

STATE EXPERT APPRAISAL COMMITTEE – TAMIL NADU

Minutes of 362nd meeting of the State Expert Appraisal Committee (SEAC) held on 13.3.2023 (Monday) at SEIAA Conference Hall, 2nd Floor, Panagal Maligai, Saidapet, Chennai 600 015 for consideration of Building Construction Projects & Mining Projects

Agenda No: 362-01

File No: 9545/2022)

Proposed Rough stone & Gravel quarry lease over an extent of 0.92.31 Ha in S.F.No. 242/1A1A, 246/1B, 2461C2, 246/1K1, 247/2A2A, 247/2A2B and 247/2A2C1 Polipakkam Village of Sholinghur Taluk, Ranipet District, Tamil Nadu by Thiru A.M.Krishnan- For Environmental Clearance.

(SIA/TN/MIN/403596/2022 Dated: 18.10.2022)

The proposal was placed for appraisal in this 362nd meeting of SEAC held on 10.03.2023. 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 A.M.Krishnan has applied for Environmental Clearance for the Proposed Rough stone & Gravel quarry lease over an extent of 0.92.31 Ha in S.F.No. 242/1A1A, 246/1B, 2461C2, 246/1K1, 247/2A2A, 247/2A2B and 247/2A2C1 Polipakkam Village of Sholinghur Taluk, Ranipet 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.

| Sl. No. | Details of the Proposal | |
|---------|---|--|
| 1. | Name of the Owner / Firm | Thiru A.M.Krishnan S/o Mani No 11/91A, Anna Nagar Polipakkam Village & Post Sholinghur Taluk Ranipet District |
| 2. | Type of quarrying (savudu / Rough stone / Sand / Granite) | Rough Stone and Gravel |
| 3. | S.F No. of the quarry site | 242/1A1A, 246/1B, 2461C2, 246/1K1, 247/2A2A, 247/2A2B and 247/2A2C1 |


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| 4. | Village | Polipakkam |
| 5. | Taluk | Sholinghur |
| 6. | District | Ranipet |
| 7. | Extent of Quarry (in ha.) | 0.92.31 Ha Patta land |
| 8. | Period of Quarrying proposed | 5 Years |
| 9. | Type of Mining | Open Cast – Mechanized Mining |
| 10. | Production (Quantity in m ³) | <p>As per the approved mining plan,</p> <p>Geological reserves: 2,30,600m³ of Rough stone and 18,448 m³ of Gravel to the ultimate depth of 27m BGL</p> <p>5-year Production: 53,236m³ of Rough stone and 638 m³ of Gravel.</p> <p>The annual peak production as per mining plan is 11,630 cu.m of Rough Stone</p> |
| 11. | Ultimate Depth of Mining | 27 m Below Ground Level |
| 12. | Latitude & Longitude of all corners of the quarry site | 13°03'03.49" N to 13°03'06.78" N 79°28'50.23" E to 79°28'55.16" E |
| 13. | Topo sheet No. | 57-0/08 |
| 14. | Man power requirement | 18 Nos |
| 15. | Precise Area Communication | Rc.No./104/2020(Mines) Dated 22.07.2022 |
| 16. | Mining plan approval letter | Rc.No./104/2020(Mines) Dated 05.08.2022 |
| 17. | 500m letter | Rc.No./104/2020(Mines) Dated 05.08.2022 |
| 18. | Water requirement: 1. Drinking & domestic purposed (in KLD) 2. Dust Suppression (in KLD) & Green Belt (in KLD) | 2.0 KLD 1.00KLD 1.00KLD |
| 19. | Power requirement: a. Domestic purpose b. Industrial Purpose | TNEB 42702 liters of HSD for entire life of mine |
| 20. | Depth of Water table | 53m |
| 21. | Whether any habitation within 300m distance | Nil |
| 22. | Project cost | Rs. 34,03,860/- |
| 23. | Total EMP cost for 5 years | Rs 24,16,360/- |
| 24. | CER cost | Rs. 5.0 lakh |
| 25. | VAO letter dated | 06.08.2022 |

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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 a total excavation quantity of 53,236 m³ of Rough stone and 638 m³ of Gravel to an ultimate depth of 27 m Below Ground Level and however the annual peak production shall not exceed 11,630 m³ 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 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 by appointing required statutory personnel and get the necessary statutory permission in accordance with the Reg. 3 of MMR 1961 before obtaining the CTO.
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, Salem.
4. 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.
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 benches made in this quarry during 3rd year of operation, by involving a reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research (CIMFR) Dhanbad,

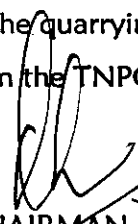

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NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal and Anna University – CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance.

7. Since few structures are located at a distance of 300-400m, the Project Proponent shall carry out the scientific studies on 'Impacts of the blasting operations carried out in the quarry on the surrounding villages and the prominent structures such as blast-induced ground/air vibrations and fly rock', within one year of the commencement of mining operations, 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.
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 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.
10. 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.
11. The Project Proponent shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman directly employed by him as per the provisions of MMR 1961.
12. 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.


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13. 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.
14. 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.
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. 5.0 lakh** and the amount shall be spent for the activities committed during SEAC appraisal before obtaining CTO from TNPCB.

Agenda No: 362-02

File No: 9552/2022)

Proposed Rough stone & Gravel quarry lease over an extent of 2.69.50 Ha in S.F.No. 1/1, 1/5 & 1/6 Nallamur Village of Maduranthagam Taluk, Chengalpattu District, Tamil Nadu by Thiru P. Lingaraj - For Environmental Clearance.

(SIA/TN/MIN/404977/2022 Dated: 03.11.2022)

The proposal was placed for appraisal in this 362nd meeting of SEAC held on 10.03.2023. 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 P. Lingaraj has applied for Environmental Clearance for the Proposed Rough stone & Gravel quarry lease over an extent of 2.69.50 Ha in S.F.No. 1/1, 1/5 & 1/6 Nallamur Village of Maduranthagam Taluk, Chengalpattu District, Tamil Nadu.


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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.

| Sl. No. | Details of the Proposal | |
|---------|---|--|
| 1. | Name of the Owner / Firm | Thiru P. Lingaraj S/o.Periyasamy, No.1, Kamatchi Nagar, Pallavaram, Old Pallavram, Kanchipuram District - 600117 |
| 2. | Type of quarrying (savudu / Rough stone / Sand / Granite) | Rough Stone and Gravel |
| 3. | S.F No. of the quarry site | 1/1, 1/5 & 1/6 |
| 4. | Village | Nallamur |
| 5. | Taluk | Maduranthagam |
| 6. | District | Chengalpattu |
| 7. | Extent of Quarry (in ha.) | 2.69.50 |
| 8. | Life/lease period of Quarrying operation | 10 Years |
| 9. | Type of Mining | Opencast Semi mechanized mining method |
| 10. | Production (Quantity in m ³) | As per the approved mining plan, Geological reserves: 7,11,792m ³ of Rough stone and 51,392 m ³ of Gravel to the 30m BGL 5-year Production: 1,34,116 m ³ of Rough stone and 22,416 m ³ of Gravel The annual peak production as per mining plan is 28,220 m ³ of Rough Stone |
| 11. | Ultimate Depth of Mining | 30 m Below Ground Level |
| 12. | Latitude & Longitude of all corners of the quarry site | 12°24'59.41"N to 12°25'5.83"N 79°54'20.83"E to 79°54'29.23"E |
| 13. | Topo sheet No. | 57-P/15 |
| 14. | Man power requirement | 18 Nos |
| 15. | Precise Area Communication | Rc.No. 3383/ Mines/ 2022 Dated: 27.09.2022 |
| 16. | Mining plan approval letter | Rc.No. 3383/ Mines/ 2021 Dated: 26.10.2022 |
| 17. | 500m letter | Rc.No. 3383/ Mines/ 2021 Dated: 26.10.2022 |
| 18. | Water requirement: | 6.75 kLD |

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| | 3. Drinking & domestic purposed (in kLD) 4. Dust Suppression (in kLD) & Green Belt (in kLD) | 2.75 kLD 4.00 kLD |
| 19. | Power requirement: c. Domestic purpose d. Industrial Purpose | TNEB 111033 liters of HSD for entire life of mine |
| 20. | Depth of Water table | 50m – 55m |
| 21. | Whether any habitation within 300m distance | Nil |
| 22. | Project cost | Rs.1,47,73,450/- |
| 23. | Total EMP cost for 5 years | Rs 1,23,65,062/- |
| 24. | CER cost | Rs. 5.0 lakh |
| 25. | VAO letter dated | 03.11.2022 |

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 34,116 m³ of Rough stone and 22,416 m³ of Gravel to an ultimate depth of 30 m Below Ground Level and however, the annual peak production shall not exceed 28,220 m³ 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:**

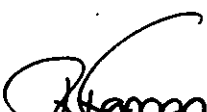
1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.
2. The PP shall ensure that the gravel produced during the quarry operations are exclusively used for reclamation activities and it shall be stored in a demarcated place within the mine lease area.
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 by appointing required statutory personnel and get the

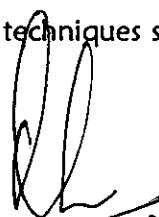

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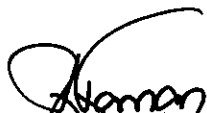
necessary statutory permission in accordance with the Reg. 3 of MMR 1961 before obtaining the CTO.


4. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Initial' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Salem (or) Trichy.
5. The Project Proponent shall furnish slope stability action plan to the concerned AD (Mines) for the proposed quarry working by maintaining appropriate benches incorporating the haul road with proper gradient and proposed amalgamation with neighbouring quarry, 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, 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.
7. Since few structures are existing at a distance of 470 m, the Project Proponent shall carry out the scientific studies on 'Cumulative Impacts of the blasting operations carried out in the cluster mines on the surrounding villages and the prominent structures such as blast-induced ground/air vibrations and fly rock' within one year of the commencement of mining operations, 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.
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.


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9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
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-JA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere EMP furnished.


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18. 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: 362-03

File No: 9559/2022)

Proposed Rough stone, Jelly & Gravel quarry lease over an extent of 1.57.0 Ha in S.F.No. 216/1, 216/2A1, 216/2A2A Kattukuthagai Karisalkulam Village of Kariyapatti Taluk, Virudhunagar District, Tamil Nadu by Thiru S. Gurusamy- For Environmental Clearance. (SIA/TN/MIN/405705/2022 Dated: 07.11.2022)

The proposal was placed for appraisal in this 362nd meeting of SEAC held on 10.03.2023. 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 S. Gurusamy has applied for Environmental Clearance for the Proposed Rough stone, Jelly & Gravel quarry lease over an extent of 1.57.0 Ha in S.F.No. 216/1, 216/2A1, 216/2A2A Kattukuthagai Karisalkulam Village of Kariyapatti Taluk, Virudhunagar 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.

| Sl. No. | Details of the Proposal | |
|---------|---|--|
| 1. | Name of the Owner / Firm | Thiru S. Gurusamy 753, K. Vilakku, Thummachinnampatti Post Aruppukottai Taluk Virudhunagar |
| 2. | Type of quarrying (savudu / Rough stone / Sand / Granite) | Rough stone, Jelly & Gravel |
| 3. | S.F No. of the quarry site | 216/1, 216/2A1, 216/2A2A |
| 4. | Village | Kattukuthagai Karisalkulam |
| 5. | Taluk | Kariyapatti |
| 6. | District | Virudhunagar |
| 7. | Extent of Quarry (in ha.) | 1.57.0 Ha |
| 8. | Period of Quarrying proposed | 5 Years |
| 9. | Type of Mining | Open Cast – Semi Mechanized Mining |

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| 10. | Production (Quantity in m ³) | As per the approved mining plan, Geological reserves: 3,75,000m ³ of Rough stone and 75,000 m ³ of Gravel to the 31m. 5-year Production: 70,000m ³ of Rough stone and 22,615 m ³ of Gravel The annual peak production as per mining plan is 20,300 m ³ of Rough Stone |
| 11. | Existing Depth of Mining | 6 m |
| 12. | Ultimate Depth of Mining | 31 m |
| 13. | Latitude & Longitude of all corners of the quarry site | 09°37'52.8" N to 09°37'55.4" N 78°04'50.1" E to 78°04'48.8" E |
| 14. | Topo sheet No. | 58-K/02 |
| 15. | Man power requirement | 10 Nos |
| 16. | Precise Area Communication | Rc.No.KVI/547/2022-Kanimam Dated 25.07.2022 |
| 17. | Mining plan approval letter | Roc.NoKVI/547/2022 Dated 26.08.2022 |
| 18. | 500m letter | Roc.NoKVI/547/2022 Dated 26.08.2022 |
| 19. | Water requirement: 5. Drinking & domestic purposed (in kLD) 6. Dust Suppression (in kLD) & Green Belt (in kLD) | 2.4 kLD 0.5kLD 1.9kLD |
| 20. | Power requirement: e. Domestic purpose f. Industrial Purpose | TNEB - |
| 21. | Depth of Water table | 45m-50m |
| 22. | Whether any habitation within 300m distance | Nil |
| 23. | Project cost | Rs. 37,02,050/- |
| 24. | Total EMP cost for 5 years | Rs 60,18,991 /- |
| 25. | CER cost | Rs. 5.0 lakh |
| 26. | VAO letter dated | 30.07.2022 |

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 70,000 m³ of Rough stone and 22,615 m³ of Gravel to an**


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ultimate depth of 31 m Below Ground Level and however, the annual peak production shall not exceed 20,300 m³ 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 PP shall construct an embankment having a base width of not less than 2 m and height of not less than 3 m with a proper garland drainage along the lease boundary directing towards the Gundar river along and the adequate plantation shall be made for preventing the soil erosion.
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 by appointing required statutory personnel and get the necessary statutory permission in accordance with the Reg. 3 of MMR 1961 before obtaining the CTO.
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, Pandalgudi (or) Trichy.
5. 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.
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. 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) during the 3rd year whichever is earlier, 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.

8. Within one year of the commencement of mining operations, the Project Proponent shall carry out the hydrological studies on 'Cumulative Impacts of the quarrying operations on the water bodies located in the surrounding villages', 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, University of Madras – Dept of Geology, and Anna University – CEG Campus – Dept of Geology. 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..
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 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.


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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 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.
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.
19. 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: 362-04

File No: 9567/2022)

Proposed Rough stone quarry lease over an extent of 1.21.5 Ha in S.F.No. 1579/2 Thimmarasanayakkanur Bit II Village of Andipatty Taluk, Theni District, Tamil Nadu by Thiru P. Mayandi - For Environmental Clearance.

