> of Weathered Rock & 18696 m <sup>3</sup> of Gravel.
13.	Ultimate Depth of quarrying	23m (2m Gravel + 1m Weathered Rock + 20m Rough Stone).
14.	Depth of water table	54m BGL
15.	Latitude & Longitude of all corners of the quarry site	10°33'16.83" N to 10°33'9.27" N 78°45'55.25" E to 78°45'50.40" E
16.	Top Sheet No.	58 J/ 14
17.	Man Power requirement per day:	18 nos
18.	Precise area communication issued by the Assistant Director, Dept of G&M with date	Rc.No.41/2022(G&M) Dated: 16.05.2022
19.	Mining Plan approved by Assistant Director, Dept of G&M with date	Rc.No.41/2022(G&M) Dated: 20.06.2022
20.	500m cluster letter issued Assistant Director, Dept of G&M with date	Rc.No.41/2022(G&M) Dated: 20.06.2022

  
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21.	VAO certificate regarding 300m radius cluster	Letter Dated:26.07.2022
22.	Water requirement: 1. Drinking & Domestic Water (In KLD) 2. Dust suppression(in KLD) 3. Greenbelt (in KLD)	1.81 KLD 0.81 KLD 0.5 KLD 0.5 KLD
23.	Power requirement a. Domestic Purpose	TNEB 1,55,002 Liters of HSD
24.	Project Cost	Rs. 2,58,33,000/-
25.	EMP cost	Capital cost: Rs. 10,01,000 /- Recurring cost: Rs. 15,33,740 /- Annum
25	CER cost	Rs.5,00,000/- as accepted by the PP

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for total excavation quantity exceed 1,87,440 m<sup>3</sup> of Rough stone, 13956 m<sup>3</sup> of Weathered Rock & 30296 m<sup>3</sup> of Gravel with maintaining an ultimate pit depth of 23m (2m Gravel + 1m Weathered Rock + 20m Rough Stone) & annual peak production capacity of 52860 m<sup>3</sup> of rough stone, 8712 m<sup>3</sup> of Weathered Rock & 18696 m<sup>3</sup> of Gravel subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, In addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.

  
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3. The PP shall submit the 'Notice of Opening' of the quarry to the Regional Inspector/Director of Mines Safety, Chennai Region under the section 16 of the Mines Act, 1952 and in accordance with the Reg. 3 of MMR 1961 before obtaining the CTO.
4. The proponent shall construct the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
5. Further, the PP shall construct the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
6. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.
7. However, the PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 4 years of operation whichever is earlier, by involving 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.
8. As a part of EC Compliance as well as few structures including sheds are situated within 300 m, the PP shall carry out the tree plantation (2000 nos) comprehensively along the lease boundary to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.

  
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9. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarries.
10. Since few structures are situated within 300m distance from the mine lease boundary, the PP shall obtain prior permission to carry out the blasting operation in the proposed quarry after the execution of lease without fail and a copy of such permission letter shall be furnished to the AD (Mines), the DEE/TNPCB and SEIAA without fail.
11. However, the PP shall carry out maximum of only one round of controlled blast per day until the blast optimisation, restricted to the maximum of 50 to 60 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 10 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
12. Due to existence of few structures within 300 m, within one year from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of Blast parameters for reducing the impact of blast-induced ground/air vibrations on the structures located within the radial distance of 500 m and to reduce the fly rock caused due to operation of the quarry by adopting appropriate controlled blasting techniques', by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal and Anna University – 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.
13. The PP shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.
14. The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him only as per the provisions

  
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of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.

15. The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
16. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP which must be furnished for the life of the project (i.e., 10 years).
17. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
18. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
19. As per the MoEF& CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere EMP furnished.
20. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Govt. Higher Secondary School, Kulathur Village as committed, before obtaining CTO from TNPCB.

Agenda No: 360-02

(File No: 9467/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 4.07.5 Ha at S.F.No 1/A, 1/2, 1/3 & 4/1, Pallakapalayam Village, Kumarpalayam Taluk, Namakkal District, Tamil Nadu by Thiru.K.Palanisamy -For Environmental Clearance (SIA/TN/MIN/289439/2022, Dt 20.08.2022).

The proposal was placed in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

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

  
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4. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 1,25,660 m<sup>3</sup> of Rough stone & 16,284 m<sup>3</sup> of Gravel. The annual peak production is 29270 m<sup>3</sup> of rough stone & 8142 m<sup>3</sup> of Gravel. The ultimate depth is 41.5 m BGL.
5. Quarrying in this lease area was earlier carried out and Environmental clearance was obtained from SEIAA-TN vide Lr.No. SEIAA-TN/F.No.5163/1(a)/EC.No.3205/2016 dated 06.07.2016 for Rough stone & Gravel upto a depth of 7m BGL at Pallakapalayam Village, Tiruchengode Taluk, Namakkal District over 4.07.5 Ha of the lease area.
6. The Existing pit depth is 6.5m.
7. The PP has obtained Certified Compliance Report vide Lr.No. E.P/12.1/2022-23/SEIAA/269/TN/269 dated: 02.03.2023.

Based on the presentation and details furnished by the project proponent, the Committee noted that there is non-compliance of many of the conditions as stipulated in the EC granted earlier as per the Certified Compliance Report, submitted by the proponent. Hence, the committee after detailed discussions decided to consider the proposal only after obtaining the adequate responses from the PP for the following points:

- i) The proponent shall erect the 'S3 (or) G2' type of Barbed wire fencing all around the boundary of the existing working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and the photographs showing the images of the same shall be furnished.
- ii) As per the EC issued earlier, the proponent shall complete the plantation as a part of Greenbelt development by considering the native species on all sides of the lease area at the rate of 500 nos / Ha. All the tree samplings should be planted around the boundary of the quarry site.
- iii) The PP shall also install the ear-marked boundary pillars along the wire fencing as per the approved Mining Plan.
- iv) The proponent shall comply with all other necessary conditions as per the earlier EC issued dated.06.07.2016 given below:

  
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- a. The PP shall show the photographic evidences indicating the rainwater harvesting measures.
  - b. The PP shall submit photographic evidences indicating Garland drain all around the boundary of the project area.
  - c. The PP shall furnish proof of separate account for maintaining the funds earmarked for Environmental Protection Measures.
  - d. The PP shall provide proof of solar lighting system provided to the nearby village.
- v) Besides, the structures within the radius of (i) 50 m. (ii) 100 m. (iii) 200 m and (iv) 300 m shall be enumerated with details such as dwelling houses with number of occupants, places of worship, industries, factories, sheds, etc.

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

**Agenda No: 360-03**

**(File No: 9481/2022)**

**Proposed Rough Stone & Gravel quarry lease over an extent of 2.07.0 Ha at S.F.No 253/1(part), 254(Part) & 255/1 (part), Vedakkipalayam Village, Pollachi Taluk, Coimbatore District, Tamil Nadu by Thiru. K. Venkatchalapathy-For Environmental Clearance (SIA/TN/MIN/400996/2022 dt 23.09.22).**

The proposal was placed in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available in the website ([parivesh.nic.in](http://parivesh.nic.in)).

**The SEAC noted the following:**

1. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
2. Quarrying in this lease area was earlier carried out and Environmental clearance was obtained from DEIAA, Coimbatore vide Lr.No. DEIAA-CBE-11/F.No.54/2(a&b)/EC.No.09/2017 dated 16.09.2017 for Rough stone & Gravel upto a depth of 22m BGL at Vedakkipalayam Village, Pollachi Taluk, Coimbatore District over 2.07.0 Ha of the lease area.
3. The Existing pit depth is 22m.

  
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4. The PP has obtained Certified Compliance Report vide Lr.No. E.P/12.1/2022-23/SEIAA/169/TN/1226 dated: 17.11.2022.
5. The Salient features of the proposed project as follows

Details of the Proposal	
1.	Name of the Owner/Firm Thiru.K.Venkatachalepathy S/o S Kanagaraj D No 29. Jayalakshmi Nagar Vadugapalayam Pollachi Taluk Coimbatore District- 642 001.
2.	Type of quarrying Rough Stone and Gravel
3.	S.F No. Of the quarry site with area break-up 253/1(part), 254(Part) & 255/1 (part)
4.	Village in which situated Vadakkipalayam
5.	Taluk in which situated Pollachi
6.	District in which situated Coimbatore
7.	Extent of quarry (in ha.) 2.07.0 Ha
8.	Lease period granted 5 Years / Existing Quarry
9.	Type of mining Opencast Semi Mechanized mining
10.	Production (Quantity in m3) The mining plan is for the period of five years & production should not exceed 1,50,100 cu.m of Rough stone.
11.	Annual peak Production (Quantity in m3) The annual peak production is 32355 cu.m of rough stone
12.	Depth of the Existing pit 4 m to 22 m
13.	Ultimate Depth of quarrying 35m BGL (22m of Existing depth + 13m of proposed depth)

  
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14.	Depth of water table	55m Summer Season – 50m Rainy Season
15.	Latitude & Longitude of all corners of the quarry site	10°43'33.82612"N to 10°43'38.51854"N 76°58'2.56401"E to 76°58'8.32251"E
16.	Top Sheet No.	58- B/14
17.	Man Power requirement per day:	15 Nos
18.	Precise area communication issued by the District Collector with date	Rc.No.664/mines/2022. dated:28.08.2022
19.	Mining Plan approved by Assistant Director, Dept of G&M with date	Rc.No.664/mines/2022. dated:07.09.2022
20.	500m cluster letter issued Assistant Director, Dept of G&M with date	Rc.No.664/mines/2022, dated:07.09.2022
21.	VAO certificate regarding 300m radius cluster	Letter Dated:07.09.2022
22.	Water requirement: 4. Drinking & Domestic Water (in KLD) 5. Dust suppression(in KLD) 6. Greenbelt (in KLD)	4.5 KLD 1.5 KLD 1.5 KLD 1.5 KLD
23.	Power requirement b. Domestic Purpose	TNEB 1,20,080 Liters of HSD
24.	Project Cost	Rs. 67,45,700/-
25.	EMP cost	Capital cost: Rs. 28,52,290/- Recurring cost: Rs. 15,76,670/- Annum
26.	CER cost	Rs. 5,00,000/-as accepted by the PP

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for total excavation quantity exceed 1,50,100 cu.m of Rough stone with maintaining an ultimate pit depth of 35m BGL (which includes 22m of Existing depth and 13m of proposed depth). However, the annual peak production capacity of not exceeding 82355 cu.m

  
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of rough stone 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 mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
3. The PP shall submit the 'Notice of Opening' of the quarry to the Regional Inspector/Director of Mines Safety, Chennai Region under the section 16 of the Mines Act, 1952 and in accordance with the Reg. 3 of MMR 1961 before obtaining the CTO.
4. The proponent shall construct the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
5. Further, the PP shall construct the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
6. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.

  
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7. The PP shall form the benches of adequate height & width as per the Approved Mining Plan and it shall be monitored at regular interval by the concerned AD (Mines).
8. However, the PP shall carry out the scientific studies to assess the slope stability of the working benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 2 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.
9. As a part of EC Compliance, the PP shall carry out the tree plantation (2000 nos) to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
10. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarries.
11. The PP shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.
12. The PP shall carry out maximum of two rounds of controlled blast only per day, restricted to the maximum of 50 to 60 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 10 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
13. However, within six months from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of Blast parameters for

reducing the impact of blast-induced ground/air vibrations on the structures located within the radial distance of 500 m and to reduce the fly rock caused due to operation of the quarry by adopting appropriate controlled blasting techniques, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal and Anna University - 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.

14. The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him only as per the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
15. The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
16. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
17. The PP shall carry out the comprehensive hydrogeological studies within 2 years of the commencement of quarrying operation to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal, Anna University Chennai-Dept of Geology, CEG Campus, and University of Madras -Dept of Applied Geology, Chennai etc 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.

  
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18. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
19. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
20. 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.
21. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Govt. Higher Secondary School, Puravipalayam Village as committed, before obtaining CTO from TNPCB.

**Agenda No: 360-D4**

**(File No: 9523/2022)**

**Proposed Rough Stone & Gravel quarry lease over an extent of 2.08.90 Ha at S.F.No 1408/1(part), 1408/2(p) and 1408/3 (Part) of Serakulam Village, Srivaikundam Taluk, Thoothukudi District, Tamil Nadu by Tvl.Sam Blue Metals -For Environmental Clearance (SI/VTN/MIN/403985/2022 dt 21.10.2022).**

The proposal was placed in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available in the website ([parivesh.nic.in](http://parivesh.nic.in)).

**The SEAC noted the following**

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

Salient Features of the Proposed Project	
1.	Name of the Owner/Firm Tvl.Sam Blue Metals. Thiru.V.Sivarubbu (Partner), Old No.B4C, 1st Street.

  
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		N.C.O Colony, Jawahar Nagar, Perumalpuram, Palayamkottai, Tirunelveli District-627 002.
2.	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	Rough Stone and Gravel
3.	S.F No. Of the quarry site with area break-up	1408/1(part), 1408/2(p) & 1408/3 (Part)
4.	Village In which situated	Serakulam
5.	Taluk In which situated	Srivaikundam
6.	District in which situated	Thoothukudi
7.	Extent of quarry (in ha.)	2.08.90 Ha
8.	Lease Period granted	5 Years/Fresh
9.	Expected Life of the Project	10 years
10.	Type of mining	Opencast -Semi Mechanized mining
11.	Production (Quantity in m3)	The mining plan is for the period of five years & production should not exceed 2,37,675 m <sup>3</sup> of Rough stone & 94,535 m <sup>3</sup> of Gravel.
12.	Annual peak Production (Quantity in m3)	The annual peak production is 48,175 m <sup>3</sup> of rough stone & 26,645 m <sup>3</sup> of Gravel.
13.	Ultimate Depth of quarrying	30m BGL
14.	Depth of water table	56m BGL
15.	Latitude & Longitude of all corners of the quarry site	08°36'45.33" N to 08°36'53.12" N 77°47'05.32" E to 77°47'08.36" E
16.	Top Sheet No.	58 H/ 14
17.	Man Power requirement per day:	13 nos

  
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18.	Precise area communication issued with date	Roc.No.G.M.1/197/2022 dated :15.07.2022
19.	Mining Plan approved by Assistant Geologist, Assistant Director(i/c). Department of Geology and mining with date	Roc.No.G.M.1/197/2022 Dated: 01.08.2022
20.	500m cluster letter issued Assistant Geologist, Assistant Director(i/c). Department of Geology and mining with date	Roc.No.G.M.1/197/2022 Dated: 10.08.2022
21.	VAO certificate regarding 300m radius cluster	Letter Dated:29.07.2022
22.	Water requirement: 7. Drinking & Domestic Water (in KLD) 8. Dust suppression(in KLD) 9. Greenbelt (In KLD)	2.5 KLD 1.0 KLD 1.0 KLD 0.5 KLD
23.	Power requirement c. Domestic Purpose	TNEB
24.	Project Cost	Rs.71,63,400/-
25.	EMP cost	Capital cost: Rs.11.04 Lakhs/- Recurring cost: Rs.17.13 Lakhs/- Annum
26.	CER cost	Rs.5,00,000/- as accepted by the PP

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for total excavation quantity exceed 2,37,675 m<sup>3</sup> of Rough stone & 94,535 m<sup>3</sup> of Gravel with maintaining an ultimate pit depth of 30m BCL & annual peak production capacity of 48,175 m<sup>3</sup> of rough stone & 26,645 m<sup>3</sup> of Gravel subject to the standard conditions as



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

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
3. The PP shall submit the 'Notice of Opening' of the quarry to the Regional Inspector/Director of Mines Safety, Chennai Region under the section 16 of the Mines Act, 1952 and in accordance with the Reg. 3 of MMR 1961 before obtaining the CTO.
4. The proponent shall construct the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
5. Further, the PP shall construct the gariand drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
6. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.
7. However, the PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 4 years of operation whichever is earlier, by involving

  
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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.

8. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarries.
9. 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.
10. The PP shall carry out maximum of two rounds of controlled blast only per day, restricted to the maximum of 50 to 60 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 10 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
11. However, within one year from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of Blast parameters for reducing the impact of blast-induced ground/air vibrations and to reduce the fly rock caused due to operation of the quarry by adopting appropriate controlled blasting techniques', by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal and Anna University - 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.
12. The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him only as per the provisions

of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.

13. The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
14. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
15. The PP shall carry out the comprehensive hydrogeological studies within 2 years of the commencement of quarrying operation to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal, Anna University Chennai-Dept of Geology, CEG Campus, and University of Madras -Dept of Applied Geology, Chennai etc 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.
16. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
17. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
18. 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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19. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Panchayat Union primary School, Karunkulam Village as committed, before obtaining CTO from TNPCB.

Agenda No: 360-05

File No: 9482/2022)

Proposed Rough stone & Gravel quarry lease over an extent of 1.21.50 Ha in S.F.No: 252(Part) & 253(Part), Kuppam Village, Pugalur Taluk Karur District, Tamil Nadu by Thiru A.Devaraju - For Environmental Clearance. (SIA/TN/MIN/ 401495/2022, Dt.27.09.2022)

The proposal was placed for appraisal in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available on the on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Thiru A.Devaraju has applied for Environmental Clearance for the Proposed Rough stone & Gravel quarry lease over an extent of 1.21.50 Ha in S.F.No: 252(Part) & 253(Part), Kuppam Village, Pugalur Taluk Karur District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006, as amended

1.	Name of the Owner / Firm	Thiru A.Devaraju, S/o.Mr.Arunachalam, Periyarangapalayam, Punnam Village, Pugalur Taluk, Karur District-639136
2.	Type of quarrying (savudu / Rough stone / Sand / Granite)	Rough Stone and Gravel
3.	S.F No. of the quarry site	252(Part) & 253(Part)
4.	Village	Kuppam
5.	Taluk	Pugalur
6.	District	Karur
7.	Extent of Quarry (in ha.)	1.21.50 Hect Patta Land

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8.	Lease Period of Quarrying proposed	5 Years / Existing Quarry
9.	Type of Mining	Open Cast - Semi-Mechanized Mining (i.e., the drilling & mild blasting operation are carried out for the extraction of dimension stones and it is loaded manually into the trucks)
10.	Production (Quantity in m <sup>3</sup> )	As per the approved mining plan, <b>Geological reserves:</b> 2,62,414 m <sup>3</sup> of rough stone 6840 cu.m of Gravel to the 25m  <b>5-year Production:</b> Rough Stone- 95,428m <sup>3</sup> , Gravel- 3,816m <sup>3</sup> The annual peak production as per mining plan is 20,510 cu.m of Rough Stone (3 <sup>rd</sup> year).
11.	Existing Depth	3 to 5 m
12.	Ultimate Depth of Mining	25m
13.	Latitude & Longitude of all corners of the quarry site	11°00'30.23"N to 11°00'32.61"N 77°57'28.55"E to 77°57'34.67"E
14.	Topo sheet No.	58-E/16
15.	Man power requirement	15 Nos
16.	Precise Area Communication	Roc.No.80/Mines/2022 Dated 12.08.2022.
17.	Mining plan approval letter	Rc.No.80/Mines/2022, Dated 30.08.2022
18.	500m letter	Rc.No.80/Mines/2022, Dated 02.09.2022.
19.	Water requirement: 1. Drinking & domestic purposed (in KLD) 2. Dust Suppression (in KLD) & Green Belt (in KLD)	1.7 KLD 0.7KLD 1.0KLD
20.	Power requirement: a. Domestic purpose b. Industrial Purpose	TNEB DG set
21.	Depth of Water table	55m-50m
22.	Whether any habitation within 300m distance	Nil
23.	Project cost	Rs.15,65,000/-
24.	Total EMP cost for 5 years	Rs. 86,12,910/-
25.	CER cost	Rs.5,00,000/-
26.	VAO letter dated	29.06.2019

  
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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 a production quantity of 95,428 cu.m of Rough stone and 3,816 Cu.m of Gravel to an ultimate pit depth of 25m and however the annual peak production shall not exceed 20,510 cu.m of Rough Stone as per the approved mining plan 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 Project Proponent (PP) shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region before obtaining the CTO and get the necessary statutory permission under the MMR 1961 pertaining to the quarry working operations.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
4. The PP shall ensure that all the statutory competent persons and non-statutory workmen have undergone the 'Refresher' training especially on 'Occupational Health Hazards associated with quarrying' under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy.
5. The PP shall ensure that the workmen including the statutory competent persons employed in the quarry on permanent or temporary basis are undergone Initial/Periodical Medical Examination before the commencement of the quarrying operations under the provisions of the Mines Rules, 1955 and a copy of the report shall be communicated to the AD (Mines), the DEE/TNPCB and SEIAA.
6. The Project Proponent shall furnish slope stability action plan to the concerned AD (Mines) for the planned working by maintaining appropriate benches incorporating the haul road with proper gradient before obtaining CTO from TNPCB.

