## STATE EXPERT APPRAISAL COMMITTEE - TAMIL NADU

Minutes of the Meeting of 287th State Expert Appraisal Committee (SEAC) held on 22nd June, 2022 (Wednesday) at SEIAA Conference Hall, 2<sup>nd</sup> Floor, Panagal Maligai, Saidapet, Chennai 600 015 for appraisal of Building and Construction Projects, Townships and Area Development Projects & Mining Projects through online and offline mode.

Agenda No: 287-1

(File No: 9207/2022)

Proposed construction of Multi-storied Residential Building Project at S. Nos.: 116/1, 116/2, 116/4, 116/5A, 116/5B, 116/8, 116/9, 117/1A1, 117/1A2, 117/2A, 117/3A, 117/3B, 119/2B, 120, 121/1A, 121/1B, 121/2, 121/3A, 121/3B, 139/4B, 140/1, 141/1, 141/2A, 141/2B, 142, 143/2, 143/3 Part, 144/2B, 145/2B, 146/1, 146/2 Siruseri Panchayat Road, Siruseri Village, Vandalur Taluk, Chengalpattu district by M/s Alliance Budget Housing India Private Limited & M/s. Alliance Infrastructure Projects Private Limited - For Terms of Reference (SIA/TN/MIS/75326/2022 Dated:16.04.2022).

The proposal was placed in this 286th SEAC meeting held on 22.6.2022. The project proponent gave a detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

### SEAC noted the following:

- 1. The Proponent, M/s Alliance Budget Housing India Private Limited & M/s. Alliance Infrastructure Projects Private Limited, has applied for Terms of Reference for the proposed construction of Multi-storied Residential Building project at S. Nos.: 116/1, 116/2, 116/4, 116/5A, 116/5B, 116/8, 116/9, 117/1A1, 117/1A2, 117/2A, 117/3A, 117/3B, 119/2B, 120, 121/1A, 121/1B、121/2、121/3A、121/3B、139/4B、140/1、141/1、141/2A、141/2B、142、 143/2, 143/3 Part, 144/2B, 145/2B, 146/1, 146/2 Siruseri Panchayat Road, Siruseri Village, Vandalur Taluk, Chengalpattu district, Tamil Nadu.
- 2. The project/activity is covered under Category "B" of item 8(b) " Township & area development Projects" of the Schedule to the EIA Notification, 2006.
- 3. The proposal consists of Block A,B,C,D,E,F&G: Combined one Basement+ Stilt floor+ 19 Floors, Block- H- Stilt +17 floors, Block- I Club House- G+ 3 Floors, Block - J Learning hub- G+3 floors. The total plot area - 40577.45 Sq.m and built up area - 239598.7 Sq.m.

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Based on the presentation and documents/clarifications furnished by the project proponent, SEAC after detailed deliberations, decided to recommend the proposal for the grant of Terms of Reference (ToR), subject to the following ToRs in addition to the standard terms of reference for EIA study and details issued by the MoEF & CC to be included in EIA/EMP report:

- The proponent shall furnish the detailed sewage treatment technology available and furnish the reason for selection for SBR technology for this proposal and also furnish the design details of the STP treatment system.
- 2. The PP shall furnish the proposal for the design of the proposed development shall meet green building norms and should obtain a minimum of IGBC Gold ranking.
- 3. The proposal to construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.
- 4. The treated/untreated sewage water shall not be let-out from the unit premises accordingly revised water balance shall be incorporated.
- 5. As per G.O. Ms. No. 142 approval from Central Ground Water Authority shall be obtained for withdrawal of water and furnish the copy of the same, if applicable.
- 6. Commitment letter from competent authority for supply of water shall be furnished.
- 7. Copy of the village map, FMB sketch and "A" register shall be furnished.
- 8. Detailed Evacuation plan during emergency/natural disaster/untoward accidents shall be submitted.
- 9. The space allotment for solid waste disposal and sewage treatment & grey water treatment plant shall be furnished.

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10. Details of the Solid waste management plan shall be pre pared as per solid waste management Rules, 2016 and shall be furnished.

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- 11. Details of the E-waste management plan shallbepreparedasperE-wasteManagementRules,2016andshallbefurnished.
- 12. Details of the Rain water harvesting system with cost estimation should be furnished.
- 13. A detailed storm water management plan to drain out the storm water entering the premises during heavy rains period shall be prepared including main drains and sub-drains in accordance with the contour levels of the proposed project considering the flood occurred in the year 2015 and also considering the water bodies around the proposed project site & the surrounding development. The storm water drain shall be designed in accordance with the guidelines prescribed by the Ministry of Urban Development.
  - 14. The proposed OSR area should not be included in the activity area. The OSR area should not be taken in to account for the green belt area.
  - 15. The layout plan shall be furnished for the greenbelt area earmarked with GPS co ordinates by the project proponent on the periphery of the site and the same shall be submitted for CMDA/DTCP approval. The green belt width should be at least 3m wide all along the boundaries of the project site. The green belt area should not be less than 15% of the total land area of the project.
  - 16. Cumulative impacts of the Project considering with other infrastructure developments and industrial parks in the surrounding environment within 5 km & 10 km radius shall be furnished.
  - 17. A detailed post-COVID health management plan for construction workers as per ICMR and MHA or the State Govt. guideline may be followed and report shall be furnished.
  - 18. The project proponent shall furnish detailed baseline monitoring data with prediction parameters for modelling for the ground water, emission, noise and traffic.
  - 19. The proposal for utilization of at least 25% of Solar Energy shall be included in the EIA/EMP report.

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20. As per the MoEF&CC Office Memorandum F.No.22-65/2017-IA.IIIdated: 30.09.2020 and 20.10.2020, the proponent shall furnish the detailed EMP mentioning all the activities as directed by SEAC in the CER and furnish the same.

Agenda No: 287-02 (File No: 9208/2022)

Proposed Rough Stone & Earth quarry lease over an extent of 2.33.5 Ha at S.F.Nos. 29/2, 29/3, 30/4, 30/9, 30/12, 30/13, Thollamur Village, Vanur Taluk, Villupuram District, Tamil Nadu by Thiru. K. Gnanasekaran for Terms of Reference (SIA/TN/MIN/76147/2022 Dt.26.04.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

- 1. The Project Proponent, Thiru. K. Gnanasekaran has applied for Terms of Reference for the proposed Rough Stone & Earth quarry lease over an extent of 2.33.5 Ha at S.F.Nos. 29/2, 29/3, 30/4, 30/9, 30/12, 30/13, Thollamur Village, Vanur Taluk, Villupuram District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item I(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 133570 cu.m of rough stone & 19912 cu.m of Earth. The annual peak production is 36850 cu.m. of Rough Stone (3rd year) and 11400 cu.m. of Earth (2rd year). The ultimate depth is 37 m BGL.

Based on the presentation made by the proponent and considering safety point of view, SEAC recommended to remove the last bench in X1Y1-CD. Accordingly grant of Terms of Reference (TOR) with Public Hearing is issued for the production of 130290m3 of rough stone and 19912m3 of Earth in 5 years with ultimate depth 37m, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

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- 1. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 2. 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.
- 4. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 5. 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.
- 6. 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.
- 7. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a) What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b) Quantity of minerals mined out.
  - c) Highest production achieved in any one year
  - d) Detail of approved depth of mining.
  - e) Actual depth of the mining achieved earlier.
  - f) Name of the person already mined in that leases area.
  - g) If EC and CTO already obtained, the copy of the same shall be

submitted.

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- h) Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 8. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/Topo sheet, topographic sheet, geomorphology. Iithology 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).
- 9. The PP shall carry out Drone video survey covering the cluster, Green belt , fencing etc.,
- 10. 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.
- 11. 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.
- 12. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act 1952 and the MMR. 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 13. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.

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- 14. 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.
- 15. 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.
- 16. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 17. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 18. 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.
- 19. 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.
- 20.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.
- 21. Impact on local transport infrastructure due to the Project should/be indicated.
- 22.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

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- and its management during mining activity.
- 23.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 24. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
- 25. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 26. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 27. 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.
- 28. 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.
- 29. 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

30.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.

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- 31. 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.
- 32.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.
- 33. 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.
- 34. 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.
- 35. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 36. 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.
- 37.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.
- 38. 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.
- 39. 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

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the Environment (Protection) Act, 1986.

Agenda No: 287-03 (File No: 9209/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 2.86.0 Ha at S.F.No. 111/18, 111/2, 115/9, 115/10 & 40/5 Themmavur & Killukulavaipatti Village, Kulathur Taluk, Pudukkottai District, Tamil Nadu by Thiru.K.Nataraj for Terms of Reference (SIA/TN/MIN/76087/2022 Dt.25.04.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

- 1. The Project Proponent, Thiru.K.Nataraj has applied for Terms of Reference for the proposed Rough Stone & Gravel quarry lease over an extent of 2.86.0 Ha at S.F.No. 111/1B, 111/2, 115/9, 115/10 & 40/5 Themmavur & Killukulavaipatti Village, Kulathur Taluk, Pudukkottai District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 267745 cu.m of rough stone & 37266 cu.m of Gravel. The annual peak production is 59645 cu.m. of Rough Stone (5th year) and 14622 cu.m. of Gravel (1st year). The ultimate depth is 43 m BGL

Based on the presentation made by the proponent and considering safety point of view. SEAC recommended to remove the last bench in XIY1-GH & XIY1-IJ. Accordingly grant of Terms of Reference (TOR) with Public Hearing is issued for the production of 262795m3 of rough stone and 37266m3 of Gravel in 5 years with ultimate depth 37m, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall furnish the certified compliance report on the existing EC issued and also submit an action taken report wherever required.
- 2. 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 prepare and submit an 'Action Plan' for carrying

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- out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 3. 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.
- 4. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 5. 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.
- 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.
- 7. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.

8. All corner coordinates of the mine lease area, superimposed on a High

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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).

- 9. The PP shall carry out Drone video survey covering the cluster. Green belt, fencing etc.,
- 10. 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.
- 11. 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.
- 12. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act 1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 13. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 14. 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.

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- 15. 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.
- 16. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 17. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 18. 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.
- 19. 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.
- 20. 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.
- 21. Impact on local transport infrastructure due to the Project should be indicated.
- 22.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.

23. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.

24. Public Hearing points raised and commitments of the Project Proponent on the

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

- 25. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 26. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 27. 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.
- 28. 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 and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 29. 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
- 30.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.

31. 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.

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- 32.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.
- 33. 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.
- 34. 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.
- 35. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 36.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.
- 37. 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.
- 38. 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.
- 39. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

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Agenda No: 287-04 (File No: 9211/2022)

Proposed Rough Stone quarry lease over an extent of 3.00.0 Ha at 5.F.No. 314 (Part-1), Thuppuganapalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu by Thiru G.Perumal for Terms of Reference (SIA/TN/MIN/76214/2022, Dt. 27.04.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. 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 G.Perumal has applied for Terms of Reference for the proposed Rough Stone quarry lease over an extent of 3.00.0 Ha at S.F.No. 314 (Part-1), Thuppuganapalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu. It is Govt Poromboke land.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 10 years. The mining plan is for the period of five years & production should not exceed 516612 cu.m of rough stone. The annual peak production is 174582cu.m. of Rough Stone (1st year). The ultimate depth is 64 m BGL. (40m AGL + 24m BGL)

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall furnish the certified compliance report on the existing EC issued.
- 2. The proposed site is located within 10km from Cauvery Wild Life Sanctuary. hence the PP shall remit Rs 10 lakh to DFO, Hosur to carry out the mitigation work.
- 3. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is

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- approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
    - If EC and CTO already obtained, the copy of the same shall be submitted.
  - g. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 9. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology

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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).

- 10. The PP shall carry out Drone video survey covering the cluster, Green belt , fencing etc.,
- 11. 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.
- 12. 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.
- 13. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 14. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 15. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.

16. The Proponent shall carry out the Cumulative impact study due to mining

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- operations carried out in the quarry specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
- 17. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 18. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 19. Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided.
- 20. Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be considered.
- 21. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 22. Impact on local transport infrastructure due to the Project should be indicated.
- 23.A tree survey study shall be carried out (nos., name of the species, age, diameter etc.,) both within the mining lease applied area & 300m buffer zone and its management during mining activity.
- 24.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 25. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to

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

- 26. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 27. The PP shall produce/display the EIA report. Executive summery and other related information with respect to public hearing in Tamil Language also.
- 28. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
- 29. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 30. 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
- 31. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 32. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.

