STATE EXPERT APPRAISAL COMMITTEE - TAMIL NADU

Minutes of 312th Meeting of the State Expert Appraisal Committee (SEAC) held on 16.9.2022 September 2022 (Friday) at SEIAA Conference Hall, 2nd Floor, Panagal Maligai, Saidapet, Chennai 600 015 for consideration of Building Construction Projects & Mining Projects.

Agenda No: 312-01 (File No. 2235/2022)

Proposed construction of Residential Development "Fomra Colours" at S.F. Nos. 1/2A1, 1/2A2A, 1/2A2B, 1/2A2C Chettiaragaram Village, Ambattur Taluk, Thiruvallur District, Tamil Nadu by M/s. Forma Housing & Infrastructure Private Limited - For Extension of validity for Environmental Clearance. (SIA/TN/MIS/267060/2022 Dt. 09.04.2022)

The proposal was placed in this 312nd Meeting of SEAC held on 16.09.2022. 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, M/s. Fomra Housing & Infrastructure Private Limited has applied for Extension of validity for the Environmental Clearance for the Proposed construction of Residential Development "Fomra Colours" at S.F. Nos. 1/2A1, 1/2A2A, 1/2A2B, 1/2A2C Chettiaragaram Village, Ambattur Taluk, Thiruvallur District, Tamil Nadu.
- 2. The project/activity is covered under Category "B2" of Item 8(a) "Building and Construction Projects" of the Schedule to the EIA Notification, 2006.
- 1. The PP had applied for Environmental Clearance and EC issued vide SEIAA Lr. No.SEIAA-TN/F.No.2235/EC/8(a)/132/2014, dated: 16.06.2014.
- Now the PP has applied online through Parivesh portal vide Proposal No. SIA/TN/MIS/267060/2022 dated: 09.04.2022 for the extension of validity of EC with all required documents.
- 4. The PP has submitted that due to certain Business strategy and slump, the construction was staggered, moreover, due to COVID 19 issues and lockdown, the project could not be completed within the validity of EC.

The SEAC had observed the MoEF&CC Notification S.O. 221(E), dated the 18.1.2021, stating that ".....Notwithstanding anything contained in this notification, the period from the 1st April, 2020 to the 31st March, 2021 shall not be considered

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CHAIRMAN SEAC- TN for the purpose of calculation of the period of validity of Prior Environmental Clearances granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19) and subsequent lockdowns (total or partial) declared for its control, however, all activities undertaken during this period in respect of the Environmental Clearance granted shall be treated as valid.".

Further it was also noted that MoEF&CC Notification S.O. 1807(E), dated the 12.4.2022, stating that "....(c) ten years in the case of all other projects and activities other than the Mining projects and River Valley Projects and Nuclear power projects referred to in clauses (a) and (b)"

Hence, the SEAC, after detailed discussions, confirmed that the validity of the Environmental Clearance issued is valid up to 15.6.2025. All others conditions stipulated in earlier Environmental Clearance vide SEIAA Lr. No.SEIAA-TN/F.No.2235/EC/8(a)/132/2014, dated: 16.06.2014 will remain unaltered and unchanged.

Agenda No: 312-02 (File No: 9416/2022)

Proposed Captive Resin plant with a Production Capacity of 21250 kg/day for Manufacturing of Plywood & Black Boards of 4329 MT/month at S.No. 139/2A2, 139/2B, 139/3, 140/1A2, 140/1B, 140/2, 140/3, 140/4, 140/5, 140/6, 140/7, 140/8, 146/1, 146/3B & 146/4 Panchalam Village, Tindivanam Taluk, Villupuram District, Tamil Nadu by M/s. HG Industries Limited (HGIL). - For grant of Terms of Reference. (SIA/TN/IND3/81014/2022, dated: 20.07.2022)

The proposal was placed for appraisal in this 312nd meeting of SEAC held on 16.09.2022. The details of the project furnished by the proponent are given on the website (parivesh.nic.in).

The SEAC noted the following:

1. The Proponent, M/s. HG Industries Limited (HGIL) has applied for Terms of Reference for the Proposed Captive Resin plant with a Production Capacity of 21250 kg/day for Manufacturing of Plywood & Black Boards of 4329 MT/month at S.No. 139/2A2, 139/2B, 139/3, 140/1A2, 140/1B, 140/2, 140/3, 140/4, 140/5, 140/6, 140/7, 140/8, 146/1, 146/3B & 146/4 Panchalam Village, Tindivanam Taluk, Villupuram District, Tarnil Nadu.

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CHAIRMAN SEAC- TN The project/activity is covered under Schedule 5(f) Category 'B'- Synthetic
Organic chemicals industry (dyes & dye intermediates; bulk drugs and
intermediates excluding drug formulations; synthetic rubbers; basic organic
synthetic organic chemicals and chemicals intermediate)" of the Schedule to
the EIA Notification, 2006.

Based on the presentation made by the proponent, SEAC recommend the proposal for the grant of Terms of Reference (TOR) with Public Hearing, since the project comes under Item No 5(f) of the Schedule and located outside of Industrial Estate, subject to the following TORs, in addition to the standard terms of reference for EIA study for 5(f) synthetic organic chemicals Industry projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

- The Proponent shall obtain fresh water supply commitment letter from the local body /TWAD.
- 2. The project proponent shall explore the possibilities of utilizing the alternate fuel like LPG, LNG, etc.,
- 3. The proponent shall furnish the layout plan for the greenbelt area earmarked with GPS coordinates with maximum area on the periphery of the unit and the green belt area should not be less than 33% of the total land area of the project.
- 4. A letter from DFO concern shall be obtained from the proposed project site to the nearest ESA like National park/sanctuary etc.
- 5. The project proponent shall construct the industry building/shed based on the green building norms.
- 6. The Board of the proponent company shall adopt 'Environment Policy' and submit the resolution to the Committee. PP shall also form an Environmental Cell to implement the policy and furnish the detail along with EIA.
- 7. The proponent shall enumerate on the details of the Raw material used and the final product and by-products for individual batches, including pollutants generated and how they are handled and disposed of.

8. Project proponent shall explore the possibilities of alternate processes and technology to reduce the raw material (solvent).

9. Details of all the solvents to be used in the process and details of solvent recovery should be furnished.

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- 10. Details of safety audit, solvent storage safety permission.
- 11. The project proponent shall provide a plan of action for utilization of 50 % of energy consumption through renewal energy. Solar panels must cover 100% of the roof top area including the plywood manufacturing unit.
- 12. Site-specific micro-meteorological data such as temperature, relative humidity, hourly wind speed and direction and rainfall should be provided.
- 13. Design details of ETP, STP with action plan for 'Zero' discharge of effluent should be included.
- 14. Details of water and air pollution and its mitigation plan.
- 15. Fugitive emissions generated from the other activities shall be collected through adequate ducting system and provided with wet scrubbers and the impacts on the workers. An action plan to control and monitor secondary fugitive emissions from all the sources.
- 16. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site specific meteorological features. Air quality modelling for the proposed plant.
- 17. Ground water quality monitoring minimum at 6 locations should be carried out.

 Geological features and Geo-hydrological status of the study area and ecological status (Terrestrial and Aquatic) should be given.
- 18. The details of solid and hazardous wastes generation, storage, utilization and disposal particularly related to the hazardous waste calorific value of hazardous waste and detailed characteristics of the hazardous waste. Details on accumulated solid waste if any due to previous activity.
- 19. EIA shall contain material balance indicating any by products, solid waste, etc.
- 20. Action plan for the management of fly ash generated from boiler should be included.
- 21. Precautions to be taken during storage and transportation of hazardous chemicals should be clearly mentioned and incorporated.
- 22. Material Safety Data Sheet for all the Chemicals are being used/will be used. CAS No./RTECS No./DOT/UN etc to be mentioned against each chemicals.

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- 23. Risk assessment for storage for chemicals/solvents. Action plan for handling &safety system. Details of the procedures adopted for the regular health check-ups for the staff shall be furnished.
- 24. Details of extra safety standards against anticipated exhaust and exposures by the project proponent to be furnished and its impact on workers including disorders and disabilities to be listed. Will exposures have any impact on workers. Can it cause disorders and disabilities?
- 25. Proper disaster management plan considering the worst-case scenario shall be furnished.
- 26. The physical and chemical characteristics of all the chemicals shall be listed in the EIA report
- 27. Action plan for rainwater harvesting measures at plant site shall be included to harvest rainwater from the roof tops and storm water drains to recharge the ground water.
- 28. Details of occupational health programme.
 - i) Chemicals to which workers are exposed directly or indirectly.
 - ii) Whether these chemicals are within Threshold Limit Values (TLV)/ Permissible Exposure Levels as per ACGIH recommendation.
 - iii) What measures company have taken to keep these chemicals within PEL/TLV.
 - iv) How the workers are evaluated concerning their exposure to chemicals during pre-placement and periodical medical monitoring.
 - v) What are onsite and offsite emergency plan during chemical disaster.
 - vi) Liver function tests (LFT) during pre-placement and periodical examination.
 - vii) Details of occupational health surveillance programme.
- 29. Detailed Environment management Plan (EMP) with specific reference to details of air pollution control system, water & wastewater management, monitoring frequency, responsibility and time bound implementation plan for mitigation measure should be provided.
- 30.EMP should include the concept of waste-minimization, recycle / reuse / recover techniques, energy conservation, and natural resource conservation.

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Agenda No: 312-3 (File No: 7650/2022)

Proposed expansion of Industrila & logistical shed at SF.No 98/2, 100, 101, 102/1, 102/2, 102/3, 103/1A etc, Vishnuvakkam and karikalavakkam Villages Tiruvallur Taluk Tiruvallur District by M/s.Shirina Industrial and Logistics Park Private limited – For Environmental Clearance (SIA/TN/MIS/271376/2022 Dt. 11.5.2022)

The proposal was placed in this 312th SEAC Meeting held on 16.09.2022. The project proponent vide e mail Dt.14.9.22 has requested the SEAC to postpone the consideration of the subject due to non-availability of Project proponent. Hence SEAC decided to defer the proposal.