7. The Project Proponent shall develop the Green belt activities (tree plantations) in the safety zone as stipulated in the Mining Plan around the periphery of the proposed quarry lease before obtaining the CTO from the TNPCB.
8. The Project Proponent shall not carry out the secondary rock breakage involving blasting operations and use only the non-explosive techniques such as rock breakers, etc.
9. The Project Proponent shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.
10. The Project Proponent shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him as per the provisions of MMR 1961.
11. The Project Proponent shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
12. The Project Proponent shall also install necessary dust and noise extraction system around mineral handling area with proper enclosures before obtaining the CTO from TNPCB.
13. Since the quarry is located in the cluster, the Project Proponent shall ensure strict compliance of the provisions given under the Mines Rules, 1955 for the health and welfare of the persons employed therein.
14. The Project Proponent shall open a separate account for maintaining the funds earmarked for environmental protection measures which should not be diverted for other purpose before obtaining the CTO from the TNPCB. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
15. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
16. As per the MoEF& CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere EMP furnished.
17. As accepted by the Project proponent the CER cost is Rs. 5.0 lakh and the amount shall be spent for the activities committed during SEAC appraisal before obtaining CTO from TNPCB.

  
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Agenda No: 360-06

File No: 9496/2022)

Proposed Gravel quarry lease over an extent of 1.81.5 Ha in S.F.No. 58/3 of Nalukottai Village, Sivagangai Taluk and Sivagangai District, Tamil Nadu by Thiru S. Karthikbabu- For Environmental Clearance. (SIA/TN/MIN/402502/2022, Dt.08.10.2022)

The proposal was placed for appraisal in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available on the on the PARIVESH web portal (parvesh.nic.in).

The SEAC noted the following:

1. The project proponent, Thiru S. Karthikbabu has applied for Environmental Clearance for the Proposed Gravel quarry lease over an extent of 1.81.5 Ha in S.F.No. 58/3 of Nalukottai Village, Sivagangai Taluk and Sivagangai District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006, as amended.

1.	Name of the Owner / Firm	Thiru S. Karthikbabu, S/o. Shanmugam, Kandagulam Village, Abiramam Post, Paramakudi Taluk, Ramanathapuram District - 623 601
2.	Type of quarrying (savudu / Rough stone / Sand / Granite)	Gravel
3.	S.F No. of the quarry site	58/3
4.	Village	Nalukottai
5.	Taluk	Sivagangai
6.	District	Sivagangai
7.	Extent of Quarry (In ha.)	1.81.5Hect Patta land
8.	Period of Quarrying proposed	2 Years
9.	Type of Mining	Open Cast Mechanized Mining
10.	Production (Quantity In m <sup>3</sup> )	As per the approved mining plan, Geological reserves:

  
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		35,960 cu.m of Gravel to the ultimate depth of 2m BGL 2-year Production: 27,864m <sup>3</sup> of Gravel The annual peak production as per mining plan is 14,040 cu.m of Gravel (1 <sup>st</sup> year).
11.	Ultimate Depth of Mining	2m BGL
12.	Latitude & Longitude of all corners of the quarry site	09°56'12.87"N to 09°56'17.08"N 78°28'27.22"E to 78°28'32.30"E
13.	Topo sheet No.	58 K/05
14.	Man power requirement	8 Nos
15.	Precise Area Communication	Rc.No.225/Mines/2022, Dated: 25.07.2022.
16.	Mining plan approval letter	Rc.No. 225/Mines/2022 Dated: 01.09.2022
17.	500m letter	Rc.No. 225/Mines/2022 Dated: 05.09.2022
18.	Water requirement: 1. Drinking & domestic purposed (in KLD) 2. Dust Suppression (in KLD) & Green Belt (in KLD)	2.0 KLD 0.2KLD 1.8KLD
19.	Power requirement: c. Domestic purpose d. Industrial Purpose	TNEB DG set
20.	Depth of Water table	55m-50m
21.	Whether any habitation within 300m distance	Two Farm House Sheds are located at 140 m & 200 m from the lease boundary but no drilling & blasting are involved as per the Approved Mining Plan.
22.	Project cost	Rs.15,94,000/-
23.	Total EMP cost for 2 years	Rs.22,39,927/-
24.	CER cost	Rs.2,00,000/-
25.	VAO letter dated	VAO letter, dated. 26.08.2021 indicated no approved houses, temples of worship and schools located within 300 m from the boundary.

Based on the presentation made and the documents furnished by the Project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the quantity of 27,864m<sup>3</sup> of Gravel to an ultimate depth of 2m and however the annual peak production shall not exceed 14,040 cu.m of Gravel as per the

  
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approved mining plan subject to the standard conditions & normal conditions stipulated by MoEF&CC. In addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The mine manager and other statutory competent persons shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952.
3. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Refresher' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy.
4. The Project Proponent shall develop the Green belt activities (tree plantations) in the safety zone as stipulated in the Mining Plan around the periphery of the proposed quarry lease before obtaining the CTO from the TNPCB.
5. The Project Proponent shall not carry out the blasting operations in the proposed quarry.
6. The Project Proponent shall carry out the comprehensive tree plantation (two to three rows) along the boundary of the quarrying site considering the wind direction to act as a barrier to reduce noise level and dust pollution directing the surrounding farm lands before obtaining the CTO from the TNPCB.
7. The PP shall ensure that the transport vehicles used in the quarry are adequately covered with tarpaulin before it is allowed to enter into the adjacent village panchayat road.
8. The Project Proponent shall also install necessary dust and noise extraction system around mineral handling area with proper enclosures before obtaining the CTO from TNPCB.
9. Since the quarry is located in the cluster, the Project Proponent shall ensure strict compliance of the provisions given under the Mines Rules, 1955 for the health and welfare of the persons employed therein.
10. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the

MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.

11. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
12. 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.
13. As accepted by the Project proponent the CER cost is Rs. 2.0 lakh and the amount shall be spent for the activities committed during SEAC appraisal before obtaining CTO from TNPCB.

Agenda No: 360-07

File No: 9510/2022)

Proposed Gravel quarry lease over an extent of 1.21.50 Ha in S.F.No: 115/2C, 116/1C, 116/1D, 116/1F, 116/1J & 117/1D, Kakkudi Village, Kamuthi Taluk Ramanathapuram District, Tamil Nadu by Thiru V. Athi - For Environmental Clearance.  
(QA/TN/MIN/ 401495/2022, Dt.27.09.2022)

The proposal was earlier placed for appraisal in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available on the on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Thiru V. Athi has applied for Environmental Clearance for the Proposed Gravel quarry lease over an extent of 1.21.50 Ha in S.F.No: 115/2C, 116/1C, 116/1D, 116/1F, 116/1J & 117/1D, Kakkudi Village, Kamuthi Taluk Ramanathapuram District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006, amended.

Details of the Proposal	
1. Name of the Owner / Firm	Thiru V.ATHI Valaiyapookkulam Post, No.3/81-I, Chinnudappankulam Village, Valaiyapookkulam Post, Kamuthi Taluk, Ramanathapuram 623605
2. Type of quarrying (savudu / Rough stone / Sand / Granite)	Gravel

  
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3.	S.F No. of the quarry site	115/2C, 116/1C, 116/1D, 116/1E, 116/1J & 117/1D
4.	Village	Kalkudi
5.	Taluk	Kamuthi
6.	District	Ramanathapuram
7.	Extent of Quarry (in ha.)	1.28.0Hect
8.	Period of Quarrying proposed	1 Year
9.	Type of Mining	Open Cast-Semi-Mechanized mining
10.	Production (Quantity in m <sup>3</sup> )	As per the approved mining plan. Geological reserves: 25,600 cu.m of Gravel to an ultimate depth of 2m BGL 1 - year Production: 17.898m <sup>3</sup> of Gravel
11.	Ultimate Depth of Mining	2m BGL
12.	Latitude & Longitude of all corners of the quarry site	9°28'8.11"N to 9°28'12.59"N 78°21'54.07"E to 78°22'0.18"E
13.	Topo sheet No.	58-K/07
14.	Man power requirement	11 Nos
15.	Precise Area Communication	Rc.No.130/G/M/2022, Dated: 05.08.2022
16.	Mining plan approval letter	Rc.No.130/G&M/2022, Dated: 24.08.2022
17.	500m letter	Rc.No.130/G&M/2022 Dated: 24.08.2022
18.	Water requirement: 1. Drinking & domestic purposed (in KLD) 2. Dust Suppression (in KLD) & Green Belt (in KLD)	1.8 KLD 1.0 KLD 0.8 KLD
19.	Power requirement: e. Domestic purpose f. Industrial Purpose	TNEB -
20.	Depth of Water table	25m-20m
21.	Whether any habitation within 300m distance	Nil
22.	Project cost	Rs. 14,79,000/-
23.	Total EMP cost for 1 year	Rs. 22,60,650/-
24.	CER cost	Rs. 2,00,000/-
25.	VAO letter dated	26.08.2022

Based on the presentation made and the documents furnished by the Project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the quantity of 17,898m<sup>3</sup> of gravel to an ultimate depth of 2m for a maximum period of one year as per the approved mining plan subject to the standard conditions & normal conditions stipulated by MoEF&CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The mine manager and other statutory competent persons shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952.
3. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Refresher' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy.
4. The Project Proponent shall develop the Green belt activities (tree plantations of two to three rows) in the safety zone as stipulated in the Mining Plan around the periphery of the proposed quarry lease before obtaining the CTO from the TNPCB.
5. The Project Proponent shall not carry out blasting operations.
6. The Project Proponent shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
7. The PP shall ensure that the transport vehicles used in the quarry are adequately covered with tarpaulin before it is allowed to enter into the adjacent village panchayat road.
8. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50m safety distance from water body should be maintained without carrying any activity. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.

  
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9. The Project Proponent shall also install necessary dust and noise extraction system around mineral handling area with proper enclosures before obtaining the CTO from TNPCB.
10. Since the quarry is located in the cluster, the Project Proponent shall ensure strict compliance of the provisions given under the Mines Rules, 1955 for the health and welfare of the persons employed therein.
11. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
12. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
13. 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.
14. As accepted by the Project proponent the CER cost is Rs. 2.0 lakh and the amount shall be spent for the activities committed during SEAC appraisal before obtaining CTO from TNPCB.

Agenda No: 360-08

File No: 9517/2022)

Proposed Rough stone & Gravel quarry lease over an extent of 2.09.5 Ha in S.F.No: 919/1A2, 919/1B2, 929/2C, 931 & 935/2, Kullapuram Village, Periyakulam Taluk Theni District, Tamil Nadu by Thiru D. Devanand- For Environmental Clearance. (SIA/TN/MIN/402044/2022) Dated: 01.10.2022

The proposal was placed for appraisal in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available on the on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Thiru D. Devanand has applied for Environmental Clearance for the Proposed Rough stone & Gravel quarry lease over an extent of 2.09.5 Ha in S.F.No: 919/1A2, 919/1B2, 929/2C, 931 & 935/2, Kullapuram Village, Periyakulam Taluk Theni District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item I(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006, as amended.

  
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1.	Name of the Owner / Firm	Thiru D. Devanand S/o. (Late) Devaraj No.1/124, Karisalpetti Karumathur Madurai - 625 514
2.	Type of quarrying (savudu / Rough stone / Sand / Granite)	Rough Stone and Gravel
3.	S.F No. of the quarry site	919/1A2, 919/1B2, 929/2C, 931 & 935/2
4.	Village	Kullapuram
5.	Taluk	Periyakulam
6.	District	Theni
7.	Extent of Quarry (in ha.)	2.09.5Hect Patta land
8.	Lease Period granted	5 Years / Existing Quarry
9.	Type of Mining	Open Cast - Mechanized Mining
10.	Production (Quantity in m <sup>3</sup> )	As per the approved mining plan, <b>Geological reserves:</b> 5,14,025m <sup>3</sup> of Rough stone, 41,122 cu.m of Gravel to the ultimate depth of 27m BGL  <b>5-year Production:</b> Rough Stone- 1,15,000m <sup>3</sup> , Gravel- 17,560m <sup>3</sup>  The annual peak production as per mining plan is 30,865 cu.m of Rough Stone.
11.	Proposed Depth of Mining	27m BGL
12.	Latitude & Longitude of all corners of the quarry site	10°03'42.45"N to 10°03'47.09"N 77°39'17.62"E to 77°39'26.08"E
13.	Topo sheet No.	58-F/12
14.	Man power requirement	23 Nos
15.	Precise Area Communication	Na.Ka.No.104/Kanimam/2018 Dated 19.07.2022
16.	Mining plan approval letter	Roc.No.104/2018/ Mines, Dated 28.07.2022
17.	500m letter	Roc.No.104/2018/ Mines, Dated 28.07.2022

  
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18.	Water requirement: 3. Drinking & domestic purposed (in kLD) 4. Dust Suppression (in kLD) & Green Belt (in kLD)	2.0 kLD 1.00kLD 1.00kLD
19.	Power requirement: g. Domestic purpose h. Industrial Purpose	TNEB DG set
20.	Depth of Water table	54m-57m
21.	Whether any habitation within 300m distance	Nil as per the VAO letter
22.	Project cost	Rs.67,07,000/-
23.	Total EMP cost for 5 years	Rs.1,20,16,817/-
24.	CER cost	Rs.5,00,000/-
25.	VAO letter dated	27.07.2022

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for a production quantity of 1,15,000 cu.m of Rough stone and 17,560 Cu.m of Gravel to a depth of 27m BGL and however the annual peak production shall not exceed 30,865 cu.m of Rough Stone as per the approved mining plan 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. The Project Proponent (PP) shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region before obtaining the CTO and get the necessary statutory permission under the MMR 1961 pertaining to the quarry working operations.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation



as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.

4. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Refresher' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy before obtaining the CTO from TNPCB.
5. The Project Proponent shall furnish slope stability action plan (leaving 5 m berm on the existing the topmost highwall bench before advancing further vertically and laterally) to the concerned AD (Mines) for the planned working by maintaining appropriate benches incorporating the haul road with proper gradient before obtaining CTO from TNPCB.
6. However, the Project Proponent shall carry out the scientific studies to assess the slope stability of the benches of the proposed quarry (or) the benches made in all the quarries of this cluster site collectively if amalgamation is done and when the depth of the working touches 30 m (or) after the completion of the 3<sup>rd</sup> year whichever is earlier, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal and Anna University – 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. Within one year of the commencement of mining operations, the Project Proponent shall carry out the scientific studies on 'Cumulative Impacts of the blasting operations carried out in the quarry on the surrounding prominent structures within 500 m from the mine lease such as blast-induced ground/air vibrations and fly rock', by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / 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


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

8. The Project Proponent shall develop the Green belt activities (tree plantations) in the safety zone as stipulated in the Mining Plan around the periphery of the proposed quarry lease before obtaining the CTO from the TNPCB.
9. The Project Proponent shall not carry out the secondary rock breakage involving blasting operations and use only the non-explosive techniques such as rock breakers, etc.
10. The Project Proponent shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
11. The Project Proponent shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.
12. The Project Proponent shall not engage any outside persons other than blaster/Mine Mate/Mine Foreman employed by him to ensure that the blasting operations are carried out as per the provisions of MMR 1961.
13. The Project Proponent shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
14. The Project Proponent shall also install necessary dust and noise extraction system around mineral handling area with proper enclosures before obtaining the CTO from TNPCB.
15. Since the water bodies/rivers are located within 500 m from the lease boundary, the PP shall carry out the comprehensive hydrogeological studies

  
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once in two years from the commencement of quarrying operations to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal, Anna University Chennai- Dept of Geology, CEG Campus, and University of Madras -Dept of Applied Geology, Chennai etc shall be carried out within one year after 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.

16. Since the quarry is located in the cluster, the Project Proponent shall ensure strict compliance of the provisions given under the Mines Rules, 1955 for the health and welfare of the persons employed therein.
17. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
18. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
19. As per the MoEF& CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere EMP furnished.
20. As accepted by the Project proponent the CER cost is Rs. 5.0 lakh and the amount shall be spent for the activities committed during SEAC appraisal before obtaining CTO from TNPCB.

Agenda No: 360-09

File No: 9524/2022)

Proposed Dolomite Quarry lease over an extent of 1.21.50 Ha in S.F.No: 55/2 (P), 55/3A, 55/3B, 55/4B(P) & 56/6(P), Semaputhur Village, Ettayapuram Taluk Thoothukudi District, Tamil Nadu by Thiru.N.Ravinthiran - For Environmental Clearance.  
(SIA/TN/MIN/403319/2022, Dt.26.10.2022)

  
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The proposal was placed for appraisal in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. 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.N.Ravinthiran has applied for Environmental Clearance for the Proposed Dolomite Quarry lease over an extent of 1.21.50 Ha in S.F.No: 55/2 (P), 55/3A, 55/3B, 55/4B(P) & 56/6(P), Semaputhur Village, Ettayapuram Taluk Thoothukudi District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006, as amended.

Project Details		
1.	Name of the Owner / Firm	Thiru.N.Ravinthiran, No.1699.1, Madurai road, Opp. ABCOY Garden, SankarNagar-627 357 Tirunelveli.
2.	Type of quarrying (savudu / Rough stone / Sand / Granite)	Dolomite
3.	S.F No. of the quarry site	55/2 (P), 55/3A, 55/3B, 55/4B(P) & 56/6(P)
4.	Village	Semaputhur
5.	Taluk	Ettayapuram
6.	District	Thoothukudi
7.	Extent of Quarry (in ha.)	1.70.5Ha Patta Land
8.	Lease Period granted	Ten Years, vide letter: Rc No.4109/MM7/2020, dated. 28.09.2022 & Govt letter, dated.30.08.2022.
9.	Life of the Project	20 years
10.	Type of Mining	Opencast semi mechanized method
11.	Production (Quantity in m <sup>3</sup> )	As per the approved mining plan. Geological reserves: RoM: 4,77,360 Tonne and Dolomite 80% - 3,81,888 Tonne 5 years production (First Five Year Plan): Production of 2,19,024 Tonne of RoM (of which recoverable reserve (Dolomite) @80%

		is 1,75,219 Tonne + mineral rejects @20% is 43,805 Tonne) and 1,91,232 Tonne of side burden for a period of first five years.  The annual peak production as per mining plan is 35567 T of Dolomite.										
12.	Ultimate Depth of Mining	37m BGL.										
13.	Latitude & Longitude of all corners of the quarry site	09°06'29.28"N to 09°06'34.62"N 77°57'56.70"E to 77°58'01.44"E										
14.	Topo sheet No.	58 G/16										
15.	Man power requirement	14 persons permanently and 6 people temporarily.										
16.	Precise Area Communication	Additional Chief Secretary to Government Industries (MMC.1) Department Secretariat Chennai Letter No.2664/MMC.1/2022-1, dated 30-08-2022										
17.	Mining plan approval letter	Additional Director, Geology & Mining Chennai. Rc.No.G.M.1/27/2022. 29.09.2022										
18.	500m letter	Rc.No.G.M.1/27/2022 dt 29.09.2022										
19.	Water requirement: 1. Drinking & domestic purposed (in KLD) 2. Dust Suppression (in KLD) & Green Belt (in KLD)	<table border="1"> <thead> <tr> <th>Details</th> <th>Quantity (KLD)</th> </tr> </thead> <tbody> <tr> <td>Drinking water</td> <td>1.0KLD</td> </tr> <tr> <td>Dust Suppression</td> <td>8.0KLD</td> </tr> <tr> <td>Green belt</td> <td>1.0KLD</td> </tr> <tr> <td><b>Total</b></td> <td><b>10.0KLD</b></td> </tr> </tbody> </table>	Details	Quantity (KLD)	Drinking water	1.0KLD	Dust Suppression	8.0KLD	Green belt	1.0KLD	<b>Total</b>	<b>10.0KLD</b>
Details	Quantity (KLD)											
Drinking water	1.0KLD											
Dust Suppression	8.0KLD											
Green belt	1.0KLD											
<b>Total</b>	<b>10.0KLD</b>											
20.	Power requirement: i. Domestic purpose j. Industrial Purpose	TNEB DG set										
21.	Depth of Water table	65m to 60m BGL										
22.	Whether any habitation within 300m distance	Nil as per the VAO letter										
23.	Project cost	Rs.1,17,55,000/-										
24.	Total EMP cost for 5 years	Rs.216.81 Lakh										
25.	CER cost	Rs.5,00,000/-										
26.	VAO letter dated	29.09.2022										

  
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From the documents furnished by the project proponent, the SEAC had noted that vide AD (Mines) letter: Rc.No.G.M.1/27/2020 dated. 02.12.2022, an old pit quarry is existing in adjacent to the proposed quarry site with a dimension of 40 m length, 25 m width & 10 m depth and however the above said quarry is not operative after expiry of 20 years lease period in 1994.