33. Occupational Health impacts of the Project should be anticipated and the

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- 34. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 35. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 36. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 37.Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 38. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site photographs which shall duly be certified by MoEF&CC, Regional Office, Chennai (or) the concerned DEE/TNPCB.
- 39. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
- 40. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

Agenda No: 287-05 (File No: 9215/2022)

 $\tilde{\mathcal{V}}$ 

Proposed Black Granite quarry lease over an extent of 1.44.5 Ha at \$.F.No. 6/4A, Hanumanthapuram Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu by

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# M/s. Globle Enterprises for Terms of Reference (\$\text{SIA/TN/MIN/76134/2022} Dt. 25.04.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

- 1. The Project Proponent, M/s. Globle Enterprises has applied for Terms of Reference for the Black Granite quarry lease over an extent of 1.44.5 Ha at S.F.No. 6/4A, Hanumanthapuram Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 20 years. The mining plan is for the period of five years & production should not exceed ROM- 17100cu.m, 5130 Cu.m of Granite & 14592 Cu.m of Weathered Rock. The annual peak production is ROM- 3600cu.m (3<sup>rd</sup> year), 1080 Cu.m of Granite (3<sup>rd</sup> year) & 7488 Cu.m of Weathered Rock (2<sup>nd</sup> year). The ultimate depth is 30 m BGL.

Based on the presentation made by the proponent and considering safety point of view, SEAC recommended to remov the last bench in XY-CD. Accordingly grant of Terms of Reference (TOR) with Public Hearing is issued for the production of ROM-17080u.m, 5124 Cu.m of Granite & 14592 Cu.m of Weathered Rock in 5 years with ultimate depth 25m, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The proposed site is located within 10km from Cauvery Wild Life Sanctuary, hence the PP shall remit Rs 5 lakh to DFO, Hosur to carry out the mitigation work.
- 2. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is

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- approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 3. 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.
- 4. The PP shall furnish the proposal to adapt SOP for wire saw cutting during the operation.
- 5. 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.
- 6. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 7. 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).
- 8. The PP shall carry out Drone video survey covering the cluster, Green belt , fencing etc.,
- 9. The proponent shall furnish photographs of adequate fencing, green pelt along

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the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.

- 10. 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.
- 11. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 12. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 13. 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.
- 14. 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.

15. Rain water harvesting management with recharging details along with water

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balance (both monsoon & non-monsoon) be submitted.

- 16. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. Impact on local transport infrastructure due to the Project should be indicated.
- 21. 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.
- 22.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 23. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.

24. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.

25. The PP shall produce/display the EIA report, Executive summery and other

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related information with respect to public hearing in Tamil Language also.

26. 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.

- 27. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated. in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 28. Taller/one year old Saplings raised in appropriate size of bags, preferably 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
- 29.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.
- 30.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.
- 31. 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.
- 32. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the

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proposed remedial measures should be detailed along with budgetary allocations.

- 33. 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.
- 34. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 35. 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.
- 36. 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.
- 37. 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.
- 38. 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.

Agenda No: 287-6 (File No: 9219/2022)

Proposed Rough Stone quarry lease over an extent of 3.20.5 Ha at S.F.No. 117/3, 117/1A, 44/10 & 44/9B, Killukulavaipatti village, Kulathur Taluk, Pudukkottai District, Tamil Nadu by Thiru.S.Balasubramanian for Terms of Reference (SIA/TN/MIN/75929/2022, Dt. 20.04.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

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### The SEAC noted the following

- 1. The Project Proponent, Thiru. S. Balasubramanian has applied for Terms of Reference for the proposed Rough Stone quarry lease over an extent of 3.20.5 Ha at S.F.No. 117/3, 117/1A, 44/10 & 44/9B, Killukulavaipatti Village, Kulathur Taluk, Pudukkottai District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 10 years. The mining plan is for the period of five years & production should not exceed 99720 cu.m of rough stone & 57315 Cu.m of Gravel. The annual peak production is 24705 cu.m of rough stone (1st year) & 29745 Cu.m of Gravel (3st year). The ultimate depth is 13 m BGL

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing is issued subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 2. 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.
- 3. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 4. The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed

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quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site.

- 5. 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.
- 6. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines.
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 7. 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).
- 8. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 9. 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.
- 10. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working

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methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment and the remedial measures for the same.

- 11. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR. 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 12. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 13. 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.
- 14. 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.
- 15. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. Impact on local transport infrastructure due to the Project should be indicated.
- 21. 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.
- 22.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 23. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
- 24. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 25. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 26. 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.

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- 27. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO. State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 28. Taller/one year old Saplings raised in appropriate size of bags, preferably 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
- 29.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.
- 30.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.
- 31. 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.
- 32. 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.
- 33. 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

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- Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 34. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 35. 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.
- 36. 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.
- 37. 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.
- 38. 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.

Agenda No: 287-7 (File No: 9220/2022)

Proposed amalgamation of lime stone quarry lease over an extent of 53.32.0Ha at S.F.No. 51/2, 51/3, 51/4, 51/5A, 51/5 B, 51/5C, 51/5D, 51/5E, 51/5F, 51/5G, 51/5H, 224/1,224/2, 226/1A, 226/1B, 226/2, 226/3, 226/4, 226/5, 226/6A, 226/6B, 226/6C, 226/6D, 226/6E, 226/7,226/8A, 226/8B, 226/8C, 226/9A, 226/9B, 226//9C, 226/10A, 226/10B, 226/10C, 226/11A, 226/11B, 226/12,226/13A, 226/13B, 226/13C, 226/14, 226/15A, 226/15B, 226/16, 228/1, 228/2, 228/3A, 228/3B, 228/3C,228/3D, 228/5, 229/1, 229/2, 229/3, 229/4, 229/7, 229/8, 229/9, 229/11, 230/1A, 230/1B, 230/2A, 230/2B,230/3, 230/4A, 230/4B, 230/5A, 230/5B, 230/5C, 230/5D, 230/6A, 230/6B, 230/6C, 230/6D, 230/6E, 230/6F,230/6G, 230/6H, 230/6I, 230/7A, 230/7B, 230/7C, 230/8, 230/9, 230/10, 230/11A, 230/11B, 230/11C, 230/12, 230/13, 230/14, 230/15A, 230/15B, 230/15C, 230/15D, 230/16, 230/17, 230/18, 230/19, 230/20,231/1A, 231/1B, 231/1C, 231/1D, 231/1E, 231/1F, 231/1G, 231/1H, 231/11, 231/13, 231/1K, 231/1L,231/1M, 231/1N, 231/2A, 231/2B, 231/2C, 231/2D, 231/2E, 231/2F, 231/2G, 231/2H, 231/2I, 231/2J.231/2K, 231/2L, 231/2M, 231/2N, 231/20, 231/2P, 231/2Q, 231/2R, 231/2S, 231/2T, 231/2U, 231/2V,231/2W, 231/2X, 231/3B, 231/3C, 231/4, 231/5A, 231/5B, 231/5C, 231/6A, 231/6B, 231/3A,

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The proposal was placed in this 287<sup>th</sup> Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

#### The SEAC noted the following

1. The Project Proponent, M/s. The Ramco Cement Limited has applied for Terms of Reference for the proposed amalgamation of lime stone quarry lease over an extent of 53.32.0Ha at S.F.No. 51/2, 51/3, 51/4, 51/5A, 51/5 B, 51/5C, 51/5D, 51/5E, 51/5F, 51/5G, 51/5H, 224/1,224/2, 226/1A, 226/1B, 226/2, 226/3, 226/4, 226/5, 226/6A, 226/6B, 226/6C, 226/6D, 226/6E, 226/7,226/8A, 226/8B, 226/8C, 226/9A, 226/9B, 226//9C, 226/10A, 226/10B, 226/10C, 226/11A, 226/11B, 226/12,226/13A, 226/13B, 226/13C, 226/14, 226/15A, 226/15B, 226/16, 228/1, 228/2, 228/3A, 228/3C,228/3D, 228/5, 229/1, 229/2, 229/3, 229/4, 229/7, 229/8, 229/9, 229/11, 230/1A, 230/1B, 230/2A, 230/2B,230/3, 230/4A, 230/4B, 230/5A, 230/5B, 230/5C, 230/5D, 230/6A, 230/6B, 230/6C, 230/6D, 230/6E, 230/6F,230/6G, 230/6H, 230/6I, 230/7A, 230/7B, 230/7C, 230/8, 230/9, 230/10, 230/11A, 230/11B, 230/11C, 230/12, 230/13, 230/14, 230/15A, 230/15B, 230/15C, 230/15D, 230/16, 230/17, 230/18, 230/19, 230/20,231/1A, 231/1B, 231/1C, 231/1D, 231/1E, 231/1F, 231/1G, 231/1H, 231/1I, 231/1J, 231/1K, 231/1L,231/1M, 231/1N, 231/2A, 231/2B, 231/2C, 231/2D, 231/2E, 231/2F, 231/2G, 231/2H, 231/2I, 231/2J,231/2K, 231/2L, 231/2M, 231/2N, 231/2O, 231/2P, 231/2Q, 231/2R, 231/2S, 231/2T, 231/2U, 231/2V, 231/2W, 231/2X, 231/3A, 231/3B, 231/3C, 231/4, 231/5A, 231/5B, 231/5C, 231/6A, 231/6B,

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- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 50 years. The mining plan is for the period of five years & production should not exceed 92,11,880 T of Limestone. The annual peak production is 29,87,000T of Limestone (4th year). The ultimate depth is 71 m BGL.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall carryout Hydro geological study through reputed institution and the same shall be included in EIA report.
- 2. As habitation is locater close to the site, the report should assess the implications of the proposal on the habitants.
- 3. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is

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- approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 4. 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.
- 5. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - a. Quantity of minerals mined out.
  - b. Highest production achieved in any one year
  - c. Detail of approved depth of mining.
  - d. Actual depth of the mining achieved earlier.
  - e. Name of the person already mined in that leases area.
  - f. If EC and CTO already obtained, the copy of the same shall be submitted.
  - g. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.  $\int_{-\infty}^{\infty}$
  - 10. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology

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- 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).
- 11. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 12. 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.
- 13. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment and the remedial measures for the same.
- 14. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act 1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 15. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 16. 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.
- 17. 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 and its mintigation measures. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
- 18. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 19. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 20. 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.
- 21. 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.
- 22. 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.
- 23. Impact on local transport infrastructure due to the Project should be indicated.
- 24.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.
- 25.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 26. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to

- implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
- 27. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 28. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 29. 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.
- 30. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 31. Taller/one year old Saplings raised in appropriate size of bags, preferably 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
- 32.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.
- 33. 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.

34. Occupational Health impacts of the Project should be anticipated and the

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- 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.
- 35. 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.
- 36. 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.
- 37. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 38. 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.
- 39.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.
- 40. 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.
- 41. 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.

Agenda No: 287-8 (File No: 9221/2022)

Proposed Rough stone quarry lease over an extent of 2.93.0Ha at \$.F.No. 391, Belladhi Village, Mettupalayam Taluk, Coimbatore District, Tamil Nadu by Thiru R.Raju for Terms of Reference (\$IA/TN/MIN/76152/2022, Dt 27.04.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. 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.Raju has applied for Terms of Reference for the proposed Rough stone quarry lease over an extent of 2.93.0Ha at S.F.No. 391, Belladhi Village, Mettupalayam Taluk, Coimbatore District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 148565 Cu.m of Rough stone. The annual peak production is 30815 Cu.m of Rough stone (2<sup>nd</sup> year). The ultimate depth is 44m BGL.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall furnish the letter received from DFO concerned stating the proximity details of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.
- 2. The PP shall include the certified compliance report on EC in the name of M/s Technomax which is located adjacent to the proposed site.
- 3. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is

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- approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 4. 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.
- 5. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 6. 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.
- 7. 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.
- 8. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 9. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/Topo sheet, topographic sheet, geomorphology lithology

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- 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).
- The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 11. 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.
- 12. 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.
- 13. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 14. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 15. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.

16. The Proponent shall carry out the Cumulative impact study the mining

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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 and its mintigation measures. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.

- 17. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 18. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 19. Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided.
- 20. Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be considered.
- 21. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 22. Impact on local transport infrastructure due to the Project should be indicated.
- 23.A tree survey study shall be carried out (nos., name of the species, age, diameter etc.,) both within the mining lease applied area & 300m buffer zone and its management during mining activity.
- 24.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 25. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to

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- implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
- 26. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 27. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 28. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
- 29. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 30. 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
- 31. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 32.A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.

33. Occupational Health impacts of the Project should be anticipated and the

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proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.

- 34. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 35. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 36. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 37. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 38. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site photographs which shall duly be certified by MoEF&CC. Regional Office. Chennai (or) the concerned DEE/TNPCB.
- 39. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
- 40. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

Agenda No: 287-9 (File No: 9227/2022)

Proposed Rough stone quarry lease over an extent of 2.02.5 Ha at S.F.No. 58/1A,

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58/1B, 58/2A, 58/2B, 58/3, 58/6, 58/7, 58/8A, 58/8B, 59/2A, 61/1B, 6\/2\/A, 61/2B

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61/3, 61/4A, 61/5A and 61/6, Kaganam Village, Vembakkam Taluk, Tiruvannamalai District, Tamil Nadu by Thiru R. Kathirvelu for Terms of Reference (SIA/TN/MIN/172833/2020 Dt.15.09.2020)

The proposal was placed in this 287<sup>th</sup> Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

- 1. The Project Proponent, Thiru R. Kathirvelu has applied for Terms of Reference for the proposed Rough stone quarry lease over an extent of 2.02.5 Ha at S.F.No. 58/1A, 58/1B, 58/2A, 58/2B, 58/3, 58/6, 58/7, 58/8A, 58/8B, 59/2A, 61/1B, 61/2A, 61/2B, 61/3, 61/4A, 61/5A and 61/6, Kaganam Village, Vembakkam Taluk, Tiruvannamalai District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "81" 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. The mining plan is for the period of five years & production should not exceed 600630 Cu.m of Rough stone, 35703 Cu.m of weathered Rock & 74124 Cu.m of Gravel. The annual peak production is 127185 Cu.m of Rough stone(4th year), 21988 Cu.m of weathered Rock(1st year) & 45288 Cu.m of Gravel(1st year). The ultimate depth is 23m BGL.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall include the study report on approach road for the existing & proposed mine lease area in the EIA Report.
- 2. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.

