State Expert Appraisal Committee (SEAC)

Minutes of 426th meeting of the State Expert Appraisal Committee (SEAC) held on 24.11.2023 (Friday) at SEIAA Conference Hall, 2nd Floor, Panagal Maligai, Saidapet, Chennai 600 015 for consideration of Mining projects.

Confirmation of Earlier Minutes

The minutes of the 425th SEAC meeting held on 23.11.2023 were circulated to the Members in advance and as there are no remarks, the Committee decided to confirm the minute.

Agenda No: 426-01

(File No: 10352/2023)

Proposed Rough Stone Quarry over an extent of 1.50.0 Ha at S.F.Nos.58/3(p) of Minnampalli Village, Valapadi Taluk, Salem District, Tamil Nadu by Thiru.J.J.Srinivasan - For Environmental Clearance. (SIA/TN/MIN/431260/2023, Dated: 28.05.2023).

The proposal was placed in the 426th Meeting of SEAC held on 24.11.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in). The SEAC noted the following:

- The Project Proponent. Thiru.J.J.Srinivasan has applied for Environmental Clearance for the Proposed Rough Stone Quarry over an extent of 1.50.0 Ha at S.F.Nos.58/3(p) of Minnampalli Village, Valapadi Taluk, Salem District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 10 years (06.01.2019 to 05.01.2029). The mining plan is for the period of Five years & seven months (06.06.2023 to 05.01.2029) & production should not exceed 1.38,770 m³ of Rough Stone with ultimate depth of mining 46m AGL.

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

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 The project proponent shall submit a Certified Compliance Report obtained from the office of the concerned DEE/TNPCB (or) IRO, MoEF & CC, Chennai as per the MoEF&CC O.M dated.08.06.2022 for the previous EC dated.10.06.2018 and appropriate mitigating measures for the non-compliance items, if any.

On receipt of the above details, the SEAC would further deliberate on this project and decide the further course of action. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVRESH portal.

Agenda No: 426-02

(File No: 10359/2023)

Proposed Ordinary Earth Quarry over an extent of 2.18.0Ha at S.F.Nos.936/3, 936/5, 936/6 & 936/7 of Thevaram Village, Uthamapalayam Taluk, Theni District, Tamil Nadu by Thiru.S.Rajasekar - For Environmental Clearance. (SIA/TN/MIN/441058/2023, Dated: 24.08.2023).

The proposal was placed in the 426th Meeting of SEAC held on 24.11.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

- 1. The Project Proponent, Thiru, S. Rajasekar has applied for Environmental Clearance for the Proposed Ordinary Earth Quarry over an extent of 2.18.0 Ha at S.F. Nos. 936/3, 936/5, 936/6 & 936/7 of Thevaram Village, Uthamapalayam Taluk, Theni District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 3 years. The mining plan is for the period of three years & production should not exceed 19.584 m³ of Ordinary Earth with ultimate depth of mining 2m BGL.

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

1. The proponent shall furnish a fresh soil test report containing the mineral

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contents (%), if any from the Soli Mechanics Laboratory of NIT, Trichy, Division of Soil Mechanics & Foundation Engineering, Dept. Of Civil Engineering, College of Engineering Guindy Campus, Anna University, Chennai - 600025. The soil sample for testing should be collected by the EIA coordinator in person as per the detailed protocol prescribed by SEAC, with videographic evidence.

- 2. The PP shall give adequate technical justifications for not considering the land / area for agricultural activities.
- 3. The PP shall furnish the video/photographs with legitimate coordinates indicating the sample pit/trench for a depth of 2 m BGL and 3 m AGL showing the lithological characteristics of the earth.

On receipt of the above details, the SEAC would further deliberate on this project and decide the further course of action. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVRESH portal.

Agenda No: 426-03

(File No: 10373/2023)

Proposed Rough Stone Quarry over an extent of 2.77.5 Ha at S.F.Nos.113/IB, 1C1, 1C2, 1D, 1E2 & 2 of Ullatti Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu by Thiru.R.Ananda Reddy - For Environmental Clearance. (SIA/TN/MIN/441449/2023, Dated: 23.08.2023).

The proposal was placed in the 426th Meeting of SEAC held on 24.11.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

- The SEAC noted the following:
 - The Project Proponent, Thiru.R.Ananda Reddy has applied for Environmental Clearance for the Proposed Rough Stone Quarry over an extent of 2.77.5 Ha at S.F.Nos.113/1B, 1C1, 1C2, 1D, 1E2 & 2 of Ullatti Village, Shoolagiri Taluk, Krishnagiri 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

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| F#1 - | File SIA/TN/MIN/441449/2023, No Dated:23.08.2023 | | | "B2" 1(a) | |
|--------|--|------------|---|-------------------|--|
| | | | Category | EC | |
| SI. No | Salient Fe | atu | res of the Proposa | 1 | |
| 1. | Name of the Owner/Firm | | Thiru. Ananda Re S/o. Rama Reddy No. 4/467, Mukk Eenusonai post, Shoolagiri Taluk, Krishnagiri Distric | ondapalli, | |
| 2. | Type of quarrying (Ordinary Stone/Sand/Granite/Limeston e) | ; | Rough Stone Quarry | | |
| 3. | S.F Nos. of the quarry site with area break-up | : | 113/1B, 113/1C1, 113/1C2, 113/1D, 113/1E2 & 113/2 | | |
| 4. | Village in which situated | : | Ullatti | | |
| 5. | Taluk in which situated | · · · | Shoolagiri | | |
| 6. | District in which situated | : | Krishnagiri | | |
| 7. | Extent of quarry (in ha.) | : | 2.77.5 | | |
| 8. | Latitude & Longitude of all corners of the quarry site | : | 12°36'50.70"N to | | |
| 9. | Topo Sheet No. | : | 57 - 1/2 | | |
| 10. | Type of mining | : | Opencast Semi n | nechanized Mining | |
| 11. | Life of Project Lease Period Mining Plan Period | : | 5 years 5 years : 5 years | | |
| 12. | Mining Plan Details | ; | As per approved Mining Plan | As modified by | |

| | Geological Resources m³ (RoM) | ; | Rough Stone – 13,42,159 m³ | Rough Stone – 12,32,595 m ³ |
|-----|---|--------|--|---|
| | Minable Resources m³ (RoM) | : | Rough Stone – 7,42,350 m ³ | Rough Stone – 5,15,865 m³ |
| | Annual Peak Production in m3 | : | Rough Stone – 1,93,620 m³ | Rough Stone – 1,25,690 m³ |
| | Ultimate Depth in meters | : | 52m BGL | 48m BGL |
| 13. | Depth of water table | : | 65m BGL | |
| 14. | Man Power requirement per day: | : | 16 Nos. | |
| 15. | Water requirement: 1. Drinking water & Domestic 2. Dust suppression 3. Green belt | | 1.75KLD 0.75KLD 0.50KLD 0.50KLD | |
| 16. | Power requirement | - | TNEB | |
| 17. | Precise area communication approved by the Joint Director / Assistant Director(i/c), Department of Geology and Mining | | Roc.No. 133/20 Dated; 08.02.20 | |
| 18. | Mining Plan approved by Joint Director / Assistant Director(i/c), Department of Geology and Mining | • | Roc.No. 133/20 Dated; 24.05.20 | · |

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| | Joint Director / Assistant | | Roc.No. 133/201 | 8/Mines |
|-----|------------------------------|----------|---------------------------------------|---|
| 19. | Director(i/c), Department of | | Dated; 09.12.201 | 9 |
| 19. | Geology and Mining, 500m | ļ | | |
| | Cluster Letter | | | |
| | VAO Certificate Regarding | | | |
| 20. | Structures within 300m | | Letter Dated: 23. | 01.2023 |
| | Radius | | | |
| 21. | Project Cost (excluding EMP | | Rs. 37,30,000/- | |
| 21. | cost) | • | K3. 37,30,000/- | |
| | | • | Validity | 30 years subject to the following upper limits. |
| | | 1 | | Rough Stone |
| 22. | EC Recommendation | | Max Total | 5,15,865m³ |
| 22. | | 1 | RoM in m ³ | 3,13,003111 |
| | | . | Annual Max | 1,25,690 m³ |
| | | 1 | RoM in m³ | 1,25,555 |
| | | | Ultimate Depth | 48m BGL |
| | | | in mtrs | |
| 23. | EMP cost (in Rs. Lakh). | 1. | Capital cost – Rs | . 15,10,400/- |
| 23. | LIVE COSE (HE KS. CARCI). | | recurring cost - 1 | Rs.14,63,940/-annum |
| 24. | CER cost (in Rs. Lakh). | : | Rs. 5,00,000 /- as accepted by the PP | |
| l | | | | |

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 1,25,690 m³ of rough stone by maintaining the ultimate depth of mining upto 48m BGL and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for

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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. As noted by the SEAC during the meeting, the PP shall furnish the modified mining plan indicating the revised bench configurations of not less than 6 m bench height and width of not less than 6 m for the annual peak production volume of not more than 1,25,690 m3 of rough stone, duly approved by the competent authority before obtaining the CTO.
- 3. Tree plantation & fencing around the mine lease area shall be completed before obtaining the CTO from TNPCB.
- 4. The PP shall mark the DGPS reference pillars painted with blue & white colour indicating the safety barrier of 7.5 m to be left under the Rule 13 (1) of MCDR, 1988 within the lease boundary and protective bunds, before obtaining the CTO from the TNPCB.
- 5. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary (or) permanent magazine approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.
- 6. Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the cumulative blasting operations carried out in a cluster environment in accordance with the DGMS Circular No. 7 of 1997, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a

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part of Environmental Compliance without any deviation.

7. The PP shall furnish an affidavit indicating the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.

8. As a part of haul road management, the PP shall ensure that the haul road dust is constructed with bitumen to minimize dust generation but however the suppression/watering are being done to maintain the required moisture level in all active haul roads. A fleet of water trucks with adequate water spray systems are available and operational at all times.

9. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 4th year or when the depth of working exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

10. As accepted by the project proponent, Rs. 5 Lakhs shall be spent for the conservation measures towards Cauvery North Wildlife Sanctuary in consultation with the DFO. Krishnagiri.

Agenda No: 10346 - 04

(File No: 10346 /2023)

Existing Black Granite Quarry (Dolerite) Quarry lease (next scheme of mining) over an extent of 1.15.0 Ha at S.F.No. 312/IC, 312/5, 312/6, 312/7, in Valathy Village, Melmalayanur Taluk, Villupuram District, Tamil Nadu by Sri Garuda Granites – Applied for Environment Clearance - ToR granted under violation category.

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(SIA/TN/MIN/436820/2023 dt 15/07/2023)

The proposal was placed in this 426th meeting of SEAC held on 24.11.2023. The Project Proponent made a detailed presentation on the proposal. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following among other things:

- The Project Proponent, M/s. Sri Garuda Granites has applied seeking Environment Clearance for the existing Black Granite Quarry (Dolerite) Quarry lease (next scheme of mining) over an extent of 1.15.0 Ha at S.F.No. 312/1C, 312/5, 312/6, 312/7, in Valathy Village, Melmalayanur Taluk, Villupuram District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006, as amended.
- 3. Previous EC Lr. No. SEIAA-TN/F.No.3442/EC/1(a)/2008/2014 dated 01.04.2015 for the quantity of 2850 m³ of Black Granite and upto a depth of 20m.

Based on the above details furnished by the project proponent, it was ascertained that the proponent had mined out above the previous EC approved quantity of 2850 m³.

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

"In case the project or activities requiring prior Environmental Clearance under EIA Notification 2006 from the concerned Regulatory Authority are brought for Environmental Clearance after starting the construction work, or have undertaken expansion, modernization and change in product-mix without prior EC, these projects shall be treated as cases of violations and in such cases, even Category B projects which are granted Environmental Clearance by the SEIAA constituted under sub-section(3) section 3 of the Environment (Protection) Act 1986 shall be appraised for grant of Environmental Clearance only by the concerned Expert Appraisal Committee and Environmental Clearance will be granted accordingly". In the present case, even though the proponent has not exceeded the depth beyond the limit specified in the prior EC issued, the PP has produced more volume of production against the EC permitted volume and hence it is violation of non-

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compliance in case of the EC issued on 17.02.2016.

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

- 1. The PP shall furnish an Independent Chapter 13 as per the MoEF & CC Violation Notification S.O. 804 (E), dated. 14.03.2017 for the project in case of assessment of Ecological damage, remediation plan and natural & community resource augmentation plan to be prepared as an independent chapter in the Environment Impact assessment report by the Accredited consultant and also with collection and analysis of data for assessment of ecological damage, preparation of remediation plan and natural & community resource augmentation plan to be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1996, accredited by NABET or a Laboratory of council of Scientific and industrial research institutions working in the field of environment..
- As a part of procedural formalities as per the MoEF & CC Violation Notification
 S.O. 804 (E), dated. 14.03.2017, the action will be initiated by the competent authority under section 15 read with section 19 of the Environment (Protection)
 Act, 1986 against violation.
- 3. The PP shall furnish the certified compliance report obtained from the competent authority for its existing EC.
- 4. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m. (ii) 100 m. (iii) 200 m and (iv) 300 m (v) 500m with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries,

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factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.

- 5. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.
- 6. The PP shall furnish letter from AD, mines including the following details,
 - Existing pit dimension through precise mine surveying (DGPS)
 - Quantity achieved Vs EC Approved Quantity
 - Balance Quantity as per Mineable Reserve calculated.
 - Mined out Depth as on date Vs EC Permitted depth
 - Details of illegal/illicit mining carried out in the proposed quarry site
 - Violation in the quarry during the past working.
 - Quantity of material mined out outside the mine lease area
 - Condition of Safety zone/benches as on date
- 7. The project proponent besides above must submit the No Objection certificate (NOC) in compliance of the orders of the Hon'ble Supreme court to approach State Mines and Geology Department for certification regarding payment of 100% cost of illegally mined minerals to the State Government in terms of the Section 21(5) of the MMDR Act, 1957.
- 8. Copy of total penalty levied by the concerned AD/DD, Dept of Geology and Mining, and copy of remittance of total penalty by PP.
- 9. The SEAC also recommends that SEIAA may look into any other legal and regulatory issues that are applicable before issuing the post mining EC.