Based on the presentation by the PP and further deliberations, the SEAC decided to recommend the proposal for the grant of Environmental Clearance for a production quantity of 2,19,024 Tonne of RoM (of which recoverable reserve (Dolomite) @80% is 1,75,219 Tonne + mineral rejects @ 20% is 43,805 Tonne) and 1,91,232tonnes of slide burden to a depth of 37m BGL and however the annual peak production shall not exceed 35,567 T of Dolomite as per the approved mining plan 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 Project Proponent (PP) shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region before obtaining the CTO and get the necessary statutory permission under the MMR 1961 pertaining to the quarry working operations.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
4. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Refresher' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy.
5. The Project Proponent shall furnish slope stability action plan to the concerned AD (Mines) for the planned working by maintaining appropriate benches incorporating the haul road with proper gradient before obtaining CTO from TNPCB.
6. However, the Project Proponent shall carry out the scientific studies to assess the slope stability of the benches of the proposed quarry during the 3<sup>rd</sup> year of operation, by involving a reputed Research and Academic Institution such as

CSIR-Central Institute of Mining and 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.

7. Within one year of the commencement of mining operations, the Project Proponent shall carry out the scientific studies on 'Impacts of the blasting operations carried out in the quarry due to the blast-induced ground/air vibrations and fly rock', by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / 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.
8. The Project Proponent shall develop the Green belt activities (tree plantations) in the safety zone as stipulated in the Mining Plan around the periphery of the proposed quarry lease before obtaining the CTO from the TNPCB.
9. The PP shall ensure that the external Waste dump is formed within the leasehold area during the quarrying operations as per the provisions of MMR 1961.
10. The PP shall consult the competent authority of considering the proposal of back filling in the old pit existing adjacent to the proposed quarrying area for the safety reasons and the fencing with bund shall be erected around the periphery of this old pit until final decision taken on back filling.
11. The Project Proponent shall not carry out the secondary rock breakage involving blasting operations and use only the non-explosive techniques such as rock breakers, etc.
12. The Project Proponent shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
13. The Project Proponent shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.

  
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14. The Project Proponent shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him as per the provisions of MMR 1961 and not by the outsourcing / contractual persons.
15. Bio remediation using microorganisms shall be carried out at the end of the mining to restore the soil environment to enable carbon sequestration.
16. The PP shall carry out the comprehensive hydrogeological studies within a period of two years from the commencement of the mining operations to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, Anna University Chennai- Dept of Geology, CEG Campus, and University of Madras -Dept of Applied Geology, Chennai etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, and DMS, Chennai as a part of Environmental Compliance.
17. The PP shall install the Environmental Management Cell headed by the statutory Mines Manager of the concerned mine under violation category and the cell shall include a dedicated full-time Environmental Engineer exclusively to look into the effective implementation of Environmental Management Plan besides the reviewing the compliance reports with the regulatory authorities.
18. The Project Proponent shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
19. The Project Proponent shall also install necessary dust and noise extraction system around mineral handling area with proper enclosures before obtaining the CTO from TNPCB.
20. Since the quarry is located in the cluster, the Project Proponent shall ensure strict compliance of the provisions given under the Mines Rules, 1955 for the health and welfare of the persons employed therein.
21. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.

  
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22.The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.

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.

24.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.

25.As accepted by the Project proponent the CER cost is Rs. 6.0 lakh and the amount shall be spent for the activities committed during SEAC appraisal before obtaining CTO from TNPCB.

**Agenda No: 360 - 10**

**(File No: 9483/2022)**

**Proposed Rough stone Quarry lease over an extent of 0.73.5 Ha at S.F.Nos. 76/2 of Kuppam Village, Pugalur Taluk, Karur District, Tamil Nadu by Thiru K. Shanmugam - For Terms of Reference. (SIA/TN/MIN/401527/2022 Dt. 28.09.2022)**

The proposal was placed in 360<sup>th</sup> SEAC meeting held on 03.03.2023. The details of the project furnished by the proponent are given in the website ([parivesh.nic.in](http://parivesh.nic.in)).

The SEAC noted the following:

1. The Project Proponent, Thiru K. Shanmugam has applied for Terms of Reference for the Proposed Rough stone Quarry lease over an extent of 0.73.5 Ha at S.F.Nos. 76/2 of Kuppam Village, Pugalur Taluk, Karur District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of item I(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The lease period is for 10 years and the mining for the entire period of first five years should not exceed 22,660 cu. m of Rough Stone & 9,315 cu. m of Gravel and 2,925 cu. m for second five years. The annual peak production is 6,450 cu. m of Rough Stone. The ultimate depth of mining is 20m (3m - Gravel and 17m - Rough Stone).
4. The proponent is proposing to carry out hand quarrying of stone.

Based on the presentation made by the proponent SEAC recommended grant of Terms of Reference (TOR) with Public Hearing, subject to the following TORs. In addition

  
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to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be Included in EIA/EEMP Report:

1. The proponent is requested to submit the valid registered lease document during the EIA appraisal after the previous lease granted for the mining operations is legally surrendered (or) lapsed with the consent of the competent authority.
2. The proponent is requested to carry out a survey and enumerate on the structures including the crematory shed located within 100m, 200m, 300m from the boundary of the mine lease area.
3. The proponent must conduct a survey and furnish the details of habitations which is located within 300m radius (Nodhikattur village) from the proposed mine lease area and impact of the proposed quarrying operations on the above habitations/structures.
4. The proponent must submit certified compliance report obtained from IRO of MoEF&CC as per OM IA3-22/10/2022-IA.III Dated 08.06.2022.
5. 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.
6. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water 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. Necessary data and documentation in this regard may be provided.
7. The proponent shall submit the details regarding the nature of blasting activity which will be carried out.
8. The PP shall furnish DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.

  
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9. The PP shall provide Individual notice regarding the Public Hearing to the nearby house owners located in the vicinity of the project site.
10. In the case of proposed lease in an existing (or old) quarry where the benches are non-existent (or) partially formed critical of the bench geometry approved in the Mining Plan, the Project Proponent (PP) shall prepare and submit an 'Action Plan' for carrying out the realignment of the 'highwall' benches to ensure slope stability in the proposed quarry lease which shall be vetted by the concerned Asst. Director of Geology and Mining, during the time of appraisal for obtaining the EC.
11. The Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry indicating the proposed stabilizing measures during the appraisal while obtaining the EC, as the depth of the proposed working is extended beyond 30 m below ground level.
6. The PP shall furnish the affidavit stating that no blasting operation in the proposed quarry is carried out as it involves only manual means of rock breaking.
7. If the blasting operation is to be carried out, the PP shall present a conceptual design for carrying out the NONEL initiation based controlled blasting operation involving line drilling & muffle blasting and Simulation Model indicating the anticipated Blast-induced Ground Vibration levels in the proposed quarry as stipulated by the DGMS Circular No.7 of 1997, during the EIA Proposal.
8. Details of Green belt & fencing shall be included in the EIA Report.
9. 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.
10. 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.
  - a) What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?

  
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- b) Quantity of minerals mined out.
  - c) Highest production achieved in any one year
  - d) Detail of approved depth of mining.
  - e) Actual depth of the mining achieved earlier.
  - f) Name of the person already mined in that leases area.
  - g) If EC and CTO already obtained, the copy of the same shall be submitted.
  - h) Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
11. 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).
  12. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
  13. 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.
  14. 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 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.
  15. 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.
  16. 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.

17. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
18. 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.
19. 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.
20. 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.
21. 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.
22. Impact on local transport infrastructure due to the Project should be indicated.
23. 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.
24. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
25. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to

  
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implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.

26. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
27. The PP shall produce/display the EIA report, Executive summary and other related information with respect to public hearing in Tamil Language also.
28. 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.
29. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-in consultation with the DFO, State Agriculture University. 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.
30. Taller/one year old Saplings raised in appropriate size of bags, preferably eco-friendly 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
31. 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.
32. 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.
33. 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.
34. 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.
35. 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.
36. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
37. 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.
38. 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.
39. 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.
40. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

  
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Agenda No: 360 - II

(File No: 9490/2022)

Proposed Rough Stone and Gravel quarry over an extent of 2.00.0 Ha at S.F.No. 766(part) of Kambillampatty Village, Kangayam Taluk Tiruppur District, Tamil Nadu by Thiru N.K. Nandhagopal- For Environmental Clearance. (SIA/TN/MIN/286157/2022 Dt. 06.08.2022)

The proposal was placed in 360<sup>th</sup> SEAC meeting held on 03.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Thiru N.K. Nandhagopal has applied for Environmental Clearance for the Proposed Rough Stone and Gravel quarry over an extent of 2.00.0 Ha at S.F.No. 766(part) of Kambillampatty Village, Kangayam Taluk Tiruppur District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The lease period is for 5 years and the mining for the entire period of five years should not exceed 2,87,680 cu. m of Rough Stone & 30,800 cu. m of Gravel. The annual peak production is 58,820 cu. m of Rough Stone and 15,200 cu. m of Gravel. The ultimate depth of mining is 42m (2m – Gravel and 40m – Rough Stone).

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

S.No		Details	
1	Name of the Owner/Firm	:	Thiru. N. K. Nandhagopal No.30, Sri Gokulam Illam, Bangalow Road Tiruppur Tiruppur-641602
2	Type of quarrying	:	Rough Stone and Gravel
3	S.F No. of the quarry site	:	766 (Part)

  
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4	Village in which situated	:	Kambliampatty
5	Taluk in which situated	:	Kangayam
6	District in which situated	:	Tiruppur
7	Extent of quarry (in ha.)	:	2.00.0 Ha
8	Latitude & Longitude of all corners of the quarry site	:	10°53'55.31" N to 10°54'01.75" N 77°37'46.11" E to 77°37'50.60" E
9	Topo Sheet No.	:	58-F/09
10	Type of mining		Opencast Mechanised Mining
11	Lease Period granted	:	5 years / Fresh Quarry
	Life of the Project		10 years
12	Production (Quantity in m <sup>3</sup> )	:	2,87,680m <sup>3</sup> of Rough stone & 30,800m <sup>3</sup> of Gravel
13	Depth of quarrying	:	42m (2m Gravel + 40m Rough stone)
14	Depth of water table	:	65m in rainy & 70m in summer season
15	Man Power requirement per day:		30 Nos.
16	Water requirement: 1. Drinking & domestic purposes 2. Dust suppression 3. Green Belt	:	1.7 KLD 0.6 KLD 0.6 KLD 0.5 KLD
17	Power requirement d. Domestic Purpose e. Industrial Purpose		TNEB 2,35,374 Liters of HSD will be utilized for the entire project life
18	Precise area communication approved by the Assistant Director, with date	:	Na. Ka. No. 795/Kanimam/2021. Dated: 17.05.2022

  
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19	Mining Plan approved by Deputy Director, Department of Geology and Mining with date	:	Rc.No.795/2021/Mines, Dated: 04.07.2022
20	Deputy Director, Department of Geology and Mining 500m cluster letter		Rc.No.795/2021/Mines, Dated: 04.07.2022
21	VAO certificate regarding 300m radius cluster		Letter dated: 18.06.2022
22	Project Cost (excluding EMP cost)	:	Rs. 47,00,000/-
23	EMP cost	:	Capital Cost - Rs. 26,32,000 Recurring Cost - Rs. 19,08,218
24	CER cost		Rs. 5,00,000

The proposal is now placed in the 360<sup>th</sup> SEAC meeting held on 03.03.2023. 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 ultimate depth of mining up to 42m BGL and the production of 2,87,680 m<sup>3</sup> of Rough stone and 30,800 m<sup>3</sup> of Gravel. The annual peak production shall not exceed 58,820 m<sup>3</sup> of Rough stone and 15,200 m<sup>3</sup> of Gravel subject to the standard conditions as per the **Annexure I** of this minutes & normal conditions stipulated by MOEF&CC, in addition to the following specific conditions:

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 Project Proponent (PP) shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region before obtaining the CTO and get the necessary statutory permission under the MMR 1961 pertaining to the quarry working operations.

  
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3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
4. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Refresher' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy.
5. The Project Proponent shall furnish slope stability action plan to the concerned AD (Mines) for the planned working by maintaining appropriate benches incorporating the haul road with proper gradient before obtaining CTO from TNPCB.
6. However, the Project Proponent shall carry out the scientific studies to assess the slope stability of the benches of the proposed quarry during the 3rd year of operation, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining and 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.
7. Since few structures are located at a distance of 600m, within six months from the commencement of mining operations, the Project Proponent shall carry out the scientific studies on 'Impacts of the blasting operations carried out in the quarry due to the blast-induced ground/air vibrations and fly rock', by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / 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.

  
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8. The Project Proponent shall develop the Green belt activities (tree plantations) in the safety zone as stipulated in the Mining Plan around the periphery of the proposed quarry lease before obtaining the CTO from the TNPCB.
9. The PP shall carry out maximum of TWO rounds of controlled blast per day, restricted to the maximum of 50 to 60 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 20 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
10. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
11. The PP shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.
12. The PP shall ensure that the blasting operations are carried out by 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.
13. 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.
14. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
15. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the

MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.

16. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
17. 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.
18. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Panchayat Union Primary School, Kavilpalayam, Tiruppur District as committed, before obtaining CTO from TNPCB.

**Agenda No: 360 - 12**  
**(File No: 9525/2022)**

**Proposed Rough Stone quarry over an extent of 2.45.0 Ha at S.F.No. 327/1 (part - 2) of Chennapalli Village, Shoolagiri Taluk Krishnagiri District, Tamil Nadu by Thiru A. Venkatachalam - For Environmental Clearance. (SIA/TN/MIN/ 403784/2022 Dt. 19/10/2022)**

The proposal was placed in 360<sup>th</sup> SEAC meeting held on 03.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Thiru A. Venkatachalam has applied for Environmental Clearance for the Proposed Rough Stone quarry over an extent of 2.45.0 Ha of Government Poramboke land granted through 'Tender-cum-Auction' process at S.F.No. 327/1 (part - 2) of Chennapalli Village, Shoolagiri Taluk Krishnagiri District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item I(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The lease period is for 10 years and the mining for the total period of first five years should not exceed 3,10,510 cu. m of Rough Stone and 1,34,210 cu. m of Rough Stone for second five years. The annual peak production is 72,000 cu. m of Rough Stone. The ultimate depth of mining is 57m (18m – AGL and 39m – BGL).

  
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Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal with following changes in its geometry of operation:

Bench Geometry & Excavation Programme for first Five years												
Year	As per Approved Mining Plan (First Five Years)					As per Approved TOR Reserves			Revised Bench Parameters after SEAC Meeting			
	Section	Bench	Height (m)	Width (m)	Depth (m)	Height (m)	Width (m)	Depth (m)	Bench	Height (m)	Width (m)	Depth (m)
1 <sup>st</sup> year	XY	I	164	113	2				I	164	113	2
	AB	II	123	105	7				II	118	93	5
2 <sup>nd</sup> year	XY	III	144	106	7				III	129	106	5
	AB											
3 <sup>rd</sup> year	XY	IV	76	96	7				IV	150	96	5
	AB											
4 <sup>th</sup> year	XY	V	76	96	7				V	147	86	5
	AB											
5 <sup>th</sup> year	XY	V	142	86	7				VI	137	76	5
	AB											
Total			3,84,881 m <sup>3</sup>						3,10,510 m <sup>3</sup>			

Bench Geometry & Excavation Programme for Second Five years												
Year	As per Approved Mining Plan (Next Five Years)					As per Approved TOR Reserves			Revised Bench Parameters after SEAC Meeting			
	Section	Bench	Height (m)	Width (m)	Depth (m)	Height (m)	Width (m)	Depth (m)	Bench	Height (m)	Width (m)	Depth (m)
1 <sup>st</sup> year	XY	VI	66	76	7				VII	127	66	5
	AB											
2 <sup>nd</sup> year	XY	VI	66	76	7				VIII	117	56	5
	AB											
3 <sup>rd</sup> year	XY	VII	122	66	7				IX	107	46	5
	AB											
4 <sup>th</sup> year	XY	VIII	112	56	7				X	97	36	5
	AB											
5 <sup>th</sup> year	XY	IX	102	46	7				XI	87	26	5
	AB								XII	77	16	5
Total (VI-X Years)			2,03,336 m <sup>3</sup>						1,34,210 m <sup>3</sup>			
Grand Total (I-X Years)			5,88,217 m <sup>3</sup>						4,44,720 m <sup>3</sup>			

**1. REVISED PRODUCTION DETAILS – First Five Years**

YEAR	Revised Yearly Production (m <sup>3</sup> )									Annual Peak Production Capacity (m <sup>3</sup> )		
	As per Approved Mining Plan			As per Approved TOR Reserves		Revised as per SEAC Meeting			As per Approved Mining Plan	Revised as per SEAC Meeting		
	Bench	Rough Stone (m <sup>3</sup> )	Gravel (m <sup>3</sup> )	Rough Stone (m <sup>3</sup> )	Gravel (m <sup>3</sup> )	Bench	Rough Stone (m <sup>3</sup> )	Gravel (m <sup>3</sup> )	Rough Stone (m <sup>3</sup> )	Rough Stone (m <sup>3</sup> )	Gravel (m <sup>3</sup> )	
I	I		Nil			I		Nil	90405	54870	Nil	
	II	90405				II	54870					
II	III	106848	Nil			III	68370	Nil	106848	68370	Nil	
III	IV	51072	Nil			IV	72000	Nil	51072	72000	Nil	
IV	IV	51072	Nil			V	63210	Nil	51072	63210	Nil	
V	V	85484	Nil			VI	52060	Nil	85484	52060	Nil	
Sub Total (I to V)		3,84,881	Nil				3,10,510	Nil	3,84,881	3,10,510	Nil	

**2. REVISED PRODUCTION DETAILS – Second Five Years**

YEAR	Revised Yearly Production (m <sup>3</sup> )									Annual Peak Production Capacity (m <sup>3</sup> )		
	As per Approved Mining Plan			As per Approved TOR Reserver		Revised as per SEAC Meeting			As per Approved Mining Plan	Revised as per SEAC Meeting		
	Bench	Rough Stone (m <sup>3</sup> )	Gravel (m <sup>3</sup> )	Rough Stone (m <sup>3</sup> )	Gravel (m <sup>3</sup> )	Bench	Rough Stone (m <sup>3</sup> )	Gravel (m <sup>3</sup> )	Rough Stone (m <sup>3</sup> )	Rough Stone (m <sup>3</sup> )	Gravel (m <sup>3</sup> )	
VI	VI	35112	Nil			VII	41910	Nil	35112	41910	Nil	
VII	VI	35112	Nil			VIII	32760	Nil	35112	32760	Nil	
VIII	VII	56364	Nil			IX	24610	Nil	56364	24610	Nil	
IX	VIII	43904	Nil			X	17460	Nil	43904	17460	Nil	
X	IX	32844	Nil			XI	11310	Nil	32844	17,470	Nil	
						XII	6160					
Sub Total (VI to X)		203336	Nil				1,34,210	Nil	2,03,336	1,34,210	Nil	

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X)									
Grand Total		5,88,217			4,44,720		5,88,217	4,44,720	

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

S. No.		Description	
1	Name of the Owner/Firm	:	Thiru.A.Venkatachalam S/o, Arthanari, D.No.1/165, Periyaseeragapadi, Salem District
2	Type of quarrying	:	Rough Stone
3	S.F No. of the quarry site	:	327/1(Part-2)
4	Village in which situated	:	Chennapalli
5	Taluk in which situated	:	Shoolagiri
6	District in which situated	:	Krishnagiri
7	Extent of quarry (in ha.)	:	2.45.0 Ha
8	Latitude & Longitude of all corners of the quarry site	:	12°37'26.6964°N to 12°37'19.7428°N 78°03'17.2026°E to 78°03'15.8616°E
9	Topo Sheet No.	:	57-L02
10	Type of mining	:	Opencast Mechanised Mining
11	Lease Period granted	:	10 years
12	Life of the Project	:	10 years
13	Total Excavation (Quantity in m <sup>3</sup> )	:	4,44,720m <sup>3</sup> of Rough stone
14	Ultimate Depth of quarrying	:	57m (18m AGL + 39m BGL)
15	Depth of water table	:	85m



16	Man Power requirement per day:	: 18 Nos.
17	Water requirement: 10. Drinking & domestic purposes 11. Dust suppression 12. Green Belt	: 2.0 KLD 1.0 KLD 0.5 KLD 0.5 KLD
18	Power requirement f. Domestic Purpose g. Industrial Purpose	: TNEB 4,76,756 Liters of HSD will be utilized for the entire project life
19	Precise area communication approved by the District Collector, with date	: Na.Ka.No.553/2022/Kanimam, Dated: 04.05.2022
20	Mining Plan approved by Deputy Director, Department of Geology and Mining with date	: Rc.No.553/2022/Mines. Dated: 28.06.2022
21	Deputy Director, Department of Geology and Mining 500m cluster letter	: Roc.No.553/2022/Mines. Dated: 28.06.2022
22	VAO certificate regarding 300m radius cluster	: Letter dated: 22.08.2022
23	Project Cost (excluding EMP cost)	: Rs. 2,34,90,000/-
24	EMP cost	: Capital Cost - Rs. 16,33,500 Recurring Cost - Rs. 13,11,400
25	CER cost	: Rs. 5,00,000

The proposal is now placed in the 360<sup>th</sup> SEAC meeting held on 03.03.2023. 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 ultimate depth of mining up to 57m (18m - AGL + 39m BGL) with the restricted total excavation of 4,44,720 m<sup>3</sup> of Rough stone. The annual peak production shall not exceed 72,000 m<sup>3</sup> of Rough stone subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF&CC, in addition to the following specific conditions:

  
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1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.
2. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 pertaining to the mine working operations in the proposed quarry from the DMS, Chennai before obtaining the CTO.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961 before the obtaining the CTO from the DEE/TNPCB.
4. The proponent shall maintain the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs showing the same before obtaining the CTO from TNPCB.
5. Further, the PP shall maintain the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 / 10 m as it is designed to take care of run-off water (size, gradient and length) before obtaining the CTO from TNPCB.
6. The PP shall furnish a Slope Stability Action Plan approved by the AD (Mines) involving the benches & haul road are properly designed in such a manner the working shall proceed in a systematic manner from top to downwards and safe method of removal of loos boulders to the DEE/TNPCB before obtaining the CTO.
7. However, the PP shall carry out the scientific studies to assess the slope stability of the benches above ground/below ground levels within 2 years from the commencement of quarrying operation, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research

- (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEC 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.
8. The PP shall carry out maximum of TWO rounds of controlled blast per day, restricted to the maximum of 50 to 60 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 20 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
  9. However, within six months from the commencement of mining operations, the PP shall carry out the scientific studies on 'Design of Blast parameters for reducing the impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarry by adopting appropriate controlled blasting techniques', by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal and Anna University - CEC 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.
  10. The PP shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.
  11. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
  12. 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.