(SIA/TN/MIN/406807/2022) Dated: 17.11.2022

The proposal was placed for appraisal in this 362nd meeting of SEAC held on 10.03.2023. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following:


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1. The project proponent, Thiru P. Mayandi has applied for Environmental Clearance for the Proposed Rough stone quarry lease over an extent of 1.21.5 Ha in S.F.No. 1579/2 Thimmarasanayakkanur Bit II Village of Andipatty Taluk, Theni 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.

Based on the presentation made by the proponent, the SEAC called for the following additional particulars from the PP.

- The PP shall furnish the certified compliance report obtained from MoEF&CC/TNPCB on the existing EC issued.
- Considering the presence of high wall on one side of the existing pit, the PP shall furnish revised mining quantity as suggested.
- The PP shall enumerate the structures belonging to the owner/not belonging to the owner at a radial distance of 100m, 150m, 200m, 250m, 300m from the lease boundary.

On receipt of the same the Committee will further deliberate and decide on future course of action.

Agenda No: 362 - 05

File No: 9532

Proposed Gravel quarry lease over an extent of 4.68.0ha in S.F. No. 24/2 (P) & 25/1B1C at Silambinathanpettai Village, Panruti Taluk, Cuddalore District Tamil Nadu by Tmt.P.Indira - For Environmental Clearance. (SIA/TN/MIN/401732/2022/dated 29.09.2022)

The proposal was placed in this 362nd SEAC meeting held on 13.03.2023. The project proponent has given a detailed presentation. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The project proponent gave detailed presentation.

SEAC noted the following:

1. The Project Proponent, Tmt.P.Indira has applied for Environmental Clearance for the proposed Gravel quarry lease over an extent of 4.68.0ha in S.F. No. 24/2 (P) & 25/1B1C at Silambinathanpettai Village, Panruti Taluk, Cuddalore


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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 Production for the three years states that total quantity should not exceed 1,29,589 m³ of Gravel for depth of mining 5m AGL.

During the presentation, SEAC noted that from the KML file uploaded by the proponent in PARIVESH portal, that the proposed site has been quarried up to a depth of 3m approximately. Further, the precise area communication letter and mine plan approval letter have not mentioned about the aforesaid excavated area. Hence, AD/Mines shall inspect the quarry site and give his comments on the existing site condition.

Agenda No:362 - 06

File No: 9565

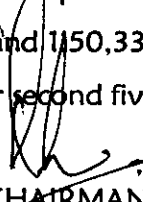
Proposed Rough Stone & Gravel quarry lease over an extent of 4.68.50ha in S.F. No. 735(P), 736(P), 737/3(P), 750/1(P), 2(P), 751/1, 2, 752/1, 2, 753/1, 2A, 2B & 754/1A(P), 1(B(P), 1C, 1D(P), 1E at Achchamdavilthan Village, Srivilliputhur Taluk, Virudhunagar District Tamil Nadu by Thiru. P.V.Lakshmi Narayanan - For Environmental Clearance. (SIA/TN/MIN/405908/2022/dated 11.11.2022)

The proposal was placed in this 362nd SEAC meeting held on 13.03.2023. The project proponent has given a detailed presentation. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The project proponent gave detailed presentation.

SEAC noted the following:

1. The Project Proponent, Thiru. P.V.Lakshmi Narayanan has applied for Environmental Clearance for the Rough Stone & Gravel quarry lease over an extent of 4.68.50ha in S.F. No. 735(P), 736(P), 737/3(P), 750/1(P), 2(P), 751/1, 2, 752/1, 2, 753/1, 2A, 2B & 754/1A(P), 1(B(P), 1C, 1D(P), 1E at Achchamsavilthan Village, Srivilliputhur Taluk, Virudhunagar 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 10 years and the mining for the entire period of first five years should not exceed 3,74,125m³ of Rough Stone and 1,50,330 m³ of Gravel up to 35m BGL and 2,67,575m³ of Rough Stone for second five years.


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The annual peak production is 91,375 cu. m of Rough Stone. The ultimate depth of mining is 45m BGL.

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

| Sl. No | Details of the Proposal | : | Data Furnished |
|--------|--|---|--|
| 1 | Name of the Owner/Firm | : | Thiru. P.V.Lakshmi Narayanan S/o, P. Venkatasamy, 1-1-92/5, Rice Mill Street, Lakshmipuram, Periyakulam Taluk, Theni District |
| 2 | Type of quarrying | : | Rough Stone and Gravel |
| 3 | S.F No. of the quarry site | : | 735(P), 736(P), 737/3(P), 750/1(P), 2(P), 751/1, 2, 752/1, 2, 753/1, 2A, 2B & 754/1A(P), 1(B(P), 1C, 1D(P), 1E |
| 4 | Village in which situated | : | Achchamdavilthan |
| 5 | Taluk in which situated | : | Srivilliputhur |
| 6 | District in which situated | : | Virudhunagar |
| 7 | Extent of quarry (in ha.) | : | 4.68.50 Ha |
| 8 | Latitude & Longitude of all corners of the quarry site | : | 09°26'05.8"N to 9°26'18.2"N 77°40'29.4"E to 77°40'33.0"E |
| 9 | Topo Sheet No. | : | 58-G/11 |
| 10 | Type of mining | : | Opencast Semi-Mechanised Mining |
| 11 | Period of quarrying proposed | : | 10 years |
| 12 | Production (Quantity in m ³) | : | First five years - 3,74,125m ³ of Rough Stone and 1,50,330 m ³ of Gravel. Second five years - 2,67,575m ³ of Rough Stone. |
| 13 | Ultimate Depth of quarrying | : | 45m BGL |
| 14 | Depth of water table | : | 50 - 55m BGL |
| 15 | Man Power requirement per day: | : | 25 Nos. |
| 16 | Water requirement: | : | 4.0 KLD |


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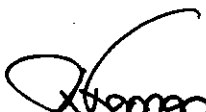
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| | | |
|----|---|---|
| | 1. Drinking & domestic purposes 2. Dust suppression 3. Green Belt | 1.0 KLD 1.5 KLD 1.5 KLD |
| 17 | Power requirement a. Domestic Purpose b. Industrial Purpose | : TNEB 1,75,779 Liters of HSD will be utilized for the five years. |
| 18 | Precise area communication approved by the District Collector, with date | : KV1/1175/2021, Dated: 20.09.2022 |
| 19 | Mining Plan approved by Deputy Director, Department of Geology and Mining with date | : KV1/1175/2021, Dated: 07.10.2022 |
| 20 | Deputy Director, Department of Geology and Mining 500m cluster letter | : KV1/1175/2021, Dated: 07.10.2022 |
| 21 | VAO certificate regarding 300m radius cluster | : Letter dated: 02.06.2022 |
| 22 | Project Cost (excluding EMP cost) | : Rs. 2,49,30,650/- |
| 23 | EMP cost | : Capital Cost - Rs. 30,18,000 Recurring Cost – Rs. 24,60,000 |
| 24 | CER cost | : Rs. 5,00,000 |

The proposal is now placed in the 362nd SEAC meeting held on 13.03.2023. Based on the presentation and documents furnished by the project proponent, SEAC noted that a **W.P. (MD) No. 1593 of 2023** is pending with **Madurai Bench of Madras High Court** and decided to recommend the proposal for the grant of **Environmental Clearance** subject to the outcome of the above mentioned **Writ Petition** for an ultimate depth of mining up to 45m BGL and the production of 3,74,125m³ of Rough Stone and 1,50,330 m³ of Gravel for first five years and 2,67,575m³ of Rough Stone for second five years. However, the annual peak production shall not exceed 91,375 m³ 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:

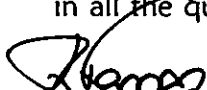
1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining


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plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier.

2. 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 by appointing required statutory personnel and get the necessary statutory permission in accordance with the Reg. 3 of MMR 1961 before obtaining the CTO.
3. The PP shall ensure that all the statutory competent persons and non-statutory workmen are undergone the 'Initial' training under Mines Vocational Training Rules 1961 in Group Vocational Training Centre, Pandalgudi (or) Trichy.
4. 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.
5. 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.
6. 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.
7. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
8. 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.
9. 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


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when the depth of the working touches 30 m (or) during the 3rd year whichever is earlier, 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.

10. Since few structures such as bus-stop are located within 300 m, The PP shall carry out ONLY ONE round of controlled blast per day, restricted to the maximum of 40 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.
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 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. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
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 in accordance with 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 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 including the bus-stop & Ash-brick Plant, from the boundary of the quarry.
16. The PP shall ensure that the sentries are posted at the either side of the highway / road to prevent the entry/presence of the persons at the time of the blasting and shall submit a Standard Operating Procedures (SOP) accordingly prepared for the blasting operation to the AD (Mines) & DEE/TNPCB before obtaining the CTO.
17. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
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 Government Middle School, Akaraipatti as committed, before obtaining CTO from TNPCB.

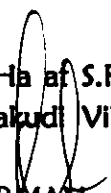
Agenda No: 362-07

(File No: 9547/2022)

Proposed Rough Stone & Gravel quarry Lease over an extent of 0.94.5 Ha at S.F.No. 539/23A, 539/23B, 539/23C, 539/23D, 539/23E & 537/6 in Lembalakudi Village,


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Thirumayam Taluk, Pudukottai District, Tamil Nadu by Thiru.N.Ananth – For Environmental Clearance (SIA/TN/MIN/405487/2022 dated 05.11.2022)

The proposal is placed for appraisal in this 362nd SEAC meeting held on 13.03.2023. 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.N.Ananth** has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry Lease over an extent of 0.94.5 Ha at S.F.No. 539/23A, 539/23B, 539/23C, 539/23D, 539/23E & 537/6 in Lembalakudi Village, Thirumayam Taluk, Pudukottai 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:

| Sl. No | Details of the Proposal | Data Furnished |
|--------|--|--|
| 1 | Name of the Owner/Firm | Thiru.N. Ananth, S/o. Nagari Devar, No.4/161, Keela Street. Lembalakudi Post, Thirumayam Taluk, Pudukkottai District – 622 412. |
| 2 | Type of quarrying (Savudu/Rough Stone/Sand/Granite) | Rough Stone & Gravel Quarry |
| 3 | S.F No. Of the quarry site | 539/23A, 539/23B, 539/23C, 539/23D, 539/23E & 537/6 |
| 4 | Village in which situated | Lembalakudi |
| 5 | Taluk in which situated | Thirumayam |
| 6 | District in which situated | Pudukkottai |
| 7 | Extent of quarry (in ha.) | 0.94.5 ha (Patta Land) |
| 8 | Latitude & Longitude of all corners of the quarry site | 10°17'15.9188"N to 10°17'15.5081"N 78°44'14.8017"E to 78°44'10.2754 "E |
| 9 | Topo Sheet No. | 58 J/11 |
| 10 | Type of mining | Opencast Semi-Mechanized Mining |
| 11 | Lease Period of quarrying proposed | 5 years |
| 12 | Production (Quantity in m ³) | 77,255m ³ of rough stone, 4936 m ³ of weathered rock & 5292m ³ of gravel |


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| | | |
|----|--|--|
| 13 | Ultimate Depth of Mining | 34m Below Ground Level |
| 14 | Depth of water table | 55m Below Ground Level |
| 15 | Man Power requirement per day: | 18 Nos. |
| 16 | Water requirement: | 1.81 KLD |
| | 1. Drinking & domestic purposes | 0.81 KLD |
| | 2. Dust suppression | 0.50 KLD |
| | 3. Green Belt | 0.50 KLD |
| 17 | Power requirement | 62,688 litres of HSD for the entire project life |
| 18 | Precise area communication approved by the Assistant Director, Dept. of Geology & Mining with date | Rc.No.376/2022(G&M) Dated: 07.07.2022. |
| 19 | Mining Plan approved by the Assistant Director, Dept. of Geology and Mining with date | Rc.No.376/2022(G&M) Dated: 27.07.2022. |
| 20 | 500m cluster letter issued by the Assistant Director, Dept. of Geology and Mining with date | Rc.No.376/2022(G&M) Dated: 26.07.2022. |
| 21 | VAO certificate regarding habitations in 300m radius | 18.08.2022. |
| 22 | Project Cost (excluding EMP) | Rs.41,88,000/- |
| 23 | EMP cost | Capital Cost: Rs.8,06,000/- Recurring Cost: Rs.9,46,740/- |

The Committee, taking into consideration the safety aspects, decided to recommend the proposal for the grant of Environmental Clearance for the revised bench height and revised quantity as follows:

| YEARWISE DEVELOPMENT AND PRODUCTION | | | | | | | | | |
|-------------------------------------|---------|-------|-------|-------|-------|--------------|-----------------------------------|----------------------|--------------|
| YEAR | Section | Bench | L (m) | W (m) | D (m) | Volume In m3 | Recoverable Reserves in m3 @ 100% | Weathered Rock in m3 | Gravel in m3 |
| I- YEAR | XY-AB | I | 42 | 53 | 2 | | | | 4452 |
| | | II | 42 | 49 | 2 | | | 4116 | |
| | | III | 42 | 45 | 5 | 9450 | 9450 | | |
| | XY-CD | I | 35 | 12 | 2 | | | | 840 |
| | | II | 41 | 10 | 2 | | | 820 | |

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| | | | | | | | | | |
|--------------|-------|-------|----|----|-------|-------|-------|------|------|
| | | III | 39 | 8 | 5 | 1560 | 1560 | | |
| | | TOTAL | | | | 11010 | 11010 | 4936 | 5292 |
| II- YEAR | XY-AB | IV | 47 | 35 | 5 | 8225 | 8225 | | |
| | | V | 42 | 25 | 5 | 5250 | 5250 | | |
| | XY-CD | IV | 56 | 1 | 5 | 280 | 280 | | |
| | | TOTAL | | | | 13755 | 13755 | | |
| III- YEAR | XY-CD | V | 60 | 57 | 5 | 17100 | 17100 | | |
| | | TOTAL | | | | 17100 | 17100 | | |
| IV- YEAR | XY-AB | VI | 37 | 15 | 5 | 2775 | 2775 | | |
| | XY-CD | VI | 55 | 47 | 5 | 12925 | 12925 | | |
| | | TOTAL | | | | 15700 | 15700 | | |
| V- YEAR | XY-AB | VII | 32 | 1 | 5 | 160 | 160 | | |
| | | VIII | 27 | 1 | 5 | 135 | 135 | | |
| | | IX | 22 | 1 | 5 | 110 | 110 | | |
| | XY-CD | VII | 50 | 37 | 5 | 9250 | 9250 | | |
| | | VIII | 45 | 27 | 5 | 6075 | 6075 | | |
| | | IX | 40 | 17 | 5 | 3400 | 3400 | | |
| | | TOTAL | | | | 19130 | 19130 | | |
| GRAND TOTAL | | | | | 76695 | 76695 | 4936 | 5292 | |


As per the revised mining plan, the production quantity is **76,695m³ of rough stone recoverable, 4936m³ of weathered rock & 5292m³ of gravel** for an ultimate depth of 34m below ground level.