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- 3. 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.
- 4. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 5. 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.
- 6. 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.
- 7. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 8. 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 ilmagery of the proposed area should clearly show the land use and other ecological

features of the study area (core and buffer zone).

- The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 10. 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.
- 11. 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.
- 12. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 13. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
  - 14. 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.
  - 15. 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,

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- climate change and flood control & health impacts and its mitigation measures. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
- 16. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 17. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 18. 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.
- 19. 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.
- 20. 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.
- 21. Impact on local transport infrastructure due to the Project should be indicated.
- 22.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.
- 23.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 24. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard

- to the Office Memorandum of MoEF& CC accordingly.
- 25. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 26. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 27. 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.
- 28. 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 and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 29. 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
- 30.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.
- 31. 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.
- 32. 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.
- 33. 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.
- 34. 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.
- 35. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 36. 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.
- 37.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.
- 38. 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.
- 39. 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.

Agenda No: 287-10 (File No: 9229/2022)

Proposed Rough stone & Gravel quarry lease over an extent of 3.82.50 Ha at S.F.Nos. 1199/2, 1199/3, 1199/4, 1199/5, 1199/6, 1199/7, 1199/8, 1199/9, 1200/4, 1200/5, 1200/6, 1200/7, 1200/8, 1200/9, 1200/10, 1200/11, 1200/12 and 1201(P) Punnam Village, Aravakurichi Taluk, Karur District, Tamil Nadu by M/S. VST Blue Metals for Terms of Reference (SIA/TN/MIN/76422/2022, Dt. 03.05.2022)

MEMBER SECRETARY
SEAC -TN

CHĂIRMÁN SEAC-TN The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

## The SEAC noted the following

- 1. The Project Proponent, M/S. VST Blue Metals has applied for Terms of Reference for the proposed Rough stone & Gravel quarry lease over an extent of 3.82.50 Ha at S.F.Nos. 1199/2, 1199/3, 1199/4, 1199/5, 1199/6, 1199/7, 1199/8, 1199/9, 1200/4, 1200/5, 1200/6, 1200/7, 1200/8, 1200/9, 1200/10, 1200/11, 1200/12 and 1201(P) Punnam Village, Aravakurichi Taluk, Karur District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 437013 Cu.m of Rough stone & 38880 Cu.m of Gravel. The annual peak production is 99068 Cu.m of Rough stone(1st year) & 13680 Cu.m of Gravel(4th year). The ultimate depth is 30m BGL.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall include the certified compliance report on existing EC obtained by the Same Company in the EIA Report.
- 2. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.

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- 3. 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.
- 4. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 5. 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.
- 6. 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.
- 7. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
  - 8. 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).

- 9. The PP shall carry out Drone video survey covering the cluster, Green belt , fencing etc.,
- 10. 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.
- 11. 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.
- 12. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 13. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 14. 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.
- 15. 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,

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- climate change and flood control & health impacts and its mintigation measures. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
- 16. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 17. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 18. 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.
- 19. 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.
- 20. 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.
- 21. Impact on local transport infrastructure due to the Project should be indicated.
- 22.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.
- 23.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 24. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard

- to the Office Memorandum of MoEF& CC accordingly.
- 25. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 26. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 27. 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.
- 28. 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-1 in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 29. 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
- 30.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.
- 31. 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.
- 32.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

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- incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 33. 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.
- 34. 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.
- 35. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 36. 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.
- 37. 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.
- 38. 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.
- 39. 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.

Agenda No: 287-11 (File No: 9232/2022)

Proposed sand quarry lease over an extent of 16.00.0 Ha at 5.F.Nos. 8(P), Koodalaiyathur Village, Kattumannarkoil Taluk, Cuddalore District, Tamil Nadu by M/S. The Executive Engineer PWD WRO for Terms of Reference (SIA/TN/MIN/76465/2022, Dt. 03.05.2022)

MEMBER SECRETARY
SEAC -TN

The proposal was placed in this 287<sup>th</sup> Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

### The SEAC noted the following

- 1. The Project Proponent, M/S. The Executive Engineer PWD WRO has applied for Terms of Reference for the proposed sand quarry lease over an extent of 16.00.0 Ha at S.F.Nos.8(P), Koodalaiyathur Village, Kattumannarkoil Taluk, Cuddalore District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is one year. The mining plan is for the period of one year & production should not exceed 373220 Cu.m of Sand including 213220 Cu.m of shoal. The ultimate depth is 1m BGL.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall carry out the study on drinking water scheme in 5 Km, either side of the bank of the River and the same shall be included in the EIA Report.
  - 1. The details of the location to cover land use and ecologically sensitive areas.
    - a. Details of the open wells, bore wells, and other surface water bodies including the details of ground water levels. Quantity in the 500m radius from the boundary of the Mine lease Area.
    - b. Impacts of this mining activity in the above said water bodies in the 500m radius from the boundary of the Mine lease Area.
    - c. Thickness of Sand and its variation covering the entire area; similarly the width of the sand bed, quantification of the shoal formation in that area

d. Agricultural land if any, surrounding the quarry site.

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- e. Details of the longitudinal and cross section of the river bed in the proposed mining area.
- f. Detail of earlier of mining carried out in the 500m radius of the mine lease area including the location, quantity of sand mined out. depth of the mining, etc., shall be furnished.
- Reclamation of the sand area after mining needs to be submitted.
- 3. Adequate plan for traffic management as per the per the Guidelines for Sustainable Sand Mining issued in 2016 by the MoEF & CC, GOI, New Delhi for the loaded vehicles passing through nearby habitation.
- 4. The PWD has to furnish the details regarding agricultural activities that are taking place around the project area.
- 5. Details of the structures available within 1km from the mine lease area boundary (both upstream and downstream and also Study the Impact of sand mining on the structures located in the said area.
- 6. The route map for the Lorries for accessing the project area and for transporting mined sand should be specified.
- 7. Suitable working methodology to prevent dust pollution needs to be prepared taking wind direction into consideration.
- 8. The mining area must be demarcated leaving at least 50m from the river embankment on either side.
- 9. Wherever irrigation channels take off from the river within the boundary of the mining project, the mining operation should not affect the flow of water in the irrigation channels. In such a way a plan of action should be submitted.
- 10. EMP should contain break up details such as tools, labor and environmental monitoring cost, cost for the ground water monitoring in the surrounding area shall be part of the EMP cost, variation of depth of ground water and quality shall be monitored during the project period by conducting survey once in 3 months. This cost shall also be included in EMP.
- 11. Since there are many proposals for sand mining under the River Coleroon.

  It is necessary to model the overall impact on sand mining on regional ground water.

- 12. The proposal for CER shall be furnished with time frame as per the office memorandum of MoEF&CC dated 01.05.2018.
  - The Following details also included in the EIA Report.
     Quantity estimated to be mined through machineries & manual mining with extent.
  - ii. Certificate from the VAO stating the details of habitation located within 300 m radius from the boundary of the proposed site along with FMB sketch.
  - iii. The project proponent has to furnish the affidavit stating that there are no bridges, culverts, cross masonaries, water head works or any other civil structures within 500 mts., of the proposed quarry site.
  - iv. The RL Upstream, RL Downstream, RL Starting, RL Ending, Chainage Starting KM, Ending KM details shall be furnished.
  - v. Geological sections Map should be furnished.
  - vi. 500m, 1KM & 5KM radius of clear Google Map showing all the features like agricultural activities, habitations, etc

Agenda No: 287-12 (File No: 6761/2022)

Proposed expansion of Mixed use Development Project at RS No: 218/5, 2, 219/1, 2, 3, 4, 5, 6, 220/2, Block 11 and RS No: 221/2, 222/1, 2, Block 12 of Perambur Village, Purasawalkam - Perambur Taluk, Chennai District by M/s SPR Construction Pvt. Ltd. - For Terms of Reference (SIA/TN/MIS/76797/2022 Dt.09.05.2022).

The proposal was placed in this 286th SEAC meeting held on 22.6.2022. The project proponent gave a detailed presentation. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

## SEAC noted the following:

- 1. The Proponent, M/s SPR Construction Pvt. Ltd., has applied for Terms of Reference for the Proposed expansion of Mixed use Development Project at RS No: 218/5, 2, 219/1, 2, 3, 4, 5, 6, 220/2, Block 11 and RS No: 221/2, 222/1, 2, Block 12 of Perambur Village, Purasawalkam Perambur Taluk, Chennai District, Tamil Nadu.
- 2. The project/activity is covered under Category "B" of item 8(b) "
  Township & area development Projects" of the Schedule to the EIA

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Notification, 2006.

# 3. The proposal consists of the following

Block	No. of floors	Total built-up area
		(After Expansion) (Sq.m)
Block 1 (Residential Block)	S+G+38 Floors	39,070
SIDER 2 (Nesideritial block)	2B + S / G + 38 Floors	45,834
Block 3 (Residential Block)	2B + 5 / G + 47 Floors	53,503
Block 4 (Residential Block)	2B + S / G + 45 Floors	65,878
Block 5 (School)	B + G + 3 Floors	17,044
Block 6 (Commercial Market + Retail)	3B + G + 15 Floors	6,37,256
Block 7 (Residential & Commercial)	28 + G + 45 Floors	1,05,582
Block 8 (Hospital)	4 B + G + 12 Floors	48,000
Block 9 (Residential block, Club House, Tourism/Museum)	3B + S/G + 65 Floors	71,256
Block 10 (Residential block)	38 + G + 45 Floors	36,453
Block 11 (Residential block)	3B + G + 45 Floors	36,453
Block 12 (Residential block)	3B + G + 45 Floors	36,453
Residential Combined Basement Floors + Combined Stilt + Landscape Podium Floor		1,33,085
Block 13 & 14 (Temple)	2 B + S / G + 9 Floors	4.645

Other Utilities (STP, OHT, UGT, UASB/Bio	13,259
methanisation Plant, Lift Machine Rooms, Crowns,	-
Staircase Head Rooms, Security Rooms, Electrical	
rooms, sub-stations, Fire Station, HVAC Room,	
Basement Ventilation Shaft, DG Platform, Gas Bank,	
Transformer, Mobile tower, Sky Light, Fire Command	
Room, Fire Staircase, Entrance Canopies and Covered	
Hardscapes, etc.)	
Total built-up area (After Expansion)	12.42
Total built-up area (Arter Expansion)	13,43,771 Sq.m

4. The total plot area – 200197 Sq.m and built up area – 1343771 Sq.m. (existing- 581528 Sq.m + expansion – 7,62,243 Sq.m)

Based on the presentation and documents/clarifications furnished by the project proponent, SEAC after detailed deliberations, decided to recommend the proposal for the grant of Terms of Reference (ToR), subject to the following ToRs in addition to the standard terms of reference for EIA study and details issued by the MoEF & CC to be included in EIA/EMP report:

- The proponent shall furnish the detailed sewage treatment technology available and furnish the reason for selection for UASB technology for this proposal and also furnish the design details of the STP treatment system.
- The PP shall furnish the proposal for the design of the proposed expansion building shall meet green building norms and should obtain a minimum of IGBC Platinum ranking.
- 3. The proposal for replacement of Diesel fired Generator set in to LPG/Gas fired Generator set.
- 4. Detailed vibration, noise & emission study of the existing & proposed DG Set.
- 5. The treated/untreated sewage water shall not be let-out from the unit premises accordingly revised water balance shall be incorporated.
- 6. As per G.O. Ms. No. 142 approval from Central Ground Water Authority shall be obtained for withdrawal of water and furnish the copy of the same, if applicable.
- 7. Commitment letter from competent authority for supply of water shall be furnished.