  
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13. 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.
14. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
15. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
16. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
17. 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.
18. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Panchayat Union Primary School, Munkannapalli as committed, before obtaining CTO from TNPCB.

**Agenda No: 360-13**

**(File No: 9491/2022)**

**Proposed Rough Stone & Gravel quarry Lease over an extent of 4.98.5 Ha at S.F.No. 719, 720, 732/2(P), 733(P) in Nadanthai South Village, Aravakuruchi Taluk, Karur District, Tamil Nadu by Tvl. New Five Star Crusher – For Environmental Clearance (SIA/TN/MIN/400924/2022 dated 26.09.2022)**


The proposal is placed in this 360<sup>th</sup> SEAC meeting held on 03.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

**SEAC noted the following:**

1. The Project Proponent, **Tvl. New Five Star Crusher** has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry Lease over an extent of 4.98.5 Ha at S.F.No. 719, 720, 732/2(P), 733(P) in Nadanthai South Village, Aravakuruchi Taluk, Karur District, Tamil Nadu.

  
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2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. Earlier, EC was accorded to the proponent vide Lr.no.SEIAA-TN/F.No.4041/1(a)/EC.No.3089/2015 dated.02.03.2016 for the quantity of 1,63,774 cu.m of rough stone.
4. Now the proponent has submitted an application for Environmental Clearance for a quantity of 1,31,721 cu.m of rough stone (@95% recovery), 13,336 cu.m of gravel and 6933 cu.m of rejects.

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 for the EC obtained earlier from the IRO, MoEF & CC, Chennai.
- ii) The PP shall revise the mining quantity after incorporating the mandatory minimum bench width in all the sections of the quarry plan accordingly and submit a Slope Stability Action Plan ensuring the safety measures for the highwall benches of 15 m in the existing quarry.
- iii) 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.
- iv) The proponent shall also furnish details/photographs of the garland drains provided.
- v) The PP shall have a separate account for EMP expenditures as stipulated in the previous EC.
- vi) The PP shall install the solar lighting in the neighbouring village.
- vii) The proponent shall furnish the registered consent letter.

  
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Agenda No: 360-14  
(File No: 9498/2022)

Proposed Rough Stone & Gravel quarry Lease over an extent of 2.81.0 Ha at S.F.No. 254/2A, 254/2B, 254/3A, 254/3B & 254/4A1 in Akhilandapuram Village, Kayathar Taluk, Thoothukudi District, Tamil Nadu by Thiru.K.Murugesan – For Environmental Clearance (SIA/TN/MIN/400506/2022 dated 09.10.2022)

The proposal is placed in this 360<sup>th</sup> SEAC meeting held on 03.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

SEAC noted the following:

1. The Project Proponent, Thiru.K.Murugesan has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry Lease over an extent of 2.81.0 Ha at S.F.No. 254/2A, 254/2B, 254/3A, 254/3B & 254/4A1 in Akhilandapuram Village, Kayathar Taluk, Thoothukudi District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The salient features of the project are as follows:

Salient Features of the Project		
1	Name of the Owner/Firm	Thiru.K.Murugesan, S/o.Karuppasamy, No.3/4, Block-1, Sannadhupthukudi, Kayathar Taluk, Thoothukudi District – 627352.
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	Rough Stone & Gravel Quarry
3	S.F No. Of the quarry site	254/2A, 254/2B, 254/3A, 254/3B & 254/4A1
4	Village in which situated	Akhilandapuram
5	Taluk in which situated	Kayathar
6	District in which situated	Thoothukudi
7	Extent of quarry (in ha.)	2.81.0 Ha
8	Latitude & Longitude of all corners of the quarry site	08°58'08.45"N to 08°58'12.86"N 77°47'37.90"E to 77°47'45.23"E
9	Topo Sheet No.	5B-H/13

  
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10	Type of mining	Opencast Semi-Mechanized Mining
11	Estimated Life of the Project	10 years
12	Lease Period granted	5 years / Fresh Quarry
13	Total Excavation for the period of 5 years (Quantity in m <sup>3</sup> )	3.82,080m <sup>3</sup> of Rough stone, 1.02,960m <sup>3</sup> of weathered rock & 69,216m <sup>3</sup> of top soil & gravel
14	Ultimate Depth of quarrying	48m from ground level
15	Depth of water table	60m from ground level
16	Man Power requirement per day:	16 Nos.
17	Water requirement:	4.0 KLD
	1. Drinking & domestic purposes	1.0 KLD
	2. Dust suppression sprinkling	1.5 KLD
	3. Green Belt	1.5 KLD
18	Power requirement	No electricity required.
19	Precise area communication approved by the District Collector with date	Na.Ka.G.M.1/903/2021. dated:15.07.2022.
20	Mining Plan approved by the Assistant Geologist/ Assistant Director (i/c), Dept. of Geology and Mining with date	Roc.No.G.M.1/903/2021. dated:28.07.2022.
21	500m cluster letter issued by the Assistant Geologist/ Assistant Director (i/c), Dept. of Geology and Mining with date	Roc.No.G.M.1/903/2021. dated:28.07.2022.
22	VAO certificate regarding habitations in 300m radius	25.07.2022
23	Project Cost (excluding EMP)	Rs.1,28,55,225/-
24	EMP cost	Capital cost: Rs.22.21 Lakhs Recurring cost: Rs.19.88 lakhs

  
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Based on the presentation and documents furnished by the project proponent, after detailed deliberations, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the 3,82,080m<sup>3</sup> of Rough stone, 1,02,960m<sup>3</sup> of weathered rock & 69,216m<sup>3</sup> of top soil & gravel for an ultimate depth of 48m from ground level with annual peak production of not exceeding 77,880m<sup>3</sup> of rough stone, 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 inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 before obtaining the CTO.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961 before the obtaining the CTO from the DEE/TNPCB.
4. The proponent shall maintain the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs showing the same before obtaining the CTO from TNPCB.
5. Further, the PP shall maintain the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 / 10 m as it is designed to take care of run-off water (size, gradient and length) before obtaining the CTO from TNPCB.
6. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.



7. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
8. 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.
9. 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.
10. 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.
11. Since a wind mill situated at a distance of 690 m from the lease boundary, within six months from the commencement of mining operations, the PP shall carry out the scientific studies in coordination with the other quarry owners located in the cluster domain on 'Design of Suitable blast parameters for reducing the impact of blast-induced ground/air vibrations and fly rock caused due to operation of the quarries by adopting appropriate controlled blasting techniques', by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc 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.
12. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
13. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be

  
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- diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
14. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
15. The PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 3 years of operation whichever is earlier, by involving a reputed Research and Academic Institution such as NIRM, IITs, NIT-Dept of Mining Engg., Surathkal, Anna University Chennai-CEG Campus, and any CSIR Laboratories etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
16. Since the water body is situated at a distance of 300 m from the lease boundary, the PP shall carry out the comprehensive hydrogeological studies once in two years from the commencement of the quarrying operations, to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg. Surathkal, Anna University Chennai-Dept of Geology, CEG Campus, and University of Madras -Dept of Applied Geology, Chennai etc 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.
17. 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.
17. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Government High School, Karisalkulam for the activities as committed, before obtaining CTO from TNPCB.

Agenda No: 360-15  
(File No: 9446/2022)


Proposed Rough Stone quarry lease over an extent of 0.84.0 Ha at SF.No.414 of Appipalayam Village, Manmangalam Taluk, Karur District, Tamil Nadu by Thiru. N.Revanth - For Environmental Clearance. (SIA/TN/MIN/269515/2022 dated:20.08.2022)

The proposal was placed in 360<sup>th</sup> Meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available in the website ([www.parivesh.nic.in](http://www.parivesh.nic.in)).

The SEAC noted the following:

1. The Project Proponent, Thiru. N.Revanth has applied for Environmental Clearance for the proposed Rough stone quarry lease over an extent of 0.84.0 Ha at SF.No. 414 of Appipalayam Village, Manmangalam Taluk, Karur District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & the production should not exceed 23,549m<sup>3</sup> of Rough Stone & 45m<sup>3</sup> of Topsoil with an ultimate depth of mining is 10m BGL. The annual peak production as per mining plan is 4950m<sup>3</sup> of rough stone (4<sup>th</sup> & 5<sup>th</sup> year) & 45m<sup>3</sup> of Topsoil (1<sup>st</sup> year).

பெயர்/பெயர்		பெயர்/பெயர்	
1.	Name of the Owner / Firm	Thiru. N.Revanth, S/o. (Late) Natrayan, No. 51/4, Pothiyampalayam, Sukkaliyur Post, Manmangalam Taluk, Karur District	
2.	Type of quarrying	Rough Stone	
3.	S.F No. of the quarry site	414	
4.	Village in which situated	Appipalayam	
5.	Taluk in which situated	Manmangalam	
6.	District in which situated	Karur	
7.	Extent of Quarry (In ha.)	0.84.0Ha	

  
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8.	Lease Period granted	5 Years / Existing Quarry
9.	Type of Mining	Open cast Semi Mechanized Mining
10.	Production (Quantity in m <sup>3</sup> )	As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & the production should not exceed 23,549m <sup>3</sup> of Rough Stone & 45m <sup>3</sup> of Topsoil with an ultimate depth of mining is 10m BGL. The annual peak production as per mining plan is 4950m <sup>3</sup> of rough stone (4 <sup>th</sup> & 5 <sup>th</sup> year) & 45m <sup>3</sup> of Topsoil (1 <sup>st</sup> year).
11.	Latitude & Longitude of all corners of the quarry site	10°55'13.31"N to 10°55'16.78"N 78°2'5.83"E to 78°2'9.22"E
12.	Topo sheet No.	58 -J/01
13.	Man power requirement per day:	14 Employees
14.	Precise Area Communication approved by the Assistant Director of Geology and Mining with date	Rc.No.573/Mines/2021, Dated 25.07.2022
15.	Mining plan approved by the Deputy Director of Geology and Mining with date	Rc.No.573/Mines/2021, Dated 05.08.2022
16.	AD mines 500m cluster letter by the Deputy Director of Geology and Mining with date	Rc.No.573/Mines/2021, Dated 08.08.2022
17.	Water requirement: 1. Drinking Water & domestic purposes (in KLD) 2. Dust Suppression 3. Green Belt	1.7 KLD 0.7 KLD 0.5KLD 0.5 KLD
18.	Power requirement: a. Domestic purpose b. Machinery works	TNEB 18839 Liters of HSD will be utilized for 5years .
19.	Depth of Mining	10m BGL
20.	Depth of Water table	50m in summer season - 40m in rainy season

21.	Whether any habitation within 300m distance	No
22.	Project Cost (including EMP cost)	Rs.1,12.85,171/-
23.	EMP cost	Rs.91.80 Lakhs
24.	CER cost	Rs.5 Lakhs
25.	VAO letter dated	02.08.2022

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for total excavation quantity of 23,549m<sup>3</sup> of Rough Stone and 45m<sup>3</sup> of Topsoil not exceeding the annual peak production of 4950m<sup>3</sup> of rough stone (4<sup>th</sup> & 5<sup>th</sup> year) & 45m<sup>3</sup> of Topsoil with maintaining an ultimate pit depth of 10m 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 mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
3. The PP shall inform the 'Notice of Opening' of the quarry to the Director of Mines Safety/Chennai Region before obtaining the CTO.
4. The proponent shall construct the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
5. The PP shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering

  
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the wind direction, shall install fencing and Garland drain before obtaining the CTO from the TNPCB.

6. Further, the PP shall construct the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
7. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarries.
8. The PP shall carry out maximum of two rounds of controlled blast only per day, restricted to the maximum of 50 to 60 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 10 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
9. 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.
10. The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him only as per the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
11. The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the other habitations situated within 300 m from the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
12. The PP shall ensure that all the statutory competent persons and non-statutory workmen have undergone the 'Refresher' training especially on 'Occupational Health Hazards associated with quarrying' under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy.

13. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
14. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
15. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
16. As per the MoEF& CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere EMP furnished.
17. As accepted by the Project proponent the CER cost is Rs.5,00,000 lakhs and the amount shall be spent for the Panchayat Union Middle School, Sukkaliyur Village as committed, before obtaining CTO from TNPCB.

**Agenda No: 360-16**

**(File No: 9485/2022)**

**Proposed Ordinary Earth quarry lease area over an extent of 3.41.0Ha at S.F.No.885 & 886 of Mandapam Village, Ramanathapuram Taluk, Ramanathapuram District, Tamil Nadu by Thiru. K.Abdul Rahman Marakayar- For Environmental Clearance. (SA/TN/MIN/400081/2022, dated: 26.09.2022).**

The proposal was placed in 360<sup>th</sup> Meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available in the website ([www.parivesh.nic.in](http://www.parivesh.nic.in)).

**The SEAC noted the following:**

1. The Project Proponent, Thiru. K .Abdul Rahman Marakayar has applied for Environmental Clearance for the proposed Ordinary Earth quarry lease over an extent of 3.41.0 Ha at S.F.No. 885 & 886 at Mandapam Village, Ramanathapuram Taluk, Ramanathapuram District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification,2006.

  
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Based on the presentation and documents furnished by the project proponent, the committee noted that the soil test result indicated more than 70% of sand content. Hence SEAC decided not to recommend the project based on the orders of the Hon'ble Madurai Bench of Madras High Court, dated. 12.02.2021 and the Commissioner, Dept of Geology and Mining vide Lr. No. 7240/MM6/2019, dated. 30.07.2021.

Agenda No: 360-17  
(File No: 9513/2022)

Proposed Red Earth & Pebbles quarry lease over an extent of 1.34.0 Ha at SF.Nos.57/5, 57/6, 57/7A2, 57/7B,57/8, 57/18A, 57/18B, 57/19, 57/20, 57/21A, 57/21B, 57/22, 57/23A of Meppullyur Village, Ulundurpet Taluk, Kallakuruchi District, Tamil Nadu by Thiru.N.Ramasamy - For Environmental Clearance. (SIA/TN/MIN/403409/2022 dated:17.10.2022)

The proposal was placed in 360<sup>th</sup> Meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available in the website ([www.parivesh.nic.in](http://www.parivesh.nic.in)).

The SEAC noted the following:

1. The Project Proponent, Thiru.N.Ramasamy has applied for Environmental Clearance for the proposed Red Earth & Pebbles quarry lease over an extent of 1.34.0Ha at SF.Nos. 57/5, 57/6, 57/7A2, 57/7B,57/8, 57/18A, 57/18B, 57/19, 57/20, 57/21A, 57/21B, 57/22, 57/23A of Meppullyur Village, Ulundurpet Taluk, Kallakuruchi District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan the lease period is 2 years. The mining plan is for the period of two years & the production should not exceed 9002m<sup>3</sup> of Red Earth & 9002m<sup>3</sup> of Pebbles with an ultimate depth of mining is 2m BGL. The annual peak production as per mining plan is 4647.5m<sup>3</sup> of Red Earth (1<sup>st</sup> year) & 4647.5m<sup>3</sup> of Pebbles (1<sup>st</sup> year).

SECRET	
1. Name of the Owner / Firm	Thiru. N.Ramasamy

  
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		S/o. Mr. Natesan, Meppuliyur Village, Ulundurpet Taluk, Kallakurichi District, Tamilnadu - 606 107.
2.	Type of quarrying	Red Earth & Pebbles
3.	S.F No. of the quarry site	57/5, 57/6, 57/7A2, 57/7B, 57/8, 57/18A, 57/18B, 57/19, 57/20, 57/21A, 57/21B, 57/22, 57/23A
4.	Village in which situated	Meppuliyur
5.	Taluk in which situated	Ulundurpet
6.	District in which situated	Kallakurichi
7.	Extent of Quarry (In ha.)	1.34.0 Ha
8.	Lease Period granted	2 Years
9.	Type of Mining	Open cast Semi Mechanized Mining
10.	Production (Quantity in m <sup>3</sup> )	As per the mining plan the lease period is 2 years. The mining plan is for the period of two years & the production should not exceed 9002m <sup>3</sup> of Red Earth & 9002m <sup>3</sup> of Pebbles with an ultimate depth of mining is 2m BGL. The annual peak production as per mining plan is 4647.5m <sup>3</sup> of Red Earth (1 <sup>st</sup> year) & 4647.5 m <sup>3</sup> of Pebbles (1 <sup>st</sup> year).
11.	Latitude & Longitude of all corners of the quarry site	11°39'26.67"N to 11°39'32.35"N 79°18'36.09"E to 79°18'40.56"E
12.	Topo sheet No.	58 M/6
13.	Man power requirement per day:	6 Employees
14.	Precise Area Communication approved by the Assistant Director of Geology and Mining with date	Roc.No. B/G & M/212/2021 dated 27.07.2022

  
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15.	Mining plan approved by the Assistant Director(i/c) of Geology and Mining with date	Roc.No. B/G & M/212/2021 dated 02.09.2022
16.	AD mines 500m cluster letter by the Assistant Director(i/c) of Geology and Mining with date	Roc.No. B/G & M/212/2021 dated 02.09.2022
17.	Water requirement: 1. Drinking Water & domestic purposes (In KLD) 2. Dust Suppression 3. Green Belt	1.5 KLD 0.3 KLD 0.7KLD 0.5 KLD
18.	Power requirement: a. Domestic purpose b. Machinery works	TNEB 4800 Liters of Diesel will be utilized
19.	Ultimate Depth of Mining	2m BGL
20.	Depth of Water table	40m in Summer season - 30m in Rainy season
21.	Whether any habitation within 300m distance	No
22.	Project Cost (including EMP cost)	Rs.8,80,000/-
23.	EMP cost	Rs.40.97 Lakhs
24.	CER cost	Rs.2 Lakhs
25.	VAO letter dated	07.09.2022

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for total excavation quantity of 9002m<sup>3</sup> of Red Earth & 9002m<sup>3</sup> of Pebbles not exceeding the annual peak production of 4647.5m<sup>3</sup> of Red Earth (1<sup>st</sup> /year) & 4647.5 m<sup>3</sup> of Pebbles (1<sup>st</sup> year) with maintaining an ultimate pit depth of 2m 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:

  
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1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The mine manager and other statutory competent persons shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952.
3. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Refresher' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy.
4. The Project Proponent shall develop the Green belt activities (tree plantations of two to three rows) in the safety zone as stipulated in the Mining Plan around the periphery of the proposed quarry lease before obtaining the CTO from the TNPCB.
5. The Project Proponent shall not carry out blasting operations.
6. The Project Proponent shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
7. The PP shall ensure that the transport vehicles used in the quarry are adequately covered with tarpaulin before it is allowed to enter into the adjacent village panchayat road.
8. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50m 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.
9. The Project Proponent shall also install necessary dust and noise extraction system around mineral handling area with proper enclosures before obtaining the CTO from TNPCB.
10. Since the quarry is located in the cluster, the Project Proponent shall ensure strict compliance of the provisions given under the Mines Rules, 1955 for the health and welfare of the persons employed therein.