SEAC decided to recommend the proposal for the grant of Environmental Clearance for the revised total production quantity of **76,695m³ of rough stone recoverable, 4936m³ of weathered rock & 5292m³ of gravel** with annual peak production capacity not exceeding 19,130m³ of rough stone for ultimate depth of 34m below ground level subject to the standard conditions as per the Annexure 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 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.
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 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 as the depth of the proposed quarry is exceeding 30 m, before obtaining CTO from TNPCB.
5. 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 working touches 30 m (or) within the commencement of two years of quarrying 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.
6. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
7. 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

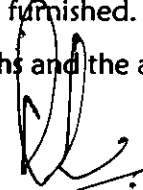

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and shall furnish the photographs showing the same before obtaining the CTO from TNPCB.

8. 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 m as it is designed to take care of run-off water (size, gradient and length).
9. Since the habitations are situated at a distance of 300 m from the quarry lease boundary, the PP shall obtain **necessary permission to carry out the blasting operation from the Director of Mines Safety, Chennai Region after executing the lease** under the provisions of MMR-1961 at the time of sending the 'Notice of Opening' and also to carry out the scientific studies on design of controlled blasting for reducing the impact of blast-induced ground/air vibrations and fly rock in the proposed quarry, **within six months** from the commencement of mining operations 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-CEG Campus, 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.
10. The PP shall furnish a Standard Operating Procedure for the safe method of carrying out the blasting operation to the concerned DEE/TNPCB before obtaining the CTO from the TNPCB.
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. **5 lakhs** and the amount


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shall be spent towards the Arangirampatti Government Primary School for the committed activities as committed, before obtaining CTO from TNPCB.

Agenda No: 362-08

(File No: 9569/2022)

Proposed Rough Stone & Gravel quarry Lease over an extent of 2.57.00 Ha at S.F.No. 12/2A, 12/2C1, 12/2C2, 13/1A1 & 13/2 in Nallamur Village, Madhuranthakam Taluk, Chengalpattu District, Tamil Nadu by Thiru.D.Rajapandian – For Environmental Clearance (SIA/TN/MIN/406458/2022 dated 15.11.2022)

The proposal is placed for appraisal in this 362nd SEAC meeting held on 13.03.2023. 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.D.Rajapandian has applied for Environmental Clearance for the Proposed Rough Stone & Gravel quarry Lease over an extent of 2.57.00 Ha at S.F.No. 12/2A, 12/2C1, 12/2C2, 13/1A1 & 13/2 in Nallamur Village, Madhuranthakam Taluk, Chengalpattu District, Tamil Nadu.
2. The project/activity is covered under Category “B2” of Item 1(a) “Mining Projects” of the Schedule to the EIA Notification, 2006.
3. The salient features of the project are as follows:

| Sl. No | Details of the Proposal | Data Furnished |
|--------|---|---|
| 1 | Name of the Owner/Firm | Thiru. D. Rajapandian, S/o. Dhanasekaran, No.7, Durai Raj Street, Devaraj Nagar, Saligramam, Chennai – 600 093. |
| 2 | Type of quarrying (Savudu/Rough Stone/Sand/Granite) | Rough Stone and Gravel Quarry |
| 3 | S.F No. Of the quarry site with area break-up | 12/2A, 12/2C1, 12/2C2, 13/1A1 and 13/2 |
| 4 | Village in which situated | Nallamur |
| 5 | Taluk in which situated | Madhuranthakam |
| 6 | District in which situated | Chengalpattu |
| 7 | Extent of quarry (in ha.) | 2.57.00 ha |


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| 8 | Latitude & Longitude of all corners of the quarry site | 12°25'03.57"N to 12°25'09.95"N 79°54'32.91"E to 79°54'44.74 "E |
| 9 | Topo Sheet No. | 57-P/15 |
| 10 | Type of mining | Opencast Mechanized Mining |
| 11 | Lease Period of quarrying proposed | 10 years |
| 12 | Production (Quantity in m ³) | 2,55,580 m ³ of Rough Stone, 19,316 m ³ of Weathered Rock and 59,706m ³ of Gravel |
| 13 | Ultimate Depth of Mining | 34m Below Ground Level |
| 14 | Depth of water table | 58m Below Ground Level |
| 15 | Man Power requirement per day: | 23 Nos. |
| 16 | Water requirement: 4. Drinking & domestic purposes 5. Dust suppression 6. Green Belt | 2.5 KLD 1.0 KLD 0.75 KLD 0.75 KLD |
| 17 | Power requirement | 81,785 litres of HSD for the entire project life |
| 18 | Precise area communication approved by the Assistant Director, Dept. of Geology & Mining with date | Rc.No.4104/Mines/2022, Dated: 07.10.2022. |
| 19 | Mining Plan approved by the Assistant Director(i/c), Dept. of Geology and Mining with date | Rc.No.4104/Mines/2022, Dated: 11.10.2022. |
| 20 | 500m cluster letter issued by the Assistant Director(i/c), Dept. of Geology and Mining with date | Rc.No.4104/Mines/2022, Dated: 11.10.2022. |
| 21 | VAO certificate regarding habitations in 300m radius | 11.10.2022. |
| 22 | Project Cost (excluding EMP) | Rs.69,92,000/- |
| 23 | EMP cost | Capital Cost: Rs.17,66,000/- Recurring Cost: Rs.20,44,400/- |

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 2,55,580 m³ of Rough Stone, 19,316 m³ of Weathered Rock and 59,706m³ of Gravel for an ultimate depth of 34m from ground level with annual peak production not exceeding 51,590m³ 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.

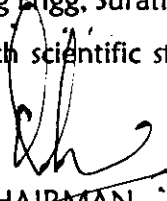
2. The PP shall inform the notice of opening of the quarry to the Director of Mines Safety (DMS)/Chennai Region and get the necessary statutory permission under the MMR 1961 before obtaining the CTO.
3. The mine manager and other statutory competent persons such as blaster (or) mine mate shall be appointed 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.


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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. Within one year 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 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 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 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


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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. 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 towards the Panchayat Union Primary School, Nallamur Village, Chengalpattu District for the committed activities as committed, before obtaining CTO from TNPCB.

Agenda No: 362-09

(File No: 9548/2022)

Proposed Rough stone & Gravel quarry lease over an extent of 1.40.86 Ha in SF. Nos. 473/1A2, 473/1B and 474/3D2 of Ayacode Village, Thiruvattar Taluk, Kanniyakumari District, Tamil Nadu by Thiru.N.Mathias - For Environmental Clearance.

(SIA/TN/MIN/405316/2022, Dt: 04.11.2022).

The proposal was placed in 362nd SEAC meeting held on 13.03.2023. 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.Mathias has applied for Environmental Clearance for the proposed Rough stone & Gravel quarry lease over an extent of 1.40.86Ha in S. F. Nos. 473/1A2, 473/1B and 474/3D2 of Ayacode 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 5 years. The mining plan is for the period of five years & the production should not exceed 98,040 m³ of Rough stone and 1230m³ of Gravel with an ultimate depth of mining is 41m (16m AGL + 25m BGL). The annual peak production is 20500m³ of Rough Stone (3rd year) and 1230 m³ of Gravel (1st year).

Based on the presentation and document furnished by the project proponent, SEAC noted certain noncompliance by the PP in the existing EC issued,. Hence, decided to seek the following details from the project proponent.

- (i) The PP shall complete fencing, tree plantation and the video proof of the same shall be submitted.


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- (ii) The PP shall complete installation of solar panels.
- (iii) The PP 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 reported to the MoEF& CC Ministry and its Integrated Regional Office (IRO) located in Chennai shall be furnished.
- (iv) The PP shall submit a copy of insurance scheme made for the employees.
- (v) The PP shall stipulate the proposed conservation measures for the sanctuary located nearby with the consultation of the concerned DFO.
- (vi) The PP shall submit the Slope Stability Action Plan approved by the concerned AD (Mines & Geology).

On receipt of the reply, the Committee will deliberate further and decide future course of action.

Agenda No: 362-10

(File No: 9555/2022)

Proposed ordinary earth quarry lease over an extent of 1.05.5 Ha at SF. No. 367(P) of Ervadi Village, Keelakarai Taluk, Ramanathapuram District, Tamil Nadu by Thiru. M.Nagarethinam- For Environmental Clearance. (SIA/TN/MIN/402659/2022, Dt: 12.10.2022).

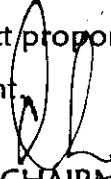
The proposal was placed in 362nd SEAC meeting held on 13.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Thiru. M.Nagarethinam has applied for Environmental Clearance for the proposed ordinary earth quarry lease over an extent of 1.05.5Ha in SF. No. 367(P) of Ervadi village, Keelakarai 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.
3. As per the mining plan the lease period is 1 year. The mining plan is for the period of one year & the production should not exceed 7616 m³ of ordinary earth with an ultimate depth of mining is 1.0m BGL.

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


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1. The kml file was unviewable. The PP shall upload the correct viewable kml file in Parivesh website.
2. The PP carry out the geological assessment to identify mineralization, to establish continuity, quality and quantity of mineral mineral deposit, particularly, the presence of heavy minerals in the Teri sand (red earth) such as ilmenite, rutile, lucoxene, garnet, monazite, zircon and sillimanite, etc. Hence the PP shall furnish the report through the systematic sampling in the proposed site with showing geological coordinates and the mineralogical analysis obtained as per the procedures laid in accordance with the provisions of Atomic Minerals Concessional Rules, 2016 through the laboratory of IREL (India) Limited, Research Centre, Beach Road, Kollam, Kerala.
3. The PP shall change all the documents from "Earth" to "Ordinary Earth" as per the TN G.O. (Ms). No.244, dated. 14.12.2022.
4. The proponent shall produce a letter from the Department of Geology and Mining stating that the location of quarry site does not lie adjoining to the rivers, streams, canals etc., and also does not come under any notified/declared protected zones in terms of the Hon'ble Madurai Bench of Madras High Court.

On receipt of the reply, the Committee will deliberate further and decide future course of action.

Agenda No: 362-11

(File No: 9562/2022)

Proposed Rough stone quarry lease over an extent of 1.56.5 Ha in SF. No. 252/3(Part) of T.Vengidapuram Village, Aravakurichi Taluk, Karur District, Tamil Nadu by Thiru.D.Elangovan - For Environmental Clearance. (SIA/TN/MIN/406363/2022, Dt: 14.11.2022).

The proposal was placed in 362nd SEAC meeting held on 13.03.2023. 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.D.Elangovan has applied for Environmental Clearance for the proposed Rough stone quarry lease over an extent of 1.56.5Ha in SF. No. 252/3(Part) of T.Vengidapuram Village, Aravakurichi Taluk, karur District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining


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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 1,17,486m³ of Rough stone with an ultimate depth of mining is 35m BGL. The annual peak production is 23696 m³ of Rough Stone (1st year).

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

- (i) The PP shall furnish certified compliance report for the previous EC.
- (ii) The PP shall complete EC conditions like, fencing, tree plantation and garland drain and the video proof of the same shall be submitted.

On receipt of the reply, the Committee will deliberate further and decide future course of action.

Agenda No: 362-12

(File No: 9535/2022)

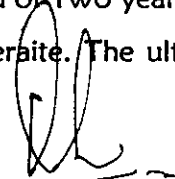
Proposed Gravel quarry Lease over an extent of 4.16.5 Ha S.F.No. 265/1B2A, 265/2B2A, 265/2B1, 265/1B2B, 265/2B2B, 265/2A & 276/13 Silambinathanpettai Village, Panruti Taluk and Cuddalore District, Tamil Nadu by Tmt Bhuvaneswari – For Environmental Clearance (SIA/TN/MIN/403763/2022 dated 19.10.2022)

The proposal is placed for appraisal in this 362nd SEAC meeting held on 13.03.2023. 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, Tmt Bhuvaneswari has applied for Environmental Clearance for the Proposed Gravel quarry Lease over an extent of 4.16.5 Ha S.F.No. 265/1B2A, 265/2B2A, 265/2B1, 265/1B2B, 265/2B2B, 265/2A & 276/13 Extent:4.16.5 Silambinathanpettai Village, Panruti Taluk and Cuddalore 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 Two years & mining paln for the period of Two years. The total production is 62318 m3 of Gravel & 6924 M3 of Lateraite. The ultimate depth is 2m AGL.


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

1. The 500m radius cluster letter issued by the AD Geology & Mines has not mentioned about the existence of adjacent quarries/ proposals located in the same village - for example lease granted to P.Indira, S.Nos. 24/2(p) & 25/1B1C. Hence the necessary clarification from AD Mines & Geology shall be furnished.