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- 8. Copy of the village map, FMB sketch and "A" register shall be furnished.
- 9. Detailed Evacuation plan during emergency/natural disaster/untoward accidents shall be submitted.
- 10. The space allotment for solid waste disposal and sewage treatment & grey water treatment plant shall be furnished.
- 11. Details of the Solid waste management plan shall be pre pared as per solid waste management Rules, 2016 and shall be furnished.
- 12. Details of the E-waste management plan shall be prepared as per E-waste Management Rules, 2016 and shall be furnished.
- 13. Details of the Rain water harvesting system with cost estimation should be furnished.
- 14. A detailed storm water management plan to drain out the storm water entering the premises during heavy rains period shall be prepared including main drains and sub-drains in accordance with the contour levels of the proposed project considering the flood occurred in the year 2015 and also considering the water bodies around the proposed project site & the surrounding development. The storm water drain shall be designed in accordance with the guidelines prescribed by the Ministry of Urban Development.
- 15. The proposed OSR area should not be included in the activity area. The OSR area should not be taken in to account for the green belt area.
- 16. The layout plan shall be furnished for the greenbelt area earmarked with GPS co ordinates by the project proponent on the periphery of the site and the same shall be submitted for CMDA/DTCP approval. The green belt width should be at least 3m wide all along the boundaries of the project site. The green belt area should not be less than 15% of the total land area of the project.
- 17. Cumulative impacts of the Project considering with other infrastructure developments and industrial parks in the surrounding environment within 5 km & 10 km radius shall be furnished.
- 18. A detailed post-COVID health management plan for construction workers as per ICMR and MHA or the State Govt. guideline may be followed and report shall be furnished.

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- 19. The project proponent shall furnish detailed baseline monitoring data with prediction parameters for modelling for the ground water, emission, noise and traffic.
- 20. The proposal for utilization of at least 15% of Solar Energy shall be included in the EIA/EMP report.
- 21. As per the MoEF&CC Office Memorandum F.No.22-65/2017-IA.IIIdated: 30.09.2020 and 20.10.2020, the proponent shall furnish the detailed EMP mentioning all the activities as directed by SEAC in the CER and furnish the same.

Agenda No: 287-13 (File No: 9239/2022)

Proposed Rough Stone quarry lease over an extent of 4.84.0 Ha at S.F.No. S.F.Nos. 509/1(Part), Munnur Village, Aravakurichi Taluk, Karur District., Tamil Nadu by Thiru. P.K. Subramani for Terms of Reference (SIA/TN/MIN/76789/2022, Dt.11.05.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. 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. P.K. Subramani has applied for Terms of Reference for the proposed Rough Stone quarry lease over an extent of 4.84.0 Ha at S.F.No. S.F.Nos. 509/1(Part), Munnur Village, Aravakurichi Taluk, Karur District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 379579 cu.m of rough stone & 4060 Cu.m of Gravel. The annual peak production is 76625 cu.m of rough stone (5th year) & 4060 Cu.m of Gravel(1st year). The ultimate depth is 40 m BGL.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for nonfcoal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

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- 1. The PP shall include the certified compliance report on the existing EC issued, in the EIA Report.
- 2. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 3. 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.
- 4. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 5. 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.
- 6. 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.
- 7. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.

e. Actual depth of the mining achieved earlier.

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- f. Name of the person already mined in that leases area.
- g. If EC and CTO already obtained, the copy of the same shall be submitted.
- h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches,
- 8. 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).
- 9. The PP shall carry out Drone video survey covering the cluster, Green belt , fencing etc.,
- 10. 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.
- 11. 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.
- 12. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act 1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 13. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 14. 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.
- 15. 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.
- 16. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 17. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 18. 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.
- 19. 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.
- 20. 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.

21. Impact an local transport infrastructure due to the Project should be indicated.

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- 22.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.
- 23.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 24. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
- 25. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 26. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 27. 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.
- 28. 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-l in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 29. 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

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- 30.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.
- 31. 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.
- 32.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.
- 33. 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.
- 34. 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.
- 35. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 36. 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.
- 37. 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.
- 38. The PP shall prepare the EMP for the entire life of mine and also furnish the sworp affidavit stating to abide the EMP for the entire life of miner

39. 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.

Agenda No: 287-14 (File No: 9241/2022)

Proposed sand quarry lease over an extent of 15.00.0 Ha at 5.F.Nos.260(P) in Coleroon River, Kanjankollai Village, Kattumannarkovil Taluk, Cuddalore District, Tamil Nadu by M/S. The Executive Engineer PWD WRO for Terms of Reference (SIA/TN/MIN/76712/2022, Dt 07.05.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

## The SEAC noted the following

- 1. The Project Proponent, M/S. The Executive Engineer PWD WRO has applied for Terms of Reference for the proposed sand quarry lease over an extent of 15.00.0 Ha at S.F.Nos.260(P) in Coleroon River, Kanjankollai Village, Kattumannarkovil Taluk, Cuddalore District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is one year. The mining plan is for the period of one year & production should not exceed 3,00,000 Cu.m of Sand. The ultimate depth is 2m Above bed level.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall furnish the details of **Thennamanalllur RF** with respect to this sand quarry . Also include the clarification whether sand quarry to be considered as exempted from the Rule of 1 Km proximity of RF
- 2. The PP shall carry out the study on drinking water scheme in 5 Km, wither side of the bank of the River and the same shall be included in the EIA Report.

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- 3. The details of the location to cover land use and ecologically sensitive areas.
  - a. Details of the open wells, bore wells, and other surface water bodies including the details of ground water levels, Quantity in the 500m radius from the boundary of the Mine lease Area.
  - b. Impacts of this mining activity in the above said water bodies in the 500m radius from the boundary of the Mine lease Area.
  - c. Thickness of Sand and its variation covering the entire area; similarly the width of the sand bed, quantification of the shoal formation in that area
  - d. Agricultural land if any, surrounding the quarry site.
  - e. Details of the longitudinal and cross section of the river bed in the proposed mining area.
  - f. Detail of earlier of mining carried out in the 500m radius of the mine lease area including the location, quantity of sand mined out, depth of the mining, etc., shall be furnished.
  - 4. Reclamation of the sand area after mining needs to be submitted.
  - 5. Adequate plan for traffic management as per the per the Guidelines for Sustainable Sand Mining issued in 2016 by the MoEF & CC, GOI, New Delhi for the loaded vehicles passing through nearby habitation.
  - 6. The PWD has to furnish the details regarding agricultural activities that are taking place around the project area.
  - 7. Details of the structures available within 1km from the mine lease area boundary (both upstream and downstream and also Study the Impact of sand mining on the structures located in the said area.
  - 8. The route map for the Lorries for accessing the project area and for transporting mined sand should be specified.
  - 9. Suitable working methodology to prevent dust pollution needs to be prepared taking wind direction into consideration.
  - 10. The mining area must be demarcated leaving at least 50m from the river embankment on either side.

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- 11. Wherever irrigation channels take off from the river within the boundary of the mining project, the mining operation should not affect the flow of water in the irrigation channels. In such a way a plan of action should be submitted.
- 12. EMP should contain break up details such as tools, labor and environmental monitoring cost, cost for the ground water monitoring in the surrounding area shall be part of the EMP cost, variation of depth of ground water and quality shall be monitored during the project period by conducting survey once in 3 months. This cost shall also be included in EMP.
- 13. Since there are many proposals for sand mining under the River Coleroon. It is necessary to model the overall impact on sand mining on regional ground water.
- 14. The proposal for CER shall be furnished with time frame as per the office memorandum of MoEF&CC dated 01.05.2018.
  - i. The Following details also included in the EIA Report.

    Quantity estimated to be mined through machineries & manual mining with extent.
    - ii. Certificate from the VAO stating the details of habitation located within 300 m radius from the boundary of the proposed site along with FMB sketch.
    - iii. The project proponent has to furnish the affidavit stating that there are no bridges, culverts, cross masonaries, water head works or any other civil structures within 500 mts., of the proposed quarry site.
    - iv. The RL Upstream, RL Downstream, RL Starting, RL Ending, Chainage Starting KM, Ending KM details shall be furnished.
    - v. Geological sections Map should be furnished.
    - vi. 500m, 1KM & 5KM radius of clear Google Map showing all the features like agricultural activities, habitations, etc

Agenda No: 287-15 (File No: 9242/2022)

Proposed Rough Stone quarry lease over an extent of 2.17.0 Ha at 5/F.No. 159/3A (P), 3B, 3C, 4A, 4B, 5A, 5B1 (P) & 5B2, 160 & 161/1, Veerapatti Village, Iluppur Talluk, Pudukkottai District, Tamil Nadu by Thiru. C.Selvaraj for Terms of Reference (SIA/TN/MIN/76731/2022, Dt.08.05.2022)

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The proposal was placed in this 287<sup>th</sup> Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

## The SEAC noted the following

- 1. The Project Proponent, Thiru. C.Selvaraj has applied for Terms of Reference for the proposed Rough Stone quarry lease over an extent of 2.17.0 Ha at S.F.No. 159/3A (P), 3B, 3C, 4A, 4B, 5A, 5B1 (P) & 5B2, 160 & 161/1, Veerapatti Village, Iluppur Talluk, Pudukkottai District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 290855 cu.m of rough stone, 7161 Cu.m of Weathered Rock & 8598 Cu.m of Top Soil. The annual peak production is 62889 cu.m of rough stone (1st year), 5724 Cu.m of Weathered Rock (3st year) & 5724 Cu.m of Top Soil (3st year). The ultimate depth is 43 m BGL.

Based on the presentation made by the proponent and considering safety point of view, SEAC recommended to remove the last bench in XY-AB & XY-CD. Accordingly grant of Terms of Reference (TOR) with Public Hearing is issued for the production of 288360 m3 of rough stone, 7161 Cu.m of Weathered Rock & 8598 Cu.m of Top Soilin 5 years with ultimate depth 43m, subject to the following TORs, in addition to the standard terms of reference for ElA study for non-coal mining projects and details issued by the MOEF & CC to be included in ElA/EMP Report:

1. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.

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- 2. 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.
- 3. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 4. 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.
- 5. 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.
- 6. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 7. 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

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features of the study area (core and buffer zone).

- 8. The PP shall carry out Drone video survey covering the cluster. Green belt . fencing etc.,
- 9. 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.
- 10. 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.
- 11. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 12. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 13. 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.
- 14. 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,

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- 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.
- 15. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 16. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 17. 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.
- 18. 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.
- 19. 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.
- 20.1mpact on local transport infrastructure due to the Project should be indicated.
- 21. 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.
- 22. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 23. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard

to the Office Memorandum of MoEF& CC accordingly.

- 24. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 25. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 26.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.
- 27. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 28. Taller/one year old Saplings raised in appropriate size of bags, preferably 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
- 29.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.
- 30.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.
- 31. 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

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- incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 32. 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.
- 33. 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.
- 34. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 35. 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.
- 36. 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.
- 37. 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.
- 38. 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.

Agenda No: 287-16 (File No: 9247/2022)

Proposed Rough Stone quarry lease over an extent of 0.87.5 Ha at S.F.No. 145/3A and 145/4A, Veerapatti Village, Iluppur Taluk, Pudukkottai District, Tamil Nadu by Thiru. D. Dineshwaran for Terms of Reference (SIA/TN/MIN/76826/2022,

Dt.10.05.20221

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The proposal was placed in this 287<sup>th</sup> Meeting of SEAC held on 22.06.2022. 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. D. Dineshwaran has applied for Terms of Reference for the proposed Rough Stone quarry lease over an extent of 0.87.5 Ha at S.F.No. 145/3A and 145/4A, Veerapatti Village, Iluppur Taluk, Pudukkottai District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 90755 cu.m of rough stone & 792 Cu.m of Top Soil. The annual peak production is 20841 cu.m of rough stone (2<sup>ND</sup> year) & 792 Cu.m of Top Soil (1st year). The ultimate depth is 42 m BGI.

Based on the presentation made by the proponent and considering safety point of view, SEAC recommended to remove the last bench in XY-AB & XY-CD. Accordingly grant of Terms of Reference (TOR) with Public Hearing is issued for the production of 88155 m3 of rough stone & 792 Cu.m of Top Soil in 5 years with ultimate depth 37m, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 2. 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.

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- 3. 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.
- 4. 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.
- 5. 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.
- 6. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 7. 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).

8. The PP shall carry out Drone video survey covering the cluster Green belt ,

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fencing etc.,

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- 9. 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.
- 10. 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.
- 11. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR. 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 12. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 13. 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.
- 14. 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.

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- 15. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 16. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 17. 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.
- 18. 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.
- 19. 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.
- 20.Impact on local transport infrastructure due to the Project should be indicated.
- 21. 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.
- 22. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 23. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.

24. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.

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- 25. The PP shall produce/display the EIA report. Executive summery and other related information with respect to public hearing in Tamil Language also.
- 26. 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.
- 27. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO. State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 28. Taller/one year old Saplings raised in appropriate size of bags, preferably 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
- 29.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.
- 30.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.
- 31. 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.

32. Public health implications of the Project and related activities for the

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population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.

- 33. 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.
- 34. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 35. 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.
- 36. 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.
- 37. 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.
- 38. 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.

Agenda No: 287-17 (File No: 9249/2022)

Proposed Rough Stone quarry lease over an extent of 1.62.5 Ha at S.F.No. 1153/7A1B2A, 153/9A2 & 153/11, Veerapatti Village, Iluppur Taluk, Pudukkottai District, Tamil Nadu by Thiru. M. Karuppaiya for Terms of Reference (SIA/TN/MIN/76816/2022, 10.05.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

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## The SEAC noted the following

- 1. The Project Proponent, Thiru. M. Karuppaiya has applied for Terms of Reference for the proposed Rough Stone quarry lease over an extent of 1.62.5 Ha at S.F.No. 1153/7A1B2A, 153/9A2 & 153/11, Veerapatti Village, Iluppur Taluk, Pudukkottai District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 10 years. The mining plan is for the period of 10 years & production should not exceed 196175 cu.m of rough stone & 27296Cu.m of Gravel. The annual peak production is 22480 cu.m of rough stone (8th year) & 14774 Cu.m of Gravel (1th year). The ultimate depth is 32 m BGL in 5th year & 37m BGL in 10th year.