  
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11. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
12. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
13. 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.
14. As accepted by the Project proponent the CER cost is Rs.2,00,000 lakhs and the amount shall be spent for the Government Higher Secondary School, Senkurichi Village as committed, before obtaining CTO from TNPCB.

**Agenda No: 360-18**

**(File No: 9465/2022)**

**Proposed rough stone & gravel Quarry over an extent of 4.74.0 Ha SF.No. 14(p), 28/28(p), Inukkandurai Part II Village, Radhapuram Taluk, Thirunelveli District, Tamil Nadu by Thiru S Venkatesan - Environmental Clearance (SIA/TN/MIN/290409/2022, dt: 26.8.2022)**

The proposal was placed in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

**The SEAC noted the following:**

1. The project proponent, **Thiru S Venkatesan** has applied for Environmental Clearance for the Proposed rough stone & gravel Quarry over an extent of 4.74.0 Ha SF.No. 14(p), 28/28(p), Inukkandurai Part II Village, Radhapuram Taluk, Thirunelveli District, Tamil Nadu.
2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. The lease period is for 10 years and mining plan is for the period of 5 Year & production should not exceed 630329m<sup>3</sup> of rough stone, 77830m<sup>3</sup> of Gravel and 223458 m<sup>3</sup> of weathered rock . The Annual peak production 135027m<sup>3</sup> of rough stone, 77830m<sup>3</sup> of Gravel and 223458 m<sup>3</sup> of weathered rock. The ultimate depth is 38 m BGL.

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

1. Enumerate the details of various types of structures located in 100m, 200m & 300m from the project site.
2. From the KML files, it is seen that there are 11 windmills located within 700 m surrounding the lease boundary of the project site and it has been observed that there is no information about the presence of wind mills in the precise area communication letter. The PP shall submit the comments on 'Existence of 11 windmills functioning within 600 m from the lease boundary before the commencement of quarrying operations' as per the provisions of Tamil Nadu Minor Mineral Concession Rules 1969, obtained from the AD, Mines & Geology after the field inspection.

On the receipt of the same further deliberation will be done.

**Agenda No: 360-19**

**(File No: 9514/2022)**

**Proposed rough stone & gravel Quarry over an extent of 1.47.50 Ha SF.No. 254/2A, 254/2B, 254/3A, 254/3B & 254/4A1 Puziyamkulam Village, Viruthunagar Taluk, Viruthunagar District, Tamil Nadu by Thiru P Soundar Rajan- Environmental Clearance (SIA/TN/MIN/291018/2022, dt: 09.09.2022)**

The proposal was placed in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

**The SEAC noted the following:**

1. The project proponent, Thiru P Soundar Rajan has applied for Environmental Clearance for the Proposed rough stone & gravel Quarry over an extent of 1.47.50 Ha SF.No. 254/2A, 254/2B, 254/3A, 254/3B & 254/4A1 Puziyamkulam Village, Viruthunagar Taluk, Viruthunagar District, Tamil Nadu.
2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. The lease period is for 10 years and mining plan is for the period of 10 Year & production should not exceed 134406.25m<sup>3</sup> of rough stone, 31998.75m<sup>3</sup> of

  
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Gravel and 21332.5 m<sup>3</sup> of top soil . The Annual peak production 49987.5m<sup>3</sup> of rough stone, 7245m<sup>3</sup> of Gravel and 4830 m<sup>3</sup> of top soil . The ultimate depth is 30 m BGL.

1.	Name of the Owner/Firm	:	Thiru. P. Soundar Rajan S/o. Petchimuthu, 4/451, Puliyankulam, Soolakarai Medu, Viruthunagar Town & Taluk, Virudhunagar - 626 129.
2.	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough Stone and Gravel
3.	S.F No. of the quarry site with area break-up	:	309/2A(P)
4.	Village in which situated	:	Puliyankulam
5.	Taluk in which situated	:	Virudhunagar
6.	District in which situated	:	Virudhunagar
7.	Extent of quarry (in ha.)	:	1.47.50 Ha
8.	Lease Period granted	:	10 Years
9.	Life of the Project	:	10 years
10.	Type of mining	:	Opencast Semi Mechanized Mining
11.	Production (Quantity in m <sup>3</sup> )	:	The lease period is for 10 years and mining plan is for the period of 10 Year & production should not exceed 134406.25m <sup>3</sup> of rough stone, 31998.75m <sup>3</sup> of Gravel and 21332.5 m <sup>3</sup> of top soil . The Annual peak production 14737.5m <sup>3</sup> of rough stone, 7245m <sup>3</sup> of Gravel and 4830 m <sup>3</sup> of top soil .
12.	Latitude & Longitude of all corners of the quarry site	:	09°31'44.3"N to 09°31'49.9"N 77°55'38.0"E to 77°55'36.3"E
13.	Ultimate depth of the quarry	:	30 m
14.	Topo Sheet No.	:	58-G/14
15.	Man Power requirement per day:	:	11 Nos

16.	Precise area communication approved by Assistant Director, Department of Geology and Mining with date	:	Na.Ka.En: KVI/356/2022-Kanimam, dated:30.05.2022
17.	Mining Plan approved by Assistant Director, Department of Geology and Mining with date	:	Roc.No: KVI/356/2022, dated: 20.06.2022
18.	Water requirement: 4. Drinking water & domestic purposes (in KLD) 5. Dust Suppression (in KLD) 6. Green Belt (in KLD)	:	2.5 KLD 0.5 KLD 1.0 KLD 1.0 KLD
19.	Power requirement h. Domestic Purpose	:	TNEB
20.	Depth of quarrying	:	30m bgl
21.	Depth of water table	:	40m-50m bgl
22.	Whether any habitation within 300m distance	:	No
23.	Project Cost (including EMP cost)	:	Rs. 65,09,080.85/-
24.	EMP cost	:	Capital Cost – Rs. 16.56 lakhs/ Recurring Cost – Rs. 12.82 lakhs per annum
25.	CER cost	:	Rs. 5,00,000/-
26.	Assistant Director, mines 500m cluster letter	:	Roc.No: KVI/356/2022, dated: 20.06.2022
27.	VAO certificate regarding 300m radius cluster	:	Letter dated 06.06.2022

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for total production should not exceed 134406.25m<sup>3</sup> of rough stone, 31998.75m<sup>3</sup> of Gravel and 21332.5 m<sup>3</sup> of top soil. The Annual peak production 14737.5m<sup>3</sup> of rough stone, 7245m<sup>3</sup> of Gravel and 4830 m<sup>3</sup> of top soil, 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

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

2. The PP shall preserve the gravel & Top soil in the mining lease area and the same shall be utilised for green belt development.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
4. The PP shall submit the 'Notice of Opening' of the quarry to the Regional Inspector/Director of Mines Safety, Chennai Region under the section 16 of the Mines Act, 1952 and in accordance with the Reg. 3 of MMR 1961 before obtaining the CTO.
5. The proponent shall construct the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
6. Further, the PP shall construct the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
7. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease as the depth of proposed working is above 30 m after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.
8. However, the PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 3 years of operation whichever is earlier, by involving 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

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

9. As a part of EC Compliance, the PP shall carry out the tree plantation (2000 nos) to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
10. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarries.
11. The PP shall carry out maximum of two rounds of controlled blast only per day, restricted to the maximum of 50 to 60 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 300 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 10 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.
12. Within one year of the commencement of mining operations, the Project Proponent shall carry out the scientific studies on 'Design of Controlled Blasting to reduce the impacts of the blasting operations carried out in the quarry on the surrounding villages and the prominent structures', by involving a 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, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
13. The PP shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.

  
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14. The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him only as per the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
15. The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
16. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
17. Since the Kanmai is situated at a distance of 400 m, the PP shall carry out the comprehensive hydrogeological studies once in 2 years from the commencement of quarrying operation to assess the quality & quantity of the ground water due to impacts of quarrying operation by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining and Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, Anna University Chennai-Dept of Geology, CEG Campus, and University of Madras -Dept of Applied Geology, Chennai etc 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.
18. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
19. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
20. 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.

21. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Panchayat Union primary School, Inam Reddiapatti as committed, before obtaining CTO from TNPCB

Agenda No: 360-20

(File No: 9528/2022)

Proposed rough stone & gravel Quarry over an extent of 1.80.0 Ha SF.No. 92(P), 93/1(P), 93/2(P), 93/3(P), 94/1(P), 94/2(P) and 94/3A(P) Ariyanayagipuram Village, Kadayanallur Taluk, Tenkasi District, Tamil Nadu by Thiru V M SUNDARAJAH -For Environmental Clearance (SIA/TN/MIN/404193/2022, dt: 28.10.2022)

The proposal was placed in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Thiru V M Sundarajah has applied for Environmental Clearance for the Proposed rough stone & gravel Quarry over an extent of 1.80.0 Ha SF.No. 92(P), 93/1(P), 93/2(P), 93/3(P), 94/1(P), 94/2(P) and 94/3A(P) Ariyanayagipuram Village, Kadayanallur Taluk, Tenkasi District, Tamil Nadu.
2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. The lease period is for 5 years and mining plan is for the period of 5 Year & production should not exceed 215679m<sup>3</sup> of rough stone & 59205m<sup>3</sup> of Gravel. The Annual peak production 44820m<sup>3</sup> of rough stone & 22305 m<sup>3</sup> of Gravel. The ultimate depth is 45 m BGL.

பெயர் (Name)		தலைப்புகள் (Titles)	
1.	Name of the Owner/Firm	:	Thiru. V.M. Sundarajah, S/o. Muthaiah Thevar, No.4/222, Main Road, Sundaresapuram, Kadayanallur Taluk, Tenkasi District - 627 751.

  
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2.	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	: Rough Stone and Gravel
3.	S.F No. of the quarry site with area break-up	: 92(P), 93/1(P), 93/2(P), 93/3(P), 94/1(P), 94/2(P) and 94/3A(P)
4.	Village in which situated	: Ariyanayagipuram
5.	Taluk in which situated	: Kadayanallur
6.	District in which situated	: Tenkasi
7.	Extent of quarry (in ha.)	: 1.80.0 Ha
8.	Lease Period granted	: 5 Years / Existing Quarry
9.	Life of the Project	: 5 years
10.	Type of mining	: Opencast Semi Mechanized Mining
11.	Production (Quantity in m <sup>3</sup> )	: The lease period is for 5 years and mining plan is for the period of 5 Year & production should not exceed 215679m <sup>3</sup> of rough stone & 659205m <sup>3</sup> of Gravel. The Annual peak production 44820m <sup>3</sup> of rough stone & 22305 m <sup>3</sup> of Gravel.
12.	Ultimate depth of the quarry	: 45 m BGL
13.	Latitude & Longitude of all corners of the quarry site	: 09°05'40.50"N to 09°05'45.36"N 77°23'23.45"E to 77°23'28.96"E
14.	Topo Sheet No.	: 58-C/8
15.	Man Power requirement per day:	: 15 Nos
16.	Precise area communication approved by Joint Director / Assistant Director (i/c), Department of Geology and Mining with date	: Roc.No.M1/25664/2014, dated: 16.08.2022
17.	Mining Plan approved by Joint Director / Assistant Director (i/c), Department of Geology and Mining with date	: Rc.No.M1/25664/2014, dated: 30.08.2022
18.	Water requirement: 1. Drinking water & domestic purposes (in KLD) 2. Dust Suppression (in KLD) 3. Green Belt (in KLD)	: 4.0 KLD 1.0 KLD 1.5 KLD 1.5 KLD
19.	Power requirement i. Domestic Purpose	: TNEB
20.	Depth of quarrying	: 45m bgl
21.	Depth of water table	: 60m bgl

22.	Whether any habitation within 300m distance	:	No
23.	Project Cost (including EMP cost)	:	Rs. 72,22,440/-
24.	EMP cost	:	Capital Cost - Rs. 18.00 lakhs Recurring Cost - Rs. 17.18 lakhs per annum
25.	CER cost	:	Rs. 5,00,000/-
26.	Assistant Director, mines 500m cluster letter	:	Rc.No.M1/25664/2014, dated: 30.08.2022
27.	VAO certificate regarding 300m radius cluster	:	Letter dated 09.09.2022

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for total production should not exceed 215679m<sup>3</sup> of rough stone & 59205m<sup>3</sup> of Gravel. The Annual peak production 44820m<sup>3</sup> of rough stone & 22305 m<sup>3</sup> of Gravel. The ultimate depth is 45 m BGL 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. 1907(E) dated 12.04.2022.
2. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
3. The PP shall submit the 'Notice of Opening' of the quarry to the Regional Inspector/Director of Mines Safety, Chennai Region under the section 16 of the Mines Act, 1952 and in accordance with the Reg. 3 of MMR 1961 before obtaining the CTO.
4. The proponent shall construct the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the

  
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commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.

5. Further, the PP shall construct the garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone of 7.5 m as it is designed to take care of run-off water (size, gradient and length).
6. The Project Proponent (PP) shall submit a 'Slope stability action plan' incorporating the haul road ramp keeping the benches intact for the proposed quarry lease after it is duly vetted by the concerned AD (Mines) before obtaining CTO from TNPCB.
7. However, the PP shall carry out the scientific studies to assess the slope stability of the existing benches to design the safe bench geometry for further development within one year from the commencement of quarrying operation, 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.
8. As a part of EC Compliance, the PP shall carry out the tree plantation (2000 nos) to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
9. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarries.
10. The PP shall carry out maximum of two rounds of controlled blast only per day, restricted to the maximum of 50 to 60 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the houses/structures located at a distance of 300 m shall not exceed 2.0 mm/s and

no fly rock shall travel beyond 10 m from the site of blasting. The PP shall also ensure that the blasting operation shall be carried out once in 2 days to reduce the environmental impacts effectively.

11. The PP shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.
12. The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him only as per the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
13. The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the school/other habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone.
14. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
15. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
16. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
17. 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.
18. As accepted by the Project proponent in lieu of CER, the amount of Rs. 5 lakhs shall be spent for the conservation measures in Nellal wild life sanctuary in consultation with concerned DFO, before obtaining CTO from TNPCB

  
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Agenda No: 360-21  
(File No: 9529/2022)

Proposed Ordinary Earth Quarry over an extent of 2.24.50Ha SF.No.91/4 of Erayur Village, Tiruvallur Taluk, Tiruvallur District by Thiru.R.Sekar - Environmental Clearance (SIA/TN/MIN/403856/2022, dt: 20.10.2022)

Earlier, the proposal was placed in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Mr.R.Sekar has applied for Environmental Clearance for the proposed Ordinary Earth Quarry over an extent of 2.24.50Ha at SF.No.91/4 of Erayur Village, Tiruvallur Taluk, Tiruvallur District.
2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. The precise area communication was issued for the period of 1 Year. The approved mining plan is for the period of 1Year & production should not exceed 35948m<sup>3</sup> of Ordinary Earth. The ultimate depth is 2m BGL.

1	Name of the Owner/Firm	: Mr.R.Sekar, Proprietor of, M/s.Jaya Durga Brick Works, Sirukalathur Village, Tiruvallur Taluk, Tiruvallur District
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	: Ordinary Earth
3	S.F No. Of the quarry site with area break-up	: 91/4
4	Village in which situated	: Erayur
5	Taluk in which situated	: Tiruvallur
6	District in which situated	: Tiruvallur
7	Extent of quarry (in ha.)	: 2.24.50Ha
8	Latitude & Longitude of all corners of the quarry site	: 13°12'55.43"N to 13°13'0.45"N 79°55'36.64"E to 79°55'43.95"E
9	Topo Sheet No.	: 57 - O/16

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10	Type of mining	Open cast Semi - Mechanized of Mining
11	Period of quarrying proposed	: 1 Year
12	Production (Quantity in m <sup>3</sup> )	: 35948m <sup>3</sup> of Ordinary Earth
13	Depth of quarrying	: 2.0m
14	Depth of water table	: 20m - 15m BGL
15	Man Power requirement per day:	7 Nos.
16	Source of Water Requirement	water vendors
17	Water requirement: 1. Drinking & domestic purposes (in KLD) 2. Dust suppression, Green Belt & Wet Drilling (In KLD)	: 2.5 KLD 0.750 KLD 1.0 KLD 0.750 KLD
18	Power requirement	TNEB
19	Whether any habitation within 300m distance	: No
20	Precise area communication approved by the, District Collector, Department of Geology and Mining with date	: Roc.No.74/2022/Kanimam.2, dt: 29.08.2022
21	Mining Plan approved by Assistant Director, Department of Geology and Mining with date	: Roc.No.74/2022/G&M-2, dt: 06.09.2022
22	Deputy Director, Department of Geology and Mining 500m cluster letter	Roc.No.74/2022/G&M-2, dt: 06.09.2022
23	Deputy Director, Department of Geology regarding 50m Radius letter	Rc.No.74/2022/G&M-2 Dt:29.11.2022
24	Soil Test Report,	Report from Division of Soil Mechanics & Foundation Engineering, Dept. of civil Engineering, College of Engineering Guindy campus, Anna University, Chennai vide Lr. No.5M&FE 204CA/Soil Test/Eraiyur/ Village /2022 Dt:05.12.2022.
25	VAO certificate regarding 300m radius cluster	Letter dt: 30.09.2022.
26	Project Cost (excluding EMP cost)	: Rs.13.396 Lakh
27	EMP cost	: Rs.32.97 Lakhs

  
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28	CER cost	Rs.2.0 Lakhs
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Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance *for the period of 1 Year* for the production quantity of 35948m<sup>3</sup> of Ordinary Earth and the ultimate depth of mining upto 2m BGL subject to the standard conditions & normal conditions stipulated by MOEF &CC. In addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The mine manager and other statutory competent persons shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952.
3. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Refresher' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Trichy.
4. The Project Proponent shall develop the Green belt activities (tree plantations of two to three rows) in the safety zone as stipulated in the Mining Plan around the periphery of the proposed quarry lease before obtaining the CTO from the TNPCB.
5. The Project Proponent shall not carry out blasting operations.
6. The Project Proponent shall carry out the tree plantation to act as a barrier to reduce noise level and dust pollution along the boundary of the quarrying site considering the wind direction before obtaining the CTO from the TNPCB.
7. The PP shall ensure that the transport vehicles used in the quarry are adequately covered with tarpaulin before it is allowed to enter into the adjacent village panchayat road.
8. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50m 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.

9. The Project Proponent shall also install necessary dust and noise extraction system around mineral handling area with proper enclosures before obtaining the CTO from TNPCB.
10. Since the quarry is located in the cluster, the Project Proponent shall ensure strict compliance of the provisions given under the Mines Rules, 1955 for the health and welfare of the persons employed therein.
11. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
12. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
13. 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.
14. As accepted by the Project proponent the CER cost is Rs. 2 lakhs and the amount shall be spent for the *Government Higher Secondary School, Meyyur Village* as committed, before obtaining CTO from TNPCB.

Agenda No: 360 – 22


(File No. 6386 /2017)

Proposed construction of Buildings for Outpatients and other departments within the existing hospital campus at S.No: 37/1 of Vepary Village, Tondiarpet Taluk, Chennai District, Tamil Nadu by M/s. Rajiv Gandhi Government General Hospital -Environmental Clearance (SIA/TN/NCP/63614/2017 dated:30.03.2017).