Agenda No: 426 - 05

(File No: 10353/2023)

Existing Black Granite Quarry lease (next scheme of mining) over an extent of 1.08.0 Ha at S.F.No.364/3B, 364/7A2, 409/1B and 409/4A, in Sindalpadi Village,

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Pappireddypatti Taluk, Dharmpuri District, Tamil Nadu by M/s. SMN Granite –for Environment Clearance. (SIA/TN/MIN/440470/2023dt 16/08/2023)

The proposal was placed in this 426th meeting of SEAC held on 24.11.2023. The Project Proponent made a detailed presentation on the proposal. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following among other things:

- 1. The Project Proponent, M/s. SMN Granite has applied seeking Environment Clearance for the Existing Black Granite Quarry lease (next scheme of mining) over an extent of 1.08.0 Ha at 5.F.No.364/3B, 364/7A2, 409/1B and 409/4A, in Sindalpadi Village, Pappireddypatti Taluk, Dharmpuri District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the ElA Notification, 2006, as amended.
- 3. The lease area was previously granted for quarrying granite vide District Collector Proceedings Rc. 392/88 (B.Mines), dated 31.05,1988. The lease period is granted for 5 years from 10.06.1988 to 09.06.1993.
- 4. There are two existing pits reported in the approved mine plan with dimensions $55 \text{m} \times 28 \text{m} \times 2 \text{m}$ and $22 \text{m} \times 18 \text{m} \times 3 \text{m}$. Presence of two dumps with dimensions $80 \text{m} \times 23 \text{m} \times 2 \text{m}$ and $25 \text{m} \times 18 \text{m} \times 2 \text{m}$ have also been reported.

| 10353 File No SIA/TN/MIN/440470, 2023 dt 16/08/2023 | | Category B2 | |
|---|----------------------------------|---|--|
| SI. No | Salient Features of the Proposal | | |
| 1. | Name of the Owner/Firm | M/s. SMN Granite, Proprietor: K.V.Srinivasan, : No.7, Vanigavalagam, Ward-13, Kamaraj Nagar, Omalur Town (TK), Salem District-636455. | |

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| | Type of quarrying (Ordinary |] | Black Granite | |
|----------|--|------------|-------------------------------------|------------------|
| 2. | Stone/Sand/Granite/ | : | : | |
| | Limestone) | 1 | | |
| 3. | S.F Nos. of the quarry site with | | S.F.No.364/3B, 364/ | 7A2, 409/1B and |
| ٠, | area break-up | ; | 409/4A | |
| 4. | Village in which situated | : | Sindalpadi | |
| 5. | Taluk in which situated | : | Pappireddypatti | |
| 6. | District in which situated | : | Dharmpuri | |
| 7. | Extent of quarry (in ha.) | : | 1.08.0 Ha | |
| 8. | Latitude & Longitude of all | . | 12°04'33.92347"N to | 12°4'38.17350"N |
| . | corners of the quarry site | • | 78°22'27.12538"E to 7 | 8°22'32.24892"E |
| 9. | Topo Sheet No. | : | 57L/08 | |
| 10, | Type of mining | : | Opencast semi mecha mining. | anized method of |
| *** | Life of Project | : | 20 years | |
| 11. | Lease Period | •••••• | 20 years | |
| | Mining Plan Period | : | 5 years | |
| | Mining Plan Details | : | As per approved | As modified by |
| | | | Mining Plan | SEAC |
| | Geological Resources m ³ | | Black Granite @ | - |
| | (RoM) | : | 20% Recovery - | |
| 10 | ! | ! | 31272 m³ | |
| 12. | Minable Resources in m ³ | ĺ | Black Granite @ | - |
| | (RoM) | : | 20% Recovery - 12923 m ³ | |
| | | | Black Granite @20% | |
| | Annual Peak Production in m ³ | : | Recovery - 700 m ³ | |
| | Maximum Depth in meters | ; | 30m BGL | |
| 13. | Depth of water table | | | |

| 14. | Man Power requirement per | : | 22Nos. | - ·· ·· · · · · · · · · · · · · | |
|------|---------------------------------|----------|-------------------------|---------------------------------|--|
| | day: | | | | |
| | Water requirement: | : | 3.2 kLD | | |
| | 1. Drinking & domestic | : | 0.500 kLD | | |
| 15. | purposes (in kLD) | | 0.7 kLD | | |
| 1.5. | 2. Dust suppression, Green | : | | | |
| | Belt & Wet Drilling (in | | 1.0 kLD & 1.0 kLD | | |
| | kLD) | | | | |
| 16 | | | TNEB power supply & | | |
| 16. | Power requirement | | 5298 litres of HSD for | DG set | |
| | Precise area communication | | Rc.No.4056143/MME. | 2/2023-1 | |
| 17. | issued by Industries Dept, Govt | : | Dt.: 08.05.2023. | | |
| | of Tamil Nadu | | ! | | |
| | Mining Plan/ Scheme of mining | | Rc.No.554/MM4/2023 | | |
| 18. | approved by Dept. of Geology | : | Dt.: 01.08.2023. | | |
| | & Mining | | | | |
| | 500m Cluster Letter issued by | | Rc.No.210/2022/Mines | | |
| 19. | Dept. of Geology & Mining | | Dated: 05.08.2023. | | |
| | VAO Certificate regarding | | Letter Dated 07.08.2023 | | |
| 20. | Structures within 300m Radius | | ; ; | | |
| | Project Cost (excluding EMP | | ± | | |
| 21. | cost) | : | Rs.69,04,800/- | | |
| | | <u> </u> | 4 | 30 years subject | |
| | | ; | Validity | to the following | |
| | EC Recommendation | | | upper limits. | |
| 22 | | - | Annual Max RoM in | Black Granite | |
| | | | m³ | 700 m³ | |
| | | - | Ultimate Depth in m | 30m BGL | |
| | | Ϊ. | <u> </u> | 1 | |
| 23 | . Total EMP cost (in Rs. Lakh). | : | Rs.424.2 Lakh | | |

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak RoM production capacity not exceeding 700 m³ by maintaining the ultimate depth of mining of 30m BGL subject to the standard conditions as per the Annexure 1 of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- 1) The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04,2022.
- 2) The proponent shall provide the particulars for carrying out the plantation of 600 Nos. of tall saplings of native species within the proposed mining area as committed before obtaining CTO from TNPCB.
- 3) The PP shall furnish the photographic & video evidences for the tall metal fencing being installed at the periphery of the mine lease at the time of obtaining the CTO from the TNPCB.
- 4) The PP shall ensure the safety provisions as stipulated in the DGMS Circular No:02, dated, 29.11.2019 while using the Diamond Wire Saw machines in the proposed quarry operation.
- 5) The PP shall adopt only non-explosive technique (Rock Breaking Compounds) for the fracturing of granite blocks ensuring the eco-friendly mining operation in the proposed quarry.
- 6) To ensure the conditions of occupational safety, health & welfare status of persons working in the mine, the PP shall annually conduct occupational health survey to determine prevalence of Noise Induced Hearing Loss (NIHL) due to the operation of Diamond Wire Saw cutting & other HEMMs deployed in the mine and to prepare a plan for hearing conservation programme by involving anyone of the reputed institutes - Regional Occupational Health Centre

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(Southern) of ICMR-National Institute of Occupational Health, Bengaluru, National Institute of Miners' Health, Nagpur and Anna University, Chennai.

- 7) The PP shall properly provide all the required welfare amenities near quarry such as Drinking water. Rest Shelter, Canteen, Toilets, etc for the persons to be employed in the proposed quarry before the execution of lease, in accordance with the provisions of the Mines Rules, 1955.
- 8) For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 4th year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg. Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS. Chennai as a part of Environmental Compliance without any deviation.
 - 9) As accepted by the Project Proponent the CER cost of Rs.6.3 Lakh shall be spent for the committed activities at Government Higher Secondary School, Chintalapadi Village before obtaining CTO from TNPCB.

Agenda No: 426 - 06

(File No: 10367/2023)

Proposed Rough stone quarry lease over an extent of 1.89.0 Ha at S.F.802/2A in Katpadi Village, Katpadi Taluk, Vellore District, Tamil Nadu by Thiru. S. Srinivasan - Environment Clearance issued.

(SIA/TN/MIN/441840/2023 dt 30/08/2023)

The proposal was placed in this 426th meeting of SEAC held on 23.11.2023. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in). The SEAC noted that the project proponent has submitted a letter stating his inability to attend the meeting. Hence SEAC decided to defer the subject to a later date.

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Agenda No: 426 - 07

File No: 10347/2023

Proposed Rough Stone quarry lease area over an extent of Extent 1.50.0 Ha at SF. No. 219/1A (Part – 4) of Kadambur Village, Gangavalli Taluk, Salem District, Tamil Nadu by Thiru. S. Mohankumar - For Environmental Clearance. (SIA/TN/MIN/431407/2023, Dated: 29.05.2023)

The proposal was placed in the 426th SEAC meeting held on 24.11.2023. 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.

The SEAC noted the following:

- The Project Proponent, Thiru. S. Mohankumar has applied for Environmental Clearance for the Proposed Rough Stone quarry lease area over an extent of Extent 1.50.0 Ha at SF. No. 219/1A (Part – 4) of Kadambur Village, Gangavalli Taluk, Salem 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. Earlier EC issued vide Lr. No. DEIAA-DIA/TN/MIN/15286/2018-SLM-EC.No.28/2018, Dated:10.06.2018 for a quantity of 3,13,940 m³ of Rough Stone and Topsoil 15,000 m³ for a depth of 31m.
- 4. CCR obtained IRO vide Letter F.No. E. P/12.1/2023-24/SEIAA/98/TN/1182, Dated: 26.10.2023.
- 5. The depth of Existing pit is 21m AGL.
- 6. As per mining plan, the lease period is 5 years and the proposed mining plan for Five years & the production should not exceed 2,53,670m³ of Rough Stone. The Annual peak production 60,600m³ of Rough Stone. As per the duly approved Mining Plan, the ultimate depth of working is 56 m which includes 31 metres AGL and 25 m BGL.

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

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| File No | | 10347/2023 | į | Category | B2 | | |
|-----------|--|--|----------|--|---------------------------------------|--|--|
| r | IIE NO | 431407/2023 | | Category | 1(a) | | |
| SI. No | | Salient F | eat | eatures of the Proposal | | | |
| 1. | Name of the Owner/Firm | | | Thiru. S. Mohankuma S/o. Shanmugam, No.1, First Street, A.S Namakkal District – 6 | , Pettai, | | |
| 2. | | rrying (Ordinary Granite/Limestone) | | Rough Stone Quarry | | | |
| 3. | S.F Nos. of the quarry site with area break-up | | : | 219/1A (Part – 4) | | | |
| 4. | Village in which situated | | : | Kadambur | | | |
| 5. | Taluk in which situated | | : | Gangavalli | | | |
| 6. | District in which situated | | : | Salem | | | |
| 7. | Extent of qu | arry (in ha.) | : | 1.50.0 Ha | | | |
| 8. | | ongitude of all ne quarry site | | 11°30′38.98″N to 11°3 78°36′14.56″E to 78° | | | |
| 9. | Topo Sheet | No. | : | 58 - 1/10 | | | |
| 10 | Type of min | ing | : | Opencast Mechanize | d Mining | | |
| 11. | Life of Proje | | : | 5 years | | | |
| | Mining Plan | | : | 5 years | | | |
| | Mining Plan | | : | As per approved Mining Plan | As modified by SEAC | | |
| 12 | Geological I | Resources m³ | <u> </u> | Rough Stone | Rough Stone | | |
| 12 | (RoM) | | . | 6,28,670 m ³ | | | |
| | Minable Re | sources m³ (RoM) | : | Rough Stone | Rough Stone | | |
| | Millable Resources III (North) | | | 4,28,670m³ | · · · · · · · · · · · · · · · · · · · | | |

| | Annual Peak Production in m ³ | · | Rough Stone | Rough Stone | |
|-----|--|----------|---|-----------------|--|
| | Annual Feak Floduction III III | ļ | 60,600 m³ | | |
| | Ultimate Depth of working in | <u> </u> | 56 m (31 m AGL + | | |
| İ | meters | ; • | 25 m BGL) | | |
| 13. | Depth of water table | : | 68m in rainy season season | & 73m in summer | |
| 14. | Man Power requirement per day: | : | 24 Nos | | |
| 15 | Water requirement: 4. Drinking & utilized water 5. Dust suppression 6. Green belt | : | 1.0 KLD 0.2 KLD 0.5 KLD 0.3 KLD | | |
| 16 | Power requirement | : | TNEB: 2,53,652 Litres of HSD | | |
| 17. | Precise area communication approved by the Assistant Director, Dept of G&M | : | Na.Ka.No.88/2018/Kanimam/A, dated: : 31.03.2018 | | |
| 18. | Mining Plan approved by Deputy Director. Dept of Geology & Mining. | : | Roc.No.371/2022/Mines-B, dated: 16.06.2023 | | |
| 19, | Department of G&M, Deputy Director, 500m Cluster Letter | : | Roc.No.720/2023/N 22.07.2023 | Nines-A, dated: | |
| 20 | VAO Certificate Regarding Structures within 300m Radius | : | Letter Dated: 14.07.2 | 2023 | |
| 21, | Project Cost (excluding EMP cost) | : | Rs. 78,70,000 | | |

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| 22 EC Recommendation | 30 years subject to the following upper limits. Rough Stone |
|-----------------------------|---|
| | Max Total RoM in 2.53.670m³ |
| | Annual Max RoM 60,600m³ |
| | Ultimate Depth of 56 m (31 m AGL + working in mtrs 25 m BGL) |
| 23 EMP cost (in Rs. Lakhs). | Capital Cost - Rs. 23,78,000 : Recurring Cost - Rs. 17,80,042 |
| 24 CER cost (in Rs. Lakhs). | : Rs. 5,00,000 |

As per Office Memorandum issued by MoEF&CC dated: 28.04.2023, the Committee has reappraised and made the following remedial actions as recommendations based on the presentation and documents furnished by the project proponent and decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 60,600m³ of Rough stone & by maintaining the ultimate depth of working up to 56 m (31 m AGL + 25 m BGL) as stipulated by the competent authority and subject to the standard conditions as per the Annexure 1 of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

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 erect fencing all around the boundary of the proposed area with gates for entry/exit before the commencement of the operation and shall

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furnish the photographs/map showing the same before obtaining the CTO from TNPCB.

- 3. The PP shall mark the DGPS reference pillars painted with blue & white colour indicating the safety barrier of 7.5 m to be left under the Rule 13 (1) of MCDR, 1988 within the lease boundary and protective bunds, before obtaining the CTO from the TNPCB.
- 4. For ensuring the scientific & systematic way of mining, the PP shall submit a conceptual plan indicating the quarry operation to be carried out from top ward to downwards by maintaining the haul road of permitted gradient along with keeping the benches intact, to the concerned AD (Mines) at the time of lease execution.
- 5. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.
- 6. The PP shall carry out the scientific studies within a period of ONE year from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 7. The PP shall furnish an affidavit indicating the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation, and green belt development, in securing the safety

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- of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.
- 8. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 4th year or when the depth of working exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 9. As accepted by the Project Proponent the CER cost of Rs. 5 Lakhs and the amount shall be spent for the activities as committed towards Government Higher Secondary School, Kadampur, Gangavalli, Salem District before obtaining CTO from TNPCB.

Agenda No: 426 - 08

File No: 10361/2023

Proposed Grey Granite quarry lease area over an extent of Extent 2.19.0 Ha at SF. No. 389(P) & 398(P) of Mahadevakollahalli Village, Pochampalli Taluk, Krishnagiri District, Tamil Nadu by Thiru. M.S. Prabhu - For Environmental Clearance.

(SIA/TN/MIN/441363/2023, Dated: 22.08.2023)

The proposal was placed in the 426th SEAC meeting held on 24.11.2023. 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.

The SEAC noted the following:

1. The Project Proponent, Thiru. M.S. Prabhu has applied for Environmental Clearance for the Proposed Grey Granite quarry lease area over an extent of Extent 2.19.0 Ha at SF. No. 389(P) & 398(P) of Mahadevakollahalli Village.