Based on the presentation made by the proponent, SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing is issued, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 2. 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.
- 3. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.

4. The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed

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quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site.

- 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.
- 6. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 7. 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).
- 8. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 9. 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.
- 10. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working

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methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment and the remedial measures for the same.

- 11. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR. 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 12. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers. tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 13. 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.
- 14. 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.
- 15. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. Impact on local transport infrastructure due to the Project should be indicated.
- 21. 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.
- 22.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 23. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
- 24. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 25. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 26. 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.

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- 27. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 28. Taller/one year old Saplings raised in appropriate size of bags, preferably 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
- 29.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.
- 30.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.
- 31. 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.
- 32. 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.
- 33. 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.
- 34. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 35. 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.
- 36.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.
- 37. 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.
- 38. 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.

Agenda No: 287-18 (File No: 9253/2022)

7.

Proposed Rough Stone quarry lease over an extent of 2.40.0 Ha at S.F.No. 232/2 (part). Mugalur Village, Hosur Taluk, Krishnagiri District, Tamil Nadu by M/s. R.V Enterprises for Terms of Reference (SIA/TN/MIN/76721/2022, 07.05.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

- 1. The Project Proponent, M/s. R.V Enterprises has applied for Terms of Reference for the proposed Rough Stone quarry lease over an extent of 2.40.0 Ha at S.F.No. 232/2 (part), Mugalur Village, Hosur Taluk, Krishnagiri District, Tamil Nadu. It is Govt Poromboke land.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

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3. As per the mining plan the lease period is 10 years. The mining plan is for the period of five years & production should not exceed 457422 cu.m of rough stone. The annual peak production is 118015cu.m. of Rough Stone (1st year). The ultimate depth is 43 m BGL.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 2. 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.
- 3. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 4. 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.
- 5. 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.
- 6. 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,

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- a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
- b. Quantity of minerals mined out.
- c. Highest production achieved in any one year
- d. Detail of approved depth of mining.
- e. Actual depth of the mining achieved earlier.
- f. Name of the person already mined in that leases area.
- g. If EC and CTO already obtained, the copy of the same shall be submitted.
- h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 7. 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).
- 8. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 9. 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.
- 10. 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.
- 11. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.

- 12. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 13. 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.
- 14. 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.
- 15. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 16. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. Impact on local transport infrastructure due to the Project should be indicated.
- 21. 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.
- 22.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 23. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
- 24. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 25. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 26. 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.
- 27. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.

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- 28. 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
- 29.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.
- 30.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.
- 31. 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.
- 32. 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.
- 33. 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.
- 34. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 35. 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.

36. If any quarrying operations were carried out in the proposed quarrying site for

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- 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.
- 37. 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.
- 38. 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.

Agenda No: 287-19 (File No: 9256/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 1.48.0 Ha at S.F. No. S.F. No.196/1, Perumanadu Village, Illuppur Taluk, Pudukkottai District, Tamil Nadu by Thiru. V. Sekaran, for Terms of Reference (SIA/TN/MIN/76487/2022, 04.05.2022)

The proposal was placed in this 287<sup>th</sup> Meeting of SEAC held on 22.06.2022. 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. Sekaran has applied for Terms of Reference for the Rough Stone & Gravel quarry lease over an extent of 1.48.0 Ha at S.F. No. S.F. No.196/1, Perumanadu Village, Illuppur Taluk, Pudukkottai District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "81" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 176380 cu.m of rough stone, 6094 Cu.m of Weathered Rock & 13272 Cu.m of Gravel. The annual peak production is 44145 cu.m of rough stone (1st year), 6094 Cu.m of Weathered Rock (1st year) & 13272 Cu.m of Gravel (1st year). The ultimate depth is 53 m BGL.

Based on the presentation made by the proponent and considering safety point of

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view, SEAC recommended to remove the last bench in XY-AB & XY-CD. Accordingly grant of Terms of Reference (TOR) with Public Hearing is issued for the production of 171015 m3 of rough stone and 6094 Cu.m of Weathered Rock & 13272 Cu.m of Gravel in 5 years with ultimate depth 38m, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 2. 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.
- 3. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 4. 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.
- 5. 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.
- 6. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,

a. What was the period of the operation and stoppage of the early mines with last work permit issued by the AD/DD mines?

b. Quantity of minerals mined out.

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- c. Highest production achieved in any one year
- d. Detail of approved depth of mining.
- e. Actual depth of the mining achieved earlier.
- f. Name of the person already mined in that leases area.
- g. If EC and CTO already obtained, the copy of the same shall be submitted.
- h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 7. 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).
- 8. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 9. 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.
- 10. 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.
- 11. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 12. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers tanks, canals,

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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.

- 13. 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.
- 14. 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.
- 15. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 16. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 17. 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.
- 18. 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.

19. Description of water conservation measures proposed to be adopted in the

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- Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 20. Impact on local transport infrastructure due to the Project should be indicated.
- 21. 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.
- 22. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 23. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
- 24. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 25. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 26. 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.
- 27. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.

28. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The

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- proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner
- 29.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.
- 30.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.
- 31. 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.
- 32. 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.
- 33. 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.
- 34. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 35. 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.
- 36. 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,

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- 37. 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.
- 38. 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.

Agenda No: 287-20 (File No: 9253/2022)

Proposed Rough Stone quarry lease over an extent of 2.50.0 Ha at S.F. No. 603/1 (part), Panchakshipuram Village, Hosur Taluk, Krishnagiri District, Tamil Nadu by M/s. SSV blue metals for Terms of Reference (SIA/TN/MIN/76721/2022, 07.05.2022)

The proposal was placed in this 287<sup>th</sup> Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

- 1. The Project Proponent, M/s. SSV blue metals has applied for Terms of Reference for the Rough Stone quarry lease over an extent of 2.50.0 Ha at S.F. No. 603/1 (part), Panchakshipuram Village, Hosur Taluk, Krishnagiri District, Tamil Nadu, Tamil Nadu. It is Govt Poromboke land.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 466694 cu.m of rough stone. The annual peak production is 119793cu.m. of Rough Stone (3<sup>rd</sup> year). The ultimate depth is 50 m BGL.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

1. 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

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Project Proponent (PP) shall prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.

- 2. 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.
- 3. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 4. 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.
- 5. 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.
- 6. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines.
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or Exifissued) with stipulated benches.

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- 7. 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).
- 8. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 9. 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.
- 10. 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.
- 11. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 12. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.

13. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air

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- quality, soil quality & flora/fauna including traffic/vehicular movement study.
- 14. 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.
- 15. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 16. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. Impact on local transport infrastructure due to the Project should be indicated.
- 21. 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.

22. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.

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- 23. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
- 24. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 25. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 26. 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.
- 27. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 28. Taller/one year old Saplings raised in appropriate size of bags, preferably 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
- 29.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.

30. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (of) till the end

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of the lease period.

- 31. 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.
- 32. 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.
- 33. 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.
- 34. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 35. 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.
- 36.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.
- 37. 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.
- 38. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act. 1986.

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Agenda No:287 -21 (File No:9262/2022)

Proposed Development of Industrial Park at E.Kumaralingapuram S.Nos. 134/1, 134/2, 134/3, 134/4, 134/5, 154/1, 154/2, 154/4A, 154/3, 154/4B, 155/1, 155/2, 155/3, 155/4, 155/5, 155/6, 155/7, 156/1, 156/2, 156/3, 156/4, 156/5, 156/6, 156/7, 156/8, 219/1, 219/2, 219/3, 220/1, 220/2, 220/3, 228/1, 228/2, 215/1A, 215/1B, 215/2, 215/3, 216, 217, 234/1, 234/4, 234/2, 234/3, 235/1, 235/2, 235/3, 235/4, 235/5A, 235/5B, 231/1, 231/2, 231/3, 231/4, 231/5, 231/6, 232/1, 232/5, 232/2, 232/3, 232/4, 232/6A, 232/6B1, 232/6B2, 229/1, 229/2, 229/3, 229/4, 226/6A, 227/1, 227/2, 227/3, 227/4, 227/5, 222/1, 222/2A, 222/2B1, 223, 224, 225/1, 225/2A, 225/3, 225/4, 225/5, 225/6A1, 225/6B1A, 225/6B1B, 221/1, 221/2, 221/3, 230/1, 230/2, 230/3, 230/4, 230/5, 230/6, 230/7, 206, 207, 233/1, 233/2A, 233/2B, 233/2C, 233/2D, 233/2E, 233/2F, 233/3, 235/6, 236, 237, 238/1, 238/2, 238/3, 238/4, 239/1A, 239/1B, 239/2, 239/3, 239/4, 239/5, 240, 263/1, 263/2, 263/3, 263/4A1, 263/4A2, 263/4B, 263/5A1, 263/5A2, 263/5A3, 263/6A1, 263/6B1, 263/6C1, 263/7, 263/8A, 263/9A, 263/10A, 263/11, 263/12A, 264/1, 264/2, 264/3, 264/4, 264/5, 264/6, 264/7, 265/2, 265/3, 265/4, 265/5, 266/1, 266/2, 266/3, 266/4, 266/5, 266/6, 266/8, 266/7, 266/9, 266/10, 266/11, 266/12, 266/13, 266/14, 266/15, 267/1, 267/2, 267/3, 267/4, 267/5, 268/1A, 268/1B, 268/1C, 268/1D, 268/2, 268/3, 268/4, 269/1, 269/2, 269/3, 269/4, 269/5, 269/6, 269/7, 270/1, 270/2, 270/3, 270/4, 270/5, 270/6, 270/7, 270/8, 271/1, 271/2, 271/3, 271/4A, 271/4B, 271/5, 271/6, 271/7, 271/8, 271/9, 271/10, 272/1, 272/2, 272/3, 272/4, 272/5, 272/6, 272/7, 272/8, 272/9, 273/1, 273/2, 273/3, 273/4, 273/5, 273/6, 273/7, 273/8, 273/9, 273/10, 274/1, 274/2A, 274/2B, 274/3, 274/4, 275/1, 275/2, 275/3, 276/1, 276/2, 276/3, 276/4, 276/5, 277/1, 277/2A, 277/2B, 277/3, 277/4, 278/1, 278/2A, 278/2B, 278/3, 278/4, 278/5, 279/1, 279/2, 279/3, 279/4, 279/5A, 279/5B, 279/6, 279/7, 279/8, 279/9, 280/1, 280/2A, 280/2B, 280/3, 280/4, 280/5, 280/6, 280/7, 280/8, 281/1, 281/2, 281/3, 281/4, 281/5A, 281/5B, 281/6, 281/7, 281/8, 281/9, 281/10, 282/1, 282/2A, 282/2B, 282/2C, 283/1, 283/2A1, 283/2C1, 283/3A, 283/4A, 283/5, 283/6A, 80/1, 80/2A, 80/2B, 81/1, 81/2, 81/3, 81/4, 81/5A, 81/5B, 81/6, 81/7, 82/1, 82/2, 82/3, 82/4, 82/5, 82/6, 82/7, 82/8, 82/9, 83/1, 83/2, 83/3, 83/4, 83/5, 83/6, 83/7A, 83/7B, 83/8, 84/1, 84/2, \$4/3, 84/4, 84/5A, 84/5B, 84/6, 84/7, 85/1, 85/2, 85/3, 85/4, 86/2, 86/3, \$6/4, 86/5, 86/6, 99/1A, 99/1B, 99/1C, 99/1D, 99/1E, 99/2A, 99/2B, 99/2C, 99/3, 99/4, 99/5, 99/6,  $\cancel{8}9/7$ , 100/1, 100/2, 101/1, 101/2, 101/3, 101/4, 101/5,