The proposal was placed in this 360<sup>th</sup> Meeting of SEAC held on 03.03.2023. The details of the project furnished by the proponent are available in the website (parivash.nic.in).

The SEAC noted the following:

1. The Proponent, M/s. Rajiv Gandhi Government General Hospital has applied for Environment Clearance for the proposed construction of Buildings for Outpatients and other departments within the existing hospital campus at S.No: 37/1 of Vepary Village, Tondiarpet Taluk, Chennai District, Tamilnadu.

  
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2. The proposed quarry/activity is covered under Category "B" 8(a) Building & Construction Projects of the Schedule to the EIA Notification, 2006.
3. Total land area is 8424 Sqm. The total built-up area of the proposed residential building is 23,429 Sqm.
4. Earlier, this proposal was placed in the 93<sup>rd</sup> meeting of the SEAC held on 11.08.2017 for appraisal. In the SEAC meeting, the proponent was asked to furnish the following additional details.
  - 1) As per the water balance diagram presented by the proponent it is proposed to use 243 KLD of fresh water from CMWSSB. Since this is a huge quantity, any difficulty in procuring this quantity from CMWSSB will pose operation problems in running the hospital. Hence, the members of the committee interacted with the proponent regarding any contingent measure contemplated to augment the supply of fresh water in the event of deficiency in CMWSSB supply. The proponent responded by saying that another source of supply is being worked out with a nearby Military hospital. In this regard, the agreement details (MOU) shall be furnished.
  - 2) In the same water balance diagram, it is indicated that 219 KLD of raw sewage will be pumped to CMWSSB pumping station from the hospital campus. This is not an environmentally sound proposal because ultimately this sewage will come back to River Cooum in the form of treated/untreated sewage. Hence, the committee insisted that sewage generated within the campus should be treated and recycled/re-used for certain beneficial purposes like toilet flushing and green belt development. Accordingly, the proponent agreed to revise the proposals in this regard and submit the same.
  - 3) As per the data furnished by the proponent the committee noted that the particulate matter (PM10) and the noise levels are very high surrounding the project site. Hence proper mitigation measures should be implemented to control the dust and noise since the proponent is implementing a hospital project where the health of the patients and the staff should be protected by the proponent. The green belt development is one of the proposal by the proponent has to implement covering 15% of the project area with the suitable tree species. The proponent should provide double glazed panels for windows and insulation in all exterior walls facing the road to prevent noise pollution.

4) The project site is very close to the River Cooum, about 10m away. The proponent should clarify from competent authorities whether the project attracts Coastal Regulation Zone (CRZ) provisions in implementing the project.

5. Again, this proposal was placed in the 341<sup>st</sup> Meeting of SEAC held on 29.12.2022. During the meeting the Committee noted that the project proponent has not attended the meeting.

Now, the proposal was placed in this 360<sup>th</sup> Meeting of SEAC held on 03.03.2023. Based on the presentation & documents furnished, since the PP has completed the project without obtaining EC and has applied during the window period, this has to be treated as violation case. Hence, the SEAC decided to recommend for the grant of sector specific standard Terms of Reference (ToR) for rapid EIA under violation category in 3 parts for the project, for assessment of Ecological damage, remediation plan and natural & community resource augmentation plan to be prepared as an independent chapter in the Environment Impact Assessment report by the Accredited consultant and also with collection and analysis of data for the assessment of ecological damage, preparation of remediation plan and natural & community resource augmentation plan to be done by an Environmental laboratory duly notified under the Environment (Protection) Act, 1986, accredited by NABET or a laboratory of council of Scientific and Industrial research institutions working in the field of Environment in addition to the following ToRs :

1. The PP shall obtain CRZ Clearance from the Competent Authority since the project site is very close to the Buckingham Canal, about 10m away.
2. The PP shall obtain fresh water supply commitment letter and disposal of excess treated water from the Competent authority.
3. The PP shall furnish an agreement made with the HCFs/CBWTs to reduce illegal dumping of BMW.
4. Generation of the solar/renewable energy should not be less than 50% of total energy utilization and ensure that the entire roof of the building. Application of solar energy should be utilized maximum for illumination of common areas, street lighting etc.
5. The purpose of Green belt around the project should not be less than 33% of total area to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics.
6. The proponent shall provide Bio Methanation plant within project site for bio-degradable waste and shall dispose the non- Biodegradable waste to authorized

  
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recyclers as committed.

7. The PP shall consult with TNPCB to examine the possibilities of providing continuous Air monitoring system at proposed site.
8. The PP shall examine the possibilities to provide nursery and Children's playground.
9. The treated/untreated sewage water shall not be let-out from the unit premises accordingly revised water balance shall be incorporated.
10. Copy of the village map, FMB sketch and "A" register shall be furnished.
11. Detailed Evacuation plan during emergency/natural disaster/untooward accidents shall be submitted.
12. The space allotment for solid waste disposal and sewage treatment & grey water treatment plant shall be furnished.
13. Details of the Solid waste management plan shall be prepared as per solid waste management Rules, 2016 and shall be furnished.
14. Details of the E-waste management plan shall be prepared as per E-waste Management Rules, 2016 and shall be furnished.
15. Details of the Rain water harvesting system with cost estimation should be furnished.
16. A detailed storm water management plan to drain out the storm water entering the premises during heavy rains period shall be prepared including main drains and sub-drains in accordance with the contour levels of the proposed project considering the flood occurred in the year 2015 and also considering the water bodies around the proposed project site & the surrounding development. The storm water drain shall be designed in accordance with the guidelines prescribed by the Ministry of Urban Development.
17. The proposed OSR area should not be included in the activity area. The OSR area should not be taken in to account for the green belt area.
18. The layout plan shall be furnished for the greenbelt area earmarked with GPS co ordinates by the project proponent on the periphery of the site and the same shall be submitted for CMDA/DTCP approval. The green belt width should be at least 3m wide all along the boundaries of the project site. The green belt area should not be less than 15%of the total land area of the project.
19. Cumulative impacts of the Project considering with other infrastructure developments and industrial parks in the surrounding environment within 5 km & 10 km radius shall be furnished.

20. A detailed post-COVID health management plan for construction workers as per ICMR and MHA or the State Govt. guideline may be followed and report shall be furnished.
21. The project proponent shall furnish detailed baseline monitoring data with prediction parameters for modelling for the ground water emission, noise and traffic.

**Agenda No: 360-23**


**(File No: 9763/2022)**

**Proposed Construction of High Rise Building Complex (Residential Cum Commercial) at R.S.No. 322/1 In Block-11 & R.S.No 321/3 in Block-10 Triplicane (Part 2) Village, Mylapore Taluk, Chennai District by M/s. BRIGADE ENTERPRISES LIMITED -for Environmental Clearance. (SIA/TN/INFRA2/411380/2022, dated: 31.12.2022)**

The proposal was earlier placed in the 358<sup>th</sup> meeting of SEAC held on 24.02.2023. The project proponent gave a detailed presentation. The details of the project furnished by the proponent are available on the PARIVESH web portal ([parivesh.nlc.in](http://parivesh.nlc.in)).

The SEAC noted the following:

1. The Project Proponent, M/s. BRIGADE ENTERPRISES LIMITED has applied seeking Environmental Clearance for the proposed Construction of High Rise Building Complex (Residential Cum Commercial) at R.S.No. 322/1 In Block-11 & R.S.No 321/3 in Block-10 Triplicane (Part 2) Village, Mylapore Taluk, Chennai District.
2. The project/activity is covered under Category "B2" of Item 8(a) "Building and Construction Projects" of the Schedule to the EIA Notification, 2006, as amended.
3. The project consists of Combined Triple Basement Floors (for Parking) + Combined Ground & Mezzanine Floor (for Retail, Amenities, Parking) + Combined First Floor (for Parking & Retail) + Combined Second Floor (for Parking & Retail) + Combined Third Floor (for Parking & Retail) + Combined Fourth Floor (for Amenities, Residential Units, Swimming Pool & Retail); Tower 1 (Residential) – 5<sup>th</sup> Floor to 38<sup>th</sup> Floor (for Residential Units) + Terrace Floor with 250 dwelling units & Tower 2 (Commercial) – 5<sup>th</sup> Floor to 21<sup>st</sup> Floor (for Office Space) + Terrace Floor and other utilities.

  
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1.	Name of the Project	Construction of High Rise Building Complex (Residential cum Commercial) by M/s. Brigade Enterprises Limited			
2.	Location	R.S.No. 322/1 in Block-11 & R.S.No 321/3 in Block-10 Triplicane (Part 2) Village, Mylapore Taluk, Chennai District			
	Latitude & Longitude	S. No.	Latitude	Longitude	
		1	13° 3'32.85"N	80°15'34.70"E	
		2	13° 3'34.44"N	80°15'36.74"E	
		3	13° 3'25.98"N	80°15'35.52"E	
		4	13° 3'26.77"N	80°15'37.83"E	
3.	Type of Project	B2 Category B(a) "Building and Construction Projects" of the Schedule to the EIA Notification, 2006 as amended.			
4.	Brief Description of the project	The project consists of Combined Triple Basement Floors (for Parking) + Combined Ground & Mezzanine Floor (for Retail, Amenities, Parking) + Combined First Floor (for Parking & Retail) + Combined Second Floor (for Parking & Retail) + Combined Third Floor (for Parking & Retail) + Combined Fourth Floor (for Amenities, Residential Units, Swimming Pool & Retail); Tower 1 (Residential) - 5th Floor to 38th Floor (for Residential Units) + Terrace Floor with 250 dwelling units & Tower 2 (Commercial) - 5th Floor to 21st Floor (for Office Space) + Terrace Floor and other utilities with total built-up area of 1,47,885 Sq.m			
5.	Total Land Area (in sq. m)	18,941 Sq.m			
		S. No.	Description	Area (Sq.m.)	Percentage (%)
		a	Total Land Area	18,941	100
		b	Total Ground Coverage Area of Buildings	6,601	35



		c	Utilities Area (Substation, Utility Buildings, Transformer yard, RMU Yard, Sump)	1,272	7		
		d	Roads & Pavements	6,339	33		
		e	Green Belt Area	2,835	15		
		f	OSR Area	1,894	10		
6.	Built up Area (in sq. m)	1,47,885 Sq.m					
			<b>Blocks</b>	<b>No. of Floors</b>	<b>Total Built up Area (Sq.m.)</b>		
			Tower 1 (Residential with 250 Dwelling Units)	3B+G+M+38+Terrace Floor	85,490		
			Tower 2 (Commercial for Retail & Office Space)	3B+G+21+Terrace Floor	61,335		
			Other Utilities (Utility Building 1 & 2, STP Room, OWAC Room, Swimming Pool)		1,060		
			<b>Total Built-up Area (Sq.m.)</b>			<b>1,47,885</b>	
7.	Cost of Project	Rs. 707.30 Crore					

  
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8.	Water requirement in KLD and Source	Total water requirement: 495 KLD Fresh water requirement: 258 KLD (Domestic Non- Flushing) sourced from CMWSSB. Treated water from treatment plant: 237 KLD (Toilet flushing - 171 KLD, Greenbelt Development - 10 KLD, HVAC- 56 KLD)	
9.	Quantity of Sewage	Quantity of wastewater generated: 429 KLD (Sewage - 171 KLD; Grey water: 258 KLD) Quantity of treated Water: 429 KLD (Sewage - 171 KLD; Grey water: 258 KLD)	
10.	Details of STP	STP Total Capacity - 180 KLD (2 no. of 90 KLD) & GWTP- 260 KLD (1 no. of 170 KLD & 1 no. of 90 KLD)	
11.	Mode of disposal of Sewage	Treated water from treatment plant: 429 KLD (Toilet flushing - 171 KLD, Greenbelt Development - 10 KLD, HVAC- 56 KLD, Excess treated sewage disposal to CMWSSB Sewer Line - 192 KLD)	
12.	Quantity of Solid Waste generated per day, Mode of treatment and Disposal of Solid Waste	a) Biodegradable solid waste	Mode of treatment and Disposal
		Organic waste: 1,747 Kg/day	Treated in Organic Waste Converter (OWC) and used as manure for greenbelt development.
		Bio Sludge from STP : 43 Kg/day	Treated in OWC along with Biodegradable Waste after dewatering & drying process and will be used as manure for gardening
		b) Non-Biodegradable solid waste	Mode of treatment and Disposal
		Inert, Recyclable & Other Miscellaneous: 1.165 Kg/day	Handed over to Recyclers
13.	Details of D.G. set with Capacity	3 nos. of 1,250 KVA, 3 nos. of 1,010 KVA and 1 no. 625KVA DG sets are proposed as power back up during power failure. The DG Stack heights of 19.1 m above the ground level for 1,250 kVA DG sets, 18.5 m above the ground level for 1,010 kVA and 17.0 m above the ground level for 625 KVA DG set.	

	Stack Height	Stack height as per CPCB specifications.
14.	Details of Parking Area	906 Car Parking & 1.021 Two -Wheeler Parking
15.	Details of Green Belt Area	2,835 Sq. m
16.	Rainwater Harvesting	260 Cu.m Storage Tank (2 nos. of 130 Cu.m) 10 nos. of recharge pits
17.	Renewable Energy Proposed	Rooftop Solar PV Panels for illumination of common areas and consumption in Utility loads. Solar water heater for top two floors of residential block.
18.	EMP Cost	For Construction Phase: Capital Cost: Rs. 36.50 Lakh Operation Cost: Rs. 67.70 Lakh  For Operation Phase: Capital Cost: Rs. 338.00 Lakh Operation Cost: Rs. 67.00Lakh
19.	CER Allocation	Rs. 2.6 Crore

On perusal of the documents furnished by the Proponent, the SEAC noted that the project site is located within 10km aerial distance from the Guindy National Park. Hence SEAC decided defer the proposal and ask the PP to clarify on the applicability of NBWL clearance.

The subject was again taken up for further discussions in this 360<sup>th</sup> meeting of SEAC held on 03.03.2023.

The Committee noted that MoEF&CC vide letter no. MoEF&CC Wild Division F.No.10-672013 WL Dated: December 2014 addressed to the Principal Secretary (Forests), Government of Tamil Nadu has stated that,

  
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*"Reference is invited to the letter no. 3396/FR 5/2012-3 dated 7 July 2014, inter alia, forwarding proposals for declaration of Eco-Sensitive Zones around Guindy National Park, Vedanthangal Bird Sanctuary, Karikili Bird Sanctuary and Mukurthi National Park in the State of Tamil Nadu.*

*With regard to proposal for Guindy National Park, zero meter eco-sensitive zones have been proposed. The proposal has been considered in the Ministry and the undersigned has been directed to convey that in accordance with the decision of the National Board for Wildlife in its meeting held on 17 March 2005 and based on the proposal submitted by the State of Tamil Nadu, it has been agreed for 'Zero meter Eco-sensitive zone around Guindy National Park in Tamil Nadu'.*

Furthermore, the Principal Chief Conservator of Forests and Chief Wildlife Warden vide letter No. Ref No. WLS/15862/2022-7 DATED 12.01.2023 has furnished the following reply for an RTI query.

What is the Eco Sensitive Zone (in Kilometer) of Karikili Birds Sanctuary, Guindy National Park and Vedanthangal Birds Sanctuary	As per the Hon'ble Supreme Court of India order dated 03-06-2022 in IA No. 1000 of 2003, the Eco Sensitive Zone for Karikili and Vedanthangal Birds Sanctuaries is 1 Km from the Sanctuary boundary and as a special case the Eco Sensitive Zone for Guindy National Park is 'zero' meter.
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The Committee held detailed discussions and decided to accept the remarks of PCCF and decided to recommend the proposal for the grant of Environmental Clearance subject to the following specific conditions in addition to normal conditions stipulated by MOEF&CC.

1. The project proponent shall obtain IGBC Gold rating for the proposed construction project.

2. The project proponent shall maintain minimum 15% green belt as committed.
3. The proponent shall provide adequate organic waste disposal facility such as organic waste convertor waste within project site as committed and non-Biodegradable waste to authorized recyclers as committed.
4. Project proponent shall ensure that DG sets are run on minimum of 50% green energy sources instead of Diesel.
5. The height of the stacks of DG sets shall be provided as per the CPCB norms.
6. The project proponent shall submit structural stability certificate from reputed institutions like IIT, Anna University etc. to TNPCB before obtaining CTO.
7. The project proponent shall provide STP of capacity 180 KLD (2 no. of 90 KLD) & GWTP- 260 KLD (1 no. of 170 KLD & 1 no. of 90 KLD) and make proper arrangements for the utilization of the treated water of 429 kLD for committed activities (i.e Toilet flushing – 171 KLD, Greenbelt Development – 10 KLD, HVAC- 56 KLD, Excess treated sewage disposal to CMWSSB Sewer Line – 192 KLD) ensuring that the vital parameters conform to the standards prescribed by CPCB time to time.
8. The sludge generated from the Sewage Treatment Plant shall be collected and de-watered using filter press and the same shall be utilized as manure for green belt development after composting.
9. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix, in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.

  
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10. Taller/one year old Saplings raised in appropriate size of bags, preferably eco-friendly bags should be planted with 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.
11. The unit shall ensure the compliance of land use classification is fit for construction.
12. The project proponent shall provide entry and exit points for the OSR area, play area as per the norms for the public usage and as committed.
13. The project proponent shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.
14. The Proponent shall provide rain water harvesting sump of adequate capacity for collecting the runoff from rooftops, paved and unpaved roads as committed.
15. The project proponent shall comply with the provisions given under Solid Waste Management Rules, 2016, as amended.
16. The project proponent shall strictly follow the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016, as amended.
17. The project proponent shall allot necessary area for the collection of E waste and strictly follow the E-Waste Management Rules 2016, as amended for disposal of the E waste generation within the premise.

18. No waste of any type to be disposed of in any other way other than the approved one.
19. All the mitigation measures committed by the proponent for the flood management, to avoid pollution in Air, Noise, Solid waste disposal, Sewage treatment & disposal etc., shall be followed strictly.
20. The project proponent shall furnish commitment for post-COVID health management for construction workers as per ICMR and MHA or the State Government guidelines.
21. The project proponent shall provide a medical facility, possibly with a medical officer in the project site for continuous monitoring the health of construction workers during COVID and Post - COVID period.
22. The project proponent shall measure the criteria air pollutants data (including CO) due to traffic again before getting consent to operate from TNPCB and submit a copy of the same to SEIAA.
23. The project proponent shall ensure minimum of 50% of roof area is covered with solar panels to conserve energy. Solar energy should be at least 25% of total energy utilization. Application of solar energy should be utilized maximum for illumination of common areas, street lighting etc.
24. 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.
25. As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020, the proponent shall adhere the EMP as committed.
26. As accepted by the Project Proponent the CER cost is Rs.2.6 Crore and the amount shall be spent for the committed activities before obtaining CTO from TNPCB.

  
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Agenda No: 360-TA-01

(File No: 9474/2022)

Proposed Sand quarry over an extent of 4.90.0 Ha in Thenpennai River located at S.F.No.1(P) in Akkadavalli Village, Panruti Taluk, Cuddalore District, Tamil Nadu by The Executive Engineer, PWD/WRD, Vilupuram- For Environmental Clearance. (SIA/TN/MIN/290813/2022 Dt. 30.08.2022).