Agenda No: 312-4 (File No: 9471/2022)

Proposed 60 KLPD capacity cane juice and B- Heavy Molassess based Distillery and 1.5 MW captive Power Plant at SF.No. 102/1, 102/2, 102/3, 102/4, 102/5A, 102/6, 110/1, 110/2, 110/3, 110/4, 110/5, 110/6, 110/7A, 110/7B, 110/7C, 110/8, 110/9, 110/10, 110/11A, 110/11B, 110/11C, 110/11D, 110/12, 110/13, 110/14, 110/15, 116/16A, 110/16B, 110/17, 110/18, 110/19, 110/20, 111A/1A, 111A/2, 111A/3, 113A/1, 113A/2A, 113A/2B1, 113A/2B2, 113A/4A, 113A/4B, 113A/4C, 113A/5, 113A/6, 114/1A, 114/1B, 114/2, 114/3, 114/4, 114/6A, 114/6B, 114/7, 114/8, 114/9, in Sethiyathope Village, Bhuvanagiri Taluk, Cuddalore District, Tamil Nadu by M/s.M.R.Krishnamurthy Cooperative Sugar Mills Limited - For Terms of Reference (SIA/TN/IND2/81618/2022 Dt.08.09.2022)

The proposal was placed in this 312th SEAC Meeting held on 16.09.2022. The project proponent gave a detailed presentation. The details of the project furnished by the proponent are given on the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, M/s.M.R.Krishnamurthy Cooperative Sugar Mills Limited - has applied for Terms of Reference for the Proposed 60 KLPD capacity cane juice and B- Heavy Molassess based Distillery and 1.5 MW captive Power Plant at SF.No. 102/1, 102/2, 102/3, 102/4, 102/5A, 102/6, 110/1, 110/2, 110/3, 110/4, 110/5, 110/6, 110/7A, 110/7B, 110/7C, 110/8, 110/9, 110/10, 110/11A, 110/11B, 110/11C, 110/11D, 110/12, 110/13, 110/14, 110/15, 116/16A, 110/16B, 110/17, 110/18, 110/19, 110/20, 111A/1A, 111A/2, 111A/3, 113A/1, 113A/2A, 113A/2B1, 113A/2B2, 113A/4A, 113A/4B, 113A/4C, 113A/5, 113A/6, 114/1A, 114/1B, 114/2, 114/3, 114/4, 114/6A, 114/6B, 114/7, 114/8, 114/9, in Sethiyathope Village, Bhuvanagiri Taluk, Cuddalore District, Tamil Nadu.

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HAIRMAN' SEAC TN 2. The project/activity is covered under Category "B1" of Item 5(g) "Distilleries" of the Schedule to the EIA Notification, 2006.

Based on the presentation and documents/clarifications furnished by the project proponent. The SEAC noted that the existing unit is located within 1 Km from the Vellar River and the GO(Ms) No.82 Environment Climate Change & Forest (EC.3) Dept dt. 13.10.2021 stated that

"Who are indent to set up new ethanol production unit within the existing Sugar Mills/distillery units located within IKm/5Km from the water bodies in relaxation of G.O(Ms) No. 213 E&F Dt. 30.3.1989 and G.O (Ms) No. 127, E&F Dept Dt. 8.5.1988. The above permission shall be issued with the condition that the unit shall achieve Zero Liquid Discharge with Reject management system and other conditions imposed by TNPCB".

The SEAC after detailed deliberations decided to recommend the proposal for the grant of Terms of Reference (ToR) with public consultation, 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:

- 1. List of existing industrial units in the study area along with their impact on the environment, with particular reference to river pollution.
- The project proponent shall conduct a study to review the performance of operation of ETP & STP operating in M/s. M.R.Krishnamurthy Cooperative Sugar Mills by any reputed Government institution such as IIT, Anna University, NIT etc, and furnish the study report.
- 3. The PP shall provide a certified compliance report obtained from MOEF&CC on the existing EC for the Sugar mill.
- 4. The project proponent shall ensure that the green belt area maintained in the sugar mill should not be disturbed due to this proposed project.
- The unit shall submit a methodology to achieve Zero Liquid Discharge with a Reject management system.
- 6. Considering the concentration of polluting industries in the vicinity, the PP shall explore alternative sites that are at least 10 km away from the river for locating the proposed distillery.
- 7. The proponent shall furnish the details of additional pollution local to the environment due to these activities.

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- 8. Details of raw materials such as molasses/grains, their source with availability.
- 9. Details of the use of steam from the boiler.
- Surface and Ground water quality around proposed spent wash storage lagoon, and compost yard.
- 11. Action plan to reduce spent wash generation.
- 12. Proposed effluent treatment system for molasses distillery spent wash, spent lees, condensate and utilities as well as domestic sewage and scheme for R.O plant & achieving zero effluent discharge (ZLD) and the same shall be vetted by Anna University/IIT.
- 13. Details about capacity of spent wash holding tank, material used, design consideration. No. of piezometers to be proposed around spent wash holding tank.
- 14. Action plan to control ground water pollution shall be furnished.
- 15. Details of solid waste management including management of boiler ash, yeast sludge, etc.
- 16. Details of incinerated spent wash ash generation and its disposal.
- 17. Details of bio-composting yard (if applicable).
- 18. Details of source of Air Pollution and it's mitigation measures.
- 19. Details of CO2 generation and it's bottling process.
- 20. Action plan to control odour pollution.
- 21. Arrangements for installation of continuous online monitoring system (24x7 monitoring device)
- 22. Adequacy report for ETP & STP for the proposed project obtained from any reputed Government institution such as IIT, Anna University, NIT shall be furnished.
- 23. Land use conversion for industrial use zone shall be obtained from the competent Authority/DTCP for the Survey Numbers of this project. Further, the project proponent shall submit the planning permission obtained from the DTCP, if any.
- 24. The proponent shall conduct the EIA study and submit the EIA report for the entire area along with layout and necessary documents such as "A" register and village map.

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CHAIŘMAN SEAC- TN 25. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

26. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

27. The layout plan shall be furnished for the greenbelt area earmarked with GPS coordinates 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 be not less than 33 % of the total land area of the project.

28. As the plant operation involves the sensitive processing, the medical officer and the supporting staff involved in the health centre activities shall be trained in occupational health surveillance (OHS) aspects through the outsourced training from the experts available in the field of OHS for ensuring the health standard of persons employed.

29. As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall furnish the detailed EMP mentioning all the activities as proposed in the CER including organic farm.

30. The project proponent shall furnish the cumulative impact considering the surrounding Industries for Air, Noise, Fugitive, solid waste. Hazardous waste, etc. The incremental increase in the load of pollution shall be part of EIA study.

31. A Detailed post-COVID health management plan for construction workers as per ICMR and MHA guidelines.

32. Details of Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company will adopted to keep them within PEL so that health of the workers can be preserved. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

AGENDA No: 312-05

(File No: 9355/2022)

Proposed Limestone Mining at the existing "Madukkarai Limestone mine (Area: 2.71 ha.) of Production Capacity of 800 TPA of Limestone located at Kurichi village, Coimbatore

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Taluk and District, Tamil Nadu by M/s. ACC Limited - For Terms of Reference.(SIA/TN/MIN/67845/2021, dated 24.09.2021)

The proposal was placed in this 312th meeting of SEAC held on 16.09.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The project proponent gave a detailed presentation. SEAC noted the following:

- The Proponent, M/s. ACC Limited has applied for Terms of Reference for the Existing "Madukkarai Limestone mine" (Area: 2.71 Ha.) with Limestone Production Capacity of 800 Tonnes per annum located at Kurichi village, Coimbatore Taluk and District.
- 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. The mining lease was first granted on 19.08.1968. Later lease was renewed on 02.04.1990 for 10 Years (1988 to 1998). Subsequently the lease was further renewed for another 20 years in 2010, over an area of 2.71 ha. Commencing from 19.08.1998 for a period of 20 years, it will be extended up to 31.03.2030 as per new MMDR Act.
- 4. The mining plan is for the period of five years (2018-2023) & production shall not exceed 800 TPA of Limestone.

Based on the presentation made by the Proponent, SEAC recommended for the grant of Terms of Reference (TOR) with Public Hearing subject to the following ToR, in addition to the standard ToR 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 DFO letter in regard to shortest distance of Reserve Forest & protected areas/Wildlife sanctuaries & wild life corridors etc.
- 2. The Proponent shall furnish necessary documentary evidence stating that the project site is located outside the Critically Polluted Area (Kurichi) notified by MoEF&CC.
- 3. The Proponent shall furnish the copy of last transport permit issued by the Department of Geology and Mining.
- 4. A detailed report on proposed closure of the mine shall be furnished.
- 5. Proponent shall carryout hydrogeological study through reputed institution and the same shall be included in EIA report.

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- 6. As habitations are located close to the site, the report should assess the implications of the proposal on the habitants.
- 7. In the case of proposed lease in an existing (or old) quarry where the benches are not formed (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall 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.
- 8. The Proponent 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.
- 9. The Proponent 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.
- 10. 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.
- 11. 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.
 - 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.

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- 12. 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).
- 13. The Proponent shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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 mitigation measures. Accordingly, the Environment Management plan should be prepared keeping

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the concerned quarry and the surrounding habitations in the mind.

- 20. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 21. 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.
- 22. 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.
- 23. 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.
- 24. 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.
- 25. Impact on local transport infrastructure due to the Project should be indicated.
- 26.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.
- 27.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 28. 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.
- 29. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 30. The Proponent shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language

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- 31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
- 32. The purpose of Greenbelt 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.
- 33. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner
- 34.A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 35.A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 36. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 37. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 38. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project

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CHAIRMAN SEAC- TN Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

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

Agenda No: 312-06 File No: 7857/2021

Existing Quarry of Karandapalli Black Granite Quarry Project at over an Extent of 1.37.0Ha of Patta land in S.F.Nos. 431/3, 432/1A, 1B, 4A, 4B and 441/3, Karandapalli Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu State, Tamil Nadu by Thiru. K.V.Bharath Raju- For Environmental Clearance. (SIA/TN/MIN/66303/2021 dated 04/08/2021)

The proposal was placed for appraisal in this 312th meeting of SEAC held on 16.09.2022. The Committee noted that the Project Proponent has submitted request for withdrawal of this ToR application. Hence the Committee decided to remit the proposal back to SEIAA TN to consider the request.