Agenda No: 362-13

(File No: 9542/2022)

Proposed Rough stone & Gravel quarry Lease over an extent of 1.21.5 Ha S.F.No. No.130/2 over an area of 1.21.5hectares in Mothakkal Village, Thandrapattu Taluk, Tiruvannamalai District, Tamil Nadu by Thiru T Selvaraj – For Environmental Clearance (SIA/TN/MIN/404469/2022 dated 03.11.20222)

The proposal is placed for appraisal in this 362nd SEAC meeting held on 13.03.2023. 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 T Selvaraj** has applied for Environmental Clearance for the Proposed Rough stone & Gravel quarry Lease over an extent of 1.21.5 Ha S.F.No. No.130/2 over an area of 1.21.5hectares in Mothakkal Village, Thandrapattu Taluk, Tiruvannamalai 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 Ten years & mining plan for the period of Five years. The total production is not exceeding 78,530 m³ of Rough Stone and 16,284 m³ of Gravel. The annual peak production is 16650 m³ of Rough stone & 6728 m³ of Gravel. The ultimate depth is 27m (7m AGL+ 20m BGL).

| Sl. No | Details of the Proposal | : | Data Furnished |
|--------|-------------------------|---|---|
| 1 | Name of the Owner/Firm | : | Thiru. T. Selvaraj, S/o.Thoppaiyan, No:16/B11, Kottamedu Street, Mothakkal Village, Thandrapattu Taluk, |


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| | | | Tiruvannamalai District – 606 708. |
| 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 | : | 130/2 |
| 4 | Village in which situated | : | Mothakkal |
| 5 | Taluk in which situated | : | Thandrampattu |
| 6 | District in which situated | : | Tiruvannamalai |
| 7 | Extent of quarry (in ha.) | : | 1.21.5 Ha |
| 8 | Lease Period of quarrying | : | 10 Years |
| | Mining Plan Period | | 10 years |
| | Production & Development Plan | | For the first 5 years |
| 9 | Type of mining | : | Opencast Semi Mechanized Mining |
| 10 | Production (Quantity in m³) | : | 78,530 m³ of Rough Stone and 16,284 m³ of Gravel |
| 11 | Latitude & Longitude of all corners of the quarry site | : | 12°05'42.94"N to 12°05'45.63"N 78°43'45.73"E to 78°43'52.08"E |
| 12 | Topo Sheet No. | : | 57-L/12 |
| 13 | Man Power requirement per day: | : | 16 Nos |
| 14 | Precise area communication approved by Deputy Director, Department of Geology and Mining with date | : | Na.Ka.En.85/Kanimam/2022, dated:04.08.2022 |
| 15 | Mining Plan approved by Deputy Director, Department of Geology and Mining with date | : | Rc.No.85/Kanimam/2022, dated: 23.08.2022 |
| 16 | Water requirement: 4. Drinking water & domestic purposes (in KLD) 5. Dust Suppression (in KLD) 6. Green Belt (in KLD) | : | 2.5 KLD 1.5 KLD 0.5 KLD 0.5 KLD |
| 17 | Power requirement c. Domestic Purpose | : | TNEB |
| 18 | Ultimate Depth of quarrying | : | 27m (7m AGL + 20m BGL) |
| 19 | Depth of water table | : | 55m-58m BGL |
| 20 | Whether any habitation within 300m distance | : | No |
| 21 | Project Cost (including EMP cost) | : | Rs. 56,39,000/- |
| 22 | EMP cost | : | Capital Cost – Rs. 15.50 lakhs Recurring Cost – Rs. 12.73 lakhs |
| 23 | CER cost | : | Rs. 5,00,000/- |

| | | | |
|----|---|---|--|
| 24 | Assistant Director, mines 500m cluster letter | : | Rc.No.85/Kanimam/2022, dated: 22.08.2022 |
| 25 | VAO certificate regarding 300m radius cluster | : | Letter dated 30.08.2022 |

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 not exceed 78,530 m³ of Rough Stone and 16,284 m³ of Gravel** and the annual peak production is 16650 m³ of Rough stone & 6728 m³ of Gravel. The ultimate depth is 27m (7m AGL+ 20m 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 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



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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. 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.
8. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarries.
9. 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.
10. However, as few structures are located within 200-300 m, 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', within one year from the commencement of mining operations, 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.



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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 the CER cost is Rs. 5 lakhs and the amount shall be spent for the Government Higher Secondary School, Moothakkal Village as committed activities, before obtaining CTO from TNPCB.

Agenda No: 362-14
(File No: 9542/2022)

Proposed Earth quarry Lease over an extent of 2.37.0 Ha S.F.No. No.386(p) in Ervadi Village, Kilakkarai Taluk, Ramanathapuram District, Tamil Nadu by Thiru V Jayabal – For Environmental Clearance (SIA/TN/MIN/402463/2022 dated 11.10.2022)


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The proposal is placed for appraisal in this 362nd SEAC meeting held on 13.03.2023. 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 V Jayabal** has applied for Environmental Clearance for the Proposed Earth quarry Lease over an extent of 2.37.0 Ha S.F.No. No.386(p) in Ervadi Village, Kilakkarai 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.
3. The lease period is for One year & mining plan for the period of One year. The total production is not exceeding 18,921m³. The ultimate depth is 1.0m.

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

1. The kml file was unviewable. The PP shall upload the correct viewable kml file in Parivesh website.
2. The PP carry out the geological assessment to identify mineralization, to establish continuity, quality and quantity of mineral mineral deposit, particularly, the presence of heavy minerals in the Teri sand (red earth) such as ilmenite, rutile, lucoxene, garnet, monazite, zircon and sillimanite, etc. Hence the PP shall furnish the report through the systematic sampling in the proposed site with showing geological coordinates and the mineralogical analysis obtained as per the procedures laid in accordance with the provisions of Atomic Minerals Concessional Rules, 2016 through the laboratory of IREL (India) Limited, Research Centre, Beach Road, Kollam, Kerala.
3. The PP shall change all the documents from "Earth" to "Ordinary Earth" as per the TN G.O. (Ms). No.244, dated. 14.12.2022.
4. The proponent shall produce a letter from the Department of Geology and Mining stating that the location of quarry site does not lie adjoining to the rivers, streams, canals etc., and also does not come under any notified/declared protected zones in terms of the Hon'ble Madurai Bench of Madras High Court.

Agenda No. 362 - 15

(File No. 9563/2022)

Proposed Rough stone Quarry over an extent of 2.64.17Ha at at SF.No. 1055/2(Part), 1065/2 & 1065/3 Nadanthai south Village, Aravakurichi Taluk, Karur District, Tamil Nadu by M/s Ponnsankar Buiklding Materials Suppliers - for Environmental Clearance. (SIA/TN/MIN/406116/2022, Dt: 12.11.2022)

The proposal was placed in 362nd SEAC meeting held on 13.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. Now, the Project Proponent, M/s Ponnsankar Buiklding Materials Suppliers has applied for Environmental Clearance for the Proposed Rough stone Quarry over an extent of 2.64.17Ha at at SF.No. 1055/2(Part), 1065/2 & 1065/3 Nadanthai south Village, Aravakurichi Taluk, Karur District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The precise area communication/lease is issued for the period of 10 Years. The approved mining plan is for the period of 5 Years & production should not exceed 379994m³ of Rough stone and 35756 m³ of gravel. The annual peak production shall not exceed 80330 Cu.m of Rough stone. The ultimate depth is 25m BGL.

| Sl. No | Details of the Proposal | : | Data Furnished |
|--------|---|---|---|
| 1 | Name of the Owner/Firm | : | Tvl. Ponnsankar Building Metrials Suppliers, Door No.77/2, Amirthambal Nagar, Athur Post, Erode Main Road, Manmangalam Taluk, Karur District - 639 002. |
| 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 | : | 1055/2(Part), 1065/2 & 1065/3 |
| 4 | Village in which situated | : | Nadanthai South |
| 5 | Taluk in which situated | : | Aravakurichi |
| 6 | District in which situated | : | Karur |


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| 7 | Extent of quarry (in ha.) | : | 2.64.17 Ha |
| 8 | Lease Period of quarrying | : | 10 Years |
| | Mining Plan Period | | 10 years |
| | Production & Development Plan | | For the first 5 years |
| 9 | Type of mining | : | Opencast Semi Mechanized Mining |
| 10 | Production (Quantity in m ³) | : | The precise area communication/lease is issued for the period of 10 Years. The approved mining plan is for the period of 5 Years & production should not exceed 379994m ³ of Rough stone and 35756 m ³ of gravel. The annual peak production shall not exceed 80330 Cu.m of Rough stone. |
| | | | |
| 11 | Latitude & Longitude of all corners of the quarry site | : | 10°53'9.15"N to 10°53'15.83"N 77°51'45.13"E to 77°51'51.71"E |
| 12 | Topo Sheet No. | : | 58-F/13 |
| 13 | Man Power requirement per day: | : | 18 Nos |
| 14 | Precise area communication approved by Deputy Director, Department of Geology and Mining with date | : | Na.Ka.En.140/Kanimam/2022, dated:10.10.2022 |
| 15 | Mining Plan approved by Deputy Director, Department of Geology and Mining with date | : | Rc.No.140/Mines/2022, dated: 07.11.2022 |
| 16 | Water requirement: 7. Drinking water & domestic purposes (in KLD) 8. Dust Suppression (in KLD) 9. Green Belt (in KLD) | : | 5.75 KLD 2.75 KLD 1.5 KLD 1.5 KLD |
| 17 | Power requirement d. Domestic Purpose e. Industrial Purpose | : | TNEB 309944 Liters of HSD |
| 18 | Ultimate Depth of quarrying | : | 25m BGL |
| 19 | Depth of water table | : | 55m-60m bgl |
| 20 | Whether any habitation within 300m distance | : | No |
| 21 | Project Cost (including EMP cost) | : | Rs. 66,35,680/- |
| 22 | EMP cost | : | Rs. 1,80,38,667/- |
| 23 | CER cost | : | Rs. 5,00,000/- |
| 24 | Assistant Director, mines 500m cluster letter | : | Rc.No.140/Mines/2022, dated: 07.11.2022 |

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| 25 | VAO certificate regarding 300m radius cluster | : | Letter dated 01.11.2022 |
|----|---|---|-------------------------|

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the production quantity of 379994m³ of Rough stone and 35756 m³ of gravel for an ultimate depth restricted to 25 m BGL and however, the annual peak production shall not exceed 80330 Cu.m of Rough stone & and 35756 m³ of gravel 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 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 PP shall explore the possibility of carrying out the amalgamation with the neighbouring/adjacent quarries after having executed the lease and getting the prior permission from the Director of Mines Safety, Chennai Region.
5. 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.


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6. 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.
7. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
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, as few structures are located within 200-300 m, 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', within one year from the commencement of mining operations, 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.
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 Rs5 lakhs and the amount shall be spent for the Government Girls Higher Secondary School, Chinnadharapuram as committed, before obtaining CTO from TNPCB.

Agenda No: 362-16

(File No: 9571/2022)

Proposed Black granite Lease over an extent of 1.90.0 Ha S.F.No. No. 802/3B1, 803/1, 803/2, 804/2, 804/3, 805/1 (P), 805/2 & 831/2 (P) Irudukottai Village, Denkanikottai Taluk, Krishnagiri District , Tamil Nadu by M/s Seven Hills Black Granite – For Environmental Clearance (SIA/TN/MIN/405609/2022 dated 07.11.2022)

The proposal is placed for appraisal in this 362nd SEAC meeting held on 13.03.2023. 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, **M/s Seven Hills Black Granite** has applied for


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Environmental Clearance for the proposed Black granite Lease over an extent of 1.90.0 Ha S.F.No. No. 802/3B1, 803/1, 803/2, 804/2, 804/3, 805/1 (P), 805/2 & 831/2 (P) Irudukottai Village, Denkanikottai Taluk, Krishnagiri District , Tamil Nadu.

2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The lease period is 20 year & mining plan for the period of Five year. The total production is not exceeding ROM- 103170m³, Recovery- 20634 m³ & Granite waste – 100007 m³. The annual peak production for ROM- 26220m³, Recovery- 5241 m³ & Granite waste – 20976 m³ The ultimate depth is 43.5m.

Based on the presentation and documents furnished by the project proponent, SEAC decided to obtain the following details with documentary evidence (Photos & videos) from the PP.

1. The CNWLS is located within 10km, hence the PP shall furnish the details of conservation measures at a cost of 5 Lakhs in consultation with concern DFO.
2. Since the residential structures are located in Southern side of the proposed site, the PP shall make provision to provide the thick Green belt with 2 rows of trees followed by Galvanized sheet at the height of 2 to 3 m in the Southern side of the proposed site, directing the habitations.

Agenda No. 362 - 17.

(File No. 9536/2022)

Proposed Red Earth Quarry over an extent of 1.46.45Ha at at SF.No.51/7A1, 51/7B, 51/8A & 51/8B1 of Kadagampattu Village, Vanur Taluk, Villupuram District, Tamil Nadu by Mr.K.Vijayan - for Environmental Clearance. (SIA/TN/MIN/404485/2022, Dt: 28.10.2022)

The proposal was placed in 362nd SEAC meeting held on 13.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. Now, the Project Proponent, Mr.K.Vijayan has applied for Environmental Clearance for the proposed Red Earth Quarry over an extent of 1.46.45Ha at SF.No.51/7A1, 51/7B, 51/8A & 51/8B1 of Kadagampattu Village, Vanur Taluk, Villupuram District, Tamil Nadu.


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2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The precise area communication/lease is issued for the period of 2 Years. The approved mining plan is for the period of 2 Years & production should not exceed 16632m³ of Red Earth Quarry and the annual peak production shall not exceed 8400 Cu.m of Red Earth Quarry. The ultimate depth is 2m BGL.

| Sl. No | Details of the Proposal | : | Data Furnished |
|--------|---|---|--|
| 1 | Name of the Owner/Firm | : | Mr.K.Vijayan, S/o.Mr.Kannaiyan, No.22A, Mariyamman Kovil Street, Kadagampattu Village, Vanur Taluk, Viluppuram District – 605502. |
| 2 | Type of quarrying (Savudu/Rough Stone/Sand/Granite) | : | Red Earth |
| 3 | S.F No. Of the quarry site with area break-up | : | 51/7A1, 51/7B, 51/8A & 51/8B1 |
| 4 | Village in which situated | : | Kadagampattu |
| 5 | Taluk in which situated | : | Vanur |
| 6 | District in which situated | : | Villupuram |
| 7 | Extent of quarry (in ha.) | : | 1.46.45Ha |
| 8 | Latitude & Longitude of all corners of the quarry site | : | 12°1'36.23"N to 12°1'40.33"N 79°40'6.83"E to 79°40'12.49"E |
| 9 | Topo Sheet No. | : | 57 – P/12 |
| 10 | Type of mining | : | Opencast Semi - Mechanized of Mining |
| 11 | Period of quarrying proposed | : | 2 years |
| 12 | Production (Quantity in m ³) | : | 16632m ³ of Red Earth |
| 13 | Depth of quarrying | : | 2.0m |
| 14 | Depth of water table | : | 25m – 20m BGL |
| 15 | Man Power requirement per day: | : | 6 Nos. |
| 16 | Source of Water Requirement | : | water vendors |
| 17 | Water requirement: 10. Drinking & domestic purposes (in KLD) | : | 2.0 KLD 1.0 KLD |

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| | 11. Dust suppression, Green Belt & Wet Drilling (in KLD) | 0.5 KLD 0.5 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 | : Rc.No.A/G&M/31/2020, dt: 28.09.2022 |
| 21 | Mining Plan approved by Assistant Director, Department of Geology and Mining with date | : Roc.No.A/G&M/31/2020, dt: 14.10.2022 |
| 22 | Deputy Director, Department of Geology and Mining 500m cluster letter | Roc.No.A/G&M/31/2020, dt: 17.10.2022 |
| 23 | VAO certificate regarding 300m radius cluster | Letter dt: 26.02.2022. |
| 24 | Project Cost (excluding EMP cost) | : Rs.8.53 Lakhs |
| 25 | EMP cost | : Rs.7.76 Lakhs/2 Years |
| 26 | CER cost | Rs.3.75 Lakhs |


Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance *for the period of 2 Years* for the production quantity of 16632m³ of Red Earth & 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 PP shall obtain necessary amendment for mineral name from ' Red Earth' to 'Ordinary Earth ' in the mining plan as per Industries, Investment Promotion and Commerce Department G.O.(MS)No.244 dt.14.12.2022.
2. The proponent shall mandatorily appoint the statutory competent persons accordingly for the proposed quarry size to satisfy the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961.
3. 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.