MEMBER SECRETARY
SEAC -TN

101/6A, 101/6B, 101/6C, 101/6D, 101/6E, 101/6F, 171, 172, 173/1, 173/2, 173/3, 173/4, 173/5, 173/6, 173/7, 173/8, 173/9, 174/1, 174/2, 174/3, 174/4, 174/5, 174/6, 174/7, 174/8, 175/1, 175/2, 175/3, 175/4, 175/5A, 175/5B, 175/6, 176/1, 176/2, 176/3A, 176/3B, 176/4, 177/1, 177/2, 177/3, 177/4, 177/5, 177/6, 177/7, 177/8, 177/9, 178/1, 178/2, 178/3, 178/4, 178/5A, 178/5B, 179/1, 179/2, 179/3A, 179/3B, 179/4, 179/5, 179/6, 202/1, 202/2A, 202/2B, 202/3, 202/4, 202/5A, 202/5B, 202/6A, 202/6B, 203/1, 203/2, 203/3A1, 203/3A2, 203/3B, 203/4, 204/1, 204/2, 204/3, 204/4, 205/1, 205/2, 205/3, 205/4, 205/5, 208/1, 208/2, 208/3, 208/4, 208/5, 208/6, 208/7, 209/1, 209/2, 209/3, 209/4, 209/5, 209/6, 210/1, 210/2A, 210/2B, 210/2C, 210/2D, 210/3, 210/4A1, 210/4A2, 210/4A3, 210/4A4, 210/4A5, 210/4B, 210/5, 211/1, 211/2, 211/3A, 211/3B, 211/4A, 211/4B, 211/4C, 211/4D, 211/5, 212/1A, 212/1B1, 212/1B2, 212/2A, 212/2B, 212/3, 212/4A, 212/4B, 212/5, 213/1, 213/2, 213/3A, 213/3B, 213/3C, 213/3D, 213/3E, 213/3F, 213/3G, 213/4, 213/5, 213/6, 180/1A, 180/1B, 180/1C, 180/1D, 180/2, 180/3, 181/1, 181/2, 181/3A, 181/3B, 181/4, 181/5, 181/6, 182/1, 182/2, 183/1A, 183/1B, 183/2, 184/1, 184/2, 184/3, 185/1, 185/2, 185/3, 185/4, 186/1, 186/2, 186/3, 187/1, 187/2, 187/3A, 187/3B, 187/3C, 187/4, 188/1, 188/2, 189/1, 189/2, 189/3, 189/4, 189/5, 189/6, 189/7, 190/1, 190/2, 190/3, 190/4, 191/1, 191/2, 191/3, 191/4, 191/5A, 191/5B, 191/6, 191/7, 192/1, 192/2, 192/3, 192/4A, 192/4B, 193/1, 193/2, 193/3, 193/4, 193/5, 193/6, 194/1, 194/2, 194/3, 195/1, 195/2, 195/3, 196/1A, 196/1B, 196/2, 196/3, 197/1, 197/2, 197/3, 197/4, 197/5A, 197/5B, 198/1, 198/2, 199/1, 199/2, 199/3, 199/4, 200, 201/1A, 201/1B, 201/2A, 201/2B, 201/3.

E.Muthulingapuram S.Nos. 14/1, 14/2, 14/3, 14/4, 14/5, 14/6, 14/7, 15/1, 15/2, 15/3, 62/1, 62/2, 62/3, 62/4, 63/1, 63/2, 63/3, 64, 67, 68/1, 68/2, 69/1, 69/2, 69/3, 69/4, 71/1, 71/2, 71/3, 71/4.

Thulukapatty S.Nos. 239/1, 239/2, 239/3, 239/4, 239/5, 239/6, 239/7, 239/8, 239/9, 239/10, 239/11, 240/1A, 240/1B, 240/2A, 240/2B, 240/2C, 240/3B, 240/3C, 240/3D, 240/4A, 240/4B, 240/4C, 240/4D, 240/6A, 240/6B, 240/7A, 240/7B, 240/8, 240/9A, 240/9B, 240/10A, 240/10B, 240/11, 240/12, 240/13, 241/1, 241/2, 241/3, 241/4A, 241/4B, 241/5, 241/6, 241/7, 241/8, 241/9, 242/1, 242/2, 242/3A, 242/3B, 242/4A, 242/4B, 242/5A, 242/5B, 242/5C, 242/6, 243/1A, 243/1B, 243/1C, 243/1D, 243/2, 243/3, 244, 245/1, 245/2, 247/1, 247/2, 247/3A, 247/3B, 247/4, 247/5, 248/1, 248/2, 248/3A, 248/3B, 248/4A, 248/4B, 248/4C, 248/5, 248/6, 248/7A,

MEMBER SECRETARY
SEAC -TN

248/7B, 248/8, 248/9, 248/10, 248/11, 250/1A, 250/1B, 250/2, 250/4, 250/5B, 250/6, 250/7A, 250/7B, 250/8A, 250/8B, 250/9, 250/10, 250/11, 250/12, 250/13, 250/14, 250/15, 250/16, 250/17 Sattur Taluk, Virudhunagar District Tamil Nadu By M/s SIPCOT for Terms of Reference (SIA/TN/NCP/76868/2022, Dt. 11.05.2022\_)

The proposal was placed for appraisal in this 287th SEAC meeting held on 22.6.2022. The details of the project furnished by the proponent are given in the website (parivesh. nic.in).

The SEAC noted the following:

1. The project proponent M/s. State Industries Promotion Corporation of Tamil Nadu Limited, has applied for seeking Terms of Reference for the Proposed Development of Industrial Park over an extent of 425.55 Ha (1051.10 Acres) at E.Kumaralingapuram SF.No. 134/1, 134/2, 134/3, 134/4, 134/5, 154/1, 154/2, 154/4A, 154/3, 154/4B, 155/1, 155/2, 155/3, 155/4, 155/5, 155/6, 155/7. 156/1, 156/2, 156/3, 156/4, 156/5, 156/6, 156/7, 156/8, 219/1, 219/2, 219/3, 220/1, 220/2, 220/3, 228/1, 228/2, 215/1A, 215/1B, 215/2, 215/3, 216, 217, 234/1, 234/4, 234/2, 234/3, 235/1, 235/2, 235/3, 235/4, 235/5A, 235/5B, 231/1, 231/2, 231/3, 231/4, 231/5, 231/6, 232/1, 232/5, 232/2, 232/3, 232/4, 232/6A, 232/6B1, 232/6B2, 229/1, 229/2, 229/3, 229/4, 226/6A, 227/1, 227/2, 227/3, 227/4, 227/5, 222/1, 222/2A, 222/2B1, 223, 224, 225/1, 225/2A, 225/3, 225/4, 225/5, 225/6A1, 225/6B1A, 225/6B1B, 221/1, 221/2, 221/3, 230/1, 230/2, 230/3, 230/4, 230/5, 230/6, 230/7, 206, 207, 233/1, 233/2A, 233/2B, 233/2C, 233/2D, 233/2E, 233/2F, 233/3, 235/6, 236, 237, 238/1, 238/2, 238/3, 238/4, 239/1A, 239/1B, 239/2, 239/3, 239/4, 239/5, 240, 263/1, 263/2, 263/3, 263/4A1, 263/4A2, 263/4B, 263/5A1, 263/5A2, 263/5A3, 263/6A1, 263/6B1, 263/6C1, 263/7, 263/8A, 263/9A, 263/10A, 263/11, 263/12A, 264/1, 264/2, 264/3, 264/4, 264/5, 264/6, 264/7, 265/2, 265/3, 265/4, 265/5, 266/1, 266/2, 266/3, 266/4, 266/5, 266/6, 266/8, 266/7, 266/9, 266/10, 266/11, 266/12, 266/13, 266/14, 266/15, 267/1, 267/2, 267/3, 267/4, 267/5, 268/1A, 268/1B, 268/1C, 268/1D, 268/2, 268/3, 268/4, 269/1, 269/2, 269/3, 269/4, 269/5, 269/6, 269/7, 270/1, 270/2, 270/3, 270/4, 270/5, 270/6, 270/7, 270/8, 271/1, 271/2, 271/3, 271/4A, 271/4B, 271/5, 271/6, 271/7, 271/8, 271/9, 271/10, 272/1, 272/2, 272/3, 272/4, 272/5, 272/6, 272/7, 272/8, 272/9, 273/1, 273/2, 273/3, 273/4, 273/5, 273/6, 273/7, 273/8, 273/9, 273/10, 274/1, 274/2A, 274/2B, 274/3, 274/4, 275/1, 275/2, 275/3, 276/1, 276/2, 2/6/3, 276/4, 276/5, 277/1, 277/2A, 277/2B, 277/3, 277/4, 278/1, 278/2A, 278/2B, \$7\$/\$, 278/4, 278/5, 279/1, 279/2, 279/3, 279/4, 279/5A, 279/5B, 279/6, 279/7, **2**79/8, 279/9, 280/1, 2<u>80/</u>2**x**, 280/2B, 280/3, 280/4, 280/5, 280/6, 280/7, 280/8, 2<mark>8</mark>/1/<u>i</u>

MEMBER SECRETARY SEAC -TN CHATRMAN

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E.Muthulingapuram S.Nos. 14/1, 14/2, 14/3, 14/4, 14/5, 14/6, 14/7, 15/1, 15/2, 15/3, 62/1, 62/2, 62/3, 62/4, 63/1, 63/2, 63/3, 64, 67, 68/1, 68/2, 69/1, 69/2, 69/3, 69/4, 71/1, 71/2, 71/3, 71/4.

Thulukapatty S.Nos. 239/1, 239/2, 239/3, 239/4, 239/5, 239/6, 239/7, 239/8, 239/9, 239/10, 239/11, 240/1A, 240/1B, 240/2A, 240/2B, 240/2C, 240/3B, 240/3C, 240/3D, 240/4A, 240/4B, 240/4C, 240/4D, 240/6A, 240/6B, 240/7A, 240/7B, 240/8, 240/9A, 240/9B, 240/10A, 240/10B, 240/11, 240/12, 240/13, 241/1, 241/2, 241/3, 241/4A, 241/4B, 241/5, 241/6, 241/7, 241/8, 241/9, 242/1, 242/2, 242/3A, 242/3B, 242/4A,

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242/4B, 242/5A, 242/5B, 242/5C, 242/6, 243/1A, 243/1B, 243/1C, 243/1D, 243/2, 243/3, 244, 245/1, 245/2, 247/1, 247/2, 247/3A, 247/3B, 247/4, 247/5, 248/1, 248/2, 248/3A, 248/3B, 248/4A, 248/4B, 248/4C, 248/5, 248/6, 248/7A, 248/7B, 248/8, 248/9, 248/10, 248/11, 250/1A, 250/1B, 250/2, 250/4, 250/5B, 250/6, 250/7A, 250/7B, 250/8A, 250/8B, 250/9, 250/10, 250/11, 250/12, 250/13, 250/14, 250/15, 250/16, 250/17 Sattur Taluk, Virudhunagar District Tamil Nadu, Sattur Taluk, Virudhunagar District Tamil Nadu.

2. The proposed quarry/activity is covered under Category "B1" of Item 7(c) "Industrial Park" of the Schedule to the EIA Notification, 2006.

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Terms of Reference with Public hearing, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The project proponent shall obtain the approval from the competent authority for the extraction of Groundwater.
- 2. The project proponent shall create and monitor Environmental Management Cell.
- 3. The project proponent shall take fresh base line data for the study.
- 4. The project proponent shall comply Wet land Management Rules, 2017.
- 5. The project proponent shall furnish a detailed study analysis of Ayacut.
- 6. The project proponent shall study in detail about the PWD tank and other water bodies.
- 7. All industries in the SIPCOT should not store inflammable materials. The SIPCOT shall furnish the plan for the same.
- 8. The salt shall not be disposed to TSDF and it should be scientifically disposed and disposal plan shall be submitted.
- 9. The contour levels of the proposed site shall be measured and contour map shall be furnished. The project Proponent shall furnish the detailed water balance as per the MoEF & CC guidelines.

10. The project Proponent shall furnish 'A' register, Village map with FMB sketch to check the contiguous nature of the site.

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- 11. The Proponent shall carryout a Cumulative impact study for soil, water, air etc, and the same may be furnished in the report.
- 12. A detailed storm water plan to drain out the water from site shall be prepared in accordance with the contour levels of the proposed project site considering the flood occurred in the year 2015 and also considering the surrounding development.
- 13. Storm water drain should be utilized inside the premises and there should not be any discharge out of the plant and plan shall be submitted accordingly.
- 14. The layout plan for the greenbelt area shall be earmarked with GPS coordinates by the project proponent on the periphery of the site and the same shall be submitted to CMDA/DTCP for approval. It is the responsibility of the SIPCOT to have 33% green belt.
- 15. The proponent shall list out all the commercial activities planned in the SIPCOT area.
- 16. The SIPCOT shall provide a hospital facility in industrial housing area.
- 17. The proponent shall fix separate compound between factory and residences. Minimum distance as per guidelines should be there between factory and residence.
- 18. The space allotment for solid waste disposal (5% of the area) and sewage treatment shall be furnished.
- 19. Details of Solid Waste management plan shall be prepared as per Solid waste management Rules, 2016 by SIPCOT and shall be furnished.
- 20. Details of Rainwater harvesting system proposed should be furnished and the water shall be used for other beneficial purpose so that fresh water utilization is reduced.
- 21. The Proponent shall assess and include the Solid waste Generation and Hazardous waste Generation due to the expired chemicals.
- 22. The Proponent shall carry out the AAQ & ANL survey in minimum six places & minimum 6 ground water samples of Surface Water Quality to be analyzed.

23. The Proponent shall carry out the Traffic Study at minimum two locations.

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SEAC -TN

CHAIRMAN SEAC- TN

- 24. The Proponent shall carry out the assessment and modeling study on Fugitive Emission and analysis the impact of the same.
- 25. The proponent shall use green technology, renewable energy at least 20% should be of solar energy.