Agenda No: 312-07 (File No: 9439/2022)

Proposed Rough Stone and Gravel quarry over an extent of 1.53.5Hectares at Survey Nos. 425/6, 425/7 & 425/8 of Lembalakudi Village, Thirumayam Taluk, Pudukkottai District, Tamil Nadu by Thiru.S.Ravi - For Terms of Reference.(SIA/TN/MIN/

81132/2022, dated 26.07.2022)

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CHAIRMAN SEAC- TN The proposal was placed in this 312th meeting of SEAC held on 16.09.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The project proponent gave a detailed presentation. SEAC noted the following:

- 1. The Proponent, Thiru.S.Ravi has applied for Terms of Reference for the Proposed Rough Stone and Gravel quarry over an extent of 1.53.5Hectares at Survey Nos. 425/6, 425/7 & 425/8 of Lembalakudi Village, Thirumayam 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. The mining plan is for the period of five years & production should not exceed 1,38,950 cu.m of Roughstone, 18,600 cu.m of Weathered Rock and 21,060 cu.m of Gravel. The ultimate 39m (2m Gravel + 2m Weathered Rock + 35m Rough Stone) below ground level.

Based on the presentation made by the proponent SEAC recommended to grant of Terms of Reference (TOR) with Public Hearing, restricting the ultimate depth to 34m BGL(2m+2m+30m) considering the safety parameters leaving the last bench of width 10m in XY-AB section and the corresponding quantity of Roughstone-1,36,000 cu.m, 18,600 cu.m of Weathered Rock and 21,060 cu.m of Gravel in 5 years as per the approved mine plan subject to the following ToR, in addition to the standard ToR 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 DFO letter in regard to shortest distance of Reserve Forest & protected areas/Wildlife sanctuaries & wild life corridors etc.
- 2. The Proponent shall provide adequate fencing for the existing quarry as it lies abutting the road.
- 3. The Proponent shall carryout Hydro geological study through reputed institution and the same shall be included in EIA report.
- 4. As habitation is locater close to the site, the report should assess the implications of the proposal on the habitants.
- 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

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- 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 Proponent 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.
- 8. The Proponent 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,
- 11. 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.
- 12. 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

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- the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 13. The Proponent shall carry out Drone video survey covering the cluster, Green belt, fencing etc.
- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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 mitigation measures. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.

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- 20. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 21. 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.
- 22. 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.
- 23. 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.
- 24. 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.
- 25. Impact on local transport infrastructure due to the Project should be indicated.
- 26.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.
- 27.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 28. 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.
- 29. The Public hearing advertisement shall be published in one major National daily and one most circulated Tamil daily.

30. The Proponent shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.

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- 31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
- 32. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the Appendix-I in consultation with the DFO. State Agriculture University 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.
- 33. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner
- 34.A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 35.A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 36.Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 37. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 38. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

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

AGENDA No: 312-08 (File No: 9444/2022)

Proposed 60 KLPD Capacity Cane Juice and B-Heavy Molasses based Distillery and 1.5 MW Captive Power Plant at S. F. No. 59/1 (Part), 59/3, 60/2 (Part), 60/3(Part), 60/4 (Part), 60/5 (Part), 60/6 (Part), 60/7, 76/2 (Part), 77/1 (Part), 77/2 (Part), 78/4 (Part), 78/8, 78/9, 78/10A (Part), 78/10B, 93/1 (Part), 93/2A, 93/2B, 93/3 (Part), 93/4 (Part), 93/5 (Part), 93/6 in Moongilthurapattu Village, Sankarapuram Taluk, Kallakurichi District by M/s. Kallakurichi-1 Cooperative Sugar Mills Ltd. (KCSM) - For Terms of Reference.(SIA/TN/IND2/82097/2022, dated 09.08.2022)

The proposal was placed in this 312th meeting of SEAC held on 16.09.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The project proponent gave a detailed presentation. SEAC noted the following:

- The Proponent, M/s. Kallakurichi-1 Cooperative Sugar Mills Ltd. (KCSM) has applied for Terms of Reference for the Proposed 60 KLPD Capacity Cane Juice and B-Heavy Molasses based Distillery and 1.5 MW Captive Power Plant at Village- Mooongilthuraipattu, Taluk-Sankarapuram, District- Kallakurichi, Tamil Nadu.
 - 2. The proposed quarry/activity is covered under Category "BA" of Item 5(g)-Distilleries, "Industrial Projects-2" of the Schedule to the EIA Notification, 2006, as amended.

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- 3. Proposed Production of 60 KLPD or around 6392.56 KL/Annum (22.3 KLPD) from B-Heavy Molasses and 10800 KL/Annum (37.7 KLPD) from Sugar Cane Juice along with 1.5 MW X 1 no capacity Back Pressure Turbine will be installed for captive power plant.
- 4. Main Product: 60 KLPD (Fuel Grade Ethanol)
 - Ethanol from Cane Juice 10320 KL/Annum (38 KLPD)
 - Ethanol from B-Heavy Molasses 5987.8 KL/Annum (22 KLPD)
- 5. By-product:
 - Liquid CO2 8144 TPA
 - Fusel Oil 27.15 KL/Annum
 - Potash Rich Boiler Ash 370 TPA
- 6. Total land requirement 8.47.0 Ha. (20.94 Acres)
- 7. The proposed Distillery will operate under "Zero Liquid Discharge" (ZLD) concept.

Based on the presentation and documents furnished by the project proponent, The SEAC noted that the existing unit is located at a distance of 100m from the River Thenpenniyar and the GO(Ms) No.82 Environment Climate Change & Forest (EC.3) Dept Dt. 13.10.2021 stated that "Who are indent to set up new ethanol production unit within the existing Sugar Mills/distillery units located within 1Km/5Km from the water bodies in relaxation of G.O(Ms) No. 2013 E&F Dt. 30.3.1989 and G.O (Ms) No. 127, E&F Dept Dt. 8.5.1988. The above permission shall be issued with the condition that the unit shall achieve Zero Liquid Discharge with Reject management system and other and other conditions imposed by TNPCB".

Further, MoEF&CC vide Notification dated 13.06.2019 has notified that "A/l Molasses based distilleries <= 100 kLD and Non-molasses based distilleries <= 200 kLD fall under B Category projects".

Furthermore, as per the MoEF&CC Notification dated 16.06.2021, "Expansion of sugar manufacturing units or distilleries for production of ethanol, having Prior Environment Clearance (EC) for existing unit, to be used completely for Ethanol Blended Petrol (EBP) Programme only, as per self-certification in form of an affidavit by the Project Proponent, shall be appraised as category 'B2' projects.". However this plant has no Environmental Clearance for the existing activity, as the plant was started well before the EIA Notification, 2006 came into existence. Hence the Proponent has applied under B1 Category seeking ToR for the EIA study.

The SEAC after detailed deliberations decided to recommend the proposal for the grant of Terms of Reference (ToR) with Public Consultation, subject to the following ToRs in addition to the standard terms of reference for EIA study and details issued by

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the MoEF & CC to be included in EIA/EMP report:

- 1. The Proponent shall furnish the details of alternative site(s) chosen for the proposed project activity.
- 2. Detailed report on Reject Management techniques to be adopted at the plant for achieving net zero waste generation.
- 3. Mode of disposal of the bottom ash shall be furnished.
- 4. List of existing industrial units in the study area along with their impact on the environment, with particular reference to river pollution.
- 5. Considering the concentration of polluting industries in the vicinity, the Proponent shall explore alternative sites that are at least 10 km away from the river for locating the proposed distillery.
- 6. The proponent shall furnish the details of additional pollution load to the environment due to these activities.
- 7. Details of raw materials such as molasses/grains, their source with availability.
- 8. Details of the use of steam from the boiler.
- 9. Surface and Ground water quality around proposed spent wash storage lagoon, and compost yard.
- 10. Action plan to reduce spent wash generation within 6-8 KL/KL of alcohol produced.
- 11. Proposed effluent treatment system for molasses/cane juice based distillery spent wash, spent lees, condensate and utilities) as well as domestic sewage and scheme for R.O plant & achieving zero effluent discharge (ZLD) and the same shall be vetted by Anna University/IIT.
- 12. Proposed action to restrict fresh water consumption within 10 KL/KL of alcohol production.
- 13. Details about capacity of spent wash holding tank, material used, design consideration. No. of piezometers to be proposed around spent wash holding tank.
- 14. Action plan to control ground water pollution.
- 15. Details of solid waste management including management of boiler ash, yeast sludge, etc.
- 16. Details of incinerated spent wash ash generation and its disposal

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- 17. Details of bio-composting yard (if applicable).
- 18. Details of source of Air Pollution and it's mitigation measures.
- 19. Action plan for reduction of fresh water through CREB conditions for
- 20. Details of CO₂ generation and it's bottling process.
- 21. Action plan to control odour pollution.
- 22. Arrangements for installation of continuous online monitoring system (24x7 monitoring device)
- 23. Adequacy report for ETP & STP for the proposed project obtained from any reputed Government institution such as IIT. Anna University, NIT shall be furnished.
- 24. Land use conversion for industrial use zone shall be obtained from the competent Authority/DTCP for the Survey Numbers of this project. Further, the project proponent shall submit the planning permission obtained from the DTCP, if any.
- 25. The proponent shall conduct the EIA study and submit the EIA report for the entire campus along with layout and necessary documents such as "A" register and village map.
- 26. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- 27. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- 28. The layout plan shall be furnished for the greenbelt area earmarked with GPS coordinates 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 be not less than 33 % of the total land area of the project.
- 29. As the plant operation involves the sensitive processing, the medical officer and the supporting staff involved in the health centre activities shall be trained in occupational health surveillance (OHS) aspects through the outsourced training from the experts available in the field of OHS for ensuring the health standard of persons employed.