The proposal was placed for appraisal in this 360<sup>th</sup> SEAC Meeting held on 03.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Proponent. The Executive Engineer, has applied for Environmental Clearance for the Proposed Sand quarry over an extent of 4.90.0 Ha in Thenpennai river located at S.F.No.1(P) in Akkadavalli Village, Panruti Taluk, Cuddalore District, Tamil Nadu.
2. The project/activity is covered under category "B2" of Item 1(a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. As per mining plan, the lease period is one year and the mining plan for the period of One year & mining quantity should not exceed 1.14.380 m<sup>3</sup> (65,380 m<sup>3</sup> of Shoal above TBL (1.334m) + 49,000 m<sup>3</sup> of sand below TBL (1m). The ultimate depth 1m Below Theoretical Bed Level.
4. The Salient features of the proposed project as follows

Sl. No.	Details
1. Name of the owner	The Executive Engineer, PWD, Water Resource Organization, Mining and Monitoring Division, Viluppuram district-605 602.
2. Type of quarrying	Sand
3. Name of the River	Thenpennai river
4. S.F No. of the quarry site with area break-up	1(P)
5. Village in which situated	Akkadavalli Village

  
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6.	Taluk in which situated	Panruti Taluk		
7.	District in which situated	Cuddalore District		
8.	Extent of quarry (in ha.)	4.90.0 Ha		
9.	Proof of land ownership	It is a River Poramboke (Govt land)		
10.	New or existing quarry	Fresh		
11.	Period of quarrying proposed	1 Year		
12.	Production (Quantity in m <sup>3</sup> )	1.14,380 m <sup>3</sup> (65,380 m <sup>3</sup> of Shoal above TBL (1.334m) + 49,000 m <sup>3</sup> of Sand below TBL (1m).		
13.	Depth of sand available in the quarry site and depth of mining proposed	1.334m above Theoretical Bed Level + 1m Below Theoretical Bed Level.		
14.	Depth of water table	6m		
15.	Method of mining (Manual or Mechanised)	Open cast - mechanized mining		
16.	Latitude & Longitude of all corners of the quarry site	Pillar No	Latitude	Longitude
		1	11°51'14.7960"N	79°31'44.0199"E
		2	11°51'18.4567"N	79°31'46.7479"E
		3	11°51'11.7307"N	79°31'56.0702"E
		4	11°51'08.0419"N	79°31'53.3415"E
17.	Topo Sheet No.	57 M/09		
18.	Man Power requirement per day:	30 Nos.		
19.	Precise area communication approved by the District Collector with date	Rc.No.76/mines/2020, dated: 01.04.2022		

  
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20.	Mining Plan approved by the Assistant Director, Geology and Mining, with date	Rc.No.76/mines/2020, dated: 10.08.2022.
21.	500m cluster letter issued by Assistant Director, Department of Geology & Mining.	Rc.No.76/mines/2020, dated: 10.08.2022
22.	VAO certificate regarding 300m radios cluster	Letter Dated: 24.08.2022
23.	Water requirement: 1. Drinking purposes (in KLD) 2. Dust suppression 3. Green Belt (in KLD)	5.0 KLD 2.0 KLD 1.5 KLD 1.5 KLD
24.	Power requirement:	TNEB
25.	Project Cost	Rs. 30.0Lakhs
26.	EMP cost	Rs. 6 Lakhs
27.	CER Cost	Rs.5 Lakhs as accepted by the PP

5. Earlier, this proposal was placed in the 322<sup>nd</sup> SEAC Meeting held on 19.10.2022. Based on presentation & documents furnished by the PP, SEAC decided to carry out onsite inspection by the Sub-Committee constituted by SEAC to assess the present Environmental Condition.

1. The Project Proponent shall study and report in detail on the "Replenishment Study" as per Sustainable Sand Mining Management Guidelines, 2016 and Enforcement & Monitoring Guidelines for Sand Mining 2020".
2. Pillar stone shall be erected before the site inspection.

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

  
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The Sub Committee report has placed in 360<sup>th</sup> SEAC Meeting held on 03.03.2023 and the same is as follows.

**1.0 Sub Committee:**

The State Expert Appraisal Committee (SEAC) Tamilnadu constituted a subcommittee vide its Lr.No.5EAC/TN/Site Inspection/2023, dt:11.02.2023 to inspect and study the field condition for the proposal seeking EC for a sand quarry proposed at Akkadavalli Village in SF No. 1(P) Pannuti Taluk, Cuddalore District. The Committee comprises of Thiru.D Velazhagan, member of SEAC.

As per the above letter the sub-committee visited the site on 11.02.2023. The observations made in the field and recommendation derived on the basis of the field visit are as below:

**1.1 Proponent team:**

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

1. Er.S.Lenin Francis, E.E., Mining & Monitoring division/Villupuram.
2. Er. K.Maheswari, A.E.E., Mining & monitoring Sub Division/Cuddalore.
3. Er.A.Anularasan, A.E.,Mining & monitoring sec-1/Cuddalore.

**2.0 Akkadavalli Sand Quarry :**

**a) Details of the Quarry**

No	Description	Detail
1	Proposal number	SLA/TN/MIN/290813/2022, DT.30.08.2022
2	File number	9474/2022
3	Proponent	Executive Engineer, WRD., Mining and Monitoring Division, Villupuram
4	Major Project Activity	1 a. Mining of minerals
5	Category	B2
6	Project Type	Fresh EC

  
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7	River	Thenpennai river
8	Location	S.F.No.1(P) in Akkadavalli Village
9	Area	4.90.0 Ha
10	Quantity & Duration	1,14,380 m <sup>3</sup> & 1 year
11	Depth	1m Below Theoretical Bed Level.
12	Method of Mining	Open cast - mechanized mining

**b) Location of the Quarry**

Pillar No	Latitude	Longitude
1	11°51'14.7960"N	79°31'44.0199"E
2	11°51'18.4567"N	79°31'46.7479"E
3	11°51'11.7307"N	79°31'56.0702"E
4	11°51'08.0419"N	79°31'53.3415"E

**3.0 Observations:**

- Proposed sand quarry is located on the North eastern side of the Akkadavalli Village in SF. No.1(P) in the river bed of Thenpennaiyar River. It is close to the right bank of Thenpennaiyar river.
- The dimension of the proposed sand quarry is 350 m in length and 140 m in width, 4.90.00 hectares in area.
- It is located about 5.02 km downstream of Enathirimangalam Anicut and 1.95 km upstream of Kandrakottal Checkdam Dam.
- NH 36 - Vikravandi - Panruti located 2.4 km South West.
- No Combined water Supply Scheme wells were located near Proposed quarry site.
- Bay of Bengal sea lies 32 km East of proposed sand quarry site.
- The sand at the proposed site is replenished well and sand is deposited above the bed level (Theoretical bed level +31.309m) with the shoal of 1.334 m.

- It was informed by the WRD officials that a temporary road with bio-degradable material will be formed along the banks of river to transport the sand to the yard.
- Paddy fields are seen enroute Panruti to Akkadavalli village.
- Akkadavalli sand quarry site is proposed on right side (deposition side) bed of Thenpennai river. It helps to regulate the flood water to flow freely to avoid further meandering on left side (erosion side).

#### 4.0 Recommendations:

- The following recommendations of the Enforcement & Monitoring Guidelines for Sand Mining, 2020 of the MoEFCC, Government of India (Annexure VIII Salient provision for sand mining in the state of Tamil Nadu) can be implemented.  
*"To monitor the groundwater level during sand quarrying operations, a network of existing wells may be established around the sand quarrying area and new piezometers must be installed at all sand quarry sites. Monitoring of Ground Water Quality in the vicinity (one Km radius from the sand quarrying site) shall be carried out once in two months".*
- In this endeavor, Groundwater Wing of the Water Resources Department of the PWD may be engaged.
- As per Rule 36 of the Tamil Nadu Minor Mineral Concession Rules 1956, no sand quarry should be allowed within 500m radial distance from the location of any bridge, water supply system, infiltration well or pumping installation.
- Within 500 m on either side no such structures or installation are available, the mining of sand at the proposed sand quarry in SF No.1 (P) of Akkadavalli village, Panruti Taluk, Cuddalore District as per the mining plan is recommended for Environmental Clearance.

Now, the proposal was placed for appraisal in this 360<sup>th</sup> SEAC Meeting held on 03.03.2023. Based on the Inspection report, presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for 1,14,380 m<sup>3</sup> of Sand for period of 1 Year, subject to the

  
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following specific conditions, in addition to normal conditions stipulated by MOEF &CC:

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

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

  
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18. During the sand mining work, appropriate progressive mine closure activities must be implemented to restore the river bed to its original status for ensuring the free flow.

19. As accepted by the Project proponent the CER cost is Rs. 5 lakhs and the amount shall be spent for the Schools in Alkadavalli Village as committed, before obtaining CTO from TNPCB.

Agenda No: 360-TA-2

(File No: 9316/2022)

Proposed Rough Stone and Gravel quarry lease area over an extent of 2.07.21Ha at S.F.No.483/1A4B & 483/1A4C of Mecode Village, Thiruvattar Taluk, Kanniyakumari District, Tamil Nadu by Tmt. Anitha Raja Bai - For Environmental Clearance. (SI/VTN/MLN/277968/2022, dated: 13.06.2022).

The proposal was placed in 314<sup>th</sup> Meeting of SEAC held on 23.09.2022. The details of the project furnished by the proponent are available in the website ([www.parivesh.nic.in](http://www.parivesh.nic.in)).


The SEAC noted the following:

1. The Project Proponent, Tmt. Anitha Raja Bai has applied for Environmental Clearance for the proposed Rough Stone & Gravel quarry lease over an extent of 2.07.21 Ha at S.F.Nos. 483/1A4B & 483/1A4C at Mecode Village, Thiruvattar Taluk, Kanniyakumari District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan, the lease period is for 10 years & mining plan is for 5 years. 5,27,035m<sup>3</sup> of Rough stone and 43,730m<sup>3</sup> of gravel with ultimate depth of mining 42m above ground level. The Annual peak production as per mining plan is 1,09,680m<sup>3</sup> of Rough stone (1<sup>st</sup> year) and 24,806m<sup>3</sup> of gravel (1<sup>st</sup> year).

During presentation, the Committee had observed that the site is a hilly terrain and presence of vegetation is found around the quarry as also a water course at a distance of 200 m -300 m from the proposed mine, and hence SEAC decided to carry out a site inspection by sub-committee to assess the present status of the project and environmental settings.

  
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On the receipt of the subcommittee report, further deliberation will be carried out.

Now the proposal was placed in 360<sup>th</sup> Meeting of SEAC held on 03.03.2023.

The Sub Committee report has placed in 360<sup>th</sup> SEAC meeting held on 03.03.2023.

The State Expert Appraisal Committee (SEAC) Tamil Nadu constituted a subcommittee vide its Lr.No. SEAC-TN/9316-Site Inspection/2022 dated 23.09.2022 to inspect and study the field condition for the proposal seeking EC. The Committee comprises of Thiru KSSVP Reddy, Member, SEAC and Dr.P.Balamadeswaran, Member, SEAC.

As per the above letter the sub-committee visited the site on 28.11.2022.

The observations made in the field and recommendation derived on the basis of the field visit are as below:

#### OBSERVATIONS OF THE SUB-COMMITTEE

Sl. No.		Observations in the field			
1.	Environmental settings	The area exhibits hillock topography with boulders and scattered scrubs and thickets, hillock dominated by the grass species.			
2.	Existence of any other quarries situated within the vicinity of the proposed quarry site (Ref: Fig 1.0)	Sl. No	Distance Range (meters / km)	No of Stone Quarries	
				Existing / Operating	Abandoned
		1.	Within 300 m	2	1
		2.	300 m to 500 m	Nil	1
		3.	500 m to 1 km	Nil	1
		4.	1 km to 2 km	4	1
		5.	2 km to 3 km	2	5
		6.	3 km to 4 km	Nil	NR
7.	4 km to 5 km	1	1		
		Total	9	10	

  
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3.	Habitation / Forest location	<b>Habitation:</b> There is no habitation within 300m radial distance of lease hold area as per Rule 36(1) of TNMMCR, 1959 as per the records of VAO.			
4.	Existence of structures situated within the vicinity of the proposed quarry site (Ref: Fig 2.0).	Sl. No	Distance Range (meters)	Structures	
				Belonging to the Owner	Not Belonging to the Owner / Unapproved Layouts
		1.	Within 100 m	Nil	Nil
		2.	100 m to 200 m	Nil	1 (Shed)
		3.	200 m to 250 m	1 (Crusher)	1 (Plant office)
		4.	250 m to 300 m	Nil	2 (Temple & Shed)
		5.	300 m to 500 m	Nil	7 (4 Houses + 2 Crushers + 1 Shed)
		Total		1	11
5.	Drilling , Blasting and Heavy Machinery use	As it is a mechanized mine they will adopt the drilling for controlled /mild blasting, HEMM for the exploitation of hard rock formation.			
6.	Adequate and qualified statutory personnel	Proposed to employ a I/II Class Mine Manager Certificate of Competency issued by the DGMS as Mine Manager along with other statutory qualified personnel such as Foreman, Mine Mate, Blaster.			
7.	Destination location	The mined-out ROM (Rough stone) will be sent to the Crusher cum Screening Plant which is located within the lease hold area and hence no long travel is required causing the environmental nuisance. Here, the customers/purchasers are			

  
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		encouraged to come to the Plant for loading of the crushed stone.
8.	Ground water table intersection.	<ol style="list-style-type: none"> <li>1. From the geophysical studies, it was clear that groundwater movement is very poor in this region as the massiveness of the rock formation increases from the depth of 16-25 m. bgl on an average. The transmissivity property of the study area indicates that there is very insignificant movement of groundwater at sub surface level or the movement may be completely negligible.</li> <li>2. The mining area is 42m agl - (RL 114m - RL 72m) For First Five year; 30m bgl - (RL 72m - RL 42m) For Second Five year.</li> <li>3. Hence there is no possibility of intersection ground water table.</li> <li>4. The drinking and agricultural water resources in the nearby villages are not affected by this mining activity as the proposed mining area lies in highly elevated region.</li> </ol>
9.	Green Belt development in safety zone and as per norms in terms of species and numbers.	Developed in safety zone of 7.5 m adjacent to the patta land possessed by the quarry owner as per norms stipulated. Around 200 numbers of trees were planted in the safety zone around the boundary of the lease adjacent to their own patta land.
10.	Location of Temples/Monuments	There is a small temple situated at a distance of 295 m in the project area where the public at large

  
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		may expected to arrive only during the festival seasons.
11.	Surface drainage	They have provided garland drainage system of permanent mode using the cementing, as shown in the Figures presented in the Annexure, along the boundary of the lease ended one side with a siltation sump/tank before releasing the water into the surrounding area.
12.	Mined material transport route	Within the lease area and away from habitation.

#### RECOMMENDATIONS OF THE SUB COMMITTEE

1. The Sub-committee has observed that the green belt is being developed on the Haulroad leading to the quarry site. However, it is recommended that the proponent shall maintain the green belt all around the boundary of the quarry site covering a width of 10 m during the quarrying operations.
2. The PP shall deliver proposed action plan for green belt development in the next five years such that it shall be maintained in 33 % of the overall project area and accordingly the plantation shall be carried out in a phase manner as a part of progressive mine closure activities.
3. The PP shall install the **Environmental Management Cell** headed by a dedicated **Environmental Engineer** exclusively to look after the effective Implementation of Environmental Management Plan besides the reviewing the compliance reports with the regulatory authorities.
4. The quarry management should maintain an **effective drainage system** in order to avoid Inrush of water during rainy season on to the benches. The PP shall ensure that the **Catch drains and siltation ponds** which have been constructed to arrest silt and sediment flows from soil, OB and mineral reject (stone waste) dumps are maintained properly. The water so collected in such sump should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly de-silted and maintained properly.

5. 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 PP 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.
6. 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.
7. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
8. The PP shall carry out the quarrying operations maintaining the bench height of 5m as per approved mine plan. Bench width should be at least 5m while working the benches. The slope angle of individual bench may be kept at 65° to 75° in general, but however the Ultimate pit slope angle should not be more than 45° while working of benches for the safety reasons.
9. The PP shall carry out the scientific studies to assess the slope stability of the proposed working benches/ quarry wall when the depth of the quarrying operation from the top of the hillock touches 30 m, by involving any of these reputed Research and Academic Institutions - Central Institute of Mining and Fuel Research (CIMFR) – Dhanbad / Nagpur, NIRM, IIT-Madras, NIT- Dept of Mining Engg. Surathkal, Anna University Chennai – CEG campus. A copy of such scientific study report shall be submitted to the AD (Geology & Mines), IRO/MoEF, Chennai, DMS-Chennai Region and the SEIAA-TN, Chennai. The report shall also cover the slope stability action plan incorporating haul road along with benches, for the proposed workings in the hilly terrain of the quarry.
10. The PP shall annually carry out a comprehensive hydrogeological study to evaluate the impact of quarrying on the surrounding water bodies, by involving any of these reputed Research and Academic institutions - Central Institute of

  
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Mining and Fuel Research (CIMFR) – Dhanbad / Nagpur, NIRM, IIT-Madras, NIT- Dept of Mining Engg. Surathkal, NIT Trichy, University of Madras, Anna University – CEG Campus. A copy of such scientific study report shall be submitted to the AD (Geology & Mines), the concerned DEE/TNPCCB, IRO/MoEF, Chennai and the SEIAA-TN, Chennai.

11. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCCB once in six months.
12. The PP shall carry out a comprehensive biodiversity study (flora & fauna) including soil health annually to evaluate the impact of quarrying on the surrounding environmental settings, by involving any of these reputed Research and Academic institutions - NEERI, TN Agricultural University/ Forest research institution, Central Institute of Mining and Fuel Research (CIMFR) – Dhanbad / Nagpur, Anna University-CEG, Guindy Campus. A copy of such scientific study report shall be submitted to the AD (Geology & Mines), the concerned DEE/TNPCCB, IRO/MoEF, Chennai and the SEIAA-TN, Chennai.
13. The PP shall ensure that the surface of the benches mined out is suitably vegetated in scientific manner with the native species to maintain the slope stability, prevent erosion and surface run off. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps.
14. The PP shall also carry out a comprehensive study on "Socio – Economic aspects of the proposed site", indicating the developmental activities to be undertaken to enhance the quality of life in the surrounding villages, within one year from the commencement of the quarrying operations by involving any of these reputed Research and Academic institutions - such as Madras School of Economics, Pondicherry University-Department of Social Work, IIT Madras - DoMS, NIT Trichy, Anna University Chennai - DoMS, Guindy Campus.
15. The PP shall carry out a study on "Impact of Climate Change on quarrying operation and flood control measures and Environmental Management" in the proposed site, indicating the mitigating measures during the development of the project, within one year from the commencement of the quarrying operations by involving any of these reputed Research and Academic institutions - Central Institute of Mining and Fuel Research (CIMFR) – Dhanbad,

Pondicherry University, IIT - Madras, NIT Trichy, NIT-Surathkal, Anna University Chennai - Centre for Climate Studies, CEG Campus etc.

16. The PP shall conduct the Occupational health survey for all the persons employed in the mine including contractual labours and maintain the record indicating the status of their health condition once in a year and a copy of report of the same shall be submitted to the DEE/TNPCB, IRO/MoEF Chennai, SEIAA and DMS, Chennai.
17. The PP shall carryout the studies pertaining to the Airborne Respirable Dust, Noise for the proposed mining operations and the Whole-Body Vibration (WBV) of the HEMMs used annually by involving a reputed Research and Academic Institution such as National Institute of Miners' Health - KGF, NIT Surathkal - Dept of Mining Engg. Anna University Chennai-CEG Campus, and any CSIR Laboratories etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance.
18. The PP shall ensure that all the persons employed directly by him/her in the mines as well as the contractual labours undergo the Initial / Periodical Vocational training on "Occupational Exposure to Dust, Noise and Vibration in Mines," in the Group Vocational Training Centre, Trichy (or) Pandalgudi before obtaining the CTO from TNPCB.
19. The Project Proponent shall prepare and submit an 'Action Plan' approved by the concerned AD/DD (Geology & Mines) for carrying out the quarrying operation through formation of the benches property of not more than 6 m in height, from top to downwards in the proposed quarry lease including the removal of weathered boulders lying over the sloping face before obtaining the CTO.
20. The proponent shall ensure that the transportation of the quarried materials shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried ROM ore; and transport of ROM ore will be as per IRC Guidelines with respect to complying with traffic congestion and density. Perennial maintenance of haulage

  
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road/village / Panchayat Road shall be carried out by the project proponent accordingly.