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4. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
5. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation. No change in basic mining proposal shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form of Short Term Permit (STP), Query license or any other name.
6. 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.
7. 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.
8. 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.
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.
10. Taller/one year old saplings raised in appropriate size of bags (preferably eco-friendly bags) should be planted in proper spacing as per the advice of local forest authorities/botanist/horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
11. **Noise and Vibration Related:** (i) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers


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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.

12. 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.
13. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
14. The proponent shall ensure that the transportation of the quarried granite stones shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried granite stones; and transport of granite stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
15. 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.
16. The Project Proponent shall take all possible precautions for the protection of environment and control of pollution while carrying out the mining or processing of granite in the area for which such licence or lease is granted, as per
17. 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.
18. The project proponent shall ensure that the provisions of the MMDR Act, 1957, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are complied by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the

quarrying area and in a manner to preserve the environment and ecology of the area.

19. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCB) by the proponent without fail.
20. 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.
21. 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.
22. 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.
23. The Project Proponent shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under.
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. 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.
26. 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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27. As accepted by the Project proponent the CER cost is Rs. **3.75 lakhs** and the amount shall be spent for the Govt High School, Kadagampattu Village as committed, before obtaining CTO from TNPCB.

Agenda No. 362- 18.

(File No. 9543/2022)

Proposed Rough Stone & Gravel Quarry over an extent of 1.14.0Ha at SF.No.607/1 of Uthumalai Village, Veerakeralampudur Taluk, Thenkasi District by Thiru.C.Murugesan, - for Environmental Clearance.(SIA/TN/MIN/402972/2022, Dt: 02.11.2022)

The proposal was placed in The proposal was placed in 362nd SEAC meeting held on 13.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. Now, the Project Proponent **Thiru.C.Murugesan** has applied for Environmental Clearance for the Rough Stone & Gravel Quarry over an extent of 1.14.0Ha at SF.No.607/1 of Uthumalai Village, Veerakeralampudur Taluk, Thenkasi District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The precise area communication/lease is issued for the period of 5Years. The approved mining plan is for the period of five years & production should not exceed 1,25,720m³ of Rough Stone & 26,266 m³ of Gravel and the annual peak production shall not exceed 25440 m³ of Rough Stone (4th Year) & 10,602m³ of Gravel (1st Year). The ultimate depth is 38m BGL.

| Sl. No | Details of the Proposal | : | Data Furnished |
|--------|---|---|--|
| 1 | Name of the Owner/Firm | : | Thiru.C.Murugasen S/o.Shri.Chithamaram, 5/182, B2, Nellai Road, Uthumalai Veerakeralampudur Taluk, Tenkasi-District - 627860 |
| 2 | Type of quarrying (Savudu/Rough Stone/Sand/Granite) | : | Rough Stone & Gravel |
| 3 | S.F No. Of the quarry site with area break-up | : | 607/1 |
| 4 | Village in which situated | : | Uthumalai |

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| 5 | Taluk in which situated | : Veerakeralampudur |
| 6 | District in which situated | : Thenkasi |
| 7 | Extent of quarry (in ha.) | : 1.14.0Ha |
| 8 | Latitude & Longitude of all corners of the quarry site | : 08°58'24.36"N to 08°58'30.05"N 77°32'41.06"E to 77°32'44.63"E |
| 9 | Topo Sheet No. | : 58/G/8 |
| 10 | Type of mining | Opencast Semi - Mechanized of Mining |
| 11 | Lease Period of quarrying | : 5 years |
| | Mining Plan Period | 5 years |
| 12 | Production (Quantity in m ³) | : 125720m ³ of Rough Stone & 26266m ³ of Gravel |
| 13 | Ultimate Depth of quarrying | : 38m BGL |
| 14 | Depth of water table | : 50m BGL |
| 15 | Man Power requirement per day: | 12 Nos. |
| 16 | Source of Water Requirement | water vendors |
| 17 | Water requirement: 12. Drinking & domestic purposes (in KLD) 13. Dust suppression, Green Belt & Wet Drilling (in KLD) | : 2.5 KLD 1.0 KLD 1.0 KLD 0.5 KLD |
| 18 | Power requirement | TNEB |
| 19 | Whether any habitation within 300m distance | : No |
| 20 | Precise area communication approved by the, Joint Director/Assistant Director (i/c), Department of Geology and Mining with date | : Rc.No.M1/5539/2022, dt: 18.08.2022 |


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| 21 | Mining Plan approved by Joint Director/ Assistant Director (i/c) , Department of Geology and Mining with date | : Roc.No.M1/5539/2022, dt: 30.08.2022 |
| 22 | Joint Director/Assistant Director (i/c), Department of Geology and Mining 500m cluster letter | Roc.No.M1/5539/2022, dt: 30.08.2022 |
| 23 | VAO certificate regarding 300m radius cluster | Letter dt: 21.09.2022. |
| 24 | Project Cost (excluding EMP cost) | : Rs.63.87 Lakh |
| 25 | EMP cost | : Rs.85.35 Lakhs/5 Years. |
| 26 | CER cost | Rs.5.0 Lakhs |

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the ultimate depth of mining upto 38m BGL and the quantity of 1,25,720m³ of Rough Stone & 26,266 m³ of Gravel and however the annual peak production shall not exceed 25440 m³ of Rough Stone & 10,602m³ 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 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 ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
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 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 copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
9. The PP shall carry out 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.


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10. Since the windmill is located at a distance of 205 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 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 – 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.
11. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
12. 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.
13. 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.
14. 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.
15. Since a water body is situated at a distance of 80m, the PP shall carry out the comprehensive hydrogeological studies within 2 years from the commencement of the 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 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 PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
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 Government Higher Secondary school, Uthumalai Village as committed, before obtaining CTO from TNPCB.

Agenda No: 362 – 19.

(File No: 9557/2022)

Proposed Rough Stone and Gravel Quarry lease over an extent of 2.26.0Ha SF.No.359/5, 359/6(P), 359/7(P), 363/2B1&2B2 & 364/3A(P) of Nathikudi Village, Vembakottai Taluk, Virudhunagar District by Thiru.E.Gnanaraj - for Environmental Clearance (SIA/TN/MIN/405636/2022, dt 07.11.2022)

The proposal was placed in 362nd SEAC meeting held on 13.03.2023. The project proponent gave detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Thiru.E.Gnanaraj has applied for Environmental Clearance for the proposed Rough Stone and Gravel quarry lease over an extent of 2.26.0Ha SF.No.359/5, 359/6(P), 359/7(P), 363/2B1&2B2 & 364/3A(P) of Nathikudi Village, Vembakottai Taluk, Virudhunagar District, Tamil Nadu.


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2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per mining plan, the lease period is 5 years. The mining plan is for the period of 5 years & the production should not exceed 165030m³ of Rough Stone & 75230m³ of Weathered rock 53895m³ of Gravel. The annual peak production 33460m³ of Rough Stone (4th Year) 24200 m³ of Weathered rock (1st Year) & 17901 m³ of Gravel (1st Year). The ultimate depth – 43m BGL.

| Sl. No | Details of the Proposal | : | Data Furnished |
|--------|--|---|--|
| 1 | Name of the Owner/Firm | : | Thiru.E.Gnanaraj, S/o.E.Sakkiraj, No.372a, West Street, V.O.C.Nagar, Samusigapuram, Rajapalayam Taluk – 626102. Virudhunagar District. |
| 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 | : | 359/5, 359/6(P), 359/7(P), 363/2B1&2B2 & 364/3A(P) |
| 4 | Village in which situated | : | Nathikudi |
| 5 | Taluk in which situated | : | Vembakottai |
| 6 | District in which situated | : | Virudhunagar |
| 7 | Extent of quarry (in ha.) | : | 2.26.0Ha |
| 8 | Latitude & Longitude of all corners of the quarry site | : | 09°24'26.10"N to 09°24'34.80"N 77°42'08.25"E to 77°42'15.15"E |
| 9 | Topo Sheet No. | : | 58 – G/11 |
| 10 | Type of mining | : | Opencast Semi - Mechanized of Mining & Existing quarry |
| 11 | Period of quarrying proposed | : | 5 years |
| 12 | Production (Quantity in m ³) | : | 165030m ³ of Rough Stone & 75230m ³ of Weathered rock 53895m ³ of Gravel |
| 13 | Ultimate Depth of quarrying | : | 43m BGL |
| 14 | Depth of water table | : | 80m BGL |
| 15 | Man Power requirement per day: | : | 14 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) | : | 4.0 KLD 1.0 KLD 1.5 KLD 1.5 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 | : | Rc.No.KV1/190/2022-Kanimam, dt: 03.08.2022 |
| 21 | Mining Plan approved by Assistant Director, Department of Geology and Mining with date | : | Roc.No.KV1/190/2022, dt: 25.08.2022 |
| 22 | Assistant Director, Department of Geology and Mining 500m cluster letter | | Roc.No.KV1/190/2022, dt: 25.08.2022 |
| 23 | VAO certificate regarding 300m radius cluster | | Letter dt: 08.08.2022. |
| 24 | Project Cost | : | Rs.63.86 Lakh |
| 25 | EMP cost | : | Rs.116.36 Lakhs |
| 26 | CER cost | | Rs.5.0 Lakhs |

Based on the presentation and documents furnished by the project proponent, SEAC after considering safety and sustainable mining practice decided to recommend the proposal for the grant of Environmental Clearance excluding section [(A-A') & (B-B')] (SF. No. 363/2B1) (86 (Length)X 24 (Width) X 8 (Depth)) & section [(C-C') & (D-D')] (SF. No. 363/2B2) (63 (Length)X 23 (Width) X 8 (Depth)) for the period of 5 Years and the ultimate depth of mining is upto 43m BGL and for the production of 136926 m³ of Rough Stone & 75230m³ of Weathered rock & 53895m³ of Gravel and however the annual peak production shall not exceed 33460m³ of Rough Stone, 24200 m³ of Weathered rock & 17901 m³ 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


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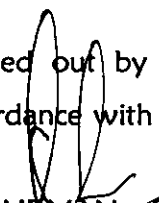
plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022..

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 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. The PP shall install an embankment of having base width of not less than 2m and height of not less than 3m along the lease boundary directing towards the river side along with adequate garland drainage and necessary tree plantations shall be carried out for preventing soil erosion in the embankment.
6. 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.
7. The PP shall ensure that the benches & haul road are properly designed and formed in accordance with the provisions of MMR 1991.
8. 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.
9. 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 copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

10. The PP shall carry out 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.
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 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. No 'Deep-hole large diameter drilling and blasting' is permitted in the proposed quarry.
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 in accordance with the


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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 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.
16. The PP shall meticulously carry out the mitigation measures as spelt out in the revised EMP.
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 Government Middle School, Nathikudi as committed, before obtaining CTO from TNPCB.

Agenda No: 362-20

(File No: 9551/2022)

Proposed Rough stone & Gravel lease over an extent of 3.89.0 Ha at S.F.No's: 178/9, 178/10, 217/1B, 217/2, 217/3, 217/4A, 217/4B & 217/5 in Perumbakkam Village, Cheyyur Taluk, Chengalpattu District, Tamil Nadu by K. Chellamuthu-For Environmental Clearance (SIA/TN/MIN/405350/2022 dt 04.11.2022)

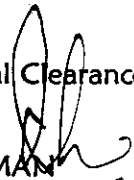
The proposal was placed in this 362nd meeting of SEAC held on 13.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

1. The Project Proponent, K. Chellamuthu has applied for Environmental Clearance


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for the Proposed Rough stone & Gravel lease over an extent of 3.89.0 Ha at S.F.No's: 178/9, 178/10, 217/1B, 217/2, 217/3, 217/4A, 217/4B & 217/5, Perumbakkam Village, Cheyyur Taluk, Chengalpattu District, Tamil Nadu.

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

| Sl. No | Details of the Proposal | |
|--------|---|---|
| 1. | Name of the Owner/Firm | K. Chellamuthu (Partner), M/s. Murugappa Blue Metals, No.3, Bagavatsing Nagar, Thirutheri, Singaperumal Koil, Chengalpattu Taluk & District. |
| 2. | Type of quarrying | Rough stone & Gravel |
| 3. | S.F No. Of the quarry site with area break-up | 178/9, 178/10, 217/1B, 217/2, 217/3, 217/4A, 217/4B & 217/5 |
| 4. | Village in which situated | Perumbakkam |
| 5. | Taluk in which situated | Cheyyur |
| 6. | District in which situated | Chengalpattu |
| 7. | Extent of quarry (in ha.) | 3.89.0 Ha |
| 8. | Lease Period granted | 10 Years/New |
| 9. | Life of the Project | 10 years |
| 10. | Type of mining | Opencast, Semi-Mechanized mining method |
| 11. | Production (Quantity in m3) | As per the mining plan the lease period is 10 years. The mining plan is for the period of five years & production should not exceed 5,29,788m ³ of Rough Stone & 96,687m ³ of Gravel with maintaining a depth of 25m (3m Gravel + 22m Rough stone) BGL. |


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| | | |
|-----|--|--|
| 12. | Annual peak Production (Quantity in m3) | The annual peak production is 142220m ³ of Rough Stone & 96687m ³ of Gravel. |
| 13. | Ultimate Depth of quarrying | 40m BGL |
| 14. | Depth of water table | 55m in Summer Season -50m in Rainy Season |
| 15. | Latitude & Longitude of all corners of the quarry site | 12°24'29.75"N to 12°24'39.01"N 80° 2'9.57"E to 80° 2'17.52"E |
| 16. | Top Sheet No. | 66-D/3 |
| 17. | Man Power requirement per day: | 18 Nos. |
| 18. | Precise area communication approved by the Assistant Director & G&M with date | NA.KA.No.8513/Kanimam/2021, Dated:30.08.2022 |
| 19. | Mining Plan approved by Assistant Director (i/c)& Geology and Mining with date | Rc.No. 8513/ Mines/ 2021 Dated: 12.09.2022 |
| 20. | Assistant Director (i/c)& Geology and Mining, mines 500m cluster letter | Rc.No. 8513/ Mines/ 2021 Dated: 12.09.2022 |
| 21. | VAO certificate regarding 300m radius cluster | Letter dated: 20.07.2021 |
| 22. | Water requirement: 14. Drinking & Utilized Water (in KLD) 15. Dust suppression(in KLD) 16. Greenbelt (in KLD) | 6.750 KLD 2.750 KLD 2.0 KLD 2.0 KLD |
| 23. | Power requirement f. Domestic Purpose | TNEB 439934Liters of HSD |
| 24. | Project Cost | Rs.1,17,31,550/- |

| | | |
|-----|----------|--|
| 25. | EMP cost | Capital cost: Rs.60,84,616/- Recurring cost: Rs.32,54,780/- 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 529788m³ of Rough Stone & 96687m³ of Gravel with maintaining proposed pit depth of 25m (3m Gravel + 22m Rough stone) BGL & annual peak production capacity of 142220m³ of Rough Stone & 96687m³ 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 garland drain with proper size, gradient and length along the boundary of the pit leaving behind the mandatory safety zone



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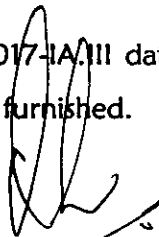

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of 7.5 m as it is designed to take care of run-off water (size, gradient and length).