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Agenda No: 312-09 (File No: 9293/2022)

Proposed Rough stone and Gravel Quarry lease over an extent of 1.29.0 Ha at S.F.Nos. 316/4 of Kodangipalayam Village, Palladam Taluk, Tiruppur District, Tamil Nadu by Thiru. R. Shanmugam - For Terms of Reference. (SIA/TN/MIN/77222/2022 Dt. 25.05.2022)

The proposal was placed in 312th SEAC meeting held on 16.09.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

- The Project Proponent, Thiru. R. Shanmugam has applied for Environmental Clearance for the Proposed Rough stone and Gravel Quarry lease over an extent of 1.29.0 Ha at S.F.Nos. 316/4 of Kodangipalayam Village, Palladam Taluk, Tiruppur District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

Based on the presentation made by the proponent, SEAC noted that,

Proposal-No. / File No.	Status .
SIA/TN/MIN/65311/2021 Dated: 14.07.2021 File No. 8640	Proposal was placed in 237th SEAC Meeting held on 08.10.2021 SEAC decided not to recommend the project.
	Proposal was placed in 481st SEIAA Meeting held on 24.01.2022 & 25.01.2022 Authority decided to request the MS, SEIAA to communicate the SEAC MoM to PP.
No Communication was re	ceived for the Proposal 8640
Therefore, Online Proposal was Submitted SIA/TN/MIN/77222/2022 Dated: 25.05.2022 File No. 9293 Dated: 06.06.2022	 With reconsideration letter Dated: 07.06.2022 Later PP requested for withdrawal of Application due to administrative reasons and he is no longer willing to continue for obtaining EC for this file. Submitted with letter Dated: 24.07.2022.

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As the Project proponent has requested to withdraw the proposal, SEIAA may decide upon the withdrawal based on the request furnished by the proponent.

Agenda No: 312-10 (File No: 8566/2021)

Proposed Rough Stone and Gravel Quarry lease over an extent of 1.54.0 Ha at S.F.No. 211/1 & 211/2 in Kuppam Village, Pugalur Taluk, Karur District, Tamilnadu by Thiru.S.Sadhasivam- For Terms of Reference.(SIA/TN/MIN/62991/2021 dated 27.04.2022)

The proposal was placed in 312th meeting of SEAC held on 16.09.2022. The details of the project are available in the website (parivesh.nic.in).

The SEAC noted the following:

- The project proponent, Thiru.S.Sadhasivam has applied for Terms of Reference for the proposed Rough stone & Gravel quarry lease over an extent of 1.54.0 at S.F.Nos. 211/1 & 211/2 in Kuppam Village, Pugalur Taluk, Karur District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan, the lease period is for 5 years. The mining plan is for 5 years. The production for 5 years not to exceed **28,430 cu.m of rough stone** and **16,270 cu.m of gravel** with an ultimate depth of 7m below ground 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. 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 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

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- MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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).
- 7. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 8. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between

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- the adjacent quarries & water bodies nearby provided as per the approved mining plan.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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.

14. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.

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- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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.
- 19. Impact on local transport infrastructure due to the Project should be indicated.
- 20.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.
- 21. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 22. 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.
- 23. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 24. The PP shall produce/display the EIA report. Executive summery and other related information with respect to public hearing in Tamil Language also.

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- 25. 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.
- 26. 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.
- 27. 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
- 28.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.
- 29.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.
- 30.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.
- 31. 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

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- 32. 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.
- 33. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 34. 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.
- 35. 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.
- 36. 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.
- 37. 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: 312-11 (File No: 8581/2021)

Proposed Rough stone & gravel quarry lease over an extent of 2.47.9 Ha at S.F.Nos.238/2 (P), 239/1B, 239/2B, 240/2B (P), 241/1 (P), 241/2 (P), 241/3 (P) & 241/4 (P) of Pachapalayam Village, Sulur Taluk, Coimbatore District, Tamil Nadu by Tvl.Gomuki Blue Metals L.L.P- For Terms of Reference. (SIA/TN/MIN/62942/2021 Dt.10.09.2022)

The proposal was placed in 312th SEAC meeting held on 16.09.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

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The SEAC noted the following:

- The Project Proponent, Tvl.Gomuki Blue Metals L.L.P has applied for Terms for Reference for the proposed Rough stone & gravel quarry lease over an extent of 2.47.9 Ha at S.F.Nos.238/2 (P), 239/1B, 239/2B, 240/2B (P), 241/1 (P), 241/2 (P), 241/3 (P) & 241/4 (P) of Pachapalayam Village, Sulur Taluk, Coimbatore District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. The Production for the five years states that total quantity should not exceed 3,11,184 m³ of rough stone & 5,576 m³ of gravel with an ultimate depth of mining is 37m BGL (2m Gravel + 35m Rough Stone).

Based on the presentation made by the proponent, SEAC has decided to recommend grant of Terms of Reference (TOR) with Public Hearing for the production of 3,11,184m³ of Rough Stone & 5,576m³ of Gravel in 5 years with an ultimate depth 37m BGL, 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:

- 1. The PP shall furnish DFO letter in regard to shortest distance of Reserve Forest & protected areas/Wildlife sanctuaries & wild life corridors etc.
- 2. The Proponent shall enumerate the number of structures belonging to the owner (Proponent) & not belonging to the owner (Proponent) existing within 100m, 200m, 300 m and 500 m distance from the boundary of the existing quarry, indicating the details about the type of building & its structure constructional features, details of occupants, partly/fully occupied, etc during the EIA appraisal.
- 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 approved by the concerned Asst. Director of Geology and Mining during the time of appraisal for obtaining the EC.

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- 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 20 m from the blast site, in particular attention paid to the railway track existing nearby and the surrounding habitations/structures.
- 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 and geology of the mining lease area should be provided. Such an Imagery of

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- 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 operations carried out in the quarry specifically with reference to the specific

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- 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 implement the same should be provided and also incorporated in the final

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- 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 Tamil 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-lin 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 proposed preventive measures spelt out in detail. Details of pre-placement

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- 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: 312-12 (File No: 9382/2022)

Proposed Rough stone and Gravel Quarry lease over an extent of 2.70.0 Ha at S.F.Nos. 471/1 of Melur/ Chockkalingapuram Village, Melur Taluk, Madurai District, Tamil Nadu by Thiru. G. Karuppanan - For Terms of Reference.

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CHAIRMAN

(SIA/TN/MIN/79614/2022 Dt. 07.07.2022)

The proposal was placed in 312th SEAC meeting held on 16.09.2022. 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, Thiru. G. Karuppanan has applied for Terms of Reference for the Proposed Rough stone and Gravel Quarry lease over an extent of 2.70.0 Ha at S.F.Nos. 471/1 of Melur/ Chockkalingapuram Village, Melur Taluk, Madurai District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

Based on the presentation made by the proponent SEAC recommended grant of Terms of Reference (TOR) with Public Hearing, subject to the following TORs, in addition 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 conduct a detailed 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) for both monsoon and non-monsoon seasons by a reputed institution to assess the impacts on the wells due to quarrying activity vice versa on the quarrying operations.
- 2. The proponent shall provide the conceptual design on controlled blasting activity planned to be carried out for the splitting of stone blocks from the insitu rock.
- The PP shall furnish DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.
- 4. The PP shall provide individual notice regarding the Public Hearing to the nearby house owners located in the vicinity of the project site.
- 5. In the case of proposed lease in an existing (or old) quarry where the benches are non-existent (or) partially formed critical of the bench geometry approved in the Mining Plan, the Project Proponent (PP) shall

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HARMAN SEAC-TN prepare and submit an 'Action Plan' for carrying out the realignment of the 'highwall' benches to ensure slope stability in the proposed quarry lease which shall be vetted by the concerned Asst. Director of Geology and Mining, during the time of appraisal for obtaining the EC.

- 6. The Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry indicating the proposed stabilizing measures as the workings are to be carried out in shallow benches where more persons are employed for splitting of the rock 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.
- 8. As habitations are situated at a distance of 300 m, the PP shall furnish an affidavit stating that only the NONEL initiation based controlled mild blasting operation involving line drilling in the proposed quarry is carried out for splitting of stone from the insitu rock and no heavy blasts are involved so as to produce the blast-induced ground vibrations outside the permissible limits as stipulated by the DGMS as well as no fly rock travel beyond 20 m from the blast site.
- 9. Since the quarry lies in a cluster situation, the PP shall furnish a Standard Operating Procedure for carrying out the safe method of carrying out the blasting operation while considering the adjacent quarries lies in a radial distance of 500 m from their quarry.
- 9. Details of Green belt & fencing shall be included in the EIA Report.
- 10. 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.
- 11. 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.
- 12. 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).
- 13. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 14. 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.
- 15. 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.
- 16. 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.

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- 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

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- 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 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. 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.

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- 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 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 profisions in

CHAIRMAN SEAC-TH the Environment (Protection) Act, 1986.

Agenda No: 312-13 (File No: 9410/2022)

Proposed Rough stone and Gravel Quarry lease over an extent of 2.09.5 Ha at 5.F.Nos. 179/1, 179/2, 179/3, 180/3F, 180/3G, 180/4A, 180/5A, 180/4B, 180/4C, 180/4D, 180/4E and 180/4F of Kundiyanthandalam Village, Vembakkam Taluk, Tiruvannamalai District, Tamil Nadu by Thiru. T. Bharath - For Terms of Reference. (SIA/TN/MIN/80597/2022 Dt. 18.07.2022)

The proposal was placed in 312th SEAC meeting held on 16.09.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

- The Project Proponent, Thiru. T. Bharath has applied for Terms of Reference for the Proposed Rough stone and Gravel Quarry lease over an extent of 2.09.5 Ha at S.F.Nos. 179/1, 179/2, 179/3, 180/3F, 180/3G, 180/4A, 180/5A, 180/4B, 180/4C, 180/4D, 180/4E and 180/4F of Kundiyanthandalam Village, Vembakkam Taluk, Tiruvannamalai District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

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

- The proponent must submit certified compliance report along with EIA report.
- 2. The Project Proponent shall conduct a detailed 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) for both monsoon and non-monsoon seasons by a reputed institution to assess the impacts on the wells due to quarrying activity vice versa on the quarrying operations.
- 3. The proponent shall submit the details regarding the nature of blasting activity which will be carried out.