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Pochampalli Taluk, Krishnagiri District, Tamil Nadu.

- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per mining plan, the lease period is 20 years and the proposed mining plan for Five years & the production should not exceed RoM 21,960m³, Grey Granite recovery @ 25% 5,490m³, Granite Waste @ 75% 16,470m³. The Annual peak production RoM 4,414.5 m³, Grey Granite recovery @ 25% 1,103.6m³, Granite Waste @ 75% 3,310.9m³. The ultimate depth is 33 metres below ground level.
- 4. Earlier obtained EC from SEIAA-TN vide SEIAA-TN/F.No.5009/1(a)/EC. No:3209/2016, Dated: 06.07.2016.
- 5. CCR from IRO vide EP/12.1/2022-23/SEIAA/210/TN/112, Dated: 20.01.2023.
- 6. Depth Approved: 8m, Depth Achieved: 7m

The proposal is for mining of Grey Granite Quarry and the salient features of the proposal are as follows:

| | File No 10361/2023 | | Category | | B2 |
|-----------|-------------------------|--|--------------------------|---|---|
| | | 441363/2023 | | | 1(a) |
| si. No | | Salient F | Features of the Proposal | | |
| 1. | Name of th | ne Owner/Firm | • | Thiru. M.S. Prabhu, S/o. M. P. Sathiyamurt Old No.9, New No.16 Bakthavatchalam Naga Chennai District- 600 C | , 2 nd Street, ar, Adyar, |
| 2. | | arrying (Ordinary /Granite/Limestone) | : | Grey Granite Quarry | |
| 3. | S.F Nos. of with area b | the quarry site reak-up | : | 389(P) & 398(P) | |
| 4. | Village in w | hich situated | | Mahadevakollahalli | <i>f</i> . |
| 5. | Taluk in wh | nich situated | : | Pochampalli | |

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| 6. | District in which situated | ; | Krishnagiri | | |
|-----|--|----|--------------------------------|---------------------|--|
| 7. | Extent of quarry (in ha.) | : | 2.19.0Ha | | |
| 8. | Latitude & Longitude of all | | 12°26'21.85"N to 12° | 26'27.60"N | |
| 8. | corners of the quarry site | • | 78°19'40.43"E to 78°19'48.23"E | | |
| 9. | Topo Sheet No. | : | 57 - L/07 | | |
| 10. | Type of mining | : | Opencast Mechanize | d Mining | |
| | Life of Project | : | 20 years | | |
| 11. | Lease Period | | 20 years | | |
| | Mining Plan Period | : | 5 years | | |
| - | Mining Plan Details | | As per approved | As modified by SEAC | |
| | Willing Flatt Details | - | Mining Plan | | |
| | Geological Resources m³ (RoM) | | Grey Granite | Grey Granite | |
| | | | 5,70,850 m³ | - | |
| | | | Granite Recovery | Granite Recovery @ | |
| | | | @ 25% | 25% | |
| | | | 1,42,712.5m³ | - | |
| | | | Granite Waste @ | Granite Waste @ | |
| | | | 75% | 75% | |
| | | | 4,28,137.5m³ | - | |
| 12. | | | Grey Granite | Grey Granite | |
| | | | 1,77,833m³ | - | |
| | | | Granite Recovery | Granite Recovery @ | |
| | Minable Resources m³ (RoM) | | @ 25% | 25% | |
| : | Minable Resources in (ROW) | | 44,458.0m³ | - | |
| | | | Granite Waste @ | Granite Waste @ | |
| | | | 75% | 75% | |
| | | | 1,33,375.0m³ | - | |
| | Annual Peak Production in m ³ | Τ. | Grey Granite | Grey Granite | |
| | Annual Fear Floudetton III III | | 4,414.5 m³ | | |

| | | | Granite Recovery | Granite Recovery @ |
|-----|---|-----|--|--------------------|
| | | | @ 25% | 25% |
| | | : | 1,103.6m³ | - |
| | | i | Granite Waste @ | Granite Waste @ |
| | | i | 75% | 75% |
| | | | 3,310.9 m³ | - |
| | Ultimate Depth in meters | | 33m BGL | |
| 13. | Depth of water table | : | 59m in rainy season season | & 64m in summer |
| 14. | Man Power requirement per day: | : | 34 Nos | |
| 15. | Water requirement: 7. Drinking & utilized water 8. Dust suppression 9. Green belt | • | 1.8 KLD 0.5 KLD 0.7 KLD 0.6 KLD | |
| 16. | Power requirement | : | TNEB 35,136 Litres of HSD | 1 |
| 17. | Precise area communication approved by the Industries (MME.2) Department, with date | : | G.O. (3D) No.56, da | ated: 29.07.2016 |
| 18. | Mining Plan approved by Commissioner, Dept of Geology & Mining. | ··· | Rc.No.3108/MM4/2 26.11.2022 | 021, dated: |
| ••• | Department of G&M, Deputy | + | Roc.No.438/2021/M | lines, dated: |
| 19. | Director, 500m Cluster Letter | : | 16.12.2022 | |
| 20. | VAO Certificate Regarding Structures within 300m Radius | : | Letter Dated: 14.07.2 | 2023 |

| 21. | Project Cost (excluding EMP cost) | ; | Rs. 1,45,25,000 | |
|-----|-----------------------------------|---|---|--|
| | EC Recommendation | : | Validity | 30 years subject to the following upper limits. Grey Granite |
| 22. | | | Annual Max RoM in m³ | RoM - 4,414.5 m³, Grey Granite recovery @ 25% - 1,103.6m³, Granite Waste @ 75% - 3,310.9m³ |
| | | : | Ultimate Depth in mtrs | 33m BGL |
| 23. | EMP cost (in Rs. Lakhs). | ; | Capital Cost – Rs. 25,788,000 Recurring Cost – Rs. 10,87,250 | |
| 24. | CER cost (in Rs. Lakhs). | : | Rs. 5,00,000 | |

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 4,414.5 m³ of Grey Granite & by maintaining the ultimate depth of mining up to 33m BGL as stipulated by the competent authority and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

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

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- The PP shall furnish the photographic & video evidences for the tall metal fencing being installed at the periphery of the mine lease at the time of obtaining the CTO from the TNPCB.
- 3. The PP shall ensure the safety provisions as stipulated in the DGMS Circular No:02, dated, 29.11.2019 while using the Diamond Wire Saw machines in the proposed quarry operation.
- 4. The PP shall adopt only non-explosive technique (Rock Breaking Compounds) for the fracturing of granite blocks ensuring the eco-friendly mining operation in the proposed quarry.
- 5. To ensure the conditions of occupational safety, health & welfare status of persons working in the mine, the PP shall annually conduct occupational health survey to determine prevalence of Noise Induced Hearing Loss (NIHL) due to the operation of Diamond Wire Saw cutting & other HEMMs deployed in the mine and to prepare a plan for hearing conservation programme by involving anyone of the reputed institutes Regional Occupational Health Centre (Southern) of ICMR-National Institute of Occupational Health, Bengaluru, National Institute of Miners' Health, Nagpur and Anna University, Chennai.
- 6. The PP shall properly provide all the required welfare amenities near quarry such as Drinking water, Rest Shelter, Canteen, Toilets, etc for the persons to be employed in the proposed quarry before the execution of lease, in accordance with the provisions of the Mines Rules, 1955.
- 7. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 4th year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB,

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- AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 8. As accepted by the Project Proponent the CER cost of Rs. 5 Lakhs and the amount shall be spent for the activities as committed towards Panchayat Union Primary school, Mangalahalli, Bargur Block, Krishnagiri District before obtaining CTO from TNPCB.

Agenda No: 426 - 09

File No: 10375/2023

Proposed Rough Stone quarry lease area over an extent of Extent 1.50.0 Ha at SF. No. 219(P) (BIT- 2) of Kutalamparai Village, Mohanur Taluk, Namakkal District, Tamil Nadu by Tmt. R. Papitha - For Environmental Clearance. (SIA/TN/MIN/442315 /2023, Dated: 01.09.2023)

The proposal was placed in the 426th SEAC meeting held on 24.11.2023. 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.

The SEAC noted the following:

- The Project Proponent, Tmt. R. Papitha has applied for Environmental Clearance for the Proposed Rough Stone quarry lease area over an extent of Extent 1.50.0 Ha at SF. No. 219(P) (BIT- 2) of Kutalamparai Village, Mohanur Taluk, Namakkal District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per mining plan, the lease period is 5 years and the proposed mining plan for Five years & the production should not exceed 1,10,030m³ of Rough Stone. The Annual peak production 22,565 m³ of Rough Stone. The ultimate depth is 30m Above ground level.

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

File No 10375/2023 Category B2

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| | 442315 /2023 | | | 1(a) | |
|-------------|---|--|--|------------------------|--|
| SI. No | Salient Features of the Proposal | | | | |
| 1. | Name of the Owner/Firm | | Tmt.R.Papitha, W/o. Sakthivel, No.17/7A. Doctor Sa Namakkal Taluk, Namakkal District | ankaran Road. | |
| 2. | Type of quarrying (Ordinary Stone/Sand/Granite/Limestone) | :: | Rough Stone Quarry | | |
| 3. | S.F Nos. of the quarry site with area break-up | : | 219(P) (BIT- 2) | | |
| 4. | Village in which situated | : | Kutalamparai | | |
| 5. | Taluk in which situated | | Mohanur | | |
| 6. | District in which situated | : | Namakkal | | |
| 7. | Extent of quarry (in ha.) | : | 1.50.0Ha | | |
| 8. | Latitude & Longitude of all corners of the quarry site | : | 11°10'01.14"N to 11°10'06.65"N 78°06'49.06"E to 78°06'54.99"E | | |
| 9. | Topo Sheet No. | : | 58 - 1/04 | | |
| 10. | Type of mining | : | Opencast Semi-Mechanized Mining | | |
| | Life of Project | · | 5 years | | |
| 11. | Lease Period | i | 5 years | | |
| | Mining Plan Period | : | 5 years | | |
| | Mining Plan Details | : | As per approved Mining Plan | As modified by SEAC | |
| 12. | Geological Resources m ³ | | Rough Stone | Rough Stone | |
| | (RoM) | • | 3.54,800 m ³ | • | |
| | Minable Resources m³ (RoM) | | Rough Stone | Rough Stone | |
| | , , , , , , , , , , , , , , , , , , , | | 1,10,030m³ | [- | |

CHAIRMAN' SEAGETN

| | Annual Peak Production in m³ | : | Rough Stone | Rough Stone | |
|-----|--|---|---|-------------|--|
| | | | 22,565 m³ | - | |
| | Ultimate Depth in meters | : | 30m AGL | | |
| 13. | Depth of water table | : | 53m in rainy season & 56m in summer season | | |
| 14. | Man Power requirement per day: | : | 22 Nos | | |
| 15. | Water requirement: 10. Drinking & utilized water 11. Dust suppression 12. Green belt | : | 4.0 KLD 1.0 KLD 1.5 KLD 1.5 KLD | | |
| 16. | Power requirement | : | TNEB 88,024 Litres of HSD | | |
| 17. | Precise area communication approved by the District Collector, Dept of Geology & Mining | : | Na.Ka.No. 346/Kanimam/2023, dated: 18.04.2023 | | |
| 18. | Mining Plan approved by Assistant Director, Dept of Geology & Mining. | : | Roc.No.346/Mines/2023, dated: 14.06.2023 | | |
| 19. | Department of G&M, Assistant Director, 500m Cluster Letter | : | Roc.No.346/Mines/2023, dated: 10.08.2023 | | |
| 20. | Radius | : | Letter Dated: 18.08.2023 | | |
| 21. | Project Cost (excluding EMP cost) | : | : Rs.98,50,000 | | |

| | EC Recommendation | : | Validity | 30 years subject to the following upper limits. Rough Stone |
|-----|--------------------------|---|--|--|
| 22. | | : | Max Total RoM in | 1,10,030m³ |
| | | : | Annual Max RoM in m³ | 22,565 m³ |
| | | : | Ultimate Depth in mtrs | 30m AGL |
| 23. | EMP cost (in Rs. Lakhs). | : | Capital Cost - Rs. 30.08 Lakhs Recurring Cost - Rs. 23.18 Lakhs | |
| 24. | CER cost (in Rs. Lakhs). | : | Rs. 8,00,000 | |

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 22,565 m³ of Rough stone & by maintaining the ultimate depth of mining up to 30m Above Ground Level and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- The prior Environmental Clearance granted for this mining project shall be valid
 for the project life including production value as laid down in the mining plan
 approved and renewed by competent authority, from time to time, subject to
 a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification
 S.O, 1807(E) dated 12.04.2022.
- 2. The proponent shall erect fencing all around the boundary of the proposed area with gates for entry/exit and garland drainage with settlement tank 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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- 3. The PP shall mark the DGPS reference pillars painted with blue & white colour indicating the safety barrier of 7.5 m to be left under the Rule 13 (1) of MCDR, 1988 within the lease boundary and protective bunds, before obtaining the CTO from the TNPCB.
- 4. For ensuring the scientific & systematic way of mining, the PP shall submit a conceptual plan indicating the quarry operation to be carried out from top ward to downwards by maintaining the haul road of permitted gradient along with keeping the benches intact, to the concerned AD (Mines) at the time of lease execution.
- 5. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.
- 6. The PP shall carry out the scientific studies within a period of ONE year from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 7. The PP shall furnish an affidavit indicating the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation, and green belt development, in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.

- 8. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 4th year or when the depth of working exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 9. As accepted by the Project Proponent the CER cost of Rs. 8 Lakhs and the amount shall be spent for the activities as committed towards Panchayat Union Middle School, Valliyappampattipudhur before obtaining CTO from TNPCB.

Agenda No: 426-10

(File No.10348/2023)

Proposed Rough Stone Quarry lease area over an extent of 1.03.0 Ha (Patta Land) at S.F. No.1191/2 (P) of Nagampalli Village, Aravakurichi Taluk, Karur District, Tamil Nadu by Thiru. R. Thirunavukkarasu - For Environmental Clearance.

(SIA/TN/MIN/431937/2023 dated: 02.06.2023).

The proposal was placed for appraisal in the 426th Meeting of SEAC held on 24.11.2023. 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. R. Thirunavukkarasu has applied for Environmental Clearance for the Proposed Rough Stone Quarry lease area over an extent of 1.03.0 Ha (Patta Land) at S.F. No.1191/2 (P) of Nagampalli Village, Aravakurichi Taluk, Karur District, Tamil Nadu.
- 2. The project/activity is covered under category "B2" of Item 1 (a), "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.

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- 3. Earlier, EC was accorded to the project proponent by DEIAA vide Lr.No.DEIAA-DIA/TN/MIN/18921/2018-KRR EC.No.142/2018/Mines dated.16.11.2018 for a period of 5 years from the date of execution of mining lease. EC was accorded for the quantity of 87,077m3 of rough stone up to a depth of 36m below ground level.
- 4. Now, based on MoEF&CC O.M dated.24.04.2023, the proponent has submitted the application at SEIAA-TN for re-appraisal of EC granted by DEIAA.

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

The project proponent shall submit a Certified Compliance Report as per the i) MoEF&CC O.M dated.08.06.2022 for the previous EC obtained from DEIAA dated.16.11.2018.