Agenda No:287 -22 (File No:9263/2022)

Proposed Development of Industrial Park at Soorapoondi Village S.Nos. 65/1, 181, 182, 183, 184, 185, 186, 187, 188, 189/1, 190, 192, 213pt, 214pt, 215, 216, 217, 218pt, 219 pt, 220pt, 221pt, 227pt, 228pt, 235pt. Vaniamallee Village S.Nos. -142/1, 175/2, 175/3, 175/4, 176/1, 176/2, 176/3, 177, 178/1, 179, 180/1, 180/2, 180/3, 180/4, 180/5, 180/6, 181/1, 181/2, 181/3, 181/4, 182, 183, 184, 185, 188/2, 188/3, 188/4, 188/5, 189/1, 189/2, 189/3, 189/4, 197/2, 198/1, 199, 200, 201, 202, 203/1, 204/10, 205/2, 206, 207/1, 207/2, 207/3, 207/4, 207/5, 207/6, 207/7, 207/8, 207/9, 208/1, 208/2, 208/3, 208/4, 208/5, 208/6, 209, 210, 211, 212, 213pt, 214pt, 215, 216, 217/1, 218pt, 219pt, 221pt, 222pt, 223pt, 225pt, 226pt, 228/1 Gummidipoondi Taluk, Tiruvallur District Tamil Nadu By M/s SIPCOT for Terms of Reference (SIA/TN/MIS/76835/2022 Dt. 21.6.2022)

The proposal was placed for appraisal in this 287th SEAC meeting held on 22.6.2022. The details of the project furnished by the proponent are given in the website (parivesh. nic.in).

The SEAC noted the following:

1. The project proponent M/s. State Industries Promotion Corporation of Tamil Nadu Limited, has applied for seeking Terms of Reference for the Proposed Development of Industrial Park over an extent of 203.69 Ha (503.12 Acres) at Soorapoondi Village S.Nos. 65/1, 181, 182, 183, 184, 185, 186, 187, 188, 189/1, 190, 192, 213pt, 214pt, 215, 216, 217, 218pt, 219 pt, 220pt, 221pt, 227pt, 228pt, 235pt. Vaniamallee Village S.Nos. -142/1, 175/2, 175/3, 175/4, 176/1, 176/2, 176/3, 177, 178/1, 179, 180/1, 180/2, 180/3, 180/4, 180/5, 180/6, 181/1, 181/2, 181/3, 181/4, 182, 183, 184, 185, 188/2, 188/3, 188/4, 188/5, 189/1, 189/2, 189/3, 189/4, 197/2, 198/1, 199, 200, 201, 202, 203/1, 204/10, 205/2, 206, 207/1, 207/2, 207/3, 207/4, 207/5, 207/6, 207/7, 207/8, 207/9, 208/1, 208/2, 208/3, 208/4, 208/5, 208/6, 209, 210, 211, 212, 213pt, 214pt, 215, 216, 217/1/.

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218pt, 219pt, 221pt, 222pt, 223pt, 225pt, 226pt, 228/1, Gummidipoondi Taluk, Tiruvallur District Tamil Nadu.

2. The proposed quarry/activity is covered under Category "B1" of Item 8(b) "Area Development" of the Schedule to the EIA Notification, 2006.

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Terms of Reference, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall obtain SCNBWL prior clearance since Pulicat Bird Sanctuary is 7.34 Km. ESZ for Pulicat Bird Sanctuary has not been notified.
- 2. The project proponent shall obtain the approval from the competent authority for the extraction of Groundwater.
- 3. The project proponent shall create and monitor Environmental Management Cell.
- 4. The project proponent shall take fresh base line data for the study.
- 5. The project proponent shall comply Wet land Management Rules, 2017.
- 6. The project proponent shall furnish a detailed study analysis of Ayacut.
- 7. The project proponent shall study in detail about the PWD tank and other water bodies.
- 8. All industries in the SIPCOT should not store inflammable materials. The SIPCOT shall furnish the plan for the same.
- 9. The salt shall not be disposed to TSDF and it should be scientifically disposed and disposal plan shall be submitted.
- 10. The contour levels of the proposed site shall be measured and contour map shall be furnished. The project Proponent shall furnish the detailed water balance as per the MoEF & CC guidelines.

11. The project Proponent shall furnish 'A' register, Village map with FMB sketch to check the contiguous nature of the site.

12. The Proponent shall carryout a Cumulative impact study for soil water, air etc. and the same may be furnished in the report.

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- 13. A detailed storm water plan to drain out the water from site shall be prepared in accordance with the contour levels of the proposed project site considering the flood occurred in the year 2015 and also considering the surrounding development.
- 14. Storm water drain should be utilized inside the premises and there should not be any discharge out of the plant and plan shall be submitted accordingly.
- 15. The layout plan for the greenbelt area shall be earmarked with GPS coordinates by the project proponent on the periphery of the site and the same shall be submitted to CMDA/DTCP for approval. It is the responsibility of the SIPCOT to have 33% green belt.
- 16. The proponent shall list out all the commercial activities planned in the SIPCOT area.
- 17. The SIPCOT shall provide a hospital facility in industrial housing area.
- 18. The proponent shall fix separate compound between factory and residences. Minimum distance as per guidelines should be there between factory and residence.
- 19. The space allotment for solid waste disposal (5% of the area) and sewage treatment shall be furnished.
- 20. Details of Solid Waste management plan shall be prepared as per Solid waste management Rules, 2016 by SIPCOT and shall be furnished.
- 21. Details of Rainwater harvesting system proposed should be furnished and the water shall be used for other beneficial purpose so that fresh water utilization is reduced.
- 22. The Proponent shall assess and include the Solid waste Generation and Hazardous waste Generation due to the expired chemicals.
- 23. The Proponent shall carry out the AAQ & ANL survey in minimum six places & minimum 6 ground water samples of Surface Water Quality to be analyzed.

24. The Proponent shall carry out the Traffic Study at minimum two locations.

25. The Proponent shall carry out the assessment and modeling study on Fugitive Emission and analysis the impact of the same.

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26. The proponent shall use green technology, renewable energy at least 20% should be of solar energy.

Agenda No: 287-23 (File No: 9267/2022)

Proposed sand quarry lease over an extent of 16.05.0 Ha at S.F.No.2596(A) part in Nerur North Village, Manmangalam Taluk, Karur District, Tamil Nadu by M/s.The Executive Engineer PWD WRO for Terms of Reference (SIA/TN/MIN/77000/2022, 18.05.2022)

The proposal was placed in this 287<sup>th</sup> Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

## The SEAC noted the following

- 1. The Project Proponent, M/s. The Executive Engineer PWD WRO has applied for Terms of Reference for the proposed sand quarry lease over an extent of 16.05.0 Ha at S.F.No.2596(A) part in Nerur North Village. Manmangalam Taluk, Karur District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is one year. The mining plan is for the period of one year & production should not exceed 3,21,000 Cu.m of Sand. The ultimate depth is 2m above bed level.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

1. The PP shall furnish the details of **Kattalai RF** with respect to this sand quarry.

Also include the clarification whether sand quarry is exempted from the Rule of

1 Km proximity of RF issued by Mines (Industries) Department.

2. The PP shall furnish the details of RF located within 1 Km from the DFO and furnish the same in EIA Report.

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- 3. The PP shall carry out the study on drinking water scheme in 5 Km, either side of the bank of the River and the same shall be included in the EIA Report.
- 4. The details of the location to cover land use and ecologically sensitive areas.
  - a. Details of the open wells, bore wells, and other surface water bodies including the details of ground water levels. Quantity in the 500m radius from the boundary of the Mine lease Area.
  - b. Impacts of this mining activity in the above said water bodies in the 500m radius from the boundary of the Mine lease Area.
  - c. Thickness of Sand and its variation covering the entire area; similarly the width of the sand bed, quantification of the shoal formation in that area
  - d. Agricultural land if any, surrounding the quarry site.
  - e. Details of the longitudinal and cross section of the river bed in the proposed mining area.
  - f. Detail of earlier of mining carried out in the 500m radius of the mine lease area including the location, quantity of sand mined out, depth of the mining, etc., shall be furnished.
  - 5. Reclamation of the sand area after mining needs to be submitted.
  - 6. Adequate plan for traffic management as per the per the Guidelines for Sustainable Sand Mining issued in 2016 by the MoEF & CC, GOI, New Delhi for the loaded vehicles passing through nearby habitation.
  - 7. The PWD has to furnish the details regarding agricultural activities that are taking place around the project area.
  - 8. Details of the structures available within 1km from the mine lease area boundary (both upstream and downstream and also Study the Impact of sand mining on the structures located in the said area.
  - 9. The route map for the Lorries for accessing the project area and for transporting mined sand should be specified.
  - 10. Suitable working methodology to prevent dust pollution needs to be prepared taking wind direction into consideration.  $\int$
  - 11. The mining area must be demarcated leaving at least 50m from the river embankment on either side.

- 12. Wherever irrigation channels take off from the river within the boundary of the mining project, the mining operation should not affect the flow of water in the irrigation channels. In such a way a plan of action should be submitted.
- 13. EMP should contain break up details such as tools, labor and environmental monitoring cost, cost for the ground water monitoring in the surrounding area shall be part of the EMP cost, variation of depth of ground water and quality shall be monitored during the project period by conducting survey once in 3 months. This cost shall also be included in EMP.
- 14. Since there are many proposals for sand mining under the River Cauvery. It is necessary to model the overall impact on sand mining on regional ground water.
- 15. The proposal for CER shall be furnished with time frame as per the office memorandum of MoEF&CC dated 01.05,2018.
  - a. The Following details also included in the EIA Report.

    Quantity estimated to be mined through machineries & manual mining with extent.
  - b. Certificate from the VAO stating the details of habitation located within 300 m radius from the boundary of the proposed site along with FMB sketch.
  - c. The project proponent has to furnish the affidavit stating that there are no bridges, culverts, cross masonries, water head works or any other civil structures within 500 mts., of the proposed quarry site.
  - d. The RL Upstream, RL Downstream, RL Starting, RL Ending, Chainage Starting KM, Ending KM details shall be furnished.
  - e. Geological sections Map should be furnished.
  - f. 500m, 1KM & 5KM radius of clear Google Map showing all the features like agricultural activities, habitations, etc

Agenda No: 287-24 (File No: 9270/2022)

Proposed sand quarry lease over an extent of 24.00.0 Ha at 5.F.No.265/1 Part in Cauvery River in Achamapuram Village, Manmangalam Taluk, Karur District Tamil Nadu by M/s.The Executive Engineer PWD WRO for Terms of Reference (SIA/TN/MIN/76972/2022, Dt. 18.05.2022)

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The proposal was placed in this 287<sup>th</sup> Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

## The SEAC noted the following

- 1. The Project Proponent, M/s. The Executive Engineer PWD WRO has applied for Terms of Reference for the proposed sand quarry lease over an extent of 24.00.0 Ha at S.F.No.265/1 Part in Cauvery River in Achamapuram Village, Manmangalam Taluk, Karur District Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is one year. The mining plan is for the period of one year & production should not exceed 3,21,000 Cu.m of Sand. The ultimate depth is 2m above bed level.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall furnish the details of RF located within 1 Km from the DFO and furnish the same in EIA Report.
- 2. The PP shall carry out the study on drinking water scheme in 5 Km, either side of the bank of the River and the same shall be included in the EIA Report.
- 3. The details of the location to cover land use and ecologically sensitive areas.
  - g. Details of the open wells, bore wells, and other surface water bodies including the details of ground water levels. Quantity in the 500m radius from the boundary of the Mine lease Area.
  - h. Impacts of this mining activity in the above said water bodies in the 500m radius from the boundary of the Mine lease Area.
  - i. Thickness of Sand and its variation covering the entire area; similarly the width of the sand bed, quantification of the shoal formation in that area/

Agricultural land if any, surrounding the quarry site.

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- k. Details of the longitudinal and cross section of the river bed in the proposed mining area.
- 1. Detail of earlier of mining carried out in the 500m radius of the mine lease area including the location, quantity of sand mined out, depth of the mining, etc., shall be furnished.
- 4. Reclamation of the sand area after mining needs to be submitted.
- 5. Adequate plan for traffic management as per the per the Guidelines for Sustainable Sand Mining issued in 2016 by the MoEF & CC, GOI, New Delhi for the loaded vehicles passing through nearby habitation.
- 6. The PWD has to furnish the details regarding agricultural activities that are taking place around the project area.
- 7. Details of the structures available within 1km from the mine lease area boundary (both upstream and downstream and also Study the Impact of sand mining on the structures located in the said area.
- 8. The route map for the Lorries for accessing the project area and for transporting mined sand should be specified.
- 9. Suitable working methodology to prevent dust pollution needs to be prepared taking wind direction into consideration.
- 10. The mining area must be demarcated leaving at least 50m from the river embankment on either side.
- 11. Wherever irrigation channels take off from the river within the boundary of the mining project, the mining operation should not affect the flow of water in the irrigation channels. In such a way a plan of action should be submitted.
- 12. EMP should contain break up details such as tools, labor and environmental monitoring cost, cost for the ground water monitoring in the surrounding area shall be part of the EMP cost, variation of depth of ground water and quality shall be monitored during the project period by conducting survey once in 3 months. This cost shall also be included in EMP.
- 13. Since there are many proposals for sand mining under the River Cauvery. It is necessary to model the overall impact on sand mining on regional ground water.

- 14. The proposal for CER shall be furnished with time frame as per the office memorandum of MoEF&CC dated 01.05.2018.
  - a. The Following details also included in the EIA Report.

    Quantity estimated to be mined through machineries & manual mining with extent.
  - b. Certificate from the VAO stating the details of habitation located within 300 m radius from the boundary of the proposed site along with FMB sketch.
  - c. The project proponent has to furnish the affidavit stating that there are no bridges, culverts, cross masonaries, water head works or any other civil structures within 500 mts., of the proposed quarry site.
  - d. The RL Upstream, RL Downstream, RL Starting, RL Ending, Chainage Starting KM, Ending KM details shall be furnished.
  - e. Geological sections Map should be furnished.
  - f. 500m, 1KM & 5KM radius of clear Google Map showing all the features like agricultural activities, habitations, etc

Agenda No: 287-25 (File No: 9271/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 2.28.0 Ha at S.F.No. S.F.No. 672/3, 674, 675/2 & 676/3, Ethirkottai Village, Vembakottai Taluk, Virudhunagar District, Tamil Nadu by Thiru. S. Ramachandran for Terms of Reference (SIA/TN/MIN/77143/2022, 21.05.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. 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. Ramachandran has applied for Terms of Reference for the Rough Stone & Gravel quarry lease over an extent of 2.28.0 Ha at S.F.No. S.F.No. 672/3, 674, 675/2 & 676/3, Ethirkottai Village, Vembakottai Taluk, Virudhunagar District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "Bit 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. The mining plan is for

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the period of five years & production should not exceed 239140 cu.m of rough stone, 31264Cu.m of Weathered Rock & 46896 Cu.m of Gravel. The annual peak production is 63035 cu.m of rough stone(4th year), 14036Cu.m of Weathered Rock (1th year) & 21054 Cu.m of Gravel(1th year) The ultimate depth is 25 m BG.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing is issued, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall furnish the letter from Thasildhar stating the details of Fire Works units located within 300m radios from the proposed site.
- 2. The PP shall conduct a survey with respect to the permanent structures located within 300m from the project site and the same shall be included in EIA Report.
- 3. The PP shall submit a letter received from DFO concerned stating the proximity details of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
- 4. The PP shall carry out Hydro Geological study and the same shall be included in EIA report.
- 5. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 6. 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.
- 7. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.

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- 8. 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.
- 9. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
- 10. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 11. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology and geology of the mining lease area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 12. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 13. The 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.

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- 14. 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.
- 15. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act 1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 16. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 17. 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.
- 18. 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.
- 19. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 20. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water

- bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 21. 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.
- 22. 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.
- 23. 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.
- 24. Impact on local transport infrastructure due to the Project should be indicated.
- 25.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.
- 26.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 27. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
- 28. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 29. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 30. 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

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- importance of preserving local flora and fauna by involving them in the study, wherever possible.
- 31. 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 and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 32. 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
- 33.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.
- 34. 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.
- 35.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.
- 36. 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.

37. The Socio-economic studies should be carried out within a 5 km/buffer zone

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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.

- 38. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 39. 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.
- 40.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.
- 41. 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.
- 42. 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.

Agenda No: 287-26 (File No: 9276/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 4.68.5 Ha at S.F.No. 51/1A, 51/1B, 51/3A, 51/3B1, 51/3B2, 51/3B3, 51/3C, 51/4A1, 51/4A2, 51/4B1, 51/4B2, 51/5A, 74/1A1, 74/1A2, 74/1A3, 74/1A4, 74/1A5, 74/2, 75/4B, 75/5, 75/6, 75/8A, 75/8B, 75/9, 75/10A, 75/10B, 75/11, 75/12, 75/13A&75/13B Chettipillayarnatham Village, Thirumangalam Taluk, Madurai District, Tamil Nadu by Thiru. P.Shanmugam, for Terms of Reference (SIA/TN/MIN/77088/2022, 19.05.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

The Project Proponent, Thiru. P.Shanmugam has applied for Terms of

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Reference for the Rough Stone & Gravel quarry lease over an extent of 4.68.5 Ha at S.F.No. 51/1A, 51/1B, 51/3A, 51/3B1, 51/3B2, 51/3B3, 51/3C, 51/4A1, 51/4A2, 51/4B1, 51/4B2, 51/5A, 74/1A1, 74/1A2, 74/1A3, 74/1A4, 74/1A5, 74/2, 75/4B, 75/5, 75/6, 75/8A, 75/8B, 75/9, 75/10A, 75/10B, 75/11, 75/12, 75/13A&75/13B Chettipillayarnatham Village, Thirumangalam Taluk, Madurai District, Tamil Nadu.

- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 724757 cu.m of rough stone & 12938 Cu.m of Gravel. The annual peak production is 168310 cu.m of rough stone (5th year) & 10168 Cu.m of Gravel (3th year). The ultimate depth is 47 m BGL.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing is issued, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. The PP shall include the certified compliance report on existing EC issued.
- 2. The PP shall submit a letter received from DFO concerned stating the proximity details of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
- 3. The PP shall carry out Hydro Geological study and the same shall be included in EIA report.
- 4. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 5. 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.

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- 6. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 7. 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.
- 8. 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.
- 9. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 10. 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).

11. The PP shall carry out Drone video survey covering the cluster, Creen belt,

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fencing etc.,

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- 12. 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.
- 13. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment and the remedial measures for the same.
- 14. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act 1952 and the MMR. 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 15. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
- 16. 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.
- 17. 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.

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- 18. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 19. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 20.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.
- 21. 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.
- 22. 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.
- 23. Impact on local transport infrastructure due to the Project should be indicated.
- 24.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.
- 25.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 26. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.

27. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.

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- 28. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 29. 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.
- 30. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-1 in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 31. Taller/one year old Saplings raised in appropriate size of bags, preferably 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
- 32.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.
- 33.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.
- 34. 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.

35. Public health implications of the Project and related activities for the

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population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.

- 36. 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.
- 37. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 38. 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.
- 39. 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.
- 40. 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.
- 41. 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.

Agenda No: 287-27 (File No: 9281/2022)

Proposed Rough Stone & Gravel quarry lease over an extent of 2.56.5 Ha at S.F. No. 191/5 & 191/6 Perumanadu Village, Illuppur Taluk, Pudukkottai District, Tamil Nadu by Thiru B Kajamaideen, for Terms of Reference (SIA/TN/MIN/77227/2022, 24.05.2022)

The proposal was placed in this 287th Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in)

The SEAC noted the following

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- 1. The Project Proponent, Thiru B Kajamaideen has applied for Terms of Reference for the Rough Stone & Gravel quarry lease over an extent of 2.56.5 Ha at S.F. No. 191/5 & 191/6 Perumanadu Village, Illuppur Taluk, Pudukkottai District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan the lease period is 5 years. The mining plan is for the period of five years & production should not exceed 254870 cu.m of rough stone & 1184 Cu.m of Gravel. The annual peak production is 94085 cu.m of rough stone (5th year) & 1184 Cu.m of Gravel (1st year). The ultimate depth is 49 m BGL.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing is issued, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- 1. 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 prepare and submit an 'Action Plan' for carrying out the realignment of the benches in the proposed quarry lease after it is approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.
- 2. 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.
- 3. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 4. The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed

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quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site.

- 5. 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.
- 6. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
  - a. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
  - b. Quantity of minerals mined out.
  - c. Highest production achieved in any one year
  - d. Detail of approved depth of mining.
  - e. Actual depth of the mining achieved earlier.
  - f. Name of the person already mined in that leases area.
  - g. If EC and CTO already obtained, the copy of the same shall be submitted.
  - h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 7. 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).
- 8. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 9. 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.

10. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working

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methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment and the remedial measures for the same.

- 11. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
- 12. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. 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.
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- 15. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 16. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of faund, 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.
- 17. 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.
- 18. 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.
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- 21. 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.
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- 23. Public Hearing points raised and commitments of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF& CC accordingly.
- 24. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 25. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 26. 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.

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- 27. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-i in consultation with the DFO, State Agriculture University and local school/college authorities. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 28. Taller/one year old Saplings raised in appropriate size of bags, preferably 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
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- 30.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.
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- 32. 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.
- 33. 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.
- 34. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 35. 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.
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- 37. 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.
- 38. 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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Appendix -I List of Native Trees Suggested for Planting

No	Scientific Name	Tamil Name	Tamil Name
_1	Acgle marmelos	Vilvam	ஷ்ஸ்வம்
2	Adenaanthera pavenma	Manjadi	மத்சாடி. ஆனைக்குன்றிமனி
3	Albizia lebbiek	Vaagai	ஆகண்க்குள் <u>க</u> மண்
4	Albizia amara	Us:!	
- 5	Bauliinia purpurea	Manthara:	மந்தாரை
6	Bauliinia racomosa	Aathi	
7	Enultinia tomentos	Iruvathi	இருவாத்தி
8	Buchanania axillaris	Kattuma	<u>காட்டுமா</u>
9	Borassus flabellifer	Panai	<u> </u>
10	Butea monosperma	Murukkamaram	ழகுக்கமரம்
11	Bobax ceiba	Ilavu, Sevvilavu	∄a.a.
12	Calophyllum inophyllum	Purulai	புண்ணை
13	Cassia fistula	Sarakondrai	சரக்கொன்றை சரக்கொன்றை
14	Cassia roxburghii	Sengondrai	செங்கொள்றை
15	Chloroxylon sweitema	Purasamaram	புரசு மரம்
16	Cochlospermum religiosum	Kongu, Manjalilavu	கோங்கு, மஞ்சள் இலவு
17	Cordia dichotoma	Namvuli	ந்தவள்.
18	Cretova adanson:	Mavalingum	மாலிலங்கம்
	Dillenia indica	Uva. Uzha	<u>2</u> _₹1
	Dillonia pentagyna	SimiUva, Sitruzha	£ <u>11</u> 1 1 5 −
21	Diospyre sebenum	Karungali	<b>கருங்கால்</b>
22	Diespyre schloroxylon	Vaganai	917-8-675-90E
	Ficus amplissima	Kalltchi	56. J#5
24	Hibiscus tiliaccon	Aatrupooyarasu	ஆ <b>ற்ற</b> ப்புரைக
25	Hardwickia binata	Aacha	——
26	Holoptelia integrifolia	Aavili	ஆவா மிரம். ஆயிலி
2.7	Lannea coromandenca	Odhiam	ஆ≢்டம்
28	Lagoretroenna speciosa	Poo Marudhu	த மருது
20	Lepisanthus tetraphylla	Neikottaimaram	ல்தும் கொட்டடை மரம்
30	Limonia acidissima	Vila maram	<b>க்லா மரம்</b>
31	Litsea glutinos	Pisinpattai	அரம்பா. பிசின்பட்டை
32	Madinica longifolia	Ширраі	இலுப்பை
33	Manilkara hexandra	Ulakka:Paalai	உலக்கை பாலை
34	Мінияоря होट्याञ	Magizhamaram	<b>៤៩</b> ៤០៤
35	Mitragopia parvifolia	Kadambu	⊋⊏ए <b>त</b>
36	Morinda pubescens	Nuna	ы́
	Morinda cirrifolia	Veilai Nuna	வெள்ளவ நுண
38	Phoenix sylvestre	Eachai	சச்சமரம்
39	Pongamia pinnat	Pungam	

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	Minista.	Munua	BU CONDO
Promua mollissima		Narumumai	एकश तिश्रोच
Prenuna serratifolia		Malaipooyarasu	अव्यक्षेत्री एउए
Prenina tomentosa		Vanni maram	}ิลเขต±
Prosous culcies		Vengai	
A Prevocarbus mai supulibi		Vennangu, Tada	் வண்ணாங்க்
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+10 :	Puthranjiva rexburgh	Karipala	श्चाका व्यक्ति
1.	- done norstru	Ugaa Maram	மண் ப <b>்பங்கள்</b>
48 )	Salvadora persica Sapindus emarginatus	Manpungan	अस्तामिक्रकाम
40		Soapukai	அடுசாகா
		Asoca	்நூர் மூம்
50_	Saraca asoca	Piray maram	
51	Strebius aspur	Yetti	51-13
52	Strychnos nuxvonic	Therthang Kotta	ப் தேத்தான் கொட்டை
53	Strychnos potatorum	Naval	தாவ்ல்
54	Syzygium cumini	Thandr	 ≨1500'S
<del>-55</del>	Terminalia belieric		்வண் மகுது
<u></u>		Ven manidhu	Beartt
_		Sandhana vem	
57		Puvaraen	ैश] <u>क</u>
_59		yalsura	வால்கரா
	The state of the s	Veppalai	வெப்பாலை
10	0 Virightia tinctoria	Kodukkapuli	<b>िकानुस्कर्णाम्</b>
Ó	1 Pithecellobium dulce	Romeranoun	

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