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- 4. The PP shall furnish DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.
- 5. The PP shall provide individual notice regarding the Public Hearing to the nearby house owners located in the vicinity of the project site.
- 6. In the case of proposed lease in an existing (or old) quarry where the benches are non-existent (or) partially formed critical of the bench geometry approved in the Mining Plan, the Project Proponent (PP) shall prepare and submit an 'Action Plan' for carrying out the realignment of the 'highwall' benches of 12 14 m height to ensure slope stability in the proposed quarry lease which shall be vetted by the concerned Asst. Director of Geology and Mining, during the time of appraisal for obtaining the EC.
- 7. The Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry indicating the proposed stabilizing measures during the appraisal while obtaining the EC, when the depth of the working is extended beyond 30 m below ground level.
- 10. 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.
- 11. Since few habitations are situated at a distance of 300 m, the PP shall present a conceptual design for carrying out the NONEL initiation based controlled blasting operation with a help of any reputed Govt Research/Academic Institution like NIRM, IITs, NITs, Anna University and any other CSIR labs such that the blast-induced ground vibrations and fly rock due to the proposed quarry operation are controlled within the permissible limits as stipulated by the DGMS.
- 12. Since the quarry lies in a cluster situation, the PP shall furnish a Standard Operating Procedure for carrying out the safe blasting operation while considering the adjacent quarries lies in a radial distance of 500 m from their

quarry.

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- 10. Details of Green belt & fencing shall be included in the EIA Report.
- 11. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.
- 12. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
 - 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.
 - 13. 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).
 - The PP shall carry out Drone video survey covering the cluster. Green belt , fencing etc.,
 - 15. 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.
 - 16. 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

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- operations on the surrounding environment and the remedial measures for the same.
- 17. 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.
 - 18. 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.
 - 19. 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.
 - 20. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 21. 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.
- 22. 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.
- 23. 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 sequred and

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furnished to the effect that the proposed mining activities could be considered.

- 24. 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.
- 25. Impact on local transport infrastructure due to the Project should be indicated.
- 26.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.
- 27.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 28. 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.
- 29. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 30. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
- 32. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.

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

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

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- 42. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
- 43. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

Agenda No: 312-14 (File No: 9426/2022)

Proposed Rough stone and Gravel Quarry lease over an extent of 3.48.0 Ha at S.F.Nos. 67/1 & 68 of Myleripalayam Village, Madukkarai Taluk, Coimbatore District, Tamil Nadu by Thirumathi. M.Sarojini - For Terms of Reference. (SIA/TN/MIN/81043/2022 Dt. 21.07.2022)

The proposal was placed in 312th SEAC meeting held on 16.09.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

- The Project Proponent, Thirumathi. M.Sarojini has applied for Terms of Reference for the Proposed Rough stone and Gravel Quarry lease over an extent of 3.48.0 Ha at S.F.Nos. 67/1 & 68 of Myleripalayam Village, Madukkarai Taluk, Coimbatore District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

Based on the presentation made by the proponent SEAC recommended grant of Terms of Reference (TOR) with Public Hearing, subject to the following TORs, in addition 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 proponent must submit certified compliance report along with EIA report.
- 2. The Project Proponent shall conduct a detailed hydro-geological study considering the contour map of the water table detailing the number of

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- ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) for both monsoon and non-monsoon seasons by a reputed institution to assess the impacts on the wells due to quarrying activity vice versa on the quarrying operations.
- 3. The proponent shall submit the details regarding the nature of blasting activity which will be carried out.
- 4. The PP shall furnish DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.
- 5. The PP shall provide individual notice regarding the Public Hearing to the nearby house owners located in the vicinity of the project site.
- 6. In the case of proposed lease in an existing (or old) quarry where the benches are non-existent (or) partially formed critical of the bench geometry approved in the Mining Plan, the Project Proponent (PP) shall prepare and submit an 'Action Plan' for carrying out the realignment of the 'highwall' benches of 16 m to ensure slope stability in the proposed quarry lease which shall be vetted by the concerned Asst. Director of Geology and Mining, during the time of appraisal for obtaining the EC.
- 7. The Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry indicating the proposed stabilizing measures during the appraisal while obtaining the EC, when the depth of the working is extended beyond 30 m below ground level.
- 13. 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.
- 14. Since few habitations are situated at a distance of 300 m, the PP shall present a conceptual design for carrying out the NONEL initiation based controlled blasting operation with a help of any reputed Govt Research/Academic Institution like NIRM, IITs, NITs, Anna University and any other CSIR labs such that the blast-induced ground vibrations and fly rock due to the

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- proposed quarry operation are controlled within the permissible limits as stipulated by the DGMS.
- 15. Since the quarry lies in a cluster situation, the PP shall furnish a Standard Operating Procedure for carrying out the safe method of carrying out the blasting operation while considering the adjacent quarries lies in a radial distance of 500 m from their quarry.
- 15. Details of Green belt & fencing shall be included in the EIA Report.
- 16. 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.
- 17. 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.
- 18. 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).
- 19. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 20. The proponent shall furnish photographs of adequate fencing, green belt

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- along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.
- 21. 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.
- 22. 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.
 - 23. 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.
 - 24. 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.
 - 25. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 26.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.

27. Details of the land for storage of Overburden/Waste Dumps for Reject

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- 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.
- 28. 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.
- 29. 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.
- 30. Impact on local transport infrastructure due to the Project should be indicated.
- 31. 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.
- 32.A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 33. 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.
- 34. The Public hearing advertisement shall be published in one major National daily and one most circulated vernacular daily.
- 35. The PP shall produce/display the EIA report, Executive summery and other related information with respect to public hearing in Tamil Language also.
- 36. 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.
- 37. 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

CHAIRMÁN SEAC- TN 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.

- 38. 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
- 39.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.
- 40.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.
- 41. 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.
- 42. 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.
- 43. 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.

44. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

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- 45. 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.
- 46.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.
- 47. 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.
- 48. 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: 312-15 (File No: 9364/2022)

Proposed Rough Stone and Gravel Quarry lease over an extent of 2.28.5 Ha at S.F.No. 543/1, 543/2, 543/3 & 557/2(P) in Kuppam Village, Pugalur Taluk, Karur District, Tamilnadu by M/s. NTC Blue Metals LLP - For Terms of Reference. (SIA/TN/MIN/79175/2022 dated 28.06.2022)

The proposal was placed in 312th meeting of SEAC held on 16.09.2022. The details of the project are available in the website (parivesh.nic.in).

The SEAC noted the following:

- 4. The project proponent, M/s. NTC Blue Metals LLP has applied for Terms of Reference for the proposed Rough stone & Gravel quarry lease over an extent of 2.28.5 Ha at S.F.Nos. 543/1, 543/2, 543/3 & 557/2(P) in Kuppam Village, Pugalur Taluk, Karur District, Tamilnadu.
- 5. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 6. As per the mining plan, the lease period is for 5 years. The mining plan is for 5 years. The production for 5 years not to exceed 3,75,112 cu.m of fough stone and 55,728 cu.m of gravel with an ultimate depth of 40m below ground level.

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CHAIRMAN SEAC- TN 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:

- 38. The PP shall furnish DFO letter in regard to shortest distance of Reserve Forest & protected areas/Wildlife sanctuaries & wild life corridors etc.
- 39. The no. of habitations/any structures belonging to the proponent (or) not to the proponent situated within radius of (i) 100 m, (ii) 200 m, (iii) 300 m and (iv) 500m shall be enumerated in the EIA report including the details with number of occupants, places of worship, type of structure, etc.
- 40.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.
- 41. 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.
- 42. 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.
- 43. 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 within the permissible limits of DGMS as well as no fly rock travel beyond 30 m from the blast site.
- 44. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.

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- 45. 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.
- 46.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).
- 47. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 48. 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.
- 49. 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.

50. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be

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- 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.
- 51. 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.
- 52. 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.
- 53. 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.
- 54. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 55. 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.
- 56. 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.

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- 57. 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.
- 58. 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.
- 59. Impact on local transport infrastructure due to the Project should be indicated.
- 60.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.
- 61. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 62. 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.
- 63. The Public hearing advertisement shall be published in one major National daily and one most circulated Tamil daily.
- 64. The PP shall produce/display the EIA report. Executive summery and other related information with respect to public hearing in Tamil Language also.
- 65. 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.
- 66. 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

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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.

- 67. 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
- 68.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.
- 69.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.
- 70. 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.
- 71. 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.
- 72. 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.

73. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

74. Benefits of the Project if the Project is implemented should be spelt but. The

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CHAIRMAN / SEAC-TN benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.

- 75. 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.
- 76. 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.
- 77. 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: 312-16 (File No: 9357/2022)

Proposed Rough stone and gravel Quarry lease over an extent of 2.02.0 Ha at S.F.No. 482/2C in Munnur Village, Pugalur Taluk, Karur District, Tamilnadu by Tmt.N.Latha - For Terms of Reference. (SIA/TN/MIN/78982/2022 dated 25.06.2022)

The proposal was placed in 312th meeting of SEAC held on 16.09.2022. The details of the project are available in the website (parivesh.nic.in).

The SEAC noted the following:

- 1. The project proponent, Tmt.Latha has applied for Terms of Reference for the proposed rough stone and gravel quarry lease over an extent of 2.02.0 Ha at S.F.Nos. 482/2C in Munnur Village, Pugalur Taluk, Karur District, Tamilnadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.

The proposal was placed for appraisal in this 312th meeting of SEAC held on 16.09.2022. The Committee noted that the Project Proponent has submitted request for withdrawal of this ToR application stating that the project activity falls under B2 category.

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CHAIRMAN SEAC- TN During the deliberations, the PP had highlighted (i) the MOEF Notification No: S.O. 2269(E), dated. 01.07.2016 which states that...