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 3 years of operation whichever is earlier, by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
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. Since a lake is situated at a distance of 280 m, 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 & Middle School, Perumbakkam, Siruvankulam, Madaiyampakkam Village as committed, before obtaining CTO from TNPCB.

Agenda No: 362-21

(File No: 9558/2022)

Proposed Rough stone & Gravel lease over an extent of 2.02.5 Ha at S.F.No 5/2 & 6, Achchamdavilthan Village, Srivilliputhur Taluk, Virudhunagar District, Tamil Nadu by Thiru. R.Kandasamy-For Environmental Clearance (SIA/TN/MIN/291076/2022 dt 10.09.2022).

The proposal was placed in this 362nd meeting of SEAC held on 13.03.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

1. The Project Proponent, Thiru. R.Kandasamy has applied for Environmental Clearance for the the Proposed Rough stone & Gravel lease over an extent of 2.02.5 Ha at S.F.No 5/2 & 6, Achchamdavilthan Village, Srivilliputhur Taluk, Virudhunagar District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. Quarrying in this lease area was earlier carried for the period of 23.12.2013 to 22.12.2016 with proceedings no. KV3/528/2012, dated: 19.12.2013.
4. Environmental clearance for the lease area was obtained from SEIAA-TN, vide Lr.No. SEIAA-TN/F.No.1680/EC/1(a)/868/2013, dated 12.11.2013 valid upto 11.11.2016 in the name of Tmt. K.Vanaja for Gravel quarrying at S.F.No 5/2 & 6, Achchamdavilthan Village, Srivilliputhur Taluk, Virudhunagar District, Tamil Nadu upto a depth of 2m BGL.
5. Now, 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 2,41,310m³ of Rough Stone & 43,580 m³ of Gravel. The annual peak production is 66405m³ of rough stone & 27152m³ of Gravel. The ultimate depth is 34m BGL.

Based on the presentation made by the proponent, the SEAC called for the following


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details from the PP.

1. The PP shall submit Certified Compliance Report obtained from the office of the concerned DEE/TNPCB (or) IRO, MoEF & CC, Chennai on the existing EC issued and appropriate mitigating measures for the non-compliance items, if any.
2. The PP shall furnish a letter obtained from AD/DD Mine & Geology with respect to exact depth of existing Pit, period of the operation and stoppage of the earlier mines & quantity of minerals mined out.
3. 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.
4. the proponent shall complete the plantation as a part of Greenbelt development by considering the native species on all sides of the lease area.
5. The PP shall submit photographic evidences indicating Garland drain all around the boundary of the project area.
6. The PP shall enumerate the permanent structures - which may belongs to the PP or not - situated within 300m radius of the proposed mining area.

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

Agenda No: 362- TA:01


(File No: 9492/2022)

Proposed Sand quarry over an extent of 4.93.0 Ha in Cauvery river located at S.F.No: 170 (P), Sarkar Manapalli Village, Mohanur Taluk, Namakkal District, Tamil Nadu by M/s. The Executive Engineer, PWD/WRD- For Environmental Clearance. (SIA/TN/MIN/ 288558/2022 Dt.17.08.2022)

The proposal was placed for appraisal in 322nd SEAC Meeting held on 19.10.2022. 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, M/s. The Executive Engineer, PWD/WRD, has applied for Environmental Clearance proposed Sand quarry over an extent of 4.93.0 Ha in Cauvery river located at S.F.No: 170 (P), Sarkar Manapalli Village, Mohanur


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Taluk, Namakkal 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 2 years and the mining plan for the period of 2 years & mining quantity should not exceed 93,177m³ of sand. The ultimate depth 1.89m (0.89m Above Bed Level + 1m Below Bed Level) for a period of Two years.

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. Further, the PP shall furnish the following details during the site inspection.

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.

The proposal was placed in 362nd SEAC meeting held on 13.03.2023.

The State Expert Appraisal Committee (SEAC) Tamil Nadu constituted a subcommittee vide its Lr.No.SEAC/TN/9492 Site Inspection/2022, dt.21.10.2022 to inspect and study the field condition for the proposal seeking EC for a sand quarry proposed at Sarkar Manapalli Village in SF.No.170(P), Mohanur Taluk, Namakkal District. The Committee comprises of Dr.P.Balamadeswaran, Member, SEAC.

As per the above letter the sub-committee visited the site on 18.01.2023. The observations made in the field and recommendation derived on the basis of the field visit are as below:

Proponent team:

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

1. Er. M.Pavazhakkannan, EE/Mining & Monitoring Division/Trichy
2. Er. R. Arulmani, AEE/Mining & Monitoring Division, Trichy.
3. Er. C. Sukumar, AE/Mining & Monitoring Division, Trichy.
4. Er. R. Sangeetha, AE/Mining & Monitoring Division Trichy.


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| S.No | Details | Information |
|------|---|---|
| 1. | Name of the owner | M/s.The Executive Engineer Water Resources Department Mining and Monitoring Division Tiruchirappalli -620020 |
| 2. | Type of quarrying | Sand Quarry |
| 3. | Name of the River | Cauvery River |
| 4. | S.F No. of the quarry site with area break-up | 170 (P) |
| 5. | Village in which situated | Sarkar Manapalli |
| 6. | Taluk in which situated | Mohanur |
| 7. | District in which situated | Namakkal |
| 8. | Extent of quarry (in ha.) | 4.93.0 Ha |
| 9. | Period of quarrying proposed | 2 Years |
| 10. | Production (Quantity in m ³) | As per mining plan, the lease period is 2 years and the mining plan for the period of 2 years & mining quantity should not exceed 93,177m ³ of sand. The ultimate depth 1.89m (0.89m Above Bed Level + 1m Below Bed Level) for a period of Two years. |
| 11. | Depth of sand available in the quarry site and depth of mining proposed | 1.89m (0.89m Above Bed Level + 1m Below Bed Level) |
| 12. | Method of mining (Manual or Mechanized) | Opencast method of shallow mining |
| 13. | Latitude & Longitude of all corners of the quarry site | 11°04'43.9747"N to 11°04'51.1211"N 78°05'21.9213"E to 78°05'33.3789"E |


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|-----|--|--|
| 14. | Topo Sheet No. | 58-I/ 04 |
| 15. | Man Power requirement per day: | 34 Employees |
| 16. | Precise area communication approved by the District Collector with date | Rc.No.34/Mines/2021, Dated: 07.03.2022 |
| 17. | Mining Plan approved by the Assistant Director, Department of Geology and Mining with date | Rc.No.34/Mines/2021 Dated: 07.06.2022. |
| 18. | 500mts letter approved by the Assistant Director, Department of Geology and Mining with date | Rc.No. 34/Mines/2021 Dated: 20.06.2022 |
| 19. | Water requirement: 1. Drinking 2. Dust suppression 1. Green Belt (in KLD) | 3.0 KLD 0.5 KLD 1.5 KLD 1.0 KLD |
| 20. | Power requirement: a. Domestic Purpose a. Industrial purpose | TNEB 15,530 Liters of HSD Will be Utilized. |
| 21. | Depth of water table | 18m in Summer Season – 13 m in Rainy Season |
| 22. | Project Cost (excluding EMP cost) | Rs. 19,53,000/- |
| 23. | EMP cost | Rs.44.99 Lakhs |
| 24. | R.L upstream | 109.300m |
| 25. | R.L downstream | 109.130m |
| 26. | R.L Starting km., of the mining site of the river | Chainage 114+620m |
| 27. | R.L Ending km., of the mining site of the river | Chainage 114+910m |

| | | |
|-----|---|-----------|
| 28. | CER cost | Rs.50,000 |
| 29. | VAO certificate regarding 300m radius cluster | Nil |

Sarkar Manapalli Sand Quarry:

a) Location of the Quarry

| Pillar No | Latitude | Longitude |
|-----------|-------------------|-------------------|
| 1 | 11° 04' 49.8287"N | 78° 05' 23.9216"E |
| 2 | 11° 04' 51.1211"N | 78° 05' 33.3789"E |
| 3 | 11° 04' 45.2671"N | 78° 05' 31.3785"E |
| 4 | 11° 04' 43.9717"N | 78° 05' 21.9213"E |

Details of the Quarry

| Sl.No | Description | Details |
|-------|------------------------|---|
| 1 | Proposal number | SIA/TN/MIN/287975/2022, Dt.10.08.2022 |
| 2 | File number | 9492 / 2022 |
| 3 | Proponent | Executive Engineer, WRD., Mining and Monitoring Division, Tiruchirappalli |
| 4 | Major Project Activity | Mining of minerals |
| 5 | Category | B2 |
| 6 | Project Type | Fresh EC |
| 7 | River | Cauvery |
| 8 | Location | SF. No. 170 (P) of Sarkar Manapalli village |
| 9 | Area | 4.93.0 Hec |
| 10 | Quantity& Duration | 93,177 m ³ / 2 years |
| 11 | Depth | 0.89m above bed level + 1m below bed level |

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|----|------------------|-------------------------------|
| 12 | Method of Mining | Open cast - mechanized mining |
|----|------------------|-------------------------------|

Observations:

- Proposed sand quarry is located in the Sarkar Manapalli Village in SF.No.170(P) in the river bed of Cauvery.
- The dimension of the proposed sand quarry is 290m in length and 170m in width.
- Safety distance of 50m is provided from the banks of the river on either side.
- There are no infrastructures like bridge/ Pump/ Intake well within 500m radius both upstream & Downstream side.
- It is reported that there are no mining leases granted in this area for the past 5 years.

During the inspection, the SEAC Sub-Committee Member has requested the PP to carry out the Sand Replenishment Study by involving an institute of eminence possessing the expertise in the field of hydrogeology and environmental science for examining the site whether it is fit and suitable for carrying out the sand mining and if it is found suitable, replenished quantity of sand after the monsoon shall be determined for ensuring the scientific & systematic mining in line with SSMMG-2016 & EMGSM, 2020 issued by MoEF & CC.

Sand Replenishment Studies:

Sand plays an important role in delivering ecosystem services across marine, delta, beach, river and underground environments. It helps in controlling erosion, delivering nutrients, contributing to food security, and regulating the quality of aquifers. It also provides habitats and breeding grounds for diverse flora and fauna, thus supporting biodiversity.

However, Sand, gravel, crushed stone and aggregates constitute the second-most exploited natural resource in the world after water. Their use has tripled in the last two decades to reach an estimated 40-50 billion metric tonnes per year.

Keeping the above in the mind, the SSMMG-2016 highlights the identification of the sand mining sources, replenishment of the River Bed Material (Sand, Boulder, Gravel, Cobble etc.), preparation of Districts Survey Report, and Standard

Environmental Conditions suitable for sand mining projects. The necessary requirements to comply with the direction of Hon'ble NGT and to facilitate effective monitoring and enforcement of regulatory provision for sand mining in the country are as follows

"...The river reaches with sand provide the resource and thus it is necessary to ascertain the rate of replenishment of the mineral. Regular replenishment study needs to be carried out to keep a balance between deposition and extraction. This document provides the procedure to be followed for conducting replenishment study...."


According to the Enforcement and Monitoring Guidelines for Sand Mining, 2020 (EMGSM, 2020), it states that

"...Replenishment study for river bed sand is required in order to nullify the adverse impacts arising due to excessive sand extraction. Mining within or near riverbed has a direct impact on the stream's physical characteristics, such as channel geometry, bed elevation, substratum composition and stability, in-stream roughness of the bed, flow velocity, discharge capacity, sediment transport capacity, turbidity and temperature...."

For sustainable river sand mining, it is necessary that the mine pits formed as a result of sand excavation are refilled with sand by natural process of replenishment in a reasonable period of time so that the area is again available for mining.

Based on the direction given by the Sub-Committee Member, SEAC, the PP has involved the Centre for Environmental Science, University of Madras, Chennai for carrying out the Replenishment Study in the Cauvery River (4.90 Ha) Sarkar Manapalli Village, Mohanur Taluk, Namakkal District and accordingly the Institute has submitted the report after a detailed filed survey & investigations.

From the report, it has been revealed that the replenishment of sand in the Cauvery river, Sarkar Manapalli Village for an extent of 4.90.0 Ha has been calculated by spot level survey method which observed the sand deposit of 54,188.81 cu.m during the post-monsoon periods, i.e., after 18th January 2023.


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Hence it is concluded that the replenishment study of sand in the above site had ensured the controlled-scale mining of river sand above the existing streambed level resulting in no impacts on the existing environment.

A copy of the Replenishment Study carried out in the Cauvery River (4.90 Ha) Sarkar Manapalli Village, Mohanur Taluk, Namakkal District is attached along with the Inspection report.

Recommendations:

1. The PP shall form the temporary access roads or Katcha roads along the bank of the river to connect the mining area with locally available bio-degradable materials such as sugarcane waste (bagasse), hay, etc.
2. The PP shall carefully locate the proper entry and exit point taking into consideration the habitations/settlements in the area for the movement of loading vehicles in and out of the sand quarry site.
3. It is the obligation of the Water Resource Department to run the quarry in an environmentally friendly and ecologically sustainable manner.
4. The PP shall take necessary steps to construct and strengthen the embankments of the river at the both sides during the sand quarrying operation.
5. The PP shall maintain a uniform depth of excavation above the theoretical bed level during the quarrying operation such that it ensures the free flow of river course.
6. The PP shall carry out the sand quarrying activities in such a manner that it ensures safe & beneficial activity for the public as it also prevents shallow flowing of water into the surrounding agricultural lands.
7. The PP shall remove the sheds constructed at the quarry site after the exhaustion of the quantity of sand, and all the roads / pathways may be levelled so that there is no obstruction for the normal flow in the river.
8. The PP shall carry out the quarrying operation as indicated in the approved mining plan in such a way that the operation continuously aligned for smooth flow of water.
9. To prevent air pollution due to the dust during sand quarrying operations and safeguard the persons in the sand quarry and depot site, constant water sprinkling on the pathways and dust prone areas shall be carried out by the PP. The sand

loaded vehicles are also to be covered with a tarpaulin before moving out of the quarries/depots.

10. No vehicles for loading of sand, machineries other than used for loading shall be allowed within ten meters from the border of the river bank to ensure the river bank protection.
11. The PP shall ensure that the suitable indigenous plant species confirming to the site specifically are planted on quantified stretch of the river banks to prevent river ingress and also to maintain river bank stability.
12. The PP shall make sure that the access routes, if they are not beneficial to the local community would need to be ploughed and re-planted with native species.
13. The PP shall take necessary steps in the close and restore river bank areas where access ramps have been resorted, ensure river approach channel is not obstructed and that repaired bank is restored to normalcy.
14. The PP shall implement the embankment rehabilitation measures as per the requirements to achieve river bank stability.
15. Reclamation and rehabilitation of river bed affected by quarrying operations shall be undertaken in a phased manner so that work is completed before the conclusion of quarrying operations and the abandonment of quarry.
16. The PP shall strictly follow the recommendations given in the existing two guidelines viz. "Sustainable Sand Mining Management Guideline-2016" (SSMG-2016), and "Enforcement & Monitoring Guidelines for Sand Mining" (EMGSM-2020) published by the MoEF & CC without any deviations for the management of sustainable sand extraction and monitoring of the mined-out material.

Hence, the subcommittee opines the **proposal for the issue of Environmental Clearance** for the Sand quarry proposed at **Sarkar Manapalli Village** in SF No. 170 (P), Mohanur Taluk, Namakkal District, Tamil Nadu **may be considered**.

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 93,177m³ of Sand for period of 2 Years, subject to the 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 4.93.0 Ha. There should be no deviation/violation with respect to the area demarcated for quarrying.


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2. The depth of sand quarrying shall be 1.89m (0.89m above bed level + 1m below 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.
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. The PP shall form the temporary access roads or Katcha roads along the bank of the river to connect the mining area with locally available bio-degradable materials such as sugarcane waste (bagasse), hay, etc.
20. The PP shall carefully locate the proper entry and exit point taking into consideration the habitations/settlements in the area for the movement of loading vehicles in and out of the sand quarry site.


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21. It is the obligation of the Water Resource Department to run the quarry in an environmentally friendly and ecologically sustainable manner.
22. The PP shall take necessary steps to construct and strengthen the embankments of the river at the both sides during the sand quarrying operation.
23. The PP shall maintain a uniform depth of excavation above the theoretical bed level during the quarrying operation such that it ensures the free flow of river course.
24. The PP shall carry out the sand quarrying activities in such a manner that it ensures safe & beneficial activity for the public as it also prevents shallow flowing of water into the surrounding agricultural lands.
25. The PP shall remove the sheds constructed at the quarry site after the exhaustion of the quantity of sand, and all the roads / pathways may be levelled so that there is no obstruction for the normal flow in the river.
26. The PP shall carry out the quarrying operation as indicated in the approved mining plan in such a way that the operation continuously aligned for smooth flow of water.
27. To prevent air pollution due to the dust during sand quarrying operations and safeguard the persons in the sand quarry and depot site, constant water sprinkling on the pathways and dust prone areas shall be carried out by the PP. The sand loaded vehicles are also to be covered with a tarpaulin before moving out of the quarries/depots.
No vehicles for loading of sand, machineries other than used for loading shall be allowed within ten meters from the border of the river bank to ensure the river bank protection.
28. The PP shall ensure that the suitable indigenous plant species confirming to the site specifically are planted on quantified stretch of the river banks to prevent river ingression and also to maintain river bank stability.
29. The PP shall make sure that the access routes, if they are not beneficial to the local community would need to be ploughed and re-planted with native species.

30. The PP shall take necessary steps in the close and restore river bank areas where access ramps have been resorted, ensure river approach channel is not obstructed and that repaired bank is restored to normalcy.
31. The PP shall implement the embankment rehabilitation measures as per the requirements to achieve river bank stability.
32. Reclamation and rehabilitation of river bed affected by quarrying operations shall be undertaken in a phased manner so that work is completed before the conclusion of quarrying operations and the abandonment of quarry.

Agenda No: 362- TA:02


(File No: 9458/2022)

Proposed Sand quarry over an extent of 4.95.0 Ha in Cauvery river located at SF. No. 47 (P) of Bommalapalayam village, Paramathi Vellore Taluk, Namakkal District, Tamil Nadu by M/s. The Executive Engineer, PWD/WRD– For Environmental Clearance. (SIA/TN/MIN/288258/2022 Dt.11.08.2022)

Earlier, this proposal was placed for appraisal in 322nd SEAC Meeting held on 19.10.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

4. The Proponent, M/s. The Executive Engineer, PWD/WRD, has applied for Environmental Clearance proposed Sand quarry over an extent of 4.95.0 Ha in Cauvery river located at S SF. No. 47 (P) of Bommalapalayam village, Paramathi Vellore Taluk, Namakkal District, Tamil Nadu.
5. The project/activity is covered under category “B2” of Item 1(a) “Mining of Minerals Projects” of the schedule to the EIA Notification, 2006.
6. As per mining plan, the lease period is 2 years and the mining plan for the period of 2 years & mining quantity should not exceed 99,000m³ of sand. The ultimate depth 2m (1m Above Bed Level + 1m Below Bed Level) for a period of Two years.


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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. Further, the PP shall furnish the following details during the site inspection.

3. 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”.
4. Pillar stone shall be erected before the site inspection.

The proposal was placed in 362nd SEAC meeting held on 13.03.2023.

The State Expert Appraisal Committee (SEAC) Tamil Nadu constituted a subcommittee vide its Lr.No. SEAC/TN/9458 Site Inspection/2022, dtd. 21.10.2022 to inspect and study the field condition for the proposal seeking EC for a sand quarry proposed at SF. No. 47 (P) of Bommalapalayam village, Paramathi Vellore Taluk, Namakkal District, Tamil Nadu. The Committee comprises of Dr.P.Balamadeswaran, Member, SEAC.

As per the above letter the sub-committee visited the site on 18.01.2023. The observations made in the field and recommendation derived on the basis of the field visit are as below:

1.0 Sub Committee:

The State Expert Appraisal Committee (SEAC) Tamil Nadu constituted a sub-committee vide its Lr.No. SEAC/TN/9458 Site Inspection/2022, dtd. 21.10.2022 to inspect and study the field condition for the proposal seeking EC for a sand quarry proposed at Bommalapalayam Village in SF No. 47 (P), Paramathi-Velur Taluk, Namakkal District. The Committee comprises of Dr. P. Balamadeswaran, Member, SEAC.

Accordingly, the sub-committee visited the site on 18.01.2023. The observations made in the field and recommendation derived on the basis of the field visit are given as below:

1.1 Proponent team:

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

5. Er. M. Pavazhakkannan, EE, Mining & Monitoring Division, Trichy.


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6. Er. R. Arulmani, AEE/Mining & Monitoring Division, Trichy.
7. Er. C. Sukumar, AE/Mining & Monitoring Division, Trichy.
8. Er. R. Sangeetha, AE/Mining & Monitoring Division Trichy.

2.0 Bommalapalayam Sand Quarry:

b) Location of the Quarry

| Pillar No | Latitude | Longitude |
|-----------|-------------------|-------------------|
| 1 | 11° 04' 29.3123"N | 77° 54' 38.4037"E |
| 2 | 11° 04' 31.6733"N | 77° 54' 53.0239"E |
| 3 | 11° 04' 28.1433"N | 77° 54' 53.6083"E |
| 4 | 11° 04' 25.7822"N | 77° 54' 38.9882"E |

b) Details of the Quarry

| Sl.No | Description | Details |
|-------|------------------------|---|
| 1 | Proposal number | SIA/TN/MIN/288258/2022, Dt.11.08.2022 |
| 2 | File number | 9458 / 2022 |
| 3 | Proponent | Executive Engineer, WRD., Mining and Monitoring Division, Tiruchirappalli |
| 4 | Major Project Activity | Mining of minerals |
| 5 | Category | B2 |
| 6 | Project Type | Fresh EC |
| 7 | River | Cauvery |
| 8 | Location | SF. No. 47 (P) of Bommalapalayam village |
| 9 | Area | 4.95.0 Hec |
| 10 | Quantity& Duration | 99000 m ³ / 2 years |
| 11 | Depth | 1m above bed level + 1m below bed level |
| 12 | Method of Mining | Open cast - mechanized mining |


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3.0 Observations:

- Proposed sand quarry is located in the Bommalapalayam Village in SF.No.47(P) in the river bed of Cauvery.
- The dimension of the proposed sand quarry is 450m in length and 110m in width.
- Safety distance of 50m is provided from the banks of the river on either side.
- There are no infrastructures like bridge/ Pump/ Intake well within 500m radius both upstream & Downstream side.
- It is reported that there are no mining leases granted in this area for the past 5 years.

During the inspection, the SEAC Sub-Committee Member has requested the PP to carry out the Sand Replenishment Study by involving an institute of eminence possessing the expertise in the field of hydrogeology and environmental science for examining the site whether it is fit and suitable for carrying out the sand mining and if it is found suitable, replenished quantity of sand after the monsoon shall be determined for ensuring the scientific & systematic mining in line with SSMMG-2016 & EMGSM, 2020 issued by MoEF & CC.

4.0 Sand Replenishment Studies:

Sand plays an important role in delivering ecosystem services across marine, delta, beach, river and underground environments. It helps in controlling erosion, delivering nutrients, contributing to food security, and regulating the quality of aquifers. It also provides habitats and breeding grounds for diverse flora and fauna, thus supporting biodiversity.

However, Sand, gravel, crushed stone and aggregates constitute the second-most exploited natural resource in the world after water. Their use has tripled in the last two decades to reach an estimated 40-50 billion metric tonnes per year.

Keeping the above in the mind, the SSMMG-2016 highlights the identification of the sand mining sources, replenishment of the River Bed Material (Sand, Boulder, Gravel, Cobble etc.), preparation of Districts Survey Report, and Standard Environmental Conditions suitable for sand mining projects. The necessary requirements to comply with the direction of Hon'ble NGT and to facilitate

effective monitoring and enforcement of regulatory provision for sand mining in the country are as follows

"...The river reaches with sand provide the resource and thus it is necessary to ascertain the rate of replenishment of the mineral. Regular replenishment study needs to be carried out to keep a balance between deposition and extraction. This document provides the procedure to be followed for conducting replenishment study...."

According to the Enforcement and Monitoring Guidelines for Sand Mining, 2020 (EMGSM, 2020), it states that

"...Replenishment study for river bed sand is required in order to nullify the adverse impacts arising due to excessive sand extraction. Mining within or near riverbed has a direct impact on the stream's physical characteristics, such as channel geometry, bed elevation, substratum composition and stability, in-stream roughness of the bed, flow velocity, discharge capacity, sediment transport capacity, turbidity and temperature...."

For sustainable river sand mining, it is necessary that the mine pits formed as a result of sand excavation are refilled with sand by natural process of replenishment in a reasonable period of time so that the area is again available for mining.

Based on the direction given by the Sub-Committee Member, SEAC, the PP has involved the Centre for Environmental Science, University of Madras, Chennai for carrying out the Replenishment Study in the Cauvery River (4.95 Ha) Bommapalayam Village, Paramathi Vellore Taluk, Namakkal District and accordingly the Institute has submitted the report after a detailed filed survey & investigations.

From the report, it has been revealed that the replenishment of sand in the Cauvery river, Bommapalayam Village for an extent of 4.95.0 Ha has been calculated by spot level survey method which observed the sand deposit of 18,496 cu.m during the post-monsoon periods, i.e., after 18th January 2023.


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Hence it is concluded that the replenishment study of sand in the above site had ensured the controlled-scale mining of river sand above the existing streambed level resulting in no impacts on the existing environment.

A copy of the Replenishment Study carried out in the Cauvery River (4.95 Ha) Bommopalayam Village, Paramathi Vellore Taluk, Namakkal District is attached along with the Inspection report.

5.0 Recommendations:

17. The PP shall form the temporary access roads or Katcha roads along the bank of the river to connect the mining area with locally available bio-degradable materials such as sugarcane waste (bagasse), hay, etc.
18. The PP shall carefully locate the proper entry and exit point taking into consideration the habitations/settlements in the area for the movement of loading vehicles in and out of the sand quarry site.
19. It is the obligation of the Water Resource Department to run the quarry in an environmentally friendly and ecologically sustainable manner.
20. The PP shall take necessary steps to construct and strengthen the embankments of the river at the both sides during the sand quarrying operation.
21. The PP shall maintain a uniform depth of excavation above the theoretical bed level during the quarrying operation such that it ensures the free flow of river course.
22. The PP shall carry out the sand quarrying activities in such a manner that it ensures safe & beneficial activity for the public as it also prevents shallow flowing of water into the surrounding agricultural lands.
23. The PP shall remove the sheds constructed at the quarry site after the exhaustion of the quantity of sand, and all the roads / pathways may be levelled so that there is no obstruction for the normal flow in the river.
24. The PP shall carry out the quarrying operation as indicated in the approved mining plan in such a way that the operation continuously aligned for smooth flow of water.
25. To prevent air pollution due to the dust during sand quarrying operations and safeguard the persons in the sand quarry and depot site, constant water sprinkling on the pathways and dust prone areas shall be carried out by the PP. The sand

loaded vehicles are also to be covered with a tarpaulin before moving out of the quarries/depots.

26. No vehicles for loading of sand, machineries other than used for loading shall be allowed within ten meters from the border of the river bank to ensure the river bank protection.
27. The PP shall ensure that the suitable indigenous plant species confirming to the site specifically are planted on quantified stretch of the river banks to prevent river ingress and also to maintain river bank stability.
28. The PP shall make sure that the access routes, if they are not beneficial to the local community would need to be ploughed and re-planted with native species.
29. The PP shall take necessary steps in the close and restore river bank areas where access ramps have been resorted, ensure river approach channel is not obstructed and that repaired bank is restored to normalcy.
30. The PP shall implement the embankment rehabilitation measures as per the requirements to achieve river bank stability.
31. Reclamation and rehabilitation of river bed affected by quarrying operations shall be undertaken in a phased manner so that work is completed before the conclusion of quarrying operations and the abandonment of quarry.
32. The PP shall strictly follow the recommendations given in the existing two guidelines viz. "Sustainable Sand Mining Management Guideline-2016" (SSMG-2016), and "Enforcement & Monitoring Guidelines for Sand Mining" (EMGSM-2020) published by the MoEF & CC without any deviations for the management of sustainable sand extraction and monitoring of the mined-out material.

Hence, the sub-committee opines the proposal for the issue of Environmental Clearance for a Sand quarry proposed at SF. No. 47 (P) of Bommalapalayam village, Paramathi Vellore Taluk, Namakkal District, Tamil Nadu may be considered.

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 99,000m³ of Sand for period of 2 Years**, subject to the following specific conditions, in addition to normal conditions stipulated by MOEF &CC:



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33. The proponent shall fix flag posts at boundaries for the proposed mining area covering an extent of 4.95.0 Ha. There should be no deviation/ violation with respect to the area demarcated for quarrying.
34. The depth of sand quarrying shall be 2m (1m above bed level + 1m below bed level).
35. 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.
36. 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.
37. To prevent dust pollution, suitable working methodology needs to be adopted taking wind direction into consideration.
38. At no cost the impact of sand mining should interfere with the habitation and cultivation in the nearby area along the river bed.
39. The mining area must be demarcated leaving at least 50m from the river embankment on either side.
40. 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.
41. To ensure safety measures along the boundary of the quarry site, security guards are to be engaged during the entire period of mining operation.

42. 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.
43. 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.
44. 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.
45. 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.
46. The pathway used by all machineries should be properly constructed and maintained by the PWD in order to avoid pollution.
47. The mining operation should be above the ground water table.
48. Adequate statutory manpower to be deployed for complying with the provisions to use heavy machineries as per Mines Safety Regulations (MCDR, 2017 & MMR, 1961).
49. The Proponent shall provide Provision of bio-toilet to be ensured and confirmed.
50. 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.


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51. The PP shall form the temporary access roads or Katcha roads along the bank of the river to connect the mining area with locally available bio-degradable materials such as sugarcane waste (bagasse), hay, etc.
52. The PP shall carefully locate the proper entry and exit point taking into consideration the habitations/settlements in the area for the movement of loading vehicles in and out of the sand quarry site.
53. It is the obligation of the Water Resource Department to run the quarry in an environmentally friendly and ecologically sustainable manner.
54. The PP shall take necessary steps to construct and strengthen the embankments of the river at the both sides during the sand quarrying operation.
55. The PP shall maintain a uniform depth of excavation above the theoretical bed level during the quarrying operation such that it ensures the free flow of river course.
56. The PP shall carry out the sand quarrying activities in such a manner that it ensures safe & beneficial activity for the public as it also prevents shallow flowing of water into the surrounding agricultural lands.
57. The PP shall remove the sheds constructed at the quarry site after the exhaustion of the quantity of sand, and all the roads / pathways may be levelled so that there is no obstruction for the normal flow in the river.
- 26 The PP shall carry out the quarrying operation as indicated in the approved mining plan in such a way that the operation continuously aligned for smooth flow of water.
- 27 To prevent air pollution due to the dust during sand quarrying operations and safeguard the persons in the sand quarry and depot site, constant water sprinkling on the pathways and dust prone areas shall be carried out by the PP. The sand loaded vehicles are also to be covered with a tarpaulin before moving out of the quarries/depots


- 28 No vehicles for loading of sand, machineries other than used for loading shall be allowed within ten meters from the border of the river bank to ensure the river bank protection.
- 29 The PP shall ensure that the suitable indigenous plant species confirming to the site specifically are planted on quantified stretch of the river banks to prevent river ingress and also to maintain river bank stability.
- 30 The PP shall make sure that the access routes, if they are not beneficial to the local community would need to be ploughed and re-planted with native species.
- 31 The PP shall take necessary steps in the close and restore river bank areas where access ramps have been resorted, ensure river approach channel is not obstructed and that repaired bank is restored to normalcy.
- 32 The PP shall implement the embankment rehabilitation measures as per the requirements to achieve river bank stability.
- 33 Reclamation and rehabilitation of river bed affected by quarrying operations shall be undertaken in a phased manner so that work is completed before the conclusion of quarrying operations and the abandonment of quarry.


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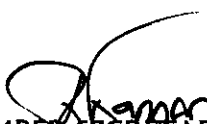
ANNEXURE-I

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 Metalliferrous 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, over burden, inter burden 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.


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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.


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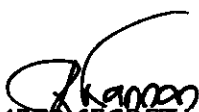
17. The proponent shall ensure that the transportation of the quarried materials shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure 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 (TNPCB) and the Director of Mines Safety (DMS), Chennai Region by the proponent without fail.
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


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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>Aegle marmelos</i> | Vilvam | விலவம் |
| 2 | <i>Adenaanthera pavonina</i> | Marjadi | மஞ்சாடி, ஆனைக்குன்றிமணி |
| 3 | <i>Albizia lebbek</i> | Vaagai | வாகை |
| 4 | <i>Albizia amara</i> | Usil | உசில் |
| 5 | <i>Bauhinia purpurea</i> | Mantharai | மந்தாரை |
| 6 | <i>Bauhinia racemosa</i> | Aathi | ஆத்தி |
| 7 | <i>Bauhinia tomentosa</i> | Iruvathi | இருவாத்தி |
| 8 | <i>Buchanania axillaris</i> | Kattuma | காட்டுமா |
| 9 | <i>Borassus flabellifer</i> | Panai | பனை |
| 10 | <i>Butea monosperma</i> | Murukkamaram | முருக்கமரம் |
| 11 | <i>Bobax ceiba</i> | Ilavu, Sevvilavu | இலவு |
| 12 | <i>Calophyllum inophyllum</i> | Punnai | புன்னை |
| 13 | <i>Cassia fistula</i> | Sarakondrai | சரக்கொன்றை |
| 14 | <i>Cassia roxburghii</i> | Sengondrai | செங்கொன்றை |
| 15 | <i>Chloroxylon sweitenia</i> | Purasamaram | புரசு மரம் |
| 16 | <i>Cochlospermum religiosum</i> | Kongu, Marjallavu | கோங்கு, மஞ்சள் இலவு |
| 17 | <i>Cordia dichotoma</i> | Naruvuli | நருவுளி |
| 18 | <i>Creteva adansoni</i> | Mavalingum | மாவிலங்கம் |
| 19 | <i>Dillenia indica</i> | Uva, Uzha | உசா |
| 20 | <i>Dillenia pentagyna</i> | SiruUva, Sitruzha | சிறு உசா |
| 21 | <i>Diospyro sebum</i> | Karungali | கருங்காலி |
| 22 | <i>Diospyro schloroxylon</i> | Vaganai | வாகனை |
| 23 | <i>Ficus amplissima</i> | Kallitchi | கல் இச்சி |
| 24 | <i>Hibiscus tiliaceou</i> | Aatrupoovarasu | ஆற்றுப்புலக |
| 25 | <i>Hardwickia binata</i> | Aacha | ஆச்சா |
| 26 | <i>Holoptelia integrifolia</i> | Aayili | ஆயா மரம், ஆயிலி |
| 27 | <i>Lannea coromandelica</i> | Odham | ஓதியம் |
| 28 | <i>Lagerstroemia speciosa</i> | Poo Marudhu | பூ மருது |
| 29 | <i>Lepisanthus tetraphylla</i> | Neikottaimaram | நெய் கொட்டை மரம் |
| 30 | <i>Limonia acidissima</i> | Vila maram | விலா மரம் |
| 31 | <i>Litsea glutinos</i> | Pisinpattai | அரம்பா, பிசின்பட்டை |
| 32 | <i>Madhuca longifolia</i> | Iluppai | இலுப்பை |
| 33 | <i>Manilkara hexandra</i> | UlakkaiPaalai | உலக்கை பாலை |
| 34 | <i>Mimusops elengi</i> | Magizhamaram | மகிழ்மரம் |
| 35 | <i>Mitragyna parvifolia</i> | Kadambu | கடம்பு |
| 36 | <i>Morinda pubescens</i> | Nuna | நுணா |
| 37 | <i>Morinda citrifolia</i> | Vellai Nuna | வெள்ளை நுணா |
| 38 | <i>Phoenix sylvestre</i> | Eachai | ஈச்சமரம் |
| 39 | <i>Pongamia pinnat</i> | Pungam | புங்கம் |

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|----|--------------------------------|-------------------------|-----------------------------|
| 40 | <i>Premna mollissima</i> | Munnai | முன்னை |
| 41 | <i>Premna serratifolia</i> | Narumunnai | தரு முன்னை |
| 42 | <i>Premna tomentosa</i> | Malaipoovarasu | மலை பூவரசு |
| 43 | <i>Prosopis cinerea</i> | Varuni maram | வன்னி மரம் |
| 44 | <i>Pterocarpus marsupium</i> | Vengai | வேங்கை |
| 45 | <i>Pterospermum canescens</i> | Vennangu, Tada | வெண்ணாங்கு |
| 46 | <i>Pterospermum xylocarpum</i> | Polavu | புலவு |
| 47 | <i>Puthranjiva roxburghii</i> | Karipala | கறிபாலா |
| 48 | <i>Salvadora persica</i> | Ugaa Maram | ஊகா மரம் |
| 49 | <i>Sapindus emarginatus</i> | Manipungan, Soapukai | மணிபுதங்கள் சோப்புக்காய் |
| 50 | <i>Saraca asoca</i> | Asoca | அசோகா |
| 51 | <i>Streblus asper</i> | Piray maram | பிராய் மரம் |
| 52 | <i>Strychnos nuxvomica</i> | Yetti | எட்டி |
| 53 | <i>Strychnos potatorum</i> | Therthang Kottai | தேத்தான் கொட்டை |
| 54 | <i>Syzygium cumini</i> | Naval | நாவல் |
| 55 | <i>Terminalia belleric</i> | Thandri | தாண்ட்ரி |
| 56 | <i>Terminalia arjuna</i> | Ven marudhu | வென் மருது |
| 57 | <i>Toona ciliata</i> | Sandhana vembu | சந்தன வேம்பு |
| 58 | <i>Thespesia populnea</i> | Puvarasu | பூவரசு |
| 59 | <i>Walsuratrifoliata</i> | valsura | வால்கரா |
| 60 | <i>Wrightia tinctoria</i> | Veppalai | வெப்பாலை |
| 61 | <i>Pithecellobium dulce</i> | Kodukkapuli | கொடுக்காப்பளி |

Appendix -II
Display Board
(Size 6' x5' with Blue Background and White Letters)

-----சுரங்கம்

கரங்கங்களில் சூவாரி செயல்பாடுகளுக்கான சுற்றுச்சூழல் அனுமதி கீழ்க்கண்ட திட்டத்தைகளுக்கு உட்பட்டு வழங்கப்பட்டுள்ளது SEIAA/____, தேதி____, சுற்றுச்சூழல் அனுமதி____ தேதி வரை செல்லத்தக்கதாக உள்ளது.

| | |
|--|---|
| பகலம் பகுதி வளர்ச்சி மேம்பாட்டுக்கான கரங்கத் திட்டம் | சூவாரியின் எல்லைகளைச் சுற்றி வேலி அமைக்க வேண்டும். |
| நடப்பட்டு புனாமறிக்கப்பட வேண்டிய மரங்கள் எண்ணிக்கை: | கரங்கப்பாசாறின் ஆழம் தரைமட்டத்திலிருந்து 1 மீட்டருக்கு மிகாமல் இருக்க வேண்டும். கரத்தில் மரக ஏற்படாதவாறு கரங்க பணிகளை மேற்கொள்ள வேண்டும். வாகனங்கள் செல்லும் பாதையில் மரக ஏற்படாத அளவிற்கு தண்ணீரை முறைப்பாக தண்ணீர் வளிகளின் மூலமாக அகவப்போது தெளிக்க வேண்டும். இனாச்சல் அளவையும் தூசி மரகப்பாட்டையும் குறைப்பதற்காக சூவாரியின் எல்லைகளை சுற்றி அடர்த்தியான பகலம் பகுதியை ஏற்படுத்த வேண்டும். |
| கரங்கத்தில் வெடி வைக்கும்பொழுது நிலஅதிர்வுகள் ஏற்படாதவாறும் மற்றும் கரிகள் பறக்காதவாறும் பாதுகாப்பு நடவடிக்கைகளை உண்டிப்பாக செயல்படுத்தப்பட வேண்டும். | |
| கரங்கத்தில் இருந்து ஏற்படும் இனாச்சல் அளவு 85 டிபிஎஸ் (dBA) அளவிற்கு மேல் ஏற்படாதவாறு தகுந்த கட்டுப்பாடுகளை மேற் கொள்ள வேண்டும். | |
| கரங்க சட்ட விதிகள் 1986ன் கீழ் கரங்கத்தில் உள்ள பணியாளர்களுக்கு தகுந்த பாதுகாப்பு கருவிகள் வழங்குவதோடு கைதாழ்மூன்ற வரிப்பறை வசதிகளை செய்ய தர வேண்டும். | |
| கிராமம் அல்லது பஞ்சாயத்து வட்டியாக வாகனங்கள் செல்லும் சாலைகளை தொடர்த்து தனக்கு புனாமறிக்க வேண்டும். | |
| கரங்கப்பணிகளால் அருகில் உள்ள விவசாயப் பணிகள் மற்றும் தீர்திறைகள் பாதிக்கப்படக் கூடாது. | |
| தீர்திறைகள் பாதிக்கப்படாமல் இருப்பதை உறுதி செய்யும் வகையில் துவத்தடி தீரின் தரத்தினை தொடர்த்து கண்காணிக்க வேண்டும். | |
| கரங்கத்திலிருந்து கனம் பொருட்களை எடுத்துச் செல்வது கிராம மக்களுக்கு எந்தத் சிரமத்தினையும் ஏற்படுத்தாதவாறு பாதுகாப்போடும் மற்றும் சுற்றுச்சூழல் பாதிக்கவாத வண்ணம் வாகனங்களை இயக்க வேண்டும். | |
| கரங்கப்பணிகள் முடிக்கப்பட்டவுடன் கரங்க மூடல் திட்டத்தில் உள்ளவாறு கரங்கத்தினை மூட வேண்டும். | |
| கரங்க நடவடிக்கைகளை முடித்தபின்னர் கரங்கப் பகுதி மற்றும் கரங்க நடவடிக்கைகளால் இடையூறு ஏற்படக்கூடிய வேறு எந்தப் பகுதியையும் மறுகட்டுமானம் செய்ய தவறாமல் விவசாயிகள் ஆவியவற்றின் வளர்ச்சிக்கு ஏற்ற வகையில் பகலம்பகுதியை உருவாக்க வேண்டும். | |
| முழுமையான திட்டத்தைகளை அறிய பாரிவேஷ் (http://parivesh.in) என்கிற இணையதளத்தைப் பார்க்கப்படவும். மேலும் எந்தவித சுற்றுச்சூழல் சார்ந்த புகர்களுக்கு சென்சைஸில் உள்ள சுற்றுச்சூழல் மற்றும் வன அமைச்சகத்தின் ஒருங்கிணைந்த வட்டார அலுவலகம்: 044 - 28223325 (அல்லது) தமிழ்நாடு மரக கட்டுப்பாடு வாரியத்தின் மாவட்ட சுற்றுச்சூழல் பொறிப்பணை அலுவலகம். | |

MEMBER SECRETARY
SEAC -TN

99/99

CHAIRMAN
SEAC- TN