21. The quarrying activity shall be stopped if the entire quantity of ROM ore 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.
22. The Project Proponent shall abide by the annual production schedule 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.
23. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
24. Perennial sprinkling arrangement shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals and submit the consolidated report to TNPCB once in six months.
25. The Proponent shall ensure that the Noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures undertaken accordingly. The report on the periodic monitoring shall be submitted to TNPCB once in 6 months.
26. Proper barriers to reduce noise level and dust pollution should be established by maintaining greenbelt along the boundary of the quarrying site consistently and suitable working methodology to be adopted by considering the wind direction.
27. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated. In addition to improving the aesthetics, A wide range of indigenous plant species should be planted as given in the appendix in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of



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

28. Taller/one-year-old Saplings raised in appropriate size of bags, preferably eco-friendly bags should be planted in proper escapements as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
29. The Mine Manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
30. The PP shall send the notice of opening to the Director of Mines Safety, Chennai Region before obtaining the CTO from the TNPCB.
31. The PP shall carry out the shallow depth Jack hammer drilled holes (of 32-34 mm dia & 1.5 m depth) & NONEL initiation based controlled blasting operation involving pre-splitting technique and muffle blasting measures using old conveyor belts in the proposed quarry such that the blast-induced ground vibrations are controlled within the permissible limits as stipulated by the DGMS as well as no fly rock travel beyond 10 m from the blast site.
32. Within one year of the commencement of mining operations, the PP shall carry out the scientific studies on controlled blasting for reducing the impact of blast-induced ground/air vibrations and fly rock, by involving any of these reputed Research and Academic institutions - Central Institute of Mining and Fuel Research (CIMFR) - Dhanbad / Nagpur, NIRM, IIT-Madras, NIT- Dept of Mining Engg. Surathkal, Anna University Chennai - CEG campus such that the blasts are designed to be conducted by achieving the PPV triggered value at a distance of 1 km from the quarry, is not exceeding 2 mm/s and the copy of the above study report shall be submitted to the SEIAA, the concerned AD (Geology & Mines), the concerned DEE/TNPCB, MoEF-IRO, Chennai and the DMS, Chennai.
33. The PP shall submit the EMP for the entire life/lease of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.

  
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With the aforesaid conditions, the subcommittee opines the proposal for the grant of **ENVIRONMENTAL CLEARANCE** for the quarrying of Rough stone and Gravel over an extent of 2.07.21 Ha at S.F.Nos. 483/1A4B & 483/1A4C of Mecode Village, Thiruvattur Taluk, Kanniyakumari District Tamil Nadu by Tmt. Anitha Raja bai may be considered.

Details of the Quarry		Particulars
1	Name of the Owner/Firm	Tmt. Anitha Raja Bai W/o. Dhas No. 1/52A, Kadamalaikuntu Mekkamandapam Kanyakumari - 629166
2	Type of quarrying	Rough Stone & Gravel
3	S.F No. Of the quarry site with area break-up	483/1A4B and 483/1A4C
4	Village in which situated	Mecode
5	Taluk in which situated	Thiruvattar
6	District in which situated	Kanniyakumari
7	Extent of quarry (in ha.)	0.81.2Ha
8	Period of quarrying proposed	5 years
9	Type of mining	Opencast Mechanized Mining Method
10	Production (Quantity in m <sup>3</sup> )	As per the mining plan, the lease period is for 10 years & the mining plan is for 5 years. The production should not exceed 5,27,035m <sup>3</sup> of Rough stone & 43,730m <sup>3</sup> of gravel with ultimate depth of mining 42m above ground level (2m Gravel + 40m Rough Stone). The Annual peak production as per mining plan is 1,09,680m <sup>3</sup> of Rough stone (1 <sup>st</sup> year) & 24,806m <sup>3</sup> of gravel (1 <sup>st</sup> year).

11	Latitude & Longitude of all corners of the quarry site	08°19'13.7517" N to 08°19'18.3025"N 77°18'39.8976"E to 77°18'49.3160"E
12	Top Sheet No.	58- H/07
13	Man Power requirement:	41 Employees
14	Precise area communication approved by the Deputy Director with date	Rc. No. 22/G&M/2019 , dated: 30.05.2022
15	Mining Plan approved by the Deputy Director of Geology and Mining with date	Roc.No.22/G&M/2019 , dated: 06.06.2022
16	500m cluster letter by Deputy Director of Geology and Mining with date	Rc. No. 22/G&M/2019 , dated: 06.06.2022
17	Water requirement: 3. Drinking & domestic purposes (in KLD) 4. Dust suppression 5. Green Belt (in KLD)	2.7 KLD 0.6 KLD 0.6 KLD 1.5 KLD
18	Power requirement j. Domestic Purpose k. Industrial Purpose	TNEB 4,28,922 litres of HSD will be utilized for the first five years
19	Depth of quarrying	42m AGL
20	Depth of water table	58m in summer season -53m in rainy season.
21	Whether any habitation within 300m distance	No
22	Project Cost	Rs.1,38,46,000 Lakhs
23	EMP cost	Rs.122.78 Lakhs
24	CER cost	Rs.5 Lakhs
25	VAO letter dated	Letter dated:01.06.2022

  
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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 total excavation quantity of 5,27,035m<sup>3</sup> of Rough Stone and 43,730m<sup>3</sup> of Gravel not exceeding the annual peak production of 1,09,680m<sup>3</sup> of rough stone & 24,806m<sup>3</sup> of Gravel with maintaining an ultimate pit depth of 42m AGL 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 mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferrous Mines Regulations, 1961.
3. The PP shall inform the 'Notice of Opening' of the quarry to the Director of Mines Safety/Chennai Region before obtaining the CTO.
4. The Sub-committee has observed that the green belt is being developed on the Haulroad leading to the quarry site. However, it is recommended that the proponent shall maintain the green belt all around the boundary of the quarry site covering a width of 10 m during the quarrying operations.
5. The PP shall deliver proposed action plan for green belt development in the next five years such that it shall be maintained in 33 % of the overall project area and accordingly the plantation shall be carried out in a phase manner as a part of progressive mine closure activities.
6. The PP shall install the Environmental Management Cell headed by a dedicated Environmental Engineer exclusively to look after the effective implementation of Environmental Management Plan besides the reviewing the compliance reports with the regulatory authorities.
7. The quarry management should maintain an effective drainage system in order to avoid inrush of water during rainy season on to the benches. The PP shall ensure that the Catch drains and siltation ponds which have been constructed to

arrest silt and sediment flows from soil. OB and mineral reject (stone waste) dumps are maintained properly. The water so collected in such sump should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly de-silted and maintained properly.

8. 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 PP 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.
9. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
10. The Project Proponent shall ensure that the funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year-wise expenditure should be reported to the MoEF & CC Ministry and its Integrated Regional Office (IRO) located in Chennai.
11. The PP shall carry out the quarrying operations maintaining the bench height of 5m as per approved mine plan. Bench width should be at least 5m while working the benches. The slope angle of individual bench may be kept at 65° to 75° in general, but however the Ultimate pit slope angle should not be more than 45° while working of benches for the safety reasons.
12. The PP shall carry out the scientific studies to assess the slope stability of the proposed working benches/ quarry wall when the depth of the quarrying operation from the top of the hillock touches 30 m, by involving any of these reputed Research and Academic institutions - Central Institute of Mining and Fuel Research (CIMFR) - Dhanbad / Nagpur, NIRM, IIT-Madras, NIT- Dept of Mining Engg, Surathkal, Anna University Chennai - CEG campus. A copy of such scientific study report shall be submitted to the AD (Geology & Mines), IRO/MoEF, Chennai, DMS-Chennai Region and the SEIAA-TN, Chennai. The report shall also cover the slope stability action plan incorporating haul road along with benches, for the proposed workings in the hilly terrain of the quarry.

  
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13. The PP shall annually carry out a comprehensive hydrogeological study to evaluate the impact of quarrying on the surrounding water bodies, by involving any of these reputed Research and Academic institutions - Central Institute of Mining and Fuel Research (CIMFR) - Dhanbad / Nagpur, NIRM, IIT-Madras, NIT- Dept of Mining Engg. Surathkal, NIT Trichy, University of Madras, Anna University - CEG Campus. A copy of such scientific study report shall be submitted to the AD (Geology & Mines), the concerned DEE/TNPCB, IRO/MoEF, Chennai and the SEIAA-TN, Chennai.
14. Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB once in six months.
15. The PP shall carry out a comprehensive biodiversity study (flora & fauna) including soil health annually to evaluate the impact of quarrying on the surrounding environmental settings, by involving any of these reputed Research and Academic institutions - NEERI, TN Agricultural University/ Forest research institution, Central Institute of Mining and Fuel Research (CIMFR) - Dhanbad / Nagpur, Anna University-CES, Guindy Campus. A copy of such scientific study report shall be submitted to the AD (Geology & Mines), the concerned DEE/TNPCB, IRO/MoEF, Chennai and the SEIAA-TN, Chennai.
16. The PP shall ensure that the surface of the benches mined out is suitably vegetated in scientific manner with the native species to maintain the slope stability, prevent erosion and surface run off. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps.
17. The PP shall also carry out a comprehensive study on "Socio - Economic aspects of the proposed site", indicating the developmental activities to be undertaken to enhance the quality of life in the surrounding villages, within one year from the commencement of the quarrying operations by involving any of these reputed Research and Academic Institutions - such as Madras School of Economics, Pondicherry University-Department of Social Work, IIT Madras - DoMS, NIT Trichy, Anna University Chennai - DoMS, Guindy Campus.
18. The PP shall carry out a study on "Impact of Climate Change on quarrying operation and flood control measures and Environmental Management" in the proposed site, indicating the mitigating measures during the development of the project, within one year from the commencement of the quarrying operations

by involving any of these reputed Research and Academic institutions - Central Institute of Mining and Fuel Research (CIMFR) - Dhanbad, Pondicherry University, IIT - Madras, NIT Trichy, NIT-Surathkal, Anna University Chennai - Centre for Climate Studies, CEG Campus etc.

19. The PP shall conduct the Occupational health survey for all the persons employed in the mine including contractual labours and maintain the record indicating the status of their health condition once in a year and a copy of report of the same shall be submitted to the DEE/TNPCB, IRO/MoEF Chennai, SEIAA and DMS, Chennai.
20. The PP shall carryout the studies pertaining to the Airborne Respirable Dust, Noise for the proposed mining operations and the Whole-Body Vibration (WBV) of the HEMMs used annually by involving a reputed Research and Academic Institution such as National Institute of Miners' Health - KGF, NIT Surathkal - Dept of Mining Engg, Anna University Chennai-CEG Campus, and any CSIR Laboratories etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance.
21. The PP shall ensure that all the persons employed directly by him/her in the mines as well as the contractual labours undergo the Initial / Periodical Vocational training on "Occupational Exposure to Dust, Noise and Vibration In Mines," in the Group Vocational Training Centre, Trichy (or) Pandalgudi before obtaining the CTO from TNPCB.
22. The Project Proponent shall prepare and submit an 'Action Plan' approved by the concerned AD/DD (Geology & Mines) for carrying out the quarrying operation through formation of the benches properly of not more than 6 m in height, from top to downwards in the proposed quarry lease including the removal of weathered boulders lying over the sloping face before obtaining the CTO.
23. The proponent shall ensure that the transportation of the quarried materials shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried ROM ore; and transport of

  
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- ROM ore will be as per IRC Guidelines with respect to complying with traffic congestion and density. Perennial maintenance of haulage road/village / Panchayat Road shall be carried out by the project proponent accordingly.
24. The quarrying activity shall be stopped if the entire quantity of ROM ore 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.
25. The Project Proponent shall abide by the annual production schedule 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.
26. The Project Proponent shall send a copy of the clearance letter marked to concerned Panchayat from whom any suggestion/representation has been received while processing the proposal.
27. Perennial sprinkling arrangement shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals and submit the consolidated report to TNPCB once in six months.
28. The Proponent shall ensure that the Noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures undertaken accordingly. The report on the periodic monitoring shall be submitted to TNPCB once in 6 months.
29. Proper barriers to reduce noise level and dust pollution should be established by maintaining greenbelt along the boundary of the quarrying site consistently and suitable working methodology to be adopted by considering the wind direction.
30. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated. In addition to improving the aesthetics, A wide range of indigenous plant species should be planted as given in the appendix in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of



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

31. Taller/one-year-old Saplings raised in appropriate size of bags, preferably eco-friendly bags should be planted in proper escapements as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
32. The Mine Manager and other statutory competent persons such as blaster (or) mine mate shall be appointed before the commencement of mining operation as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
33. The PP shall send the notice of opening to the Director of Mines Safety, Chennai Region before obtaining the CTO from the TNPCB.
34. The PP shall carry out the shallow depth Jack hammer drilled holes (of 32-34 mm dia & 1.5 m depth) & NONEL initiation based controlled blasting operation involving pre-splitting technique and muffle blasting measures using old conveyor belts in the proposed quarry such that the blast-induced ground vibrations are controlled within the permissible limits as stipulated by the DGMS as well as no fly rock travel beyond 10 m from the blast site.
35. Within one year of the commencement of mining operations, the PP shall carry out the scientific studies on controlled blasting for reducing the impact of blast-induced ground/air vibrations and fly rock, by involving any of these reputed Research and Academic Institutions - Central Institute of Mining and Fuel Research (CIMFR) - Dhanbad / Nagpur, NIRM, IIT-Madras, NIT- Dept of Mining Engg, Surathkal, Anna University Chennai - CEG campus such that the blasts are designed to be conducted by achieving the PPV triggered value at a distance of 1 km from the quarry, is not exceeding 2 mm/s and the copy of the above study report shall be submitted to the SEIAA, the concerned AD (Geology & Mines), the concerned DEE/TNPCB, MoEF-IRO, Chennai and the DMS, Chennai.
36. The PP shall submit the EMP for the entire life/lease of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
37. As accepted by the Project proponent the CER cost is Rs.5,00,000 lakhs and the amount shall be spent for the Government Primary school, Mugilangarai, Macode Village, Kanniyakumari District as committed, before obtaining CTO from TNPCB.

  
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### ANNEXURE-1

1. The proponent shall mandatorily appoint the required number of statutory officials and the competent persons in relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
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 i.e. quantum of mineral, waste, overburden, interburden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form of Short Term Permit (STP), Query license or any other name.
5. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
6. The proponent shall ensure that the slope of dumps is suitably vegetated in scientific manner with the native species to maintain the slope stability, prevent erosion and surface run off. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps.

7. Perennial sprinkling arrangement shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals and submit the consolidated report to TNPCB once in six months.
8. The Project Proponent shall carry out slope stability study by a reputed academic/research Institution such as NIRM, IIT, Anna University for evaluating the safe slope angle if the proposed dump height is more than 30 meters. The slope stability report shall be submitted to concerned Regional office of MoEF&CC, Govt. of India, Chennai as well as SEIAA, Tamilnadu.
9. The Proponent shall ensure that the Noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures undertaken accordingly. The report on the periodic monitoring shall be submitted to TNPCB once in 6 months.
10. Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology to be adopted by considering the wind direction.
11. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
12. Taller/one year old Saplings raised in appropriate size of bags, preferably eco-friendly bags should be planted in proper escapements as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.

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

17. The proponent shall ensure that the transportation of the quarried materials shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried rough stones; and transport of rough stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
18. To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
19. After mining operations are completed, the mine closure activities as indicated in the mine closure plan shall be strictly carried out by the Proponent fulfilling the necessary actions as assured in the Environmental Management Plan.
20. The Project proponent shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition that is fit for the growth of fodder, flora, fauna etc.
21. The Project Proponent shall comply with the provisions of the Mines Act, 1952, MMR 1961 and Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
22. The project proponent shall ensure that the provisions of the MMRD, 1956, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are 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.
23. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCCB) and the Director of Mines Safety (DMS), Chennai Region by the proponent without fail.

  
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24. The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
25. Prior clearance from Forestry & Wild Life including clearance from committee of the National Board for Wildlife as applicable shall be obtained before starting the quarrying operation, if the project site attracts the NBWL clearance, as per the existing law from time to time.
26. All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the Precise area communication letter issued by concerned District Collector should be strictly followed.
27. The mining lease holders shall, after ceasing mining operations, undertake 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.
28. The Project proponent shall install a Display Board at the entrance of the mining lease area/abutting the public Road, about the project information as shown in the Appendix -II of this minute.

  
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**Appendix -I**  
**List of Native Trees Suggested for Planting**

No	Scientific Name	Tamil Name	Tamil Name
1	<i>Apple malabarica</i>	Vilvam	அப்பளம்
2	<i>Adenanthera pavonina</i>	Marjachi	மார்ச்சி, மாமாத்தாத்தாணி
3	<i>Albizia lebbek</i>	Vangai	வாங்கை
4	<i>Albizia amara</i>	Usil	உசில்
5	<i>Bauhinia purpurea</i>	Mantharai	மந்தாரை
6	<i>Bauhinia racemosa</i>	Aathi	அத்தி
7	<i>Bauhinia tomentosa</i>	Iruvathi	இருவத்தி
8	<i>Buchanania axillaris</i>	Kattuma	கட்டும்மா
9	<i>Boronia flabellifer</i>	Panni	பாணி
10	<i>Butea monoperma</i>	Marukkamarum	மருக்கமரம்
11	<i>Bobax oboia</i>	Ilavu, Sevvilavu	இலாவு
12	<i>Catophyllum inophyllum</i>	Pungai	புங்கை
13	<i>Cassia fistula</i>	Sarakondrai	சரகண்டரை
14	<i>Cassia torburchii</i>	Sengondrai	செங்கண்டரை
15	<i>Oloroxylon asiatica</i>	Parasamaram	பாரசமரம்
16	<i>Cochlospermum religiosum</i>	Kongu, Marjallavu	காங்கு, மார்ஜல்லாவு
17	<i>Cordia dichotoma</i>	Nannoli	நாந்லி
18	<i>Crotola adansonii</i>	Mavalingum	மாவுலிங்கம்
19	<i>Dillenia indica</i>	Uva, Uzha	உவா
20	<i>Dillenia pentagyna</i>	SivaUva, Sitrazha	சிவா உவா
21	<i>Diospyros sebottiana</i>	Karungali	காருங்கலி
22	<i>Diospyros schloroxylon</i>	Vaganai	வாغانை
23	<i>Ficus amplissima</i>	Kallitchi	காலித்தி
24	<i>Hibiscus tiliaceus</i>	Aatrupoovarasu	அத்தரூபுவாரசு
25	<i>Hardwickia binata</i>	Acha	அச்சா
26	<i>Holoptelia integrifolia</i>	Aayili	அயிலி, அயிலி
27	<i>Lannea coromandelica</i>	Ochiyan	அச்சியன்
28	<i>Lagerstromia speciosa</i>	Poo Marudhu	பூ மரூதூ
29	<i>Leprosanthus tetraphylla</i>	Neikottalmaran	நைகொட்டாமரம்
30	<i>Limonis acidissima</i>	Vila maram	வில்லாமரம்
31	<i>Litsea glutinosa</i>	Pisinpattai	பிசின்பட்டை
32	<i>Madhuca longifolia</i>	Iluppi	இலுப்பி
33	<i>Mankania hexandra</i>	UlakkalPaalai	உலக்கல்பாலை
34	<i>Mimusops elengi</i>	Magizhamaram	மாழிசாமரம்
35	<i>Mitragyna parvifolia</i>	Kadambu	கடம்பு
36	<i>Morinda pubescens</i>	Nura	நூரா
37	<i>Morinda citrifolia</i>	Vellai Nura	வெலை நூரா
38	<i>Phoenix sylvestris</i>	Eechai	ஏச்சை
39	<i>Pongamia pinnata</i>	Pungam	புங்கம்

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40	<i>Premna mollissima</i>	Mumrai	முல்லை
41	<i>Premna serratifolia</i>	Narimanur	நரி முல்லை
42	<i>Premna tomentosa</i>	Mahipootaram	மலை முல்லை
43	<i>Prosopis cinerea</i>	Vanni maran	வானி மரம்
44	<i>Pterocarpus marsupium</i>	Vengai	வேங்கை
45	<i>Pterospermum canescens</i>	Vennangu, Tada	வேண்டி
46	<i>Pterospermum xylocarpum</i>	Polavu	பொலவு
47	<i>Pithecolobium roxburghii</i>	Karpala	கர்பலா
48	<i>Salodora persica</i>	Uga Maran	உகா மரம்
49	<i>Sapindus emarginatus</i>	Mampungan, Soanikai	மம்புளா, சோனிகை
50	<i>Sarcococca</i>	Asoca	அசோகா
51	<i>Strobilus asper</i>	Piray maran	பிராய் மரம்
52	<i>Strychnos nuxvomica</i>	Yetti	யெட்டி
53	<i>Strychnos potatorum</i>	Therhang Kottai	தேரங்க கோட்டை
54	<i>Syzygium cumini</i>	Neval	நெவல்
55	<i>Terminalia bellerica</i>	Thenda	தெண்டா
56	<i>Terminalia arjuna</i>	Ven marudhu	வேன் மரூது
57	<i>Toona ciliata</i>	Sandhara vembu	சாந்தாரா வெம்பு
58	<i>Thespesia populnea</i>	Puvrasu	புவராசு
59	<i>Walscratrifoliata</i>	valara	வாலரா
60	<i>Wrightia tinctoria</i>	Veppalai	வேப்பலை
61	<i>Pithecolobium dulce</i>	Kodikkapuli	கொடிகாபுலி

  
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