"...A cluster shall be formed when the distance between the peripheries of one lease is less than 500 meters from the periphery of other lease in a homogeneous mineral area which shall be applicable to the mine leases or quarry licenses granted on and after 9th September, 2013.":

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

Based on the above deliberations, the SEAC had ascertained the following legal provisions of:

- (1) 'The Mines and Minerals (Development and Regulation) Act, 1957' which states that
 - "....3 (c) "mining lease" means a lease granted for the purpose of undertaking mining operations, and includes a sub-lease granted for such purpose;
 - (d) "mining operations" means any operations undertaken for the purpose of winning any mineral;...."
- (2) Mineral Conservation and Development Rules (MCDR), 2017 which defines...
 - "...3 (a) 'Abandonment of mine' means the final closure of a mine, either whole or part thereof, when the mineral deposits within the mine or part thereof have been fully extracted or when the mining operations thereon become uneconomic;...."
- (3) Besides, the provisions of MCDR 2017 as enumerated below is relevant to the "Final Mine Closure Plan (FMCP)" of any mine:-

"...As per Rule 21(4), the holder of a ML shall not abandon a mine unless a FMCP duly approved by the competent authority, is implemented, and for this purpose, the lessee shall be required to obtain a certificate from the authorized officer, as the case may be, to the effect that protective, reclamation and rehabilitation work in accordance with the FMCP or with such modifications as approved by the competent authority have been carried out before abandonment of mine...."

Hence it clearly indicates that 'abandoned' and 'expired' mines cannot be considered for cluster situation.

Therefore, the SEAC decided that that the PP's request may be considered by SEIAA TN in the light of the above clarification.

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Agenda No: 312-17 (File No: 9376/2022)

Proposed Earth Quarry lease over an extent of 1.45.0 Ha at S.F.No. 43/2 in Kulasekarapatti Village, Tenkasi Taluk, Tenkasi District, Tamilnadu by Thiru.M.Gandhi Selwyn - For Terms of Reference. (SIA/TN/MIN/76966/2022 dated 16.05.2022)

The proposal was placed in 312th meeting of SEAC held on 16.09.2022. The details of the project are available in the website (parivesh.nic.in).

The SEAC noted the following:

- The project proponent, Thiru.M.Gandhi Selwyn has applied for Terms of Reference for the proposed earth quarry lease over an extent of 1.45.0 Ha at S.F.Nos. 43/2 in Kulasekarapatti Village, Tenkasi Taluk, Tenkasi District, Tamilnadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan, the lease period is for 2 years. The mining plan is for 2 years. The production for 2 years not to exceed 12,296 cu.m of earth with an ultimate depth of 2m below ground 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 composition/component of the minerals proposed to be quarried shall be tested in any of the laboratories authorized by the Dept of Geology & Mining, which shall also be duly certified by the concerned AD (Geology & Mining).
- The proponent should produce a letter from the Department of Geology and Mining stating that the location of quarry site does not lie adjoining to the rivers, streams, canals etc., and also does not come under any notified/declared protected zones.
- 3. 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

4. The proponent shall discuss mitigation measures with DFO Tirunel welli, since

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- Kanyakumari wild life sanctuary is situated within 10kms of the proposed project area and incorporate the same in the EMP.
- 5. The EIA Coordinator 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 indicate the provision of basic amenities such as Rest Room, First-Aid Room, Toilets, etc under the provisions of Mines Rules 1955, in the EIA Report.
- 12. The Project Proponent shall study the hydro-geological impacts due to mining activities 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 500 m (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD.
- 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) shall 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. 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.

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- 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.
- 18. 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.
- 19. Impact on local transport infrastructure due to the Project should be indicated.
- 20.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.
- 21. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 22. 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.
- 23. The Public hearing advertisement shall be published in one major National daily and one most circulated Tamil daily.
- 24. The PP shall produce/display the EIA report, Executive summary and other related information with respect to public hearing in Tamil Language also.
- 25. 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.
- 26. 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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- 27. 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
- 28.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.
- 29. 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.
- 30.Occupational Health impacts of the Project should be anticipated and the proposed preventive measures should be spelt out in detail. Details of preplacement 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.
- 31. 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.
- 32. 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.
- 33. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 34. 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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- 35. 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.
- 36. 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.
- 37. 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: 312-18 (File No: 9383/2022)

Proposed Red Earth Quarry lease over an extent of 1.53.5 Ha at S.F.No. 70/2, 70/3, 70/4, 70/5A & 71/3 in Kondalangkuppam Village, Vanur Taluk, Viluppuram District, Tamilnadu by Mr.B.Venkatakrishnan - For Terms of Reference. (SIA/TN/MIN/79249/2022 dated 30.06.2022)

The proposal was placed in 312th meeting of SEAC held on 16.09.2022. The details of the project are available in the website (parivesh.nic.in).

The SEAC noted the following:

- 1. The project proponent, Mr.B.Venkatakrishnan has applied for Terms of Reference for the proposed red earth quarry lease over an extent of 1.53.5 Ha at 5.F.Nos. 70/2, 70/3, 70/4, 70/5A & 71/3 in Kondalangkuppam Village, Vanur Taluk, Viluppuram District, Tamilnadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
- 3. As per the mining plan, the lease period is for 2 years. The mining plan is for 2 years. The production for 2 years not to exceed 23,004 cu.m of red earth with an ultimate depth of 2m below ground 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

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- The PP shall furnish DFO letter in regard to shortest distance of Reserve Forest
 & protected areas/Wildlife sanctuaries & wild life corridors etc.
- 2. The PP is requested to submit the composition/component of the minerals proposed to be quarried which shall be tested in the Department of Civil Engineering laboratory, NIT, Trichy authorized by the Dept of Geology & Mining, and further it shall be duly certified by the concerned AD (Geology & Mining).
- 3. The proponent should produce a letter from the Department of Geology and Mining stating that the location of quarry site does not lie adjoining to the rivers, streams, canals etc., and also does not come under any notified/declared protected zones.
- 4. 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.
- 5. 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.
- 6. 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

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- the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 7. The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,
- 8. 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.
- 9. 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.
- 10. 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.
- 11. The Project Proponent shall indicate the provision of basic amenities such as Rest Room, First-Aid Room, Toilets, etc under the provisions of Mines Rules 1955, in the EIA Report.
- 12. The Project Proponent shall study the hydro-geological impacts due to mining activities 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 500 m (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD.
- 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

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- 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) shall 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. 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.
- 18. 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.
- 19. Impact on local transport infrastructure due to the Project should be indicated.
- 20.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.
- 21. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
- 22. 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.

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- 23. The Public hearing advertisement shall be published in one major National daily and one most circulated Tamil daily.
- 24. The PP shall produce/display the EIA report, Executive summary and other related information with respect to public hearing in Tamil Language also.
- 25. 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.
- 26. 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.
- 27. 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
- 28.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.
- 29.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.
- 30. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures should be spelt out in detail. Details of preplacement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health

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- mitigation measures with required facilities proposed in the mining area may be detailed.
- 31. 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.
- 32. 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.
- 33. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 34. 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.
- 35.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.
- 36. 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.
- 37. 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: 312-19 (File No: 9358/2022)

Proposed Rough stone & gravel quarry lease over an extent of 2.05.0Ha at S.F.No. 1066/I(P) of Thennilai (East) Village, Pugalur Taluk, Karur District, Tamil Nadu by Tmt.L.Kamalam - For Terms of Reference.(SIA/TN/MIN/78993/2022 Dt.27.06.2022)

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The proposal was placed in 312th SEAC meeting held on 16.09.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

- The Project Proponent, Tmt.L.Kamalam has applied for Terms for Reference for the proposed Rough stone & gravel quarry lease over an extent of 2.05.0Ha at S.F.No. 1066/1 (P) of Thennilai (East) Village, Pugalur Taluk, Karur District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

During the deliberations, the PP had highlighted (i) the MOEF Notification No: 5.0. 2269(E), dated. 01.07.2016 which states that...

"....A cluster shall be formed when the distance between the peripheries of one lease is less than 500 meters from the periphery of other lease in a homogeneous mineral area which shall be applicable to the mine leases or quarry licenses granted on and after 9th September. 2013.";

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

Based on the above deliberations, the SEAC had ascertained the following legal provisions of:

- (1) 'The Mines and Minerals (Development and Regulation) Act, 1957' which states that
 - "....3 (c) "mining lease" means a lease granted for the purpose of undertaking mining operations, and includes a sub-lease granted for such purpose;
 - (d) "mining operations" means any operations undertaken for the purpose of winning any mineral;...."
- (2) Mineral Conservation and Development Rules (MCDR), 2017 which defines..

"...3 (a) 'Abandonment of mine' means the final closure of a mine, either whole or part thereof, when the mineral deposits within the mine or part

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thereof have been fully extracted or when the mining operations thereon become uneconomic:..."

(3) Besides, the provisions of MCDR 2017 as enumerated below is relevant to the "Final Mine Closure Plan (FMCP)" of any mine:-

"...As per Rule 21(4), the holder of a ML shall not abandon a mine unless a FMCP duly approved by the competent authority, is implemented, and for this purpose, the lessee shall be required to obtain a certificate from the authorized officer, as the case may be, to the effect that protective, reclamation and rehabilitation work in accordance with the FMCP or with such modifications as approved by the competent authority have been carried out before abandonment of mine...."

Hence it clearly indicates that 'abandoned' and 'expired' mines cannot be considered for cluster situation.

Therefore, the SEAC decided that that the PP's request may be considered by SEIAA TN in the light of the above clarification.