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

Agenda No: 426- 11

(File No.10355/2023)

Proposed Gravel Quarry lease area over an extent of 1.06.0 Ha (Patta Land) at S.F. No.185/4 of Bolanahalli Village, Nallampalli Taluk, Dharmapuri District, Tamil Nadu by Thiru. V. Bagavathsing - For Environmental Clearance.

(SIA/TN/MIN/441478/2023, dated:23.08.2023).

The proposal was placed for appraisal in the 426th Meeting of SEAC held on 24.11.2023. The details of the project furnished by the proponent are given in the website(parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Thiru. V. Bagavathsing has applied for Environmental Clearance for the Proposed Gravel Quarry lease area over an extent of 1.06.0 Ha (Patta Land) at S.F No.185/4 of Bolanahalli Village, Nallahipalli Taluk,

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- Dharmapuri District, Tamil Nadu.
- The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. The project proponent has submitted a soil test report obtained from the Government College of Engineering, Dharmapuri vide Lr.No. GCE/DPI/CIVIL/SOIL/2023/C-163 Dated:30.08.2023. According to the test report, the % of sand in the soil sample is 15.30% and the soil is classified as Poorly Graded Gravel.
- 4. Assistant Director, Dept. of Geology and Mining, Dharmapuri District vide Rc.No.65/2023/Mines dated.28.07.2023 informed that

 "...there is no rivers, streams, canals, ponds etc., situated within 50 mts to the
- 5. The salient features of the proposal are as follows:

applied area"

| File | No . | 10355/2023 | Category | | B2 | |
|-----------|--------------|--|----------|--|--------|--|
| | 441478/2023 | | } | | 1(a) | |
| SI. No | ! | Salien | t Fea | itures of the Proposal | | |
| 1. | Name of t | he Owner/Firm | • | Thiru. V. Bagavathsing S/o. Veerachandhirathi No.3/49, Mel Street, Samichettipatti Village, Dharmapuri District. | lagam, | |
| 2. | | uarrying (Ordinary d/Granite/Limeston | : e) | Gravel Quarry | | |
| 3. | S.F Nos. o | f the quarry site | : | 185/4 | | |
| 4. | Village in v | which situated | ; | Bolanahalli | · | |
| 5. | Taluk in w | hich situated | : | Nallampalli | | |
| 6. | District in | which situated | : | Dharmapuri | | |

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| 7. | Extent of quarry (in ha.) | : | 1.06.0 Ha | | | |
|-----|--|-----------|----------------------------------|------------------------------|--|--|
| 8. | Latitude & Longitude of all | ; | 12°1'17.49"N to 12°1'22.07"N | | | |
| | corners of the quarry site | L | | 78°2'39.82"E to 78°2'44.56"E | | |
| 9. | Topo Sheet No. | : | 57 L/04 | | | |
| 10. | Type of mining | : | Open cast semi-Mechanized Mining | | | |
| 11. | Life of Project | : | 1 year | | | |
| | Lease Period | | 1 year | | | |
| | Mining Plan Period | : | 1 year | | | |
| 12. | Mining Plan Details | : | As per approved Mining Plan | As modified by SEAC | | |
| | Geological Resources m ³ (RoM) | : | Gravel - 31,794 m³ | Gravel – 21,146 m³ | | |
| | Minable Resources m³ (RoM) | : | Gravel - 23,136 m³ | Gravel – 15,157 m³ | | |
| | Annual Peak Production in m³ | : | Gravel - 23,136 m³ | Gravel – 15,157 m³ | | |
| | Maximum Depth in meters | : | 3.0 m BGL | 2.0 m BGL | | |
| 13. | Depth of water table | | 30m- 35m | | | |
| 14. | Man Power requirement per day: | : | 7 Nos. | | | |
| | Water requirement: | | 1.1 KLD | | | |
| 15. | 13. Drinking & Domestic | | 0.1 KLD | | | |
| IJ. | 14. Dust suppression | | 0.5 KLD | | | |
| | 15. Green belt | | 0.5KLD | | | |
| 16. | Power requirement | | 6176 Liters of HSD | | | |
| | Precise area communication | \dagger | Rc.No.65/2023(Kar | imam). | | |
| 17. | approved by the Assistant | | Dated:26.06.2023. | | | |

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| | Director, Dept. of G&M with | -:- | | - | | |
|-----|--|----------|---|---|--|--|
| | date | į | | | | |
| 18. | Mining Plan approved by Assistant Director, Dept. of G&M with date | : | Rc.No.65/2023(Min | es), Dated:21.07.2023. | | |
| 19. | 500m cluster letter issued by the Assistant Director, Dept. of G&M with date | : | Rc.No.65/2023(Mines), Dated:28.07.2023. | | | |
| 20. | VAO Certificate Regarding Structures within 300m Radius | : | Letter Dated: : 24.07 | 7.2023. | | |
| 21. | Project Cost (excluding EMP cost) | : | Rs.15.90,000/- | | | |
| | | : | Validity | 1 year subject to the following upper limits. | | |
| | ! | | | Gravel | | |
| 22. | EC Recommendation | : | Max Total RoM in m ³ | 15,157m³ | | |
| | • | : | Annual Max RoM in m ³ | 15,157m³ | | |
| | | :: | Ultimate Depth in mtrs | 2m BGL | | |
| 23. | EMP cost (in Rs. Lakhs). | : | Rs.3.55 Lakhs | | | |
| 24. | CER cost (in Rs. Lakhs). | : | Rs. 2 Lakhs | , | | |

Based on the presentation and details furnished by the project proponent, SEAC decided to recommend the proposal for grant of Environmental Clearance for the revised production quantity production of 15,157m3 of gravel for the period of 1 year with an ultimate depth of 2 m below Ground Level, subject to the standard conditions &

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

- 1. The PP shall complete the quarrying operations within a period of I year from the date of execution of the lease.
- 2. The PP shall ensure that the loaded trucks are covered with a tarpaulin cover to avoid the spillage & dust pollution while transportation.
- 3. The PP shall install a temporary Rest Shelter and Bio-toilet for the persons employed in the mine before obtaining the CTO from the TNPCB.
- 4. The PP shall deploy a dedicated water sprinkler for controlling the dust along the public road.
- 5. Tree plantation & fencing and installation of garland drainage with siltation tank around the mine lease area shall be completed before obtaining the CTO from the TNPCB.
- 6. As accepted by the Project proponent, the CER cost is Rs.2 Lakhs and the amount shall be spent for the committed activities towards Panchayat Union Middle School, Samichettipatti Village before obtaining CTO from TNPCB.

Agenda No: 426 - 12

(File No.10362/2023)

Proposed Rough Stone and Gravel Quarry lease area over an extent of 2.19.0 Ha (Patta Land) at S.F No.1159/2 of Kuppam Village, Pugalur Taluk, Karur District, Tamil Nadu by Tmt. S. Lakshmi - For Environmental Clearance.

(SIA/TN/MIN/440350/2023, dated: 17.08.2023).

The proposal was placed for appraisal in the 426th Meeting of SEAC held on 24.11.2023. The details of the project furnished by the proponent are given in the website(parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Tmt. S. Lakshmi has applied for Environmental Clearance for the Proposed Rough Stone and Gravel Quarry lease area over an extent of 2.19.0 Ha (Patta Land) at S.F No.1159/2 of Kuppam Village, Pugalur Taluk, Karur District, Tamil Nadu.

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2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the Schedule to the ElA Notification, 2006.

Based on the presentation and details furnished by the project proponent, the Committee noted that a Primary School is located at a distance of 500m from the proposed project site on the northern side. Hence, the Committee decided to call for the following details from the project proponent to consider the proposal for appraisal:

- i) The proponent shall furnish the complete details on the existence of the Govt/Private schools within a radial distance of 1 km including the population details, the working hours, the exact distance of the school from the project area, etc.
- ii) The proponent shall revise & submit the approved mining plan by leaving a 50m safety distance on the northern side. The safety distance of 50m shall be used for planting minimum 5 rows of trees of thick canopy to curtail dust and noise pollution.
- iii)The proponent shall also furnish details on the transportation route from the quarry site to the crusher.
- iv)The proponent shall erect metal sheet fencing on the northern side & shall furnish photographic evidence for the same.
- v) The proponent shall furnish an affidavit regarding the details of drilling & blasting such as no. of holes, blasting time & frequency, etc.

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

Agenda No: 426 - 13

(File No.10376/2023)

Proposed Rough Stone Quarry lease area over an extent of 1.00.0 Ha (Government Land) at S.F No.21/1 (part) (Bit-2) of Gajakombai Village, Sendamangalam Taluk, Namakkal District, Tamil Nadu by Thiru. K. Gnanavel - For Environmental Clearance. (SIA/TN/MIN/442570/2023, dated:01.09.2023).

The proposal was placed for appraisal in the 426th Meeting of SEAC held on

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24.11.2023. The details of the project furnished by the proponent are given in the website(parivesh.nic.in).

The SEAC noted the following:

- The project proponent. Thiru. K. Gnanavel has applied for Environmental Clearance for the Proposed Rough Stone Quarry lease area over an extent of 1.00.0 Ha (Government Land) at S.F No.21/1 (part) (Bit-2) of Gajakombai Village, Sendamangalam 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. The salient features of the proposal are as follows:

| Fi | la Nia | 10376/2023 | | Catagoni | B2 | | | |
|-------|--|---|--|---|------------------|--|--|--|
| F | le No | 442570/2023 | | Category | 1(a) | | | |
| SI.No | Salient Features of the Proposal | | | | | | | |
| 1. | Name of the Owner/Firm | | Name of the Owner/Firm : Pattatha Sendam | | panayakkenpatti. | | | |
| 2. | | uarrying (Ordinary anite/ Limestone) | : | Rough Stone Quarry | | | | |
| 3. | S.F Nos. o with area | f the quarry site break-up | : | 21/1 (Part) (Bit-2) | | | | |
| 4. | Village in | which situated | : | : Gajakombai | | | | |
| 5. | Taluk in w | hich situated | : | Sendamangalam | | | | |
| 6. | District in | which situated | : | Namakkal | | | | |
| 7. | Extent of | quarry (in ha.) | : | 1.00.0 Ha | | | | |
| 8. | Latitude & Longitude of all corners of the quarry site | | | 11°12'58.79"N to 11°13'03 78°15'49.97"E to 78°15'5 | ↑ | | | |

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| 9. | Topo Sheet No. | : 581/08 | | | | | | |
|-----|---|---|---------------------------------|--|--|--|--|--|
| 10. | Type of mining | : Opencast Semi-Mec | Opencast Semi-Mechanized Mining | | | | | |
| | Life of Project | 5 years | | | | | | |
| 11. | Lease Period | 5 years | | | | | | |
| | Mining Plan Period | : 5 years | | | | | | |
| | Mining Plan Details | : As per approved : Mining Plan | As modified by SEAC | | | | | |
| | Geological Resources m ³ | Rough Stone - | | | | | | |
| | (RoM) | 2.64,290m³ | | | | | | |
| | Minable Resources m³ | Rough Stone - | | | | | | |
| 12. | (RoM) | 81,790m³ | | | | | | |
| | Annual Peak Production in m ³ | Rough Stone 17,015m³ | | | | | | |
| İ | Maximum Depth in meters | 30m (20m AGL + 10m BGL) | - | | | | | |
| 13. | Depth of water table | 58 m BGL | | | | | | |
| 14. | Man Power requirement per day: | : 22 Nos. | : | | | | | |
| | Water requirement: | 3.5 KLD | | | | | | |
| 15. | Dust & Domestic Purpose | : 1.0 KLD | | | | | | |
| | 2. Dust Suppression | 1.0 KLD | | | | | | |
| | 3. Green belt | 1.5 KLD | | | | | | |
| 16. | Power requirement | 65.432 KL of HSD f | or the entire project life | | | | | |
| 17. | Precise area communication approved by the District Collector, Dept. of G&M | Rc.No.345/Kanimam/2023, Dated:24.04.2023. | | | | | | |

CHAIRMAI SEAC-JN

| 18. | Mining Plan approved by Assistant Director, Dept. of G&M. | | Rc.No.345/Mines/20 Dated:14.06.2023. | 23. | | |
|-----|--|---|--|---|--|--|
| 19. | 500m cluster letter issued by the Assistant Director, Dept. of G&M | : | Rc.No.345/Mines/20 Dated:10.08.2023. | 23, | | |
| 20. | VAO Certificate Regarding Structures within 300m Radius | : | 14.07.2023 | | | |
| 21. | Project Cost (excluding EMP cost) | : | Rs. 89,60,000/- | | | |
| | | | Validity | 30 years subject to the following upper limits. | | |
| | | | | Rough Stone | | |
| 22. | EC Recommendation | | Max Total RoM in | 81,790m³ | | |
| | | : | Annual Max RoM in m³ | 17,015m³ | | |
| | | : | Max Depth in mtrs | 30m (20mAGL+10m8GL) | | |
| 23. | EMP cost (in Rs. Lakhs). | : | Capital Cost – Rs. 30.53 Lakhs Recurring Cost – Rs. 21.64 Lakhs | | | |
| 24. | CER cost (in Rs. Lakhs). | : | Rs. 8 Lakhs | | | |

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity not exceeding 17,015m³ of Rough stone by restricting the ultimate depth of mining up to 30m (20m above ground level + 10m below ground level) as stipulated by the competent authority and subject to the standard conditions

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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 5.0, 1807(E) dated 12.04.2022.
- 2) The proponent shall erect fencing all around the boundary of the proposed area with gates for entry/exit and garland drainage with settlement tank before the commencement of the operation and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
- 3) The PP shall mark the DGPS reference pillars painted with blue & white colour indicating the safety barrier of 7.5 m to be left under the Rule 13 (1) of MCDR, 1988 within the lease boundary and protective bunds, before obtaining the CTO from the TNPCB.
- 4) For ensuring the scientific & systematic way of mining, the PP shall submit a conceptual plan indicating the quarry operation to be carried out from top ward to downwards by maintaining the haul road of permitted gradient along with keeping the benches intact, to the concerned AD (Mines) at the time of lease execution.
- 5) The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.
- 6) The PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the quarry, by involving anyone of these reputed Research and Academic Institution such as \$\psi\$SIR-Central

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

- 7) The PP shall furnish an affidavit indicating the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation, and green belt development, in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.
- 8) For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 3rd year, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation
- 9) As accepted by the Project Proponent the CER cost is Rs. 8 Lakhs and the amount shall be spent towards Panchayat Union Primary School, Gajakombai village for the activities committed by the PP during the appraisal without deviation, before obtaining CTO from TNPCB.

Agenda No: 426- 14

(File No: 10349/2023)

Proposed Rough Stone quarry lease over an extent of 3.57.5Ha at SF.No. 365/1, 363/2B, 369/1 and 370/1 of Serukudi Village, Musiri Taluk, Tiruchirappalli District, Tamil Nadu by Thiru.D.Krishnamoorthy - For Environmental Clearance.

(SIA/TN/MIN/430478/2023, Dated:23.05.2023)

The proposal was placed in the 426th meeting of SEAC held on 24.11.202\$, The details

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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.D.Krishnamoorthy has applied for Environmental

Clearance for the proposed Rough Stone quarry lease over an extent of 2.69.8Ha

at SF.No. 365/1, 363/2B. 369/1 and 370/1 of Serukudi Village, Musiri Taluk,

Tiruchirappalli District, Tamil Nadu.

2. The proposed quarry/activity is covered under Category "B2" of Item 1(a)

"Mining Projects" of the Schedule to the EIA Notification, 2006.

3. Earlier the PP obtained EC from DEIAA Vide - Lr.No.DEIAA-TN-

TRY/F.No.311/2016) /MINES/ Dated:23.05.2018.

Based on the presentation and details furnished by the project proponent, **SEAC decided**

to defer and call for additional particulars as follows,

1. The PP shall submit Certified Compliance Report obtained from the office of the

IRO, MoEF & CC. Chennal and the PP shall furnish appropriate mitigating

measures for the non-compliance items, if any.

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

advised to submit the details within a period of 30 days failing which the proposal will

be automatically delisted from the PARIVESH Portal.

Agenda No: 426- 15

(file No: 10356/2023)

Proposed Multi colour Granite quarry lease over an extent of 1.17.5Ha at SF.No. 79/IA

of Mattaparai Village, Gingee Taluk, Viluppuram District, Tamil Nadu by Thiru. V.

Nachiyappan - For Environmental Clearance.

(SIA/TN/MIN/439209/2023, Dated:04.08.2023)

The proposal was placed in the 426th meeting of SEAC held on 24.11.2023. 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.V.Nachiyappan has applied for Environmental

Clearance for the proposed Multi colour Granite quarry lease over an extent of

1.17.5Ha at SF.No. 79/1A of Mattaparai Village, Gingee Taluk, Viluppuram

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District, Tamil Nadu.

- 2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. Earlier the PP obtained EC from SEIAA Vide Lr.No. SEIAA-TN-F.No.5804/1(a)/EC. No:3792/2016 Dated:24.10.2016.

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

 The PP shall submit Certified Compliance Report obtained from the office of the IRO. MoEF & CC. Chennai and the PP shall furnish appropriate mitigating measures for the non-compliance items, if any.

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

Agenda No: 426-16

(File No: 10357/2023)

Proposed Earth quarry lease over an extent of 2.43.0 Ha at 5.F.No. 530/1B2 of Vettangudi Village, Sirkazhi Taluk, Mayiladuthurai District, Tamil Nadu by Thiru. J. Rajaraman – For Environmental Clearance.

(SIA/TN/MIN/441290/2023, Dated: 23.08.2023)

The proposal was placed for appraisal in this 426th meeting of SEAC held on 24.11.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

- 1. 1.The project proponent, Thiru. J. Rajaraman has applied for Environmental Clearance for the Proposed Earth quarry lease over an extent of 2.43.0 Ha at S.F.No. 530/1B2 of Vettangudi Village, Sirkazhi Taluk, Mayiladuthurai District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. The precise area communication was issued for the period of 2 years. The approved mining plan is for 2 Years. The annual peak production shall not exceed

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19,380 m³ of Earth for an ultimate depth of 2m below ground level.

4. DFO letter vide Ref. No. 2833/2022 D Dt: 20.12.2022

| File No 10357 / 2023 | | | Category | B2 / 1(a) | | | |
|----------------------|---|----------------------------------|----------|---|------------------------------------|--|--|
| SI. No | | Salient Fe | atu | ires of the Proposal | | | |
| 1 | Name of the Owner/Firm | | | Thiru. J. Rajaraman S/o. Jayaraman, No.3/226, Amman Thoppiruppu, Ariya Bhuvanagiri Taluk, Cuddalore District | Kovil Street, akosti - Madhura, | | |
| 2 | Type of quarrying (Ordinary : Stone/Sand/Granite/Limestone) : Earth | | | | | | |
| 3 | S.F Nos. of area break- | the quarry site with up | : | 530/1B2 | | | |
| 4 | Village in w | vhich situated | : | Vettangudi | | | |
| 5 | Taluk in wh | nich situated | : | Sirkazhi | | | |
| 6 | District in v | vhich situated | : | Mayiladuthurai | | | |
| 7 | Extent of q | uarry (in ha.) | : | 2.43.0 Ha | | | |
| 8 | | Longitude of all the quarry site | : | 11°16′16.88″N to 11° 79°48′50.85″E to 7 | | | |
| 9 | Topo Sheet | No. | : | C44B15 | | | |
| 10 | Type of mi | ning | | Opencast Semi-Med | chanized Mining | | |
| | Life of Proj | ect | : | 2 years | | | |
| 11 | Lease Perio | d | : | 2 years | | | |
| | Mining Plan | n Period | : | 2 years | | | |
| 12 | Mining Pla | n Details | : | As per approved Mining Plan | As modified by SEAC | | |
| 12 | Geological (RoM) | Resources m³ | : | Earth 97,200 m ³ | Earth - | | |

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| | 14' 14 D | | Earth | Earth |
|-----|--|------------|-----------------------|---------------------|
| | Minable Resources m³ (RoM) | • | 38,760 m ³ | - |
| ļ | Annual Peak Production in m ³ | | Earth | Earth |
| Ì | Annual Peak Production III III | | 19,380 m³ | - |
| | Lillation at a Donath in motors | | 2m below ground | _ |
| | Ultimate Depth in meters | • | level | |
| 13 | Depth of water table | : | 6m | |
| 14 | Man Power requirement per | | 12 Nos. | |
| 14 | day: | | | |
| | Water requirement: | | 2.0 KLD | |
| | 1. Drinking water | | 0.5 KLD | |
| 15 | 2. Utilized water | : | 0.5 KLD | |
| | 3. Dust suppression | | 0.5 KLD | |
| | 4. Green belt | i | 0.5 KLD | |
| 16 | Power requirement | : | 10336 Liters of HSD | |
| | Precise area communication | | R.C.No.21/Mines/20 |)22, |
| 17 | approved by Assistant Director | : | Dated:28.06.2022 | |
| | (i/c), Department of G&M | ! | | |
| | Mining Plan approved by | | R.c.No.21/Mines/20 | 22, |
| 18 | Assistant Director (i/c). | : | Dated:02.08.2022 | |
| | Department of G&M | | | |
| 10 | Department of G&M, Assistant | | Rc.No.21/Mines/20 | 22. |
| 19 | Director 500m Cluster Letter | | Dated:02.08.2022 | |
| 200 | VAO Certificate Regarding | ١. | - | |
| 20 | Structures within 300m Radius | . | | <u> </u> |
| | Project Cost (excluding EMP | Ι. | Rs. 16,05,100/- | |
| 21 | cost) | 1 | | |
| | FC Decomposition | - | | 30 years subject to |
| 22 | EC Recommendation | : | Validity | the following |
| 22 | | | | upper limits. |

| | | <u>-</u> | · · · · · · · · · · · · · · · · · · · | Earth | | |
|----|-------------------------|----------|---|-----------------------|--|--|
| | | : | Max Total RoM in | 38,760 m³ | | |
| | | : | Annual Max RoM in m ³ | 19,380 m³ | | |
| | | ; | Max Depth in mtrs | 2m below ground level | | |
| 23 | EMP cost (in Rs. Lakh). | : | Capital Cost – Rs. 6. Recurring Cost – Rs. | i | | |
| 24 | CER cost (in Rs. Lakh). | : | Rs. 2,00.000/- | | | |

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 19,380 m³ of Earth by maintaining the ultimate depth of mining upto 2m below ground level for a period of two years only and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- 1) The PP shall ensure that the loaded trucks are covered with a tarpaulin cover to avoid the spillage & dust pollution while transportation.
- 2) The PP shall install a temporary Rest Shelter and Bio-toilet for the persons employed in the mine before obtaining the CTO from the TNPCB.
- The PP shall deploy a dedicated water sprinkler for controlling the dust along the public road.
- 4) Tree plantation & fencing and installation of garland drainage with siltation tank around the mine lease area shall be completed before obtaining the CTO from the TNPCB.
- 5) As accepted by the Project Proponent the CER cost of **Rs. 2 Lakhs** and the amount shall be spent for the activities as committed towards the belowmentioned school, before obtaining CTO from TNPCB.

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| CER Activity | CER Cost (Rs.) | | | | | | | |
|---|----------------|--|--|--|--|--|--|--|
| Government High School, Edamanal Village, | | | | | | | | |
| Sirkazhi Taluk, Mayiladuthurai Distr | rict | | | | | | | |
| Painting for Buildings | 1,00,000/- | | | | | | | |
| Incinerator | 10,000/- | | | | | | | |
| Toilet Construction and maintenance | 90,000/ | | | | | | | |
| Total Cost Allocation | Rs. 2,00,000/- | | | | | | | |

Agenda No: 426-17

(File No: 10364/2023)

Proposed Gravel and Laterite quarry lease over an extent of 1.14.0 Ha at S.F.No. 285/4 of C.N. Palayam Village, Cuddalore Taluk, Cuddalore District, Tamil Nadu by Tmt. G. Latha – For Environmental Clearance. (SIA/TN/MIN/441677/2023, Dated: 24.08.2023)

The proposal was placed for appraisal in this 426th meeting of SEAC held on 24.11.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

- The project proponent, Tmt. G. Latha has applied for Environmental Clearance for the Proposed Gravel and Laterite quarry lease over an extent of 1.14.0 Ha at S.F.No. 285/4 of C.N. Palayam Village, Cuddalore Taluk, Cuddalore District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. The precise area communication was issued for the period of 2 years. The approved mining plan is for 2 Years. The annual peak production shall not exceed 5529.6 m³ of Gravel and 1382.4 m³ of Laterite for an ultimate depth of 2m.
- 4. The salient features of the proposal are as follows:

| File No | 10364 / 2023 | | Category | B2 / 1(a) |
|------------------------------|--------------|----|----------|---------------------|
| | | | ۶ | |
| MEMBER SECRETARY SEAC -TN | | 50 | | CHAYRMAN SEAC-TN |

| SI. | | | | | | | | |
|-----|--|--|--|---------------------|-----------|--|--|--|
| No | Salient Fea | itu | tures of the Proposal | | | | | |
| 1 | Name of the Owner/Firm | Tmt. G. Latha, W/o. Govindharasu, No.239, North Street, Silambinathanpettai, Panruti Taluk, Cuddalore District - 607 102. | | | | | | |
| 2 | Type of quarrying (Ordinary | | Gravel at | nd Laterite | | | | |
| _ | Stone/Sand/Granite/Limestone) | | | | | | | |
| 3 | S.F Nos. of the quarry site with area break-up | :: | 285/4 | | | | | |
| 4 | Village in which situated | : | C.N. Palayam | | | | | |
| 5 | Taluk in which situated | : | Cuddalore | | | | | |
| 6 | District in which situated | : | Cuddalore | | | | | |
| 7 | Extent of quarry (in ha.) | : | 1.14.0 Ha | | | | | |
| 8 | Latitude & Longitude of all corners of the quarry site | : | 11°42'45.08"N to 11°42'47.60"N 79°36'31.22"E to 79°36'39.36"E | | | | | |
| 9 | Topo Sheet No. | : | 58 – M/1 | 0 | | ·· · · · · · · · · · · · · · · · · · · | | |
| 10 | Type of mining | : | Opencasi | Mechanize | ed Mining | | | |
| | Life of Project | : | 2 years | | | | | |
| 11 | Lease Period | †: | 2 years | | | | | |
| | Mining Plan Period | : | 2 years | | | | | |
| | Mining Plan Details | : | As per ap | • | As mod | fled by | | |
| 12 | Geological Resources m³ (RoM) | • | Gravel 18,048 m³ | Laterite 4512 m³ | Gravel | Laterite - | | |
| | Minable Resources m³ (RoM) | : | Gravel | Laterite | Gravel | / Laterite | | |

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| | | | 11,059 | 2765 | | |
|----|--|----------------|--------------------|------------|---------------|-------------|
| | | | m³ | m³ | - | - |
| | | | Gravel | Laterite | Gravel | Laterite |
| | Annual Peak Production in m ³ | : | 5529.6 | 1382.4 | | |
| | | | m³ | m³ | - i | - |
| | Ultimate Depth in meters | : | 2m | 1 | - | |
| 13 | Depth of water table | - | 44m-49n | below gro | ound leve | l |
| 14 | Man Power requirement per day: | : | 10 Nos. | | | |
| | Water requirement: | | 1.0 KLD | | | |
| | 1. Drinking water | er 0.2 KLD | | | | |
| 15 | 2. Utilized water | : - | | | | |
| | 3. Dust suppression | | 0.5 KLD | | | |
| | 4. Green belt | i | 0.3 KLD | | | |
| 16 | Power requirement | : | 2300 Liters of HSD | | | |
| | Precise area communication | - | R.C.No.2 | 52/Mines/2 | 2022, | |
| 17 | approved by Assistant Director, | : | Dated:18. | .05.2023 | | |
| | Department of G&M | | - | | | |
| | Mining Plan approved by | " | Rc.No.25 | 2/Mines/20 | 022, | |
| 18 | Assistant Director, Department | : | Dated:25 | .07.2023 | | |
| | of G&M | | | | | |
| 19 | Department of G&M, Assistant | | Rc.No.25 | 2/Mines/20 | 022, | _ |
| | Director 500m Cluster Letter | ١. | Dated:25 | .07.2023 | | |
| 20 | VAO Certificate Regarding | | Letter dat | ed 01.08.2 | 023 | |
| 20 | Structures within 300m Radius | • | | | | |
| 21 | Project Cost (excluding EMP | : | Rs. 18,40, | 000/- | | |
| | cost) | | | | | |
| 00 | EC Recommendation | | | | _ | - |
| 22 | | : | Validity | | 2022, 022, | ſ: |
| | | | | | upper iti | nits. |

| | | | | Gravel | Laterite | |
|----|-------------------------|----------------|-----------------------------|----------|----------|--|
| | | ! | Max Total RoM in | 11,059 | 2765 | |
| | | | m³ | m³ | m³ | |
| | | | Annual Max RoM | 5529. | 1382.4 | |
| | | : | in m³ | 6 m³ | m³ | |
| | | ; : | Max Depth in mtrs | 2m | | |
| | END - (C D. 1 LL) | + | Capital Cost Rs. 7,98,800/- | | | |
| 23 | EMP cost (in Rs. Lakh). | ; | Recurring Cost - Rs. | 5,15,330 | /- | |
| 24 | CER cost (in Rs. Lakh). | : | Rs. 2,00,000/- | | | |

Based on the presentation and documents furnished by the project proponent. SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 5529.6 m³ of Gravel & 1382.4 m³ of Laterite by maintaining the ultimate depth of mining upto 2m for a period of two years only and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- 1) The PP shall ensure that the loaded trucks are covered with a tarpaulin cover to avoid the spillage & dust pollution while transportation.
- 2) The PP shall install a temporary Rest Shelter and Bio-toilet for the persons employed in the mine before obtaining the CTO from the TNPCB.
- 3) The PP shall deploy a dedicated water sprinkler for controlling the dust along the public road.
- 4) Tree plantation & fencing and installation of garland drainage with siltation tank around the mine lease area shall be completed before obtaining the CTO from the TNPCB.
- 5) As accepted by the Project Proponent the CER cost of Rs. 2 Lakhs and the amount shall be spent for the activities as committed towards Government Higher Secondary School, C.N.Palayam Village, Cuddalore District, before obtaining CTO from TNPCB.

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Agenda No: 426-18

(File No: 10378/2023)

Proposed Rough Stone and Gravel quarry lease over an extent of 2.72.50 Ha at S.F.Nos. 1159, 1162 & 1163 of Kunnur Village, Andipatti Taluk, Theni District, Tamil Nadu by Thiru. P.K. Suresh – For Environmental Clearance.

(\$IA/TN/MIN/442422/2023, Dated: 30.08.2023)

The proposal was placed for appraisal in this 426th meeting of SEAC held on 24.11.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

- 1. The project proponent, Thiru. P.K. Suresh has applied for Environmental Clearance for the Proposed Rough Stone and Gravel quarry lease over an extent of 2.72.50 Ha at S.F.Nos. 1159, 1162 & 1163 of Kunnur Village, Andipatti Taluk, Theni District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. The precise area communication was issued for the period of 5 years. The approved mining plan is for 5 Years. The annual peak production shall not exceed 60,650 m³ of Rough Stone (5th year) and 25,912 m³ of Gravel (1st year) for an ultimate depth of 32m below ground level.
- 4. The salient features of the proposal are as follows:

| File No | | 10378 / 2023 | | Category | B2 / 1(a) | | | |
|-----------|--|--|---|--------------------|-----------|--|--|--|
| SI. No | | Salient Fea | ent Features of the Proposal | | | | | |
| 1 | S/o. Kasthuri, Name of the Owner/Firm : No.139/A, Subbar Theni, Theni Talu | | Thiru. P.K. Suresh, S/o. Kasthuri, No.139/A, Subban St Theni, Theni Taluk, Theni District - 625 | | | | | |
| 2 | | uarrying (Ordinary Granite/Limestone) | : | Rough Stone and Gr | avel | | | |

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| 3 | S.F Nos. of the quarry site with area break-up | | 1159, 1162 | 2 & 1163 | | | |
|----|--|---------------------------|---------------------------------|--------------|---------------------------------------|--------------|--|
| 4 | Village in which situated | | Kunnur | | | | |
| 5 | Taluk in which situated | | Kunnur Andipatti | | | | |
| 6 | District in which situated | | Theni | | | | |
| | Extent of quarry (in ha.) | : | 2.72.50 ł | -la | | | |
| | Latitude & Longitude of all | | 09°57'14.52"N to 09°57'24.21"N | | | | |
| 8 | corners of the quarry site | · : | 77°30'50.05"E to 77°30'54.84"E | | | | |
| 9 | Topo Sheet No. | : | 58 – G/09 | | | | |
| 10 | Type of mining | : | Opencast Semi-Mechanized Mining | | | | |
| | Life of Project | | | | | | |
| 11 | Lease Period | : | 5 years | | | | |
| | Mining Plan Period | : | 5 years | | | | |
| | Mining Plan Details | : | As per approved As modified b | | fled by | | |
| | | | Mining Plan S | | SEAC | SEAC | |
| | Geological Resources m³ (RoM) | : | Rough | Gravel | Rough | Gravel | |
| | | | Stone | Clavel | Stone | Gravei | |
| | | | 8,17,29 | 54,486 | : | | |
| | | | 0 m³ | m³ | | - | |
| | Minchia December 3 (Deb4) | | Rough | Gravel | Rough | Gravel | |
| 12 | | | Stone | | Stone | | |
| 12 | Minable Resources m³ (RoM) | | 2.99,33 | 43.044 | · · | | |
| | | | 0 m³ | : m³ | ; - | - | |
| | Appual Peak Production in m3 | 1 | Rough | Gravel | Rough | Gravel | |
| | | | Stone | | Stone | Giavei | |
| | LAnnual Peak Production in m3 | • | | | · · · · · · · · · · · · · · · · · · · | | |
| | Annual Peak Production in m ³ | : | 60,650 | 25,912 | | <u> </u> | |
| | Annual Peak Production in m ³ | ; | 60,650 m³ | 25,912 m³ | - | _ | |
| | | : - | m³ | | | - | |
| | Annual Peak Production in m³ Ultimate Depth in meters | : | m³ | m³ | - L | - | |

CHAIRMAN C

| 14 | Man Power requirement per day: | : | 25 Nos. | | | |
|----|--|--|-------------------------|------------------|-----------------|--|
| | Water requirement: | | 6.0 KLD | | | |
| | 1. Drinking water | | 1.0 KLD | | | |
| 15 | 2. Utilized water | | - | | | |
| | 3. Dust suppression | | 2.7 KLD | | | |
| | 4. Green belt | | 2.3 KLD | | | |
| 16 | Power requirement | : | 246642 Liters of HSC |) | | |
| | Precise area communication | communication Na.Ka.No.332/Kanimam/2019, | | | 9, | |
| 17 | approved by Assistant Director, | : | Dated:28.07.2023 | | | |
| | Department of G&M | | | | | |
| | Mining Plan approved by Assistant Director, Department | | Roc No.332/2019/Mines, | | | |
| 18 | | | Dated:03.08.2023 | | | |
| | of G&M | | | | | |
| 19 | Department of G&M, Assistant | | Roc No.332/2019/Mines, | | | |
| | Director 500m Cluster Letter | | Dated:03.08.2023 | | | |
| 20 | VAO Certificate Regarding | | Letter dated 04.08.2023 | | | |
| | Structures within 300m Radius | Ĺ | | | | |
| 21 | Project Cost (excluding EMP | | Rs. 81,35,000/- | | | |
| | cost) | | | | | |
| | EC Recommendation | | | 30 years subject | | |
| | | | | to the following | | |
| | | | Validity | upper limits. | | |
| | | | | Rough | Gravel | |
| 22 | | | | Stone | 43.044 | |
| | | | Max Total RoM in | 2,99,3 | 43,044 | |
| | | | m³ | 30 m³ | m³ | |
| | | | Annual Max RoM | : | 25,912 | |
| | | | in m³ | 0 m³ | DA ³ | |

| | |]_ | Max Depth in mtrs | 32m | below |
|----|-------------------------|-------|----------------------------------|--------------|-------|
| ! | | • | | ground level | |
| 23 | EMP cost (in Rs. Lakh). | : | Capital Cost - Rs. 40.36 lakhs | | |
| 25 | | | Recurring Cost – Rs. 30.69 lakhs | | |
| 24 | CER cost (in Rs. Lakh). | : | Rs. 8,00,000/- | | |

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 60,650 m³ of Rough Stone & 25,912 m³ of Gravel by maintaining the ultimate depth of mining upto 32m below ground level and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- 1) The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
- 2) The proponent shall erect fencing all around the boundary of the proposed area with gates for entry/exit and garland drainage with settlement tank before the commencement of the operation and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
- 3) The PP shall mark the DGPS reference pillars painted with blue & white colour indicating the safety barrier of 7.5 m to be left under the Rule 13 (1) of MCDR, 1988 within the lease boundary and protective bunds, before obtaining the CTO from the TNPCB.
- 4) For ensuring the scientific & systematic way of mining, the PP shall submit a conceptual plan indicating the quarry operation to be carried out by maintaining the haul road of permitted gradient along with keeping the benches intact, to the concerned AD (Mines) at the time of lease execution.

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CHAIRMAI

- 5) The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.
- 6) The PP shall carry out the scientific studies within a period of ONE year from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS. Chennai as a part of Environmental Compliance without any deviation.
- 7) The PP shall furnish an affidavit indicating the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation, and green belt development, in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.
- 8) For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 4th year or when the depth of working exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

9) As a part of Ground Water Management, the PP shall carry out the scientific studies to assess the existing hydrogeological condition and impacts of the quarrying operation on the ground water level present in the core zone, by involving any one of the reputed Research and Academic Institution - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras - Centre for Environmental Studies, and Anna University Chennai-Dept of Geology, CEG Campus, A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

(0) As accepted by the Project Proponent ti

10) As accepted by the Project Proponent the CER cost of **Rs. 8 Lakhs** and the amount shall be spent for the activities as committed towards Panchayat Union Primary School, Pallapatti Village, Theni District, before obtaining CTO from

TNPCB.

11) In addition to that, PP has included Rs. 5 Lakhs as conservation measures towards SMTR in the EMP and the same shall be spent towards the committed activities in consultation with concerned DFO before obtaining CTO from TNPCB.

Agenda No: 426 - 19

(File No: 10351 /2023)

Proposed Rough stone quarry lease over an extent of 1.00.0Ha in S.F.No.12(Part-1), Jagadevampatti Village, Omalur Taluk, Salem District, Tamil Nadu by Thiru.C.Selladurai - For Environmental Clearance. (SIA/TN/MIN/431267/2023 Dt. 28/05/2023).

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

The SEAC noted the following:

 The project proponent, Thiru.C.Selladurai has applied for Environmental Clearance for the Rough stone quarry lease over an extent of 1.00.0Ha in S.F.No:12(Part-1), Jagadevampatti Village, Omalur Taluk, Salem District, Tamil

Nadu.

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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.

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

Agenda No: 426 - 20 (File No: 10372 /2023)

Proposed Rough stone & Gravel quarry lease over an extent of 2.77.0Ha in S.F. Nos:367/1, 367/2, 368/1G, 368/1H, 368/1I, 376/1, 376/2, 376/3, 376/4, & 376/5 of Edamachi Village, Uthiramerur Taluk, Kancheepuram District, Tamil Nadu by Thiru.R.Giridharan - For Environmental Clearance. (SIA/TN/MIN/441822/2023, Dt.25.08.2023)

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

The SEAC noted the following:

- The project proponent. Thiru.R.Giridharan has applied for Environmental Clearance for the Rough stone & Gravel quarry lease over an extent of 2.77.0Ha in S.F.Nos:367/1, 367/2, 368/1G, 368/1H, 368/11, 376/1, 376/2, 376/3, 376/4, & 376/5 of Edamachi Village, Uthiramerur Taluk, Kancheepuram District, Tamil Nadu.
- 2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
- 3. The precise area communication was issued for the period of 5 years. The approved mining plan is for the period of 1st five years & production should not exceed 52288m³ of Rough Stone & 58816m³ of Gravel. The annual peak production is 11856m³ of Rough Stone (5th Year) & 2304m³ of Gravel (1st Year). The depth of mining is 42m BGL.

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

1) The PP shall carry out the scientific studies to assess the hydrogeological condition of the quarry by involving any one of the reputed Research and Academic Institution - CSIR-Central Institute of Mining & Fuel Research / Dhanbad,

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NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras (Guindy Campus) - Dept of Geology, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be submitted.

- Form I to be corrected regarding Karikili Bird Sanctuary.
- 3) The Project Proponent shall carry out a study on impact of the dust & other environmental impacts due to proposed quarrying operations on the agricultural activities within 1 km radius and the PP shall obtain a letter from the Concerned Director of Agriculture stating that proposed mining activity has no impact on the surrounding Agriculture.
- 4) Change in land use classification.
- 5) The Project Proponent shall furnish the Modified mining plan approved by the RQP, incorporating the revised Plan & Section indicating the revised bench & height configurations as directed by the Committee for the bench geometry of not more than 6 m in height and width of not less than bench width as stipulated by with the provisions of the MMR 1961.

On receipt of the above details, the SEAC would further deliberate on this project and decide the further course of action. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVRESH portal.

Agenda No: 426 - 21

(File No.10369/2023)

Proposed repair & re-construction of existing shore protection seawall for the Arulmigu Subramaniya Swamy Temple, Tiruchendur, Tamil Nadu by the Executive Engineer. Arulmigu Subramaniya Swamy Thirukoll - Application seeking CRZ Clearance -Submitted under Terms of Reference (SIA/TN/INFRA1/440855/2023 dt. 18/08/2023).

The proposal was placed for appraisal in the 426th Meeting of SEAC held on 24.11.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

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The SEAC noted the following:

- The project proponent, Executive Engineer of Arulmigu Subramaniya Swamy
 Thirukoil has submitted an application seeking CRZ Clearance vide ToR Proposal
 No. SIA/TN/INFRA1/440855/2023 dt. 18/08/2023 for the Proposed repair & reconstruction of existing shore protection seawall for the Arulmigu Subramaniya
 Swamy Temple, Tiruchendur, Tamil Nadu.
- 2. The DCZMA of Thoothukudi District has recommended the proposal to TNSCZMA in the meeting held on 12.01.2023.
- 3. The TNSCZMA in its 121" meeting dated.26.06.2023, has appraised the proposal. From the minutes of the 121" TNSCZMA meeting, the following were observed: "... An application no.4 of 2013 was filed by Thiru. O. Fernandes before the Hon'ble NGT(SZ), on erosion control measures at shoreline. The Hon'ble NGT (SZ) has disposed the application, with the below directions, vide order dated.11.04.2022.

"The approved CZMP shall contain the parameters as listed in the CRZ 2019 Notification including High, Medium and Low erosion stretches for such erosion prone areas. SMP (Shoreline Management plan) shall be prepared as illustrated by NiOT for such erosion prone areas. We further direct preparation/updation of their SMPs for such identified eroding stretches shown in the CZMPs within six months. Pending preparation/updation of such SMPs by the Coastal States/UTs, no further hard structures for erosion control be raised or constructed".

Further based on the above orders, the preparation of SMP is under progress. However, as the proposed project is only repair and reconstruction of the existing shore protection sea wall. Hence, the above order may not be applicable for repair of the existing seawall...."

Subsequently, TNSCZMA has recommended the proposal to SEIAA-TN for CRZ Clearance subject to the conditions stated therein.

4. In view of the above, the proposal was earlier placed in the 409th SEAC meeting held on 21.09.2023.

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CHAIŘMÁN SEAC- TN Based on the presentation and documents submitted by the project proponent, the SEAC decided to call for the following details/documents from the project proponent before deciding on the proposal:

- i) The proponent shall prepare a detailed Shore Management Plan covering 1 km stretch on either side of the proposed structure through a reputed consultant. As a part of the study, the proponent shall furnish details on the past erosion data and the implications of the proposed work on erosion. The PP shall also suggest a district level monitoring system to administer the Shore Management Plan in consultation with the District Collector.
- ii) The proponent shall explain in detail the technology proposed to be adopted and implementation process/procedures involved during the reconstruction of the seawall.
- iii) The PP shall provide the source of places with mode of transportation & storage facilities for the raw materials (boulders) to be supplied for the construction.
- iv) The PP shall carry out a detailed study on Risk Assessment & Management and submit a 'Safety Audit' for the work is to be accomplished considering the movement of large public in the vicinity.
- v) Further, the proponent shall furnish the timeline related to the implementation of the proposed activities.
- vi) The PP shall provide the Disaster Management Cell headed by a senior official from PWD coordinating the overall activities pertaining to the aforesaid construction.
- 5. The proponent vide letter dated.06.11.2023 submitted a reply to the above details sought by SEAC.
- 6. In view of the above, the proposal is again placed in this 426th meeting.
- 7. From the details furnished & presentation made by the proponent, the Committee noted the following:
 - i) There are no protruding structures like rubble mound groynes involved in the proposal.

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- ii) No new structures are proposed rather than strengthening and reconstruction of existing sea wall along the coast by using Gabion box to a length of 496m.
- iii) It was proposed by IITM, for providing gabion box structures since it is mentioned as flexible soft structures.
- iv) The Specifications of Gabion box to be used are as follows:

 Flexible Gabion boxes made up of 9mm diameter with 4 stand tarred polypropylene with adequate UV stabilizer rope confirming to IS 1969. The mesh opening size will be 100mm x 100mm and the size of the Gabion boxes are 2m x 1m x 1m.

Based on the presentation & details furnished by the project proponent, the Committee after detailed deliberations, decided to recommend the proposal for grant of CRZ Clearance subject to the conditions imposed by DCZMA, TNSCZMA, standard conditions imposed by MoEF&CC in addition to the following conditions:

- 1) There should be 'Temple Disaster Management Cell', in addition to the District level Disaster Management, with RDO, Joint Commissioner, PWD, Fisheries Department, Local Police, Local Fire Service, etc., as members, to respond to any emergencies as the temple attracts a large number of people at any point of time.
- 2) Double barricades shall be erected all along the periphery of the seawall for the safety of the devotees.
- 3) The site shall be cleared immediately after construction and it shall be ensured that no construction waste, garbage, machinery/equipment are left post construction.
- 4) The PP shall ensure the quality of stones being used for shoreline management in the accredited QC Lab before using the same for construction.

Agenda No: 426-22

(File No: 9830/2023)

Proposed Rough Stone and Gravel quarry over an extent of 1.00.0 Ha at S.F.Nos. 27/3A (Part), 27/4 (Part), 27/5 (Part), 27/6 & 27/8 of Mambakkam Village, Sriperumbudur

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Taluk, Kancheepuram District, Tamil Nadu by Thiru. B. Gopinathan - For Environmental Clearance. (SIA/TN/MIN/417896/2023, Dated: 11.02.2023)

The proposal was placed for appraisal in this 426th meeting of SEAC held on 24.11.2023. 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. B. Gopinathan has applied for Environmental Clearance for the Proposed Rough Stone and Gravel quarry over an extent of 1.00.0 Ha at S.F.Nos. 27/3A (Part), 27/4 (Part), 27/5 (Part), 27/6 & 27/8 of Mambakkam Village, Sriperumbudur Taluk, Kancheepuram 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. Thiru. B. Gopinathan earlier applied seeking Environment Clearance (File No. 8991 and Online Proposal No. \$1A/TN/MIN/254763/2022, dated: 03.02.2022) for the Proposed Rough Stone and Gravel quarry lease over an extent of 1.00.0 Ha at S.F.Nos. 27/3A(P), 27/4(P), 27/5(P), 27/6 & 27/8 of Mambakkam Village, Sriperumbudur Taluk, Kancheepuram District. Tamil Nadu. The proposal was placed for appraisal in this 280th meeting of SEAC held on 02.06.2022. Based on the presentation and document furnished by the project proponent, SEAC noted that GAIL gas pipeline is running at a very close distance of 64 m on the western side from the boundary of the proposed quarry and therefore, decided not to recommend the project.

Subsequently, the proposal was placed in the 526° meeting of SEIAA held on 30.06.2022. The Authority noted that the subject was placed in the 280th meeting of SEAC held on 02.06.2022. After detailed deliberation, the Authority decided to request the Member Secretary SEIAA-TN to communicate the decision of the SEAC to the Project Proponent.

- 4. The project proponent has obtained NOC from Indian Oil Corporation Limited Pipelines Division vide letter SRPL/MAN/ML/22-23/25-9 Dated: 08.07.2022.
- 5. The project proponent has furnished the Approved Revised Mining Plan vide Rc.No.290/Q3/2020, Dated.13.12.2022 subject to condition that 100-meter

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Safety Distance should be provided for Indian Oil Corporation Limited for Pipeline Project.

6. The precise area communication was issued for the period of 5 years. The approved mining plan is for 5 Years. The annual peak production shall not exceed 5220 m³ of Rough Stone (5th year) and 2560 m³ of Gravel (1st year) for an ultimate depth of 17m below ground level.

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

i) The project proponent shall obtain the **RoW details** of the GAIL gas pipeline from the competent authority which is being installed close to the boundary of proposed quarry and furnish the report.

On receipt of the above details, the SEAC would further deliberate on this project and decide the further course of action. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVESH portal.

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ANNEXURE-I

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

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

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- 9. The PP shall not perform secondary breakage involving the drilling & blasting in the quarrying operations and it can be replaced with non-conventional methods such as noise-controlled rock breakers, usage of non-explosive expansive materials/chemicals, Hydraulic Splitting based on the suitable scientific studies carried out by any reputed scientific and academic institutions.
- 10. The PP shall take adequate steps to control the air pollution due to fines, dust, smoke or gaseous emissions during the quarrying operations within 'Permissible Limits' specified under the environmental laws.
- 11. The Quarrying and Mining activities shall be restricted in the Eco-sensitive Zone of 60 m from the boundary of the Reserved area and hence the PP shall not even include in constructing the haul roads in these areas.
- 12. No development on existing steep hill slopes or slopes with a high degree of erosion shall be permitted. Hence, the PP shall not carry out the quarrying on steep hill slopes with a gradient of 20° or more or areas with a high degree of erosion on forestland.
- 13. The PP shall give an affidavit at the time of lease execution that there will be no felling of trees (or) any encroachment will not be made on these Reserved Forest lands and also within the Eco- sensitive Zone of 60 m without the prior permission of the State Government in case of reserve forest land as per the procedures laid down by the State Government.
- 14. The PP shall not use plastic carry bags within the quarry area.
- 15. The PP shall ensure that all the haul roads within the quarry lease shall be provided with adequate number of road side drains and these drains shall be kept free form blockage for runoff disposals. This run off from the road side drainage shall relate to the natural drainage system in the area.
- 16. The PP shall adhere to the provisions of the MoEF had issued Notification No.
 S.O. 1545 dated 25th June 2009 regulating certain activities in the ecosensitive zone to conserve and protect the reserved forest area from ecological and environmental point of view.

GRAVEL / RED EARTH & PEBBLES QUARRY - GENERAL CONDITIONS

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

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- 9. Taller/one year old saplings raised in appropriate size of bags (preferably eco-friendly bags) should be planted in proper spacing as per the advice of local forest authorities/botanist/horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
- 10. Noise and Vibration Related: (i) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs, (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
- 11. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50 m safety distance from water body should be maintained without carrying any activity. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.
- 12. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
- 13. The proponent shall ensure that the transportation of the quarried granite stones shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried granite stones; and transport of granite stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
- 14. To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.

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

- 22. The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
- 23. As per the MoEF& CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere EMP furnished.

ROUGH STONE/JELLY/BLUE METAL QUARRY

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

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- 8) The Proponent shall submit a conceptual 'Slope Stability Action Plan' incorporating the benches & accessible haul road approved by the concerned AD (Mines) for the proposed quarry to the DEE/TNPCB at the time of obtaining the CTO.
- 9) The PP shall ensure that the persons employed in the quarry whether permanent, temporary or contractual are undergoing the initial/periodical medical examination in the DGMS approved OHS Clinics/Hospitals as per the DGMS Circular No. 01 of 2011 before they are engaged in mining activities.
- 10) The PP shall ensure that the persons employed in the quarry whether permanent, temporary or contractual are provided with adequate PPEs before engaged in mining operations.
- 11) The PP shall meticulously carry out the mitigation measures as spelt out in the approved EMP.
- 12) Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology should be adopted by considering the wind direction.
- 13) The Project Proponent shall ensure that the funds earmarked for environmental protection measures are kept in a separate bank account and should not be diverted for other purposes. Year-wise expenditure should be included in the HYCR.
- 14) The Project Proponent shall send a copy of the EC to the concerned Panchayat/local body.
- 15) Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required, in coordination with the concerned Govt. Authority.
- 16) Perennial sprinkling arrangements shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals and submit the consolidated report to TNPCB once in six months.

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- 17) The Proponent shall ensure that the noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures are undertaken accordingly. The report on the periodic monitoring shall be included in the HYCR.
- 18) Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology to be adopted by considering the wind direction.
- 19) The purpose of green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 20) Taller/one year old saplings raised in appropriate size of bags (preferably eco-friendly bags) should be planted in proper spacing as per the advice of local forest authorities/botanist/horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
- 21) Noise and Vibration Related: (i) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs, (ii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
- 22) The PP shall carry out maximum of only one round of controlled blast per day, restricted to the maximum of 30 to 40 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured, in the

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- houses/structures located at a distance of 500 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 20 m from the site of blasting.
- 23) The PP shall also ensure that the blasting operations are not carried out on a 'day after day' basis and a minimum 24 hours break should be observed between blasting days to reduce the environmental impacts effectively.
- 24) If 'Deep-hole large diameter drilling and blasting' is required, then the PP shall obtain special permission from DGMS.
- 25) The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone of 500 m from the boundary of the quarry. The PP shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.
- 26) The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him in accordance with the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
- 27) The proponent shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by the quarrying operations and shall complete this work before the conclusion of such operations as per the Environmental Management Plan& the approved Mine Closure Plan.
- 28) Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
- 29) The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50 m safety distance from water body should be maintained without carrying any activity. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.

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- 30) The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
- 31) The proponent shall ensure that the transportation of the quarried granite stones shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried granite stones; and transport of granite stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
- 32) To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
- 33) The Project Proponent shall comply with the provisions of the Mines Act, 1952, MMR 1961 and Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
- 34) The project proponent shall ensure that the provisions of the MMDR Act, 1957&the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are compiled by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.
- 35) The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCB) and the Director of Mines Safety (DMS), Chennai Region by the proponent without fail.
- 36) The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.

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- 37) All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the Precise area communication letter issued by concerned District Collector should be strictly followed.
- 38) That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.
- 39) As per the directions contained in the OM F.No.22-34/2018-IA.III dated 16th January 2020 issued by MoEFCC, the Project Proponent shall, undertake regrassing the mining area and any other area which may have been disturbed due to his mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The compliance of this direction shall be included in the Half Yearly Compliance Report which will be monitored by SEAC at regular intervals.
- 40) The mining lease holders shall, after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
- 41) As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere to the EMP as committed.

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| SPECIAL MITIGATION MEASURES FOR THE QUARRIES LOCATED IN CLOSE | | | |
|---|---|--|--|
| PROXIMITY TO THE WINDMILLS | | | |
| Existing (or) Virgin Quarry | | | |
| Wind Mills located at a distance of | Wind Mills located beyond 300 m | | |
| 150 m to 300 m | Up to 500 m | | |
| Appointment of I/II Class Mines | Appointment of I/II Class Mines Manager | | |
| Manager Certificate of | Certificate of Competency under MMR | | |
| Competency under MMR 1961. | 1961. | | |
| Special precautions are to be taken | Blast design parameters should be | | |
| during blasting within danger zone | mentioned in mining plan/scheme. and | | |
| such as posting guards, etc. | may be reviewed by a competent mining | | |
| | engineer. | | |
| Blast design parameters should be | MCPD and total charge should be fixed | | |
| mentioned in mining plan/scheme. | such that it should nott exceed 1.3 kg and | | |
| | 26.50 kg respectively. | | |
| The recommendations of scientific | Fresh scientific study may be conducted if | | |
| organisation need to be | mine management wants to increase the | | |
| incorporated in the mining | MCPD and total explosive charge above | | |
| plan/scheme before its approval. | the quantity of 1.30 kg and 26.50 kg | | |
| | respectively. Continuous monitoring using | | |
| | seismograph should also be done in such | | |
| | cases by the mine management. | | |
| Engagement of blasting in-charge | Engagement of blasting in-charge having | | |
| having Diploma/Degree in mining | Diploma/Degree in mining engineering for | | |
| engineering for day-to-day | day-to-day blasting. | | |
| blasting. | | | |
| Training of the blasting crew on | Training of the blasting crew on controlled | | |
| controlled blasting practices | blasting practices before engaged in | | |
| before engaged in operation. | operation. | | |
| | Existing (or) Virgin Quarry Wind Mills located at a distance of 150 m to 300 m Appointment of I/II Class Mines Manager Certificate of Competency under MMR 1961. Special precautions are to be taken during blasting within danger zone such as posting guards, etc. Blast design parameters should be mentioned in mining plan/scheme. The recommendations of scientific organisation need to be incorporated in the mining plan/scheme before its approval. Engagement of blasting in-charge having Diploma/Degree in mining engineering for day-to-day blasting. Training of the blasting crew on controlled blasting practices | | |

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

- 1. In the case of existing/operating mines, a letter obtained from the concerned AD (Mines) shall be submitted and it shall include the following:
 - (i) Original pit dimension
 - (ii) Quantity achieved Vs EC Approved Quantity
 - (iii) Balance Quantity as per Mineable Reserve calculated.
 - (iv) Mined out Depth as on date Vs EC Permitted depth
 - (v) Details of illegal/illicit mining
 - (vi) Violation in the quarry during the past working.
 - (vii) Quantity of material mined out outside the mine lease area
 - (viii) Condition of Safety zone/benches
 - (ix) Revised/Modified Mining Plan showing the benches of not exceeding 6 m height and ultimate depth of not exceeding 50m.
- Details of habitations around the proposed mining area and latest VAO
 certificate regarding the location of habitations within 300m radius from the
 periphery of the site.
- 3. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
- 4. The PP shall submit a detailed hydrological report indicating the impact of proposed quarrying operations on the waterbodies like lake, water tanks, etc are located within 1 km of the proposed quarry.
- 5. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.

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- 6. The DFO letter stating that the proximity distance of Reserve Forests.

 Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
- 7. In the case of proposed lease in an existing (or old) quarry where the benches are not formed (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall the PP shall carry out the scientific studies to assess the slope stability of the working benches to be constructed and existing quarry wall, by involving any one of the reputed Research and Academic Institutions CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept
 - NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. The PP shall submit a copy of the aforesaid report indicating the stability status of the quarry wall and possible mitigation measures during the time of appraisal for obtaining the EC.
- 8. However, in case of the fresh/virgin quarries, the Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry during the appraisal while obtaining the EC, when the depth of the working is extended beyond 30 m below ground level.
- 9. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, 11/1 Class mines manager appointed by the proponent.
- 10. The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site.
- 11. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.

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- 12. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
- 13. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
- 14. Quantity of minerals mined out.
 - · Highest production achieved in any one year
 - · Detail of approved depth of mining.
 - Actual depth of the mining achieved earlier.
 - Name of the person already mined in that leases area.
 - If EC and CTO already obtained, the copy of the same shall be submitted.
 - Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 15. All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology and geology of the mining lease area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 16. The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc.,
- 17. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.
- 18. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment, and the remedial measures for the same.

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- 19. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of the Mines Act 1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 20. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of groundwater pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds, etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided.
- 21. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.
- 22. The Proponent shall carry out the Cumulative impact study due to mining operations carried out in the quarry specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
- 23. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 24. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass

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- preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 25. Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided.
- 26. Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be considered.
- 27. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 28. Impact on local transport infrastructure due to the Project should be indicated.
- 29. A tree survey study shall be carried out (nos., name of the species, age, diameter etc.,) both within the mining lease applied area & 300m buffer zone and its management during mining activity.
- 30. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
- 32. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.

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- 33. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner
- 34. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 35. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 36. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 37. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 38. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 39. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

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- 40. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 41. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site photographs which shall duly be certified by MoEF&CC, Regional Office, Chennai (or) the concerned DEE/TNPCB.
- 42. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
- 43. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

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Annexure II

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

1. Statutory Compliance:

- The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightning etc.
- 3. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- 4. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- 5. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- The project proponent shall obtain the necessary permission for drawing of ground water / surface water required for the project from the competent authority.
- 7. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- 8. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department and Civil Aviation

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- Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- 9. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- 10. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

2. Air quality monitoring and preservation:

- Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- 2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- 3. The project proponent shall install a system to carry out Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM25) covering upwind and downwind directions during the construction period.
- 4. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- 5. Sand, murram, loose soil, cement, stored on site should be covered adequately so as to prevent dust pollution.
- 6. Wet jet shall be provided for grinding and stone cutting.

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- 7. Unpaved surfaces and loose soil should be adequately sprinkled with water to suppress dust.
- 8. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- 9. The diesel generator sets to be used during construction phase shall be low Sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise mission standards.
- 10. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- 11. For indoor air quality the ventilation provisions as per National Building Code of India.

3. Water Quality Monitoring and Preservation:

- The natural drain system should be maintained for ensuring unrestricted flow
 of water. No construction shall be allowed to obstruct the natural drainage
 through the site, on wetland and water bodies. Check dams, bio-swales,
 landscape, and other sustainable urban drainage systems (SUDS) are allowed
 for maintaining the drainage pattern and to harvest rainwater.
- 2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- 3. Total freshwater use shall not exceed the proposed requirement as provided in the project details.
- 4. The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with Half Yearly Compliance Reports (HYCR).

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- 5. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- 6. At least 20% of the open spaces as required by the local building byelaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- 7. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation car washing, thermal cooling, conditioning etc. shall be done.
- 8. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- 10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- 11. The local bye-law provisions on rainwater harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- 12. A rainwater harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one day of total freshwater requirement shall

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- 13. All recharges should be limited to shallow aquifer.
- 14. No ground water shall be used during construction phase of the project.
- 15. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
- 16. The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with Half Yearly Compliance Reports (HYCR).
- 17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, not related water shall be disposed into municipal drain.
- 18. No sewage or untreated effluent water would be discharged through storm water drains.
- 19. Onsite sewage treatment of capacity of treating 100% wastewater to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated wastewater shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment. Forest and Climate Change. Natural treatment systems shall be promoted.
- 20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be taken to mitigate the odor problem from STP.

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21. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Centre Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

4. Noise Monitoring and Prevention:

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

5. Energy Conservation Measures:

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

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- design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- 5. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- 6. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/local building byelaws requirement, whichever is higher.
- 7. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building byelaws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

6. Waste Management:

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

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- 5. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- 6. Any hazardous waste generated during construction phase shall be disposed of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- 7. Use of environmentally friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environmentally friendly materials.
- 8. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September 1999 and amended from time to time. Ready mixed concrete must be used in building construction.
- Any wastes from construction and demolition activities related thereto shall be managed to strictly conform to the Construction and Demolition Rules, 2016.
- 10. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

7. Green Cover:

- No tree can be felled/transplant unless exigencies demand. Where absolutely
 necessary, tree felling shall be with prior permission from the concerned
 regulatory authority. Old trees should be retained based on girth and age
 regulations as may be prescribed by the Forest Department. Plantations to
 be ensured species (cut) to species (planted).
- 2. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.

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- 3. Where the trees need to be cut with prior permission from the concerned local authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- 4. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.
- 5. A wide range of indigenous plant species should be planted as given in the Appendix-I, in consultation with the Government Forest/Horticulture Departments and State Agriculture University.

8. Transport:

- A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - Traffic calming measures.
 - c. Proper design of entry and exit points.
 - d. Parking norms as per local regulation.
- Vehicles hired to bring construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during nonpeak hours.
- 3. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within \$6.05 kms

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radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

9. Human Health Issues:

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

10. Corporate Environment Responsibility:

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

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- 2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of Half Yearly Compliance Report (HYCR).
- 3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- 4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Half Yearly Compliance Report (HYCR).

11. Miscellaneous:

- The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in Tamil language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- 2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies. Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt.

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- 3. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- 4. The project proponent shall submit Half Yearly Compliance Reports (HYCR) on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.
- 5. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- 6. The project proponent shall inform the Authority (SEIAA) of the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- 7. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- 8. The project proponent shall abide by all the commitments and recommendations made in the ElA/EMP report and also during their presentation to the State Expert Appraisal Committee.
- 9. No further expansion or modifications to the plant shall be carried out without prior approval of the Authority (SEIAA).
- 10. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 11. The Authority (SEIAA) may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 12. The Authority reserves the right to stipulate additional conditions if found necessary. The Company in a time-bound manner shall implement these conditions.

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- 13. The Regional Office of the MoEF&CC Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- 14. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

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Appendix -I List of Native Trees Suggested for Planting

| No | Scientific Name | Tamil Name | Tamil Name |
|----|--------------------------|--------------------|----------------------------|
| 1 | Aegle marmelos | Vilvam | வில்வம் |
| 2 | Adenaanthera pavonina | Manjadi | மஞ்சாழ். ஆனைக்குன்றிமணி |
| 3 | Albizia lebbeck | Vaagai | வாகை |
| 4 | Albizia amara | Usil | ∟ £⊗ |
| 5 | Baulinia purpurea | Mantharai | ம ்த்தாரை |
| 6 | Bauhinia racemosa | Aathi | -3,8 € |
| 7 | Baulinia tomentos | Iruvathi | இருவாத்தி |
| 8 | Buchanania axillaris | Kattuma | காட்டுமா |
| 9 | Borassus flabellifer | Panai | Lenenx |
| 10 | Butea monosperma | Murukkamaram | முருக்கமரம் |
| 11 | Bobax ceiba | Ilavu, Sevvilavu | ∑ 00€ |
| 12 | Calophyllum mophyllum | Punnai | പ്പർക്കണ |
| 13 | Cassia fistula | Sarakondrai | சர ட்டொன்றை |
| 14 | Cassia roxburgliii | Sengondrai | செங்கொள்றை |
| 15 | Chloroxylon sweitenia | Purasamaram | rite rote |
| 16 | Cochlospermum religiosum | Kongu, Manjalllavu | கோங்கு. மஞ்சன் இலவு |
| 17 | Cordia dichotoma | Naruvuli | நருஷனி |
| 18 | Creteva adansoni | Mavalingum | மா விலங்கம் |
| 19 | Dillenia indica | Uya, Uzha | 1 € - F 1 |
| 20 | Dillenia pentagyna | SiruUva, Sitruzha | சிறு உசா |
| 21 | Diospyro sebenum | Karungali | கருங்காலி |
| בי | Diospyro schloroxylon | Vaganai | வா <i>க</i> ளை |
| 23 | Ficus amplissima | Kalltchi | கல் இச்சி |
| 24 | Hibiscus tiliaceou | Aatrupoovarasu | ஆற்றுப்புரைக |
| 25 | Hardwickia binata | Aacha | ஆச்சா |
| 26 | Holoptelia integrifolia | Aavili | ஆராமு மரம். ஆய்பில் |
| 27 | Lannea coromandelica | Odhiam | ஃ தியம் |
| 28 | Lagerstroenna speciosa | Poo Marudhu | ர் <u>ஈ</u> ⊋் |
| 29 | Lepisanthus tetraphylla | Neikottaimaram | தெப் கொட்டடை மரம் |
| 30 | Limonia acidissima | Vila maram | விலா மரம் |
| 31 | Litsea glutinos | Pisinpattai | அரம்பா பூசின்பட்டை |
| 32 | Madhuca longifolia | Illuppai | இலுப்பை |
| 33 | Manilkara hexandra | UlakkaiPaalai | உலக்கை பாலை |
| 34 | Mimusops elengi | Magizhamaram | ம ஆர்ஸ் |
| 35 | Mitragyna partufolia | Kadambu | கடம்பூ |
| 36 | Morinda pubescens | Nuna | THEORET |
| 37 | Mormda citrifolia | Vellai Nuua | வெள்ளை நுண |
| 38 | Phoenix sylvestre | Eachai | ஈச்சமரம் |
| 39 | Pongamia pinnat | Pungam | ri.e.e.c. |

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| 40 | Premna mollissima | Munnai | முன்னை |
|----|-------------------------|------------------|-------------------------|
| 41 | Premna serratifolia | Narumunnai | ടത്ത ഗ്രത്തേങ |
| 42 | Premna tomentosa | Malaipoovarasu | மலை பூவரசு |
| 43 | Prosopis cinerea | Vanni maram | வன்னி மரம் |
| 44 | Pterocarpus marsupium | Vengai | வேங்கை |
| 45 | Pterospermum canescens | Vennangu, Tada | வெண்ணாங்கு |
| 46 | Pterospermum xylocarpum | Polavu | ମ୍ୟକ୍ଷ |
| 47 | Puthranjiva roxburghi | Karipala | கறிபாலா |
| 48 | Salvadora persica | Ugaa Maram | ஊகா மரம் |
| 49 | Sapindus emarginatus | Manipungan, | ம ண்ட்ட ப்சுத |
| : | | Soapukai | சோப்புக்காய் |
| 50 | Saraca asoca | Asoca | அளேகா |
| 51 | Streblus asper | Piray maram | பீராப் மரம் |
| 52 | Strychnos nuxvomic | Yetti | எட்டி |
| 53 | Strychnos potatorum | Therthang Kottai | ி தத்தான் கொட்டை |
| 54 | Syzygium cumini | Nava1 | ът ая. |
| 55 | Terminalia belleric | Thandri | தான்றி |
| 56 | Terminalia arjuna | Ven marudhu | வெண் மருது |
| 57 | Toona ciliate | Sandhana vembu | சந்தன வேப்பு |
| 58 | Thespesia populnea | Puvarasu | பூவரக |
| 59 | Walsuratrifoliata | valsura | வால்கரா |
| 60 | Wrightia tinctoria | Veppalai | ବିଷ୍ଟାପ୍ତମନ୍ତର |
| 61 | Pithecellobium dulce | Kodukkapuli | கொடுக்காப்புளி |

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Appendix -ll1

Display Board

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

| கரங்கங்களில் குவாரி செயல் <u>.</u> | சுடுகளுக்கான சுற்றுச்தழல் அனுமதி கீழ்க ண் ட நிடந்தனைகளு க்கு உட்பட்டு | |
|--|--|--|
| வழங்கப்பட்டுள்ளது ஊடு தே | இயிடப்பட்டு கற்றுச்தழல் அனுமதிதேதி வளர செல்லத்தக்கதாக உள்ளது. | |
| | குவாரியின் எல்லையைச் சுற்றி வேலி அமைக்க வேண்டும் | |
| பசுமை பகுதி வணர்ச்சி மேம்பாட்டுக்கான சுரங்கத் திட்டம் | காங்கப்பாதையின் ஆழம் தனாமட்டத்திலிருந்து மீட்டர்க்கு மிகாமல் இழுக்க வேண்டும் | |
| | காற்றில் மாசு ஏற்படாதவாறு கரங்க பளிகளை மேற்கோள்ள வேண்டும். | |
| | வாகனங்கள் செல்லும் பாதையில் மாக ஏற்படாத அனவிற்கு தண்ணிரை முறையாக | |
| நடப்பட்டு | தண்ணிர் லாரிகளின் மூலமாக அவ்வப்போது தெளிக்க வேண்டும். | |
| ஞாமரிக்கப்படவேள் நய மரங்கள் என்னிக்கை: | நிரைச்சல் அன்னையும் தூசி மாசுபாட்டையும் குறைப்பதற்காக குவா ர்யின் எல்லையை | |
| | கற்றி அடர்த்தியான பகமை பகுதியை ஏற்படுத்த வேண்டும் | |
| தடவடிக்கைகளை உள்ளிப்பாக செ | ழுது தில.அதீர்வுகள் ஏற்படாதவாறும் மற்றும் கற்கள் பறக்காதவாகும் பாதுகாப்பு பல்படுக்கப்படவேண்டும் | |
| ஷங்கத்தில் இருந்து ஏற்படும் இதை | ச்சல் அளவு 85 டெசியல்ஸ் (கூடி) அளவிற்கு மேல் ஏற்படாதவாறு தகுத்த கட்டுப்பாடுகளை | |
| மேற் கொள்ள வேண்டும். | | |
| கரங்க சட்ட விதிகள் பணக் கீழ் | கரங்கத்தில் உள்ள பணியாரகளுக்கு ஒருந்த பாலுகாப்பு கருவிகள் வ ழங்கவிதாடு | |
| களதாரமுள்ள கழிப்பறை வசதிகள | | |
| | s வாகனங்கள் செல்லும் சாலையை தொடர்ந்து நன்கு. பாரமரிக்க வே ண் டும். | |
| | விவசாயப் பணிகள் மற்றும் தீர்திலைகள் பாதிக்கப்படக் கூடாது. | |
| | தை உறுதி செட்டபும் வசைவில் நிலத்தடி நீரின் நாத்தினை தொடர்ந்து கண்காணிக்க வேண்டும். | |
| கரங்கத்திலிருத்து கணிம் பொருட்க | கான எடுத்துச் செல்வது கிராம மக்களுக்கு எந்தத் கிரமத்திகையும் ஏற்படுத்தாதவாறு | |
| | ல் பாதிக்கவாத வண்ணம் வாகணங்களை இயக்க வேண்டும் | |
| சரங்கப்பளிகள் முடிக்கப்பட்டவுடக் | ii கரங்க முடல் <u>திட்டத்தி</u> ல் உள்ளனது. கரங்கத்தினை முட வே ஸ்ட ும். | |
| எரங்க நடவடிக்கைகளை முடித்த | பின்னர் கரங்கப் பகுதி மற்றும் கரங்க நடவடிக்கைகளால் இடையூறு ஏற்படக்கூடிய | |
| வேறு எந்தப் பகுதியையும் மறுகப் | டுமானம் செய்து தாவரங்கள் விலங்குகள் ஆகியவற்றின் வளர்ச்சிக்கு ஏற்ற வகையில் | |
| பசுமைப்பகுதியை உருவாக்க வேல | ஈடு ம். | |
| முழுளம் <i>டான திடத்தனைகள</i> ை அறிய | ப பாரிவேஷ் (http://parwesh.ne.in) என்றே நிளையதாத்தை ப் பார்வையிடவும். <mark>மேலும் எத்தவித</mark> | |
| சுற்றுத்துவ் சார்த்த புகார்க கு த்து செ | சன்னையில் உள்ள சுற்றுச்தமுல மற்றும் வன அமைச்சகத்தின் ஒருங்கின னத்த வட்டா ர | |
| ക്കൂവാകർ: 044 – 28222325 (കൾങ്കു) | கமிற்காடு மாக கட்டுப்பாடு வாரியக்கின் மாவட்ட கற்றுக்கமுல் போரியாரண அண்கவும் | |

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