Agenda No: 312-20 (File No: 9372/2022)

Proposed Rough stone & gravel quarry lease over an extent of 1.58.0Ha at S.F.No. 151/IE (Part) of Arasampalayam Village, Kinathukadavu Taluk, Coimbatore District, Tamil Nadu by Thiru.C.Ganesh- For Terms of Reference.(SIA/TN/MIN/79375/2022 Dt.01.07.2022)

The proposal was placed in 312th SEAC meeting held on 16.09.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

- The Project Proponent, Thiru.C.Ganesh has applied for Terms for Reference for the proposed Rough stone & gravel quarry lease over an extent of 1.58.0Ha at S.F.No. 151/1E (Part) of Arasampalayam Village, Kinathukadavu Taluk, Coimbatore District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. The Production for the five years states that total quantity should not exceed 1,03,186 m³ of rough stone with a ultimate depth of mining is 47m (2m Gravel + 45m Rough Stone) below ground level.

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Based on the presentation made by the proponent, SEAC has decided to recommend grant of Terms of Reference (TOR) with Public Hearing for the production of 1,03,186m³ of Rough Stone(depth restricted considering Safety parameters) in 5 years with an ultimate depth 47m BGL, 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 PP shall furnish DFO letter in regard to shortest distance of Reserve Forest & protected areas/Wildlife sanctuaries & wild life corridors etc with in 25 Km radius.
- 2. The PP shall submit certified compliance report for EC already obtained vide Lr.No.SEIAA-Tn/F.No.5391/1(a)/EC.No.3544/2016 dated 10.08.2016.
- 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 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' during the appraisal for the proposed quarry as the existing depth of the quarry is 20 m and spell out the mitigation measures for the stability of highwall benches proposed in the quarry while obtaining the EC.
- 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.

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- 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 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 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 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

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- 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 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 spell out. The

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- 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: 312-21 (File No: 9391/2022)

Proposed Rough stone & gravel quarry lease over an extent of 1.61.5 Ha at S.F.No. 344/4, 344/6A & 344/6B1 of Pachapalayam Village, Sulur Taluk, Coimbatore District, Tamil Nadu by Tmt.S.Maheswari - For Terms of Reference.(SIA/TN/MIN/79909/2022 Dt.11.07.2022)

The proposal was placed in 312th SEAC meeting held on 16.09.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

- The Project Proponent, Tmt.S.Maheswari has applied for Terms for Reference for the proposed Rough stone & gravel quarry lease over an extent of 1.61.5Ha at S.F.No. 344/4, 344/6A & 344/6B1 of Pachapalayam Village, Sulur Taluk, Coimbatore District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. The Production for the five years states that total quantity should not exceed 70.486 m³ of Rough stone with a ultimate depth of mining is 47m below ground level.

Based on the presentation made by the proponent, SEAC has decided to recommend grant of Terms of Reference (TOR) with Public Hearing for the production of

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67.591m³ of Rough Stone(depth restricted considering Safety parameters) in 5 years with an ultimate depth 47m BGL, 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:

- 1. The PP shall furnish DFO letter in regard to shortest distance of Reserve Forest & protected areas/Wildlife sanctuaries & wild life corridors etc within 25 Km radius.
- 2. The PP shall submit certified compliance report for EC already obtained vide Lr.No.SEIAA-Tn/F.No.5391/1(a)/EC.No.3544/2016 dated 10.08.2016.
- 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 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,

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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.
- 9. 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).
- 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

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& 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 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

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- 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 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 dioices. 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
- 31. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 32.A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 33. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 34. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 35. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 36. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 37. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 38. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site photographs which shall duly be certified by MoEF&CC, Regional Office, Chernai (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: 312-22 (File No: 9412/2022)

Proposed Rough stone & gravel quarry lease over an extent of 2.75.0 Ha at S.F.No. 616/3 (Part 2), of Kammandoddi Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu by Thiru.P.Venkata Reddy - For Terms of Reference.(SIA/TN/MIN/81170/2022 Dt.25.07.2022)

The proposal was placed in 312th SEAC meeting held on 16.09.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

- The Project Proponent, Thiru.P.Venkata Reddy has applied for Terms for Reference for the proposed Rough stone & gravel quarry lease over an extent of 2.75.0 Ha at S.F.No. 616/3 (Part 2) of Kammandoddi Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu.
- 2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. The Production for the five years states that total quantity should not exceed 322317 m³ of rough stone and 28,803 m³ of Topsoil (Gravel) with an ultimate depth of mining is 52m [3m Topsoil (Gravel)+ 49 m Rough stone].

Based on the presentation made by the proponent, SEAC has decided to recommend grant of Terms of Reference (TOR) with Public Hearing with an ultimate depth not exceeding 50m BGL with bench height not exceeding 5 m & bench width of not less than bench height, 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:

1. The PP shall furnish DFO letter in regard to shortest distance of Reserve Forest & protected areas/Wildlife sanctuaries & wild life corridors etc. Within 25 Km

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- 2. The PP shall revise mining plan with 5m bench height and the same shall be approved by competent authority.
- 3. The PP shall furnish study on impact of blasting operation on the railway track nearby the proposed mining site.
- 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.
- 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.
- 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, 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 mensoon 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.
- 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.

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- 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

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- 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 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: 312-23 (File No: 9366/2022)

Proposed Rough Stone & gravel quarry lease over an extent of 2.15.0 Ha at S.F.No. 544/1,544/2,544/3 & 545/1 (P) of Kuppam Village, Pugalur Taluk, Karur District, Tamil Nadu by M/s.NTC Bule Metals LLP - for Terms of Reference (SIA/TN/MIN/79178/2022 Dt.28.06.2022)

The proposal was placed in this 312th Meeting of SEAC held on 16.09.2022 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 of M/s.NTC Bule Metals LLP has applied for Terms of Reference for the proposed Rough Stone & gravel quarry lease over an extent of 2.15.0 Ha at S.F.No. 544/1,544/2,544/3 & 545/1 (P) of Kuppam Village, Pugalur 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.

Based on the presentation made by the proponent, SEAC recommended grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for combined 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 provide the impact of the proposed quarrying activity on the lake and other surrounding water bodies which are existing within 1 km radius from the mining lease area shall be furnished.
- 2. The Proponent shall enumerate the number of structures belonging to the owner (Proponent) & not belonging to the owner (Proponent) existing within

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100m, 200 m, 300 m and 500 m distance from the boundary of the existing quarry, indicating the details about the type of building & its structure constructional features, details of occupants, partly/fully occupied, etc during the EIA appraisal.

- 3. The PP shall furnish DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.
- 4. The PP shall provide conceptual design for carrying out the NONEL initiation based controlled blasting operation involving muffle blasting in the proposed quarry such that the blast-induced ground vibrations are controlled within the permissible limits as stipulated by the DGMS as well as no fly rock travel beyond 30 m from the blast site.
- 5. In the case of proposed lease in an existing (or old) quarry where the benches are nonexistent (or) partially formed critical of the bench geometry approved in the Mining Plan, the Project Proponent (PP) shall prepare and submit an 'Action Plan' for carrying out the realignment of the 'highwall' benches in the existing quarried pit and the proposed pit indicating the possible stabilizing measures to ensure slope stability as the depth of the planned working is extended beyond 30 m below ground level which shall be submitted as a part of the revised Mining Plan, during the time of appraisal for obtaining the EC.
- 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 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. Since the quarry lies in a cluster situation, the PP shall furnish a Standard Operating Procedure for carrying out the safe blasting operation while considering the adjacent quarries lies in a radial distance of 500 m from their quarry.

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- 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.
 - b) c)Highest production achieved in any one year
 - c) d)Detail of approved depth of mining.
 - d) e) Actual depth of the mining achieved earlier.
 - e) f) Name of the person already mined in that leases area.
 - f) g) 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.
- 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. he 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 a detailed 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) for both monsoon and non-monsoon seasons by a reputed institution / University to assess the impacts on the wells due to quarrying activity vice versa on the quarrying operations.
 - 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.
 - 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.

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- 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 Tamil 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-l 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.
- Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted as per the advice of ocal forest authorities/botanist/Horticulturist with regard to site specific and ocal forest

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 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

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- 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.
- 42. As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall furnish the detailed EMP mentioning all the activities as proposed in the CER.

Agenda No: 312 -24 (File No: 9422/2022)

Proposed Rough Stone & gravel quarry lease over an extent of 2.89.0 Ha at S.F.No. 226/I (P) of Kuppam Village, Pugalur Taluk, Karur District, Tamil Nadu by Thiru K. Nallasamy - for Terms of Reference (SIA/TN/MIN/81222/2022 Dt.27.07.2022)

The proposal was placed in this 312th Meeting of SEAC held on 16.09.2022 The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

- 1. 1.The Project Proponent of Thiru K. Nallasamy has applied for Terms of Reference for the Proposed Rough Stone & gravel quarry lease over an extent of 2.89.0 Ha at S.F.No. 226/1 (P) of Kuppam Village. Pugalur 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.

Based on the presentation made by the proponent, SEAC recommended grant of Terms of Reference (TOR) with Public Hearing subject to the following TORs, in addition to the standard terms of reference for combined 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. The PP shall submit certified compliance report for EC already obtained.
- 2. The PP shall provide the impact of the proposed quarrying activity on the lake and other surrounding water bodies which are existing within 1 km radius from the mining lease area shall be furnished.
- 3. The PP shall furnish DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.
- 4. The PP shall install the fencing around the boundary of the existing pit and photographs showing the same shall be submitted during the EIA appraisal.
- 5. The PP shall provide conceptual design for carrying out the NONEL initiation-based controlled blasting operation involving muffle blasting in the proposed quarry such that the blast-induced ground vibrations are controlled within the permissible limits as stipulated by the DGMS as well as no fly rock travel beyond 30 m from the blast site.
- 6. In the case of proposed lease in an existing (or old) quarry where the benches are non-existent (or) partially formed critical of the bench geometry approved in the Mining Plan, the Project Proponent (PP) shall prepare and submit an 'Action Plan' for carrying out the realignment of the 'highwall' bench of 9 m in the existing quarried pit and the proposed pit indicating the possible stabilizing measures to ensure slope stability as the depth of the planned working is extended beyond 30 m below ground level which shall be submitted as a part of the revised Mining Plan, during the time of appraisal for obtaining the EC.
- 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.
- 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. Since the quarry lies in a cluster situation, the PP shall furnish a Standard Operating Procedure for carrying out the safe blasting operation while

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considering the adjacent quarries lies in a radial distance of 500 m from their quarry.

- 10. 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.
- 11. 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 a detailed 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) for both monsoon and non-monsoon seasons by a reputed institution / University to assess the impacts on the wells due to quarrying activity vice versa on the quarrying operations.
- 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 Tamil 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 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. 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 eco-friendly bags should Ьę 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 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.

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- 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.
- 43. As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall furnish the detailed EMP mentioning all the activities as proposed in the CER.

Agenda No: 312-25.

(File No: 9393/2022)

Proposed Rough Stone and Gravel quarry lease over an extent of 4.26.72 Ha at S.F.No.149/2B, 149/3A, 149/3B, 149/3C, 149/4A, 149/4B & 149/4C of Arasampalayam Village, Kinathukadavu Taluk, Coimbatore District, Tamil Nadu by Tvl. Sree Mahalakshmi Blue Metals for Terms of Reference.(SIA/TN/MIN/80119/2022, dt: 12.07.2022)

The proposal was placed in this 312th Meeting of SEAC held on 16.09.2022. 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, Tvl. Sree Mahalakshmi Blue Metals has applied for Terms of Reference for the proposed Rough Stone and Gravel quarry lease over an extent of 4.26.72 Ha at S.F.No.149/2B, 149/3A, 149/3B, 149/3C, 149/4A, 149/4B & 149/4C of Arasampalayam Village, Kinathukadavu Taluk, Coimbatore District, Tamil Nadu.
- 2. The proposed quarry/activity is covered under Category

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- "Mining Projects" of the Schedule to the EIA Notification, 2006.
- 3. The precise area communication/lease is issued for the period of 5 years. The approved mining plan is for the period of five years & production should not exceed 810600m³ of Rough Stone & 61836m³ of Gravel. The annual peak production is 164125m³ of rough stone (4th year) & 27802m³ of Gravel 1st Year. The ultimate depth is 42m BGL.

Based on the presentation made by the proponent, SEAC has decided to recommend grant of Terms of Reference (TOR) with Public Hearing is issued for the production of 810600m³ of Rough Stone & 61836m³ of Gravel in 5 years with ultimate depth 42m BGL, 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:

- 1. To furnish DFO letter regard to shortest distance of Reserve Forest & protected areas/Wildlife sanctuaries & wild life corridors etc.
- The Proponent shall submit a conceptual 'Slope Stability Plan' keeping the benches intact and showing the haulage road with permissible gradient for the proposed quarry during the appraisal while obtaining the EC, as 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 explore the possibility of adopting the drilling machines adopting the pneumatic dust control system to collect dust at source while drilling with three handheld rock drills at the same time reducing the exposure of respirable crystalline silica dust, thereby, helps in improving the health and providing safe work conditions for the operators, in a cluster situation.
- 5. The PP shall present a conceptual design for carrying out only controlled blasting operation, involving reputed scientific institution such as NIRM, IITs, NITs. Anna University Chennai and any other CSIR lab, in the proposed quarry which is located at a distance of 60 m from the railway track such that

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- the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 20 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.
- 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).
- 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 a detailed 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) for both monsoon and non-monsoon seasons by a reputed institution / University to assess the impacts on the wells due to quarrying activity vice versa on the quarrying operations.
- 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 (cr) Re

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- 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

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should be planted as given in the appendix-lin 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

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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: 312-26. (File No: 9423/2022)

Proposed Rough Stone and Gravel Quarry over an extent of 1.62.0Ha SF.No.553/2 (Part) of Kuppam Village, Pugalur Taluk, Karur District by M/s. New Star Blue Metals for Terms of Reference.(SIA/TN/MIN/ 81223/2022, dt: 27.07.2022)

The proposal was placed in this 312th Meeting of SEAC held on 16.09.2022. 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, M/s. New Star Blue Metals has applied for Terms of Reference for the proposed Rough Stone and Gravel Quarry over an extent of 1.62.0Ha SF.No.553/2 (Part) of Kuppam Village, Pugalur 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. The precise area communication/lease is issued for the period of 5 years. The approved mining plan is for the period of five years & production should not exceed 164992m³ of Rough Stone & 25088m³ of Gravel. The annual peak production is 42120m³ of rough stone (4th Year) & 8428m³ of Gravel (Brd Year).

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The ultimate depth is 20m BGL.

Based on the presentation made by the proponent, SEAC has decided to recommend grant of Terms of Reference (TOR) with Combined Public Hearing (File No. 9366, 9422,&9423) is issued for the production of 164992m³ of Rough Stone & 25088m³ of Gravel in 5 years with ultimate depth 20m BGL, subject to the following TORs, in addition to the standard terms of reference for Combined EIA study and details issued by the MOEF & CC to be included in EIA/EMP Report:

- The PP shall furnish DFO letter in regard to shortest distance of Reserve Forest & protected areas/Wildlife sanctuaries & wild life corridors etc within 25 Km radius.
- 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.
- The EIA Coordinators shall obtain and furnish the details of quarry/quarries
 operated by the proponent in the past, either in the same location or
 elsewhere in the State with video and photographic evidences.

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- 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

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- 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 a detailed 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) for both monsoon and non-monsoon seasons by a reputed institution / University to assess the impacts on the wells due to quarrying activity vice versa on the quarrying operations.
- 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,

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- 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-lin 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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- 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

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- 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: 312-27. (File No: 9430/2022)

Proposed Rough Stone and Gravel Quarry over an extent of 2.33.10Ha SF.No.388/1A2(P) of Kolumankondan Village, Palani Taluk, Dindigul District by Thiru.T.Kumaresh for Terms of Reference. (SIA/TN/MIN/81184/2022, dt 26.07.2022)

The proposal was placed in this 312th Meeting of SEAC held on 16.09.2022.

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.T.Kumaresh has applied for Terms of Reference for the proposed Rough Stone and Gravel Quarry over an extent of 2.33.10Ha SF.No.388/1A2(P) of Kolumankondan Village, Palani Taluk, Dindigul 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. The precise area communication/lease is issued for the period of 5 years. The approved mining plan is for the period of five years & production should not exceed 233610m³ of Rough Stone & 15042m³ of Gravel & 60168m³ of Weathered Rock. The annual peak production is 57170m³ of rough stone (5th year) & 7522m³ of Gravel (1st Year) & 30088m³ of Weathered rock (1st year). The ultimate depth is 45m BGL.

Based on the presentation made by the proponent, SEAC has decided to recommend grant of Terms of Reference (TOR) with Public Hearing is issued for the production

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of 233610m³ of Rough Stone & 15042m³ of Gravel & 60168m³ of Weathered Rock in 5 years with ultimate depth 45m BGL, 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 PP shall furnish DFO letter in regard to shortest distance of Reserve Forest & protected areas/Wildlife sanctuaries & wild life corridors etc. within 25 Km radius.
- 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.
- If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,

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

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- b. Quantity of minerals mined out.
- c. Highest production achieved in any one year
- d. Detail of approved depth of mining.
- e. Actual depth of the mining achieved earlier.
- f. Name of the person already mined in that leases area.
- g. If EC and CTO already obtained, the copy of the same shall be submitted.
- h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
- 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).
- 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 a detailed hydro-geological study considering the contour map of the water table detailing the number of

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- ground water pumping & open wells, and surface water bodies such as rivers, tanks, odai, canals, ponds etc. within 1 km (radius) for both monsoon and non-monsoon seasons by a reputed institution / University to assess the impacts on the wells due to quarrying activity vice versa on the quarrying operations.
- 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.

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- 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-lin 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

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- 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.

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- 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: 312-28. (File No: 8478/2022)

Proposed Rough Stone Quarry lease over an extent of 2.91.5Ha at S.F.No.55/1A(Part), 55/3(Part) & 58 of Kavundampalayam Village, Gobichettipalayam Taluk, Erode District, Tamil Nadu by Tmt.K.Indirani for Terms of Reference (SIA/TN/MIN/80938/2022, 22.07.2022)

The proposal was placed in this 312th Meeting of SEAC held on 16.09.2022. 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, Tmt.K.Indirani has applied for Terms of Reference for the proposed Rough Stone Quarry lease over an extent of 2.91.5Ha at S.F.No.55/1A(Part), 55/3(Part) & 58 of Kavundampalayam Village, Gobichettipalayam Taluk, Erode 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. The precise area communication/lease is issued for the period of 5 years. The approved mining plan is for the period of five years & production should not exceed 4.04.470m³ of Rough Stone. The annual peak production is 89185m³ of rough stone (5th year). The ultimate depth is 56m (16m AGL & 40m BGL).

Based on the presentation made by the proponent and considering safety point of view, SEAC has decided to recommend grant of Terms of Reference (TOR) with Public Hearing is issued for the production of 4,04,470m³ of Rough Stone in 5 years with ultimate depth 56m (16m AGL & 40m BGL), 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:

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- The PP shall furnish DFO letter in regard to shortest distance of Reserve Forest & protected areas/Wildlife sanctuaries & wild life corridors etc. within 25 Km radius.
- 2. The PP shall discuss the mitigation measures for Sathyamangalam Tiger reserve which is located at a distance of 1.28 Km, in EIA report in consultation with DFO Erode.
- 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 and merging of contiguous pits after it is 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? A

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.
- 9. 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).
- 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 a detailed 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,

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- tanks, odai, canals, ponds etc. within 1 km (radius) for both monsoon and non-monsoon seasons by a reputed institution / University to assess the impacts on the wells due to quarrying activity vice versa on the quarrying operations.
- 15. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.
- 16. The Proponent shall carry out the Cumulative impact study due to mining operations carried out in the quarry specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
- 17. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
- 18. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 19. Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided.
- 20. Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be considered.
- 21. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.

22. Impact on local transport infrastructure due to the Project should be indicated.

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- 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 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-lin 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

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- 31. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 32. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
- 33. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 34. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 35. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 36. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 37. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 38. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site photographs which shall duly be certified by MoEF&CC, Regional Office, Chennai (or) the concerned DEE/TNPCB.

39. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.

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CHAIRMAN SEAC TN 40